E-COMMERCE: PROBLEMS & PROSPECTS

E-COMMERCE:
PROBLEMS & PROSPECTS

PROF. (DR.) S.S. MODI

INSPIRA (IRA)
JAIPUR - INDIA

Prof. (Dr.) S.S. Modi

E-COMMERCE:
PROBLEMS & PROSPECTS

Edited by:
Professor (Dr.) S.S. Modi
Former Head
Department of Accountancy and Business Statistics
Faculty of Commerce,
PG School of Commerce
University of Rajasthan, Jaipur-302004 Rajasthan (India)
25, Modi Sadan, Sudama Nagar, Opp. Glass Factory,
Tonk Road, Jaipur-302018 Rajasthan
Email ID: chiefeditorija@gmail.com, profdrssmodi@gmail.com
Mobile No. +91-98293 21067

CONTENTS

ii

♦□♦

1

Information and Communication Technology in Agriculture and Rural Development

Prof. (Dr.) Jitendra Kumar[*]

Introduction

Information and Communication Technology (ICT) has many dimensions. In this article its agricultural and rural development dimension has been taken into consideration. The whole article is divided into five sections. Section one deals with the definition and role of the ICT with particular reference to agriculture and rural sector. Section second is devoted to the application of the ICT in agricultural education research, extension and production. In section third an effort has been made to briefly discuss the emerging areas and technologies relevant for agriculture and rural development. Section four deals with the major initiatives taken by the Central State Governments and private organizations to popularize the ICT. The last section analyses the challenges of ICT in agriculture and rural sectors in India and the solutions thereof.

Definition and Role

Information and Communication Technology (ICT) has been defined as the technologies involved in collecting, processing, storing, retrieving, disseminating and implementing data and information using micro electronics, optics, telecommunications and computers. It also includes internet connectivity, e-mail facility, web-portals, on-line chatting, video conferencing, multimedia technology etc. on the computers. It is well recognized that computer images have far greater impact on the minds and psyche of the rural uneducated farmers than the textual descriptions of the technology. With the

[*] Faculty of Commerce & Management Studies, G.G.D.S.D(P.G & Res.) Centre, Palwal, Haryana, India.

[~] *The paper has been presented in "*International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context*" Organized by* Inspira Research Association (IRA), *Jaipur* & LBS PG College, *Jaipur, Rajasthan, India.* 02-03 February, 2018.

establishment of rural information kiosks and Kissan Call Centres along with country-wide investment in creating information connectivity fibre optics backbone, the rural masses in the remote comers of the country have better access to the information through ICT. This helps in the dissemination of information for taking scientific knowledge and technologies to the end users.

The User Groups of ICT in Agriculture Development

There are a number of user groups in the process of agricultural research, development and management. Their knowledge requirements are also different. The following user-groups with their specific information requirements can be distinguished:

- The policy-maker groups require information for priority setting, allocation of investments and increasing efficiency by avoiding duplication and building on existing information. Policy making requires information regarding social, economic and environmental issues.

- The managers of various organizations associated with agriculture and rural development require information on various ongoing activities, available expertise and the various processes in the functioning of their organization.

- Researchers and advisors require information relating to funding sources, available researches and their findings and the areas which require research efforts.

- Farmers want information on location-specific technologies, best practices of cultivation, inputs and output use and specific information on soils, pests, crops, weather forecasts etc.

- Educational and training organizations require information on training materials, expertise, user needs, policies and programmes being run in the country and the lessons learnt so far.

Role of ICT in Rural Development

India took to IT early compared to many other developing countries. The nationwide network of computers set up by the National Information Centre took the PC to every district in the country, making government level interaction and communication faster for planners. The internet has now given us an opportunity to take the PC to every village. IT has a definite role to play in rural education, health and agriculture. In the Indian situation, a PC need not be a personal computer. It can be a community computer. In the day time, it can be used to educate children at primary and middle levels in the village school. In the evening, the community computer can turn into a "cyber dhaba" for villagers - where they can access web-sites of their choice and get information that they can use. Moreover, for the benefit of the rural people it can be located in an internet kiosk, which may be at the village pan shop or the bus stand, where people can get Information for a small price, The IT Task Force has

suggested the concept of a community information centre. We need to look at the concept of "Community information centres", community library Centres and Panchayat Centres across the country in a completely new way with the availability of IT tools and services. These community centres could become hubs of education and awareness as well, and not just remain places for providing information to people on a mass scale. Internet will enable advertising of rural products produced even in the remotest villages to global markets. The agriculture extension worker can access latest information on farm technology and products, and disseminate the same to villages.

Application of Information Technologies in Agricultural Education, Research, Extension and Production

Education, research and extension are the three integrated stages of agricultural system. Education involves teaching and training in agriculture. It is followed by research because unless one is systematically trained in the theory and practice of agricultural science, he cannot be a good researcher. Research relates to the solution of specific problems and formulation of technology. Extension is the last stage which involves the transfer of research findings and technologies to the end users *i.e.,* the farmers. To strengthen education, research and extension in the field of agriculture, the Information and Communication Technologies (ICT) play vital role. How it can be done is discussed separately in the following analysis. Although the technologies overlap yet every technology is more specific in one area than the other.

Education

The development in information and communication technologies has revolutionized the whole educational system. Educational standards will be highly raised through multimedia, computer simulation, virtual reality and other teaching tools. There will be tremendous increase in knowledge available in libraries and databases will bring to the forefront the critical question of managing and handling of this new knowledge. There will be many options open for the students and teachers to learn and specialize in the courses of their interest. It will be easier for the coming generations to prepare their own teaching material, research proposals, have access to manuscripts of research papers, reports and other documents with minor expenses and efforts. At present India has one of the biggest networks of agricultural education, research and extension system. In the field of agricultural education there are about 40 agricultural universities besides many other agricultural colleges and institutes which are imparting education and training in the field of agriculture. There is need to interlink all these institutions for better results and avoid duplication. The use of ICT will be very useful to the planners and administrators for better policy planning. The teachers will be able to enhance their knowledge and impart quality education to the students. The use of ICT will also be very .helpful to the students to learn much more than in the class room teaching.

Benefits of ICT can be reaped only when sufficient infrastructure is, created in terms of contents, connectivity and computers as these are the three major basic components required to make use of information and communication technology. Quality of infrastructure will determine the standard of teaching and training programmes. This will help in producing world-class students who can compete with the students of other countries. The teachers and the students will be exposed to the emerging areas of biotechnology, space technology, agri-business management and so on. Digital libraries can be created by stacking microfilms, CD ROMs and Multimedia packages. The libraries will have more knowledge and information pertaining to various subjects and areas. Efforts are already on to develop nation-wide agricultural information network connecting all libraries of the State agricultural universities and the ICAR research institutes. The Agricultural Research and Information Service Cells will have connectivity with libraries also for bibliographic information. Distance learning will be the area of biggest potential through ICT. The encouragement to distance learning will benefit all. It will benefit the students who cannot afford class room teaching. They will have access to world class teachers and teaching material. Distance education will be an integral part of all agricultural universities, colleges and institutes.

Research

Agricultural research in India helped in bringing green revolution, white revolution, yellow revolution, blue revolution and all combined as Rainbow Revolution. However, after 1990s stagnation has come in productivity of Indian agriculture. Indian agriculture is also experiencing technological fatigue. One of the' methods to break this barrier is the use of ICT extensively in agricultural research. There are vast potentials for the ICT to, bring second wave of rainbow revolution in India. The application of ICT will be helpful in many ways:

- It will help in prioritising research requirements of Indian agriculture. Prioritising is required because of the fact that requirements are many but the research budget is limited. To perform this task a huge database is required regarding the various sectors of Indian economy. The use of IT alone can be helpful in reaching the right decision - making - process.

- It will be of great use in exploring the frontier areas of research. Bio technology holds the key for future growth in agricultural sector in all countries of the world including India. It will help in using Recombinant DNA technology for the development of transgenic plants like cotton and tomatoes. The biotechnological research has application in bio-fertilizers, bio-control agents production, microbial fermentation technology, wine production technology, recycling and agricultural waste and cloning of select animals.

- The IT will also help iJ1 getting the feedback of research findings. This is facilitated by internet, teleconferencing and video conferencing, cable networking for T.V. Channels etc. The feedback of research will help in modification of research to the users.

- ICT is a great help in avoiding duplication of research. It will help in coordinating the researches in universities, private sector, government and private organizations as well as at international level. By avoiding duplication, a lot of efforts, money and manpower will be saved. This is essential in developing countries where research budget is the biggest constraint.

- It will be helpful in keeping the record of research work completed in different organizations of a country and of the world also. This will be of great help to the new researcher as he will not start his research from the scratch. He will start from where the earlier research was' completed. Retrieval of information is an important component of research work. The review of research will be updated and it will pave the way for new areas of research.

- The time gap between research findings by the scientists and its end users will be considerably narrowed down. At present the time gap is so wide that research findings become outdated by the time they reach the end users.

Extension

Cyber extension will be the most important form of technology dissemination in future. The new ICT can be of great help in rural development. It has great possibilities to solve the problems of poverty, inequality and bridge the gap between information-rich and information-poor population of the rural community. The use of internet will bring peoples' participation in development projects. Through internet people can send their problems and likely solutions to the government and the government can inform the people about the decision taken regarding their quarries. A two-way traffic in the flow of information will come up instead of one-way traffic from above to bottom as is the case at present.

The main objective of extension is the dissemination of technology, Indian agriculture is diversifying and so is the case with extension technologies. The major role of let in the changing agricultural scenario is as following:

- The upcoming agricultural expansion would be information- driven. The new extension methods will be supported by database. It will require documentation and planning. It will be more professional than earlier and client-oriented.

- Training and retraining of extension workers is an important component of the present strategy. These training programmes to be more effective will be linked to strong information, documentation and publication support to be more effective. With the help of leT it will be possible to get latest information from

any corner of the world. Interlinking and networking of various institutions will give synergetic support to agricultural extension: Online printing of the text is available on various websites through internet. This will be very helpful in training programmes.

- It will also strengthen the communication system. With the help of internet some of the barriers associated with communication can be removed. All components of communication system such as communicator, Message, channel, treatment message, audience and feedback will be strengthened and will function more effectively.

- In an era of globalization working under W.T.O. region, the functions of extension system have widened. In the new international trade the focus of extension system will also include communication regarding quality of production. Value addition, diversification of the products, export-oriented information etc. which are the need of the time. Strengthening the communication of these emerging trends through ICT will make Indian products more competitive in the international market.

Agricultural Production

The application of ICT has become necessary to achieve better production by managing agricultural, dairy, poultry and other livestock products. The major areas of enhancing production and productivity in agriculture and rural sector can be done with the help of ICT in the following way:

- Better Scheduling of land-use planning can be done when the farmer has full information of soil, plant, water, vegetation, climatic and socio-economic factors. ICT has made these databases available. At macro level land use involves the allocation of land for cultivation, pastures, forests, barren land and use of land for non-agricultural purposes. It has also facilitated the land use planning in these various categories. This has helped in sustainable agriculture and enhancing production.

- Better Scheduling of land-use planning can be done when the farmer has full information of soil, plant, water, vegetation, climatic and socio-economic factors. ICT has made these databases available. At macro level land use involves the allocation of land for cultivation, pastures, forests, barren land and use of land for non-agricultural purposes. It has also facilitated the land use planning in these various categories. This has helped in sustainable agriculture and enhancing production.

- A number of crops, such as spices, horticulture, floriculture, cereals etc. are in great demand for export. With the help of Information Technology it will possible to collect data regarding the demand of a crop, its quality parameters,

prices, location, time etc. in various countries, Country's export can boosted with the application of ICT.

- The IT tools can help in precision farming, regulation of the application of various inputs quantity, agronomic practices, soil nutrients etc. Precision farming will get a boost with the help of new technologies of measurement in the use of fertilizers irrigation, pesticides, insecticides, etc. Thus inputs can be saved to a great extent from overuse. Integrated Plant Nutrient Management has become easy.

- Post-harvest technology is playing very important role in preventing the wastage of agricultural products. The use of IT can be helpful in packaging.: transport, processing, storage and marketing. Value addition is the greatest benefit of modem technology.

- The application of ICT has also revolutionized the science of Farm Management. The basic objective the Farm Management is to maximize farm income on a sustainable basis. It is now taking the form an industry called Agribusiness. The farm manager has to keep information on various process of framing government policy of prices, taxes, subsidies, exports markets, credit, inputs, output etc. The Information and Communication Technology can become an effective tool in decision-making process.

- Theory of agricultural production function is highly mathematical. It involves technical relationships between inputs and output. Various types of production functions such as relationships between input-out, input-input relationship, output-output relationship, laws of returns, elasticities of input and output, demand-supply relations etc. are involved. Use of ICT has greatly facilitated in understanding of these relationships for rational decision making.

- For reliable weather forecasting ICT is the basic component Agriculture is a gamble of monsoons in India. Weather forecasting is now more reliable. The· weather forecasts through print and electronic media is helping the farmers in selecting the right crop, at right time. Advance planning has become easy.

Apart from these benefits mentioned above, many other benefits are there by the use of ICT.

The Emerging Areas in Information Technologies

Two most important emerging areas in ICT relating to agricultural are Geographical Information System (GIS) and E-Commerce. They are being discussed briefly as follows:

Geographical Information System (GIS)

GIS is a technique that incorporates graphical features with tabular data in order to assess real world problems. It is basically used as computer cartography *i.e.,*

mapping and analyzing things that exist and events that happen on earth. Hardware, software, data and people are the basic components of GIS. At present there many GIS packages available in the market which have direct relevance for agricultural and rural sector. It is used for estimation of area under cultivation, crop damages due to natural calamites, production estimates, water-shed planning, land topography, soil survey, extent of vegetative cover and so on. In short, GIS is a configuration of computer hardware and software specifically designed for the acquisition, maintenance and use of cartographic. data.

E-commerce

Electronic commerce (E-commerce) is the exchange of business information using electronic data interchange (EDI). The major methods are e-mail, electronic bulletin board, fax transmissions and electronic fund transfers. E-commerce in agriculture can widely be used. After globalization, agricultural sector in India has to compete in the international market. This requires extensive information and databases on inputs and outputs, demand, supply prices and so on to remain competitive. The agricultural marketing system is the widest and most-fragmented in the world. E-commerce can go a long way in integrating these markets. Since food is the basic necessity of all species in the world including human being, the role of E-commerce is the most important to balance demand and supply of food grains in the world.

The Emerging Technologies

- **Computer Software**
  - A number of Statistical Software Packages have been developed in the field of agricultural education, research analysis and extension system. These Statistical Software Packages have changed the scenario as the drudgery of computational labour has almost been eliminated and now agricultural research workers are willing to use advanced statistical techniques in their analysis work. A number of standardized statistical packages are available now on various aspects of agricultural research.
  - Software packages have also been developed for geographic and remote sensing applications. They are used for collecting, storing, retrieving, transforming, image rectifications and restoration, enhancing, integrating and displaying images. They are generally used a Geographic Information System (GIS).
  - Software's have also been developed for farm business management, production management and control. They have a variety of applications in crop management, horticulture, floriculture, poultry, plant protection, irrigation management, animal husbandry and fishery management.

- Software's are also available for simulation and modeling, management information systems, decision support systems and expert systems in agriculture.

- Most of the software's are based on system approach rather than micro level approaches. A number of packages have been developed for routine activities in officers. MS-Office, Lotus SMARSUITE, STAR office are some of the popular packages for information processing and application development.

Geo informatics

Geo informatics technologies include three systems:

- Geographic Information System (GIS)

- Global Positioning System (GPS)

- Remote Sensing (RS)

Geo informatics relate to the data on and above the earth. This helps in the prediction of natural calamities such as floods, storms etc. All this prediction will be very useful in preparing in advance to meet the situation. Geo informatics is also very helpful in precision farming. Precision farming deals with micro level entities such as site, soil, spatial and temporal variability within fields. Fundamentally, precision farming acknowledges that conditions for agricultural production as determined by soil resources, weather, vary across space and overtime. With these things in mind, management can take specific decisions. The other applications of geo informatics in precision farming include site-specific crop management, crop classification, positioning guidance, weed control, crop protection, management, forecasts and many other areas of agricultural production system.

Electronic Governance

Electronic Governance is a process of the functioning of a government to make it responsive, transparent and accountable. During the last few years the government has taken a number 'of initiatives in e-govemance. Budgetary allocation has been considerably enhanced for Information Technology. Various state governments have also initiated many projects and some of them are very successful. Andhra Pradesh Governments' computer-Aided Administration of Registration Department, Karnataka's Bhoomic Project for computerization of land records. Himachal Pradesh's Lokmitra for providing services etc. are some of the success stories of e-governance.

Electronic Publishing

Electronic publishing is gaining widespread popularity. The products include indexing, abstracting, full-text, databases computerized library catalogues, national and regional catalogues of library and collections, digital libraries, encyclopedias,

dictionaries. bibliographies and other reference sources etc. In -addition, there are audio, video, graphics, electronic journals etc. Electronic publishing allows faster dissemination of information than conventional printing technology. Libraries and Information centres are the beneficiaries of the Electronic Publishing. This is highly useful to agriculture sector as it. encompasses areas such as animaland crop husbandry, plant breeding, plant protection, forestryengineering, economics, statistics, management, biotechnology and so on. It has made agricultural research teaching and extension easy and effective.

Scientometrics

Scientometrics is concerned with quantitative aspects of scientific enterprises like publications, patents, journals, etc. In short it is a quantitative method of investigating the development of science as an information process. In this information model, publications are the carriers of information, journals are communication channels and bibliographical references represent the effect of previous research on the development of information flow.

The technique of scientometrics can be used as a tool for comparing research across countries and groups, fixing research priorities, impact of research output, collaborations among institutions, authors and countries. The most basic tool used in scientometric assessment is the publication output and the citations to the publications output. It is a potential area for its application as a tool of Information and Communication Technology.

Challenges for Agricultural Information Technology

- **Central Government Initiatives**

A number of initiatives have been taken by the Central and State Governments, private organizations, and the international institutions for the us~ of ICT in agriculture and rural development. The initiatives taken by the government are through the National Informatics Centre, Ministry of Information and Technology, Government of India. It has set up a Nation-wide computer Communication Network (NCNET) in collaboration with the state governments and the district administration. A number of information systems have been developed to cater to the information needs in various areas that include crops, fertilizers, seeds, animal production and health, horticulture, plant protection, fisheries, marketing etc. The ICAR has also provided its institutions all over India with good connectivity through Agricultural Research Information System Network (ARIS Net) encouraging them to develop web-portals and databases for their routine work. Similar many other facilities were created by the ICAR to plan, monitor and evaluate research projects running in its institutes.

- **Non-Government Institutions**

Among the non-government initiatives the .most important initiatives were

taken by M.S. Swaminathan Research Foundation Nagarjun group of Companies, Tatas, Indian Tobacco Company, IITs, SEWA and many other organizations. The M.S. Swaminathan Research Foundation established a project "Village Knowledge Centre" with the object of providing rural families access to a variety of information in fostering agricultural and rural development through ICT. The Nagarjun Group of Companies launched "Ikisan Portal and Information kiosks" to disseminate information on agricultural practices, animal husbandry, agricultural machinery aromatic and medicinal plants, credit, insurance, prices etc. The MSSRF-TATA established National Virtual Academy (NVA) for Food Security and Rural Prosperity. The objective is to launch an "Every Village Knowledge Centre Movement" for fostering Green Revolution without environmental hazards. The Indian Tobacco Company established E-Choupals in Madhya Pradesh connecting 1200 choupals to provide latest information on agriculture and rural development. There are many other initiatives by leading IITs which provide information kiosk which include facilities for internet, video conferencing, scanner, photo copier etc. There are many other organizations which are busy in providing ICT services to the villages.

International Initiatives

The Food and Agricultural Organisation (FAO) has developed the Virtual Extension, Research and Communication Network (VERCON) to establish and strengthen linkages among and within the human and institutional elements of agricultural research and extension systems. Similar other facilities are being developed by the W.T.O., otherinstitutional agencies and the financial aid, extended by the various countries involved in the promotion of agricultural and rural development in India.

Other Important Initiatives

- **IFFCO-ISRO Cooperation**

Recently IFFCO has initiated IT-based services for farmers and cooperative societies. It has taken up a project in association with Indian Space research Organization (ISRO) to utilize satellite based remote data and Geographical Information System (GIS). The developed countries have been utilizing precision fanning with the help of IT tools for a long time. Remote sensing and GIS information can provide warriings on evolving crop stresses and crop vigour. The IFFCO-ISRO GIS project extends support for efficient and timely availability of IFFCO's fertilizer to fanners through better logistics and efficient operations.

- **Commodity Radio System (FM Radio)**

It is the powerful medium to reach the unreached in far flung, rural' areas. It is characterized by the active participation of the community in the process of creating news, information, entertainment and culturally relevant material, with an emphasis on local issues and concerns.

- **Farm School on Air**

    This programme has been launched since 200 I to provide systematic radio lessons to the interested fanners on the different topics of current interest in agriculture and allied subjects.

- **Agri-Portals**

    They have been established as an electronic network in collaboration with input agencies. They provide information on agricultural practices, news, animal husbandry, agricultural machineries, medicinal plants, and agricultural credits and insurance etc.

- **E-Choupals**

    E-Choupals were launched in June 2000 and it has become the largest initiative among all Internet based interventions in rural India. 'e-Choupal' services today reach outto more than 4 million farmers growing in a range of crops like soybean, coffee, wheat, rice, pulses, shrimp etc. in over 40,000 villages through 6450 Kiosks across 8 states and provide agri-business information through Internet.

- **KIOSK: An Agricultural Helpline**

    It is online help centre where any fanner can put questions in his mother language and the experts provide answer to him in the local language prevailing in that state. Though the farmers pay for the query, yet the information in trustworthy and they take benefit of it.

- **Computers on Wheels**

    It is novel initiative taken up by an individual developmental entrepreneur - Ms Rajeswari Pingali since 2003 and supported by Stanford Reuters Digital Vision Programme and Digital Partners Institute, Seattle, USA. To provide access to information, a motorcycle is used which is equipped with a solar-powered laptop and facilities like Internet connectivity, printer, digital camera and a mobile phone. It provides desktop services at the village level.

- **Agricultural Marketing Information Network (AGMARKNET)**

    NIC has taken up a project "Agricultural Marketing Information Network (AGMARKNET)" on turnkey basis for the Directorate of marketing and Inspection (DMI), Department of Agriculture and Cooperation, Ministry of Agriculture. The project aims at improving the prevailing agricultural marketing information system by minimizing the gap between generation and dissemination of market information. The major components of AGMARKNET are:

- Establishment of computing facilities
- Development of human resources
- Information transmission

- Development of databases and
- Portal on market information

To provide the facilities at the AGMARKET nodes NIC has tied up with Bharat Sanchar Nigam Limited (BSNL).

Economic development and growth of ICT are complementary .to each other. Faster economic growth necessitated, the increasing use of ICT and the ICT has also helped in promoting growth faster. This complementarity is bound to increase in future. India has the comparative advantage in knowledge-based economy because of its strength in software and large pool of technically trained manpower. India has to maintain its lead in ICTif it is to become a leading economic power in the world in the coming decades. It will require new ways of teaching, new agricultural university systems, infrastructures, agricultural research, teaching and extension systems, human resource training and so on. To bring about such a system is a tremendous task which will require huge funds and basic changes in our socio-economic thinking. This is both a challenge and opportunity especially in agricultural and rural sector in India.

The major challenges are summarized below:

- There is lack of information professionals in agriculture- and rural sector as compared to non-agricultural sectors. There is lack of skills among the farmers regarding the value of agricultural information, evaluate agricultural information, organize and store that information for effective retrieval. The Indian farmers are by and large illiterate to use all these techniques.

- Indian farmers also act as managers of their farm business. Due to their illiteracy and poor training they are unable to use new techniques in the fields of organization, project management, change management, agricultural strategic planning, agricultural financial management, human resource management, communication skills, marketing skills etc. The biggest challenge is to educate and train them in these techniques.

- In India there is also the problem of proper maintenance of infrastructural facilities. Delays, mismanagement, corruption, cost and time overruns are the major problems of our society. This requires basic change in our thinking. These are the greatest obstacles in the smooth application of ICT in agriculture and rural development.

In short illiteracy, lack of funds and inefficient management system are the three basic bottlenecks of our system. To overcome these bottlenecks is a big task. Indian farmer is basically receptive to new technologies as is evident from the green revolution era when farmers readily adopted the new technology and methods to increase production. If these bottlenecks are removed, farmers will readily adopt the ICT for their benefit.

Upgradation of agricultural development structure in India holds the key for the use and spread of ICT. There is Indian council of Agricultural Research at the top for planning, promoting and co- ordinating teaching, research and extension in the field of agriculture. It has a vast network of 49 institutes on various crops and animals. It also includes National Institutes, Deemed Universities, National Bureaus, National Research Centres, Project Directorates and All India Coordinated Research Projects. India also has 40 State Agril. Universities, Central Agril. Universities, Academic Universities and Deemed Universities. Agriculture is a state subject. Therefore, Departments of Agriculture in each state are responsible for the development of agriculture in their respective states. This huge agricultural development system if upgraded in ICT, can work miracles and bring revolutions in agriculture and rural development in India.

Conclusion

The new information tools and technology can play a vital role in agricultural education, research and extension system. The application of Information and Communication Technologies are bringing fruitful results in the form of fertilization requirements, crops stresses and weather forecast etc. From GPS and GIS systems, it will be possible to understand and global agricultural patterns, agricultural production, agricuitural marketing system, produce rates and autonomy of selling the produce from the Internet. Various networks are also helping the agricultural community - students, teachers, research scholars, scientists, extension specialists and farmers for better production and timely expert help through community radio, television, networks, Internet and Multimedia application. Now farmers are being made informed farmers and they are being provided timely help through digital information system.

References

⇒   Ahuja, Astha (2006). Agriculture and Rural Development in India: Post-liberalisation Initiatives, New Delhi; New Century Publications" pp.86-96.

⇒   Banerjee, H.R. (2008). Encyclopaedia of Computer Terminology. Mumbai, Jaico Publishing, p. 274.

⇒   Cawkell, A.E. (2013). Encyclopaedia Dictionary of Information Technology and Systems. London, Bowker, p.169.

⇒   Chauhan, Narendrasinh, Jhala, Mayurdhvaj K and Sarvaiya, Joravarsinh (2005). Information Technology for agricultural Production. Education and Management, Delhi, Satish Serial Publishing House. pp.77-78.

⇒   Sharma, S.D., K.G. Garg and Suresh Kumar (2014). Informatics in . Agriculture, Handbook of Agriculture, Indian Council of Agricultural Research, New Delhi.

⇒   http://wiki.answers.comIQ/What is information technology [accessed on 13/512011]

❦❦❦

<div style="border:1px solid;">2</div>

An Empirical Study on Social Media Behavior of Consumers

Mredu Goyal[*]

Introduction

The recent developments in digital and social media landscape have shown that marketers are more embracing social media to attract, engage and transact with their customers. Social media marketing has become more popular with the increased fame of websites such as Twitter, Instagram, Facebook, LinkedIn, and YouTube. Social media marketing refers to marketing done through social media or social networking websites. Presence on these social networking websites, such as Facebook, LinkedIn, and Twitter helps the organizations to easily reach the users who does not know about it. As these social networking websites already have large established online communities, exposure is gained by simply making their presence felt on these websites. Thus it provides a low cost opportunity to reach large numbers of users and gain the brand recognition. Although social media marketing is an influential online marketing tool, it is usually used to supplement other marketing methods rather than replace them. That's why most companies still rely on Web advertising and search engine optimization to generate traffic to their websites. Social media marketing strategy usually emphasize on efforts to create content that attracts attention and encourages users to share it with their social networks. Social media is earned media instead of paid media, as the corporate message spreads from user to user and presumably reverberates because it appears to come from a trusted, third-party source, as opposed to the brand or company itself. Hence, this entirely new avenue of marketing has replaced the traditional word-of-mouth publicity to word-of-web.

[*] Research Scholar, Department of Business Administration, University of Rajasthan, Jaipur, Rajasthan, India.

~ *The paper has been presented in "***International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context***" *Organized by* **Inspira Research Association (IRA),** *Jaipur* **& LBS PG College,** *Jaipur, Rajasthan, India.* **02-03 February, 2018.**

Consumers are progressively heading to social media sites b f r making purchase decision, which greatly influences their buying behavior. The feedback and reviews from existing customers found on these social networking sites are more influential with consumers than a one-sided website. Moreover, the human interaction that's the core of social media marketing has usurped advertisements in building a level of trust with the present and potential customers. Present consumer is more l k l to trust th who give an impartial description of product rather than celebrity who paid to endorse the product. Social media allows people all v r the world t form community of consumers. Thus it would be a mistake to think that traditional marketing material will be enough to influence the way consumers think about the brand and products in the present social networking world.

Review of Literature

A study by PricewaterhouseCoopers in 2017 asked digital buyers about how they make purchase decisions online. Nearly half reported that reviews, comments and feedback on social media impacted their shopping choices.

According to a recent research conducted in April 2017 of 1,003 consumers by Sprout Social, most consumers want brands to be honest and friendly on social media, not snarky and trendy. Some 86% of respondents say they want brands to be honest in their social posts; 83% want brands to be friendly, 78% want them to be helpful, and 72% want them to be funny. Most consumers like it when brands use social media to respond to questions, join conversations, and talk about timely events. Less than half of consumers want brands to be trendy (43%), politically correct (39%), or snarky (33%) on social media. More than two-thirds of consumers find it annoying when brands use social media to make fun of competitors, post slang, talk politics, and make fun of customers. Some 83% of consumers feel comfortable with brands' showing personality in Facebook posts. However, less than half of consumers like brand personality on YouTube, Twitter, Instagram, LinkedIn, Pinterest, and Snapchat.

A research study conducted by Mass Relevance that provides a social media curation platform to clients found that 59% of consumers will more likely trust a brand that has presence in social media and 64% of the consumers interviewed have already made purchases based on social media presence and reviews (Chaney, 2012). A study for Harvard Business Review by Edelman (2010) highlights how the Internet and social marketing has changed not only the way businesses operate but also how consumers choose their products. It discusses how market has moved to a more open-ended approach whereby consumers no longer follow a methodical approach of selecting products. It stresses how important it is for brands to connect with consumers and it also studied the consumers' decisions across five different industries, namely automobile, skincare, insurance, mobile telecommunications and electronics, across three different continents. Based on the results of the study, it

proposed a four-stage model that focuses on today's consumers using social media for advocating products and also purchasing based on the reviews and backing received.

Bashar, Ahmad & Wasiq (2012) has done an empirical research to understand the effectiveness of social media as a marketing tool and an effort has been made to analyze the extent social media helps consumers in buying decision making. Results of paper suggested that the medium is growing very fast and holds huge potential but is still in its nascent stage in India. Therefore, it is time for the companies to make effective strategies and execute them to win larger share of business through this revolutionary medium and become the innovative firm of coming future.

Vij & Sharma (2013) has done a study on social media experience of consumers and marketers in the State of Punjab. The paper suggested the measures for effective Social Media Marketing (SMM) strategies that social media marketing content should be 'interesting', 'informative', 'interactive' and 'reliable'. Marketers should align their social media marketing effort with the changing tastes and preferences of customers.

Yadav (2012) has made an attempt to set up the significance of social networks as an advertising medium and evaluated the existing advertising methods that are in trend via certain case studies and concluded that social websites are not just a tool to interact with the different people but also medium to reach the prospective customers.

Bhakuni & Aronkar (2012) tried to understand the usage pattern of social media among the students of Gwalior city and also assessed the influence of social media advertising on the purchasing intention of the students. The study concluded that social media is a rapidly growing area with large number of young students associating with it and there is a strong positive relationship between purchase intention and social media advertising.

Research Gap

From the review of literature, it is evident that there have been a limited studies conducted on social media behavior of consumers. It is also evident that in the study location that is Jaipur city of Rajasthan, India there have been fewer studies conducted on social media. Certainly these studies have contributed in their own way but they have also left certain gaps that need to be addressed.

Objectives of the Study

The existing reviews of literature have helped us to frame the following objectives of our study. The objectives are as follows:

- To study the social media behavior of consumers in Jaipur city of Rajasthan, India.

- To analyze the influence of social media marketing in purchase decision of consumer.
- To suggest strategies for improving the effectiveness of social media marketing.

Scope of Study

The scope of the study is confined to social media marketing strategies and online consumer only. The study is limited to Jaipur city of Rajasthan, India region.

Research Methodology

The study is based on social media experience of consumers in the Jaipur city of Rajasthan, India. It is based upon online survey of consumers (N=300), conducted during the first quarter of 2017. Self-developed questionnaire (request to fill online questionnaire was sent through e-mail and social media such as facebook and whatsapp) containing indicators about consumer's intentions, trusts, and experiences has been used to capture their perception about reasons for their presence on social media and factors (using Exploratory Factor Analysis) determining their social media behavior. The respondents were requested to fill online questionnaires developed on Survey planet.com.

Social Media Behavior of Consumers

The survey results reveal that 36% of consumers of Jaipur city agree that social media advertisements influence their buying decisions. Considering the usage pattern, the results show that 74.4% of consumers use social media to keep in touch with family and friends. However, about 35% respondents also admit that they use social media to seek opinions about products/services and to view online advertisements, for making buying decisions. Nearly 9.9% of the respondents admitted that they refer social media to buy products or services, as shown in Table-1

Reasons of using social media
- networking purpose
- seek opinions about products/services
- read feedback and reviews
- find exclusive offers and discounts
- engage with brands
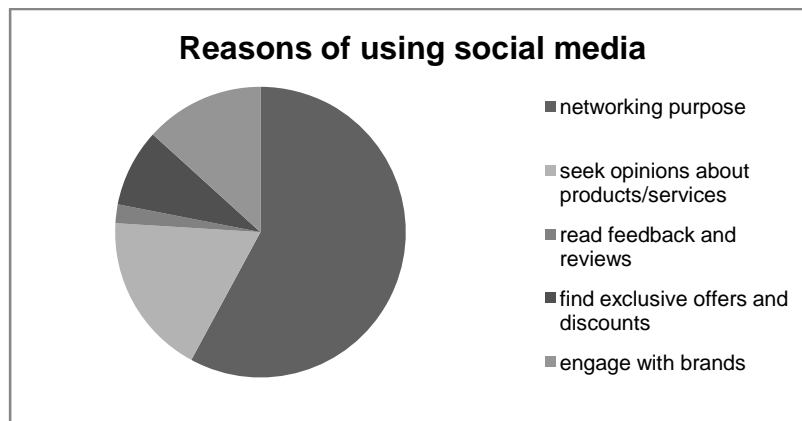
Scope of Consumers' Social Media Behavior

Consumers of Jaipur city were requested to share their agreement or disagreement with 13 statements about their social media experience. For the

purpose of identifying the scope of consumer's social media behavior, the responses of 300 respondents to these 13 statements have been subjected to Exploratory Factor Analysis. Overall Kaiser-Meyer-Olkin measure of sampling adequacy was found to be .777 and Bartlett's Test of Sphericity was also significant (Chi-Square = 704.096, df= 78, Significance =.000) signifying the suitability of data for factor analysis. All of these examinations revealed that data was fit for analysis. Principal Component Analysis was employed for extracting factors. The number of factors to be extracted was finalized on the basis of 'Latent Root Criterion' i.e. factors having Eigen value greater than 1 have been selected. Orthogonal Rotation with Varimax was run. Rotation Converged in 25 iterations. In orthogonal rotation, each factor is independent of, or orthogonal from, all other factors. The correlation between the factors is determined to be factors. All factor loadings greater than .40(ignoring the signs) have been considered for further analysis.

Four factors have been extracted which together account for 60.735 % of the variance. The results of Principal Components Analysis with Varimax Rotation are shown in Table – 2.

Table 2: Factor Structure of Consumers' Social Media Behaviour
(Principal Component Analysis with Varimax Rotation)

Statement	Factor				Communalities
	1	2	3	4	
Advertisements through social media are more comprehensive than traditional advertising	.850				.749
Social media advertisements are more communicative than traditional advertising	.790				.739
Social media advertising is more creative than traditional advertising	.722				.632
Social media is more dependable as compared to traditional media	.641				.477
I refer to the opinion of experts on social media sites while considering any product or service		.717			.563
I refer to number of likes/ dislikes and reviews of existing consumers before making a purchase decision		.693			.557
I am subscribed to updates and alerts about a brand or product through social media		.663			.511
I respond to queries and promotional offers received through social networking sites		.595			.507
Organizations that use social media for marketing purpose are more convincing than others who are not using it			.823		.737
Organizations carry a better brand image using social media for marketing purpose than others who are not using it			.808		.725
Sharing of my information of social media is not an issue for me				.771	.660

I am aware of the fact that organizations track my activities on social media				.718	.519
I am comfortable to be tracked on social media				.472	.446
Eigen Value	3.786	1.739	1.240	1.130	7.895
% of Variance	29.124	13.375	9.540	8.696	
Cumulative	29.124	42.499	52.039	60.735	

The results show that there are four major factors/dimensions in the social media behavior of consumers.

- **Factor-I [The Perception of consumers about Social Media Advertisements]**

It includes statements: 'Advertisements through social media are more comprehensive than traditional advertising' with factor loading of 0.850, 'Social media advertisements are more communicative than traditional advertising' (0.790), 'Social media advertising is more creative than traditional advertising' (0.722) and 'Social media is more dependable as compared to traditional media' (0.641).

- **Factor-II [Response of consumers to Social media marketing strategies of Marketers]**

It is reflected in statements such as: 'I refer to the opinion of experts on social media sites while considering any product or service' (0.717), 'I refer to number of likes/ dislikes and reviews of existing consumers before making a purchase decision ' (0.693), 'I am subscribed to updates and alerts about a brand or product through social media' (0.663) and 'I respond to queries and promotional offers received through social networking sites' (0.595).

- **Factor-III [Perception about Organizations Adopting Social Media Marketing]**

It includes the statements: 'Organizations that use social media for marketing purpose are more convincing than others who are not using it' (0.823) and 'Organizations carry a better brand image using social media for marketing purpose than others who are not using it' (0.808).

- **Factor-IV [Consumer's Trust Level on Social Media]**

This is the fourth element in the social media experience of consumers. It includes the statements – 'Sharing of my information of social media is not an issue for me' (0.771), 'I am aware of the fact that organizations track my activities on social media' (0.718), and 'I am comfortable to be tracked on social media' (0.472).

Findings and Conclusions

This study is an analysis of the social media consumer behavior in the Jaipur city of Rajasthan. Modern marketers are using a well-integrated social media marketing strategy along with traditional medium to communicate about their products to the consumers. Consumers are finding social media advertisements as more

interesting, innovative and interactive as social it has become easier to use social networking sites with the aid of information and modern communication technologies. Besides, the trust of the consumers about the information gained through these sites is also increasing gradually. However, the trend towards purchasing is not much, but users who purchase they are satisfied with the purchases. Hence, the use of social networking sites for brand communication is gradually proving effective for the marketers but still there is a long way to go for them. Major findings of the study and suggestions for effective marketing strategy are as follows:

- Majority of Internet users are aware about social media and they are using it also, so marketers should move their promotional efforts from traditional tools to social media tools and must use a well-integrated social media strategy considering different platforms.

- Social media not only make customers' aware about brands, but customers also prefer the brands advertised through social media while making their final purchase. They purchase now-a-days to get, so called "like". So marketing strategy must be more comprehensive including informative and shareable content as well asa proper consumer engagement policy to build relations is to be adhered.

- Customers have positive perception towards social media marketing practices; they consider social media advertising more comprehensive, communicative, creative and dependable in comparison to traditional advertising. Therefore, more of the business promotion budget should be earmarked to it.

- It cannot be said certainly that whether customers refer to the opinion of experts on social media sites while considering any product or service or not but they definitely refer to their friends and other customer reviews. So steps to boost the customer referrals must be taken such as incentives, easy referral policy, automated referral program, etc.

- A very few of the consumers are subscribed for notification alerts of marketers. So they should be encouraged to do so.

- The respondents taken under study feel comfortable in sharing their information on social media websites so it can be said that while advertising on social media websites, marketers can also get additional information about prospects which can help them to target customers in better way.

To conclude social media marketing has become a necessity, one that is imposed to the business by the overall presence and impact social networks have on the users. According to a research conducted by www.statisia.comon the social network penetration in India from 2015 to 2022. In 2019, it is estimated that 18.86 percent of the Indian population will be accessing social networks, up from 14.64

percent in 2017.This is why social media marketing is no longer considered to be on probation, but instead it has become an important part of the business world.

References

⇒   Bashar, A., Ahmad, I., & Wasiq, M. (2012). Effectiveness Of Social Media As A Marketing Tool: An Empirical Study, International Journal Of Marketing, Financial Services & Management Research, 1(11), 88-99.

⇒   Bhakuni, P., &Aronkar P. (2012). Effect of Social Media Advertising on purchase Intentions of Students-An Empirical Study conducted in Gwalior city. International Journal of Applied Services Marketing Perspectives, 1 (1), 73-79.

⇒   D'Silva, B., Bhuptani, R., Menon, S., & D'Silva, S. (2011). Influence of Social Media Marketing on Brand Choice Behaviour among Youth in India: An Empirical Study, presented in International Conference on Technology and Business Management, March 28-30, 756-763.

⇒   Dash, A. K. (2011). Use of online social net-working sites by college students and its implication for marketing:A case study in Tripura. Indian Journal of Marketing, 68-76.

⇒   Edelman, D. 2010. Branding in the digital age. Harvard Business Review, 88(12): 62–69.

⇒   Vij, S., & Sharma, J. (2013). An Empirical Study on Social Media Behaviour of Consumers and Social Media Marketing Practices of Marketers, presented paper in 5th IIMA Conference on Marketing in Emerging Economies, 9-11 January 2013, 1-19.

⇒   Yadav, N. (2012). Social Networking Sites-A New Vehicle for Advertising. MIMT Journal of IT & Management Research, 2 (1), 38-48.

⇒   https://www.emarketer.com/Article/How-Social-Media-Influences-Shopping-Behavior

⇒   https://www.statista.com/statistics/240960/share-of-indian-population-using-social-networks.

❧❧❧

3

ICT in Financial Services

Dr. Kamini Shah [*]

Introduction

There is hardly any aspect of business that the internet has not touched – life has irreversibly been transformed for all businesses who have seen this new medium change everything that they thought they knew all about. Products, means of delivery, channels, alliances, customers, suppliers, revenue sources, competitors – the entire business landscape has been transformed at an amazing speed in the past few years. True, we have seen a lot of hype, but it is equally true that there is hardly any business left without the internet occupying a significant place in its strategy – it is either eBusiness or no business at all.

New information technology (IT), especially the internet, have revolutionised the finance industry with the rapid growth of electronic finance. E-finance is a driving force that is changing the landscape of the finance industry fundamentally, in particular, towards a more competitive industry. E-finance has blurred the boundaries between different financial institutions, enabled new financial products and services, and made existing financial services available in different packages. But I think the influences of IT on finance go far beyond this.

How important are electronic communication technologies and the Internet for finance?

Is the Internet the most significant development for many decades or is it just one among many?

[*]   Associate Professor, P G Department of Business Studies, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India.
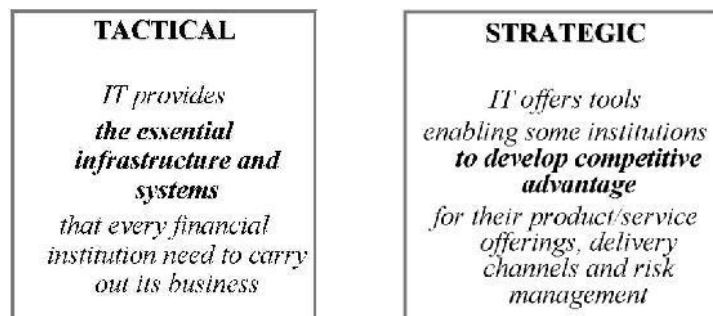
One view is that it will fundamentally transform the financial services industry and financial markets. Another is that the net represents the latest in a long line of electronic technologies that have reshaped the financial industry.

Finance and Information Technology

- **Growing mutual dependency**

  ▪ **Finance has Become Electronic:** Information technology can no longer be considered as merely an invisible support tool for financial activities. It is now an integral part of financial services' product/services offering, delivery channels and internal management. IT impact is pervasive. It is both tactical and strategic.

TACTICAL	STRATEGIC
IT provides **the essential infrastructure and systems** *that every financial institution need to carry out its business*	*IT offers tools enabling some institutions* **to develop competitive advantage** *for their product/service offerings, delivery channels and risk management*

  The relationship between the tactical and the strategic use are dynamic: strategic can become tactical, once a technology is widely adopted. This was the case of ATM networks. On the other hand, tactical can become strategic: this is the case when the bank card was transformed into a vector for loyalty-building services. IT impact goes beyond competitive positioning. It has changed the nature of financial markets and financial transactions. These have been dematerialised: what is being exchanged between financial institutions are digital representations of underlying instruments and positions. The dematerialisation had two major consequences:

  ~ an explosive growth of transactions, requiring greater processing power

  ~ a proliferation and greater complexity of new instruments, requiring sophisticated analytical tools and approaches to develop and manage new instruments.

  ▪ **Huge Market Opportunity:** For IT suppliers, finance is a critical market segment. Financial services constitute the largest segment of overall IT spending, estimated at between 25 and 30% of the total. Moreover, the importance of financial services goes beyond their quantitative weight. Financial services institutions are among the most sophisticated IT users and play a key role in deployment of key technologies such as data warehousing or transaction processing. Financial sector is seen as critical to the large-scale

take-up of electronic commerce, with Internet banking and Internet securities trading seen as "killer applications." Financial institutions, which are the heaviest relative spenders, are not necessarily the most profitable ones. The relationship appear asymmetrical: developing profitability and a competitive advantage requires heavy IT spending (in absolute terms), but a heavy IT spending does not necessarily lead to a competitive advantage. Spending numbers tell only a part of the story. To make an impact, IT spending has to be intimately integrated into the overall product/distribution strategy.

The developments of IT in the finance industry can be divided into two broad areas:

~ The first is the impact on banking and financial services. They argue that the advent of the internet and other electronic communication means has fundamentally altered many aspects of the banking industry. Many of the services traditionally provided by banks are being provided by other entities.

~ The second broad area is the transformation of financial markets. These no longer need to be associated with a physical place. As a result trading systems for equities, bonds and foreign exchange are becoming global.

Three important trends in the financial services industry have been accelerated by the emergence of the internet. These are improved **price transparency, differential pricing and transformation of distribution channels.**

Looking however at financial reporting and accounting, you may have to strain your eyesight to see any changes brought about by the web. All finance staff now surf the web, they even have their own website on the corporate intranet – but it has not really changed anything fundamentally in their work. In the large majority of all organisations, beancounting still remains a largely manual activity no different in substance from what it was a decade ago. However big changes are just round the corner and these have the potential to pull the rug from under those engaged in traditional accounting chores. Much of this has already happened in bits and pieces, though not everything has been tied up together yet.

- **Impact of IT on Financial Services**

While the internet is new and exciting, how other e-finance technologies, many of which have been around longer than the internet, have also reshaped the financial services industry, particularly the banking sector. For example, starting in the 1970s, Automated Teller Machines (ATMs) began to alter the ways that consumers interact with banks.

In the 1980s, greater use of electronic computation and data analysis changed the way credit decisions are made; these innovations have both reduced the cost of lending on average and enhanced the liquidity and marketability of loans. The use of

electronic communication in finance, in fact, goes back much further than the 1970s. As long ago as 1918, the Fedwire payment system allowed electronic settlement of payments between banks over the telegraph. This use of electronic communications in payments systems has steadily increased over time. Now virtually all large payments between banks and corporations are done electronically. In some countries, such as those in Scandinavia, electronic payments systems are becoming increasingly widely used at the consumer level. In the U.S., however, the paper-based check clearing system still predominates. There is a lack of comprehensive studies in the area of electronic financial services.

In the last 20 years, the financial services industry has witnessed dramatic changes, largely driven by globalisation, deregulation and consolidation. Technological advances helped make globalisation and consolidation feasible and encouraged deregulation. More recently, IT has accelerated the process, reinforcing some of these trends, particularly globalisation and deregulation, as well as facilitating the development of e-finance.

Recent Trends in Financial Services

Many of the recent trends in financial services have been driven by the globalization of financial markets. Financial services have also been reshaped by technological and structural changes, including the lowering of regulatory barriers.

Globalization

The globalization of financial services has increased financial integration, increased mergers and acquisitions within and across borders, and lowered barriers between markets.

- **Increased Financial Integration**

Reductions in trade barriers and transportation costs and advances in communications technology have accelerated international economic integration. Between 1987 and 1997 world trade in goods increased from 21 to 30 percent of global GDP (World Bank 1999). The complementarity of trade in financial services with trade in goods and a greater ability to trade services across borders have increased the demand for financial services. Cross-border capital flows have been the most important financial service delivery mechanism. But capital flows are just one way that financial institutions in one country can provide a loan or facilitate a security issue to an entity in another country. A financial institution can also obtain a physical presence in another country by acquiring a financial institution or by opening a branch or subsidiary. The costs of establishing a physical presence have declined, and cross-border entry has increased.

- **Increased Mergers and Acquisitions Within and Across Borders**

Governments have removed entry barriers through legal and regulatory measures. Aided by technological developments, these changes have lowered

barriers to entry and increased bank consolidation and mergers and acquisitions among financial institutions, both within and across borders. Globally, mergers and acquisitions in financial services jumped from $85 billion in 1991 to $534 billion in 1998 (BIS 1999). In the United States mergers and acquisitions rose from $25 billion (1998 dollars) in the mid-1980s to $250 billion in 1998, since 1980 the number of U.S. banks has dropped 40 percent.

- **Lower Barriers Between Markets**

    Consolidation is also being driven by the dismantling of regulatory barriers separating banking, insurance, and securities activities. Boundaries between different financial intermediaries are being blurred, and universal (or integrated) banking is becoming the norm. The recent merger of Citigroup (banking) and the Travelers Group (insurance) is the most dramatic example of this trend. An important market incentive for this reduction in barriers has been the disintermediation of bank assets and liabilities by capital market transactions. Commercial paper and corporate bonds have substituted for bank loans, and mutual funds and securities for bank deposits. These forces pressure banks to expand their financial services to cater to all customer needs and preferences. Advances in information and communication technology further facilitate the delivery of a broad array of financial services through one provider. The new world of financial services Technology is revamping the ways in which financial services are produced and delivered. In addition, technology is fundamentally changing the industrial structure of the financial services industry worldwide.

- **Technological Advances**

    Internet and wireless communication technologies are having a profound effect on financial services. These technologies are more than just new distribution channels—they are a completely different way of providing financial services. Using credit scoring and other data mining techniques, for example, providers can create and tailor products over the Internet without much human input and at very low cost. They can better stratify their customer base through analysis of Internet-collected data and allow consumers to build preference profiles online. This not only permits personalization of information and services, it also allows much more personalized pricing of financial services and much more effective identification of credit risks. At the same time, the Internet allows new financial service providers to compete more effectively for customers because it does not distinguish between traditional "bricks and mortar" providers of financial services and those without physical presence. All these forces are delivering large benefits to consumers at the retail and commercial levels.

- **Changes in industry structure**

    These technological advances are changing the face of the financial services industry (**Annexure1**). New types of service providers are entering the market within and across countries, including online banks and brokerages, and so-called

aggregators (which allow consumers to compare financial services). Nonfinancial entities are also entering the market, including telecommunication and utility companies that offer payment and other services through their distribution networks and customer relationships. To reap the benefits of the new technology, and in response to this new entry, banks, insurance companies, and the like are joining in the electronic delivery of financial services - setting up in-house online activities or completely new ventures such as virtual banks.

Thus, the delivery of financial services is moving away from a bricks-and-mortar delivery channel to a multitude of electronic and other channels, with portals and aggregators offering new distribution and advertisement channels for financial services. Vertically integrated financial service companies are growing rapidly and creating synergies by combining brand names, distribution networks, and financial service production. For example, companies associated with portals (America Online, Yahoo, Microsoft) are developing strategic relationships or ownership links with major financial service companies, or each other. At the same time, many major financial institutions (Morgan Lab, Goldman Sachs, Chase, Merrill Lynch, Morgan Stanley) are part owners of promising Internet start-ups. And goods-producing companies are taking advantage of bank distribution networks (Citidollars with a variety of consumer-related companies). These developments are changing the competitive landscape for financial services and will continue to erode the franchise value of existing financial service providers that are inefficient or do not adopt competitive business models.

- **Changes in trading systems**

Driven by advances in communications technology, trading systems are consolidating and going global. Trading is moving toward electronic platforms not tied to any location. (Nasdaq's computers are based in Turnbull, Connecticut, for example, but traders are located around the globe.) New electronic systems have lowered the transaction costs of trading and allow for better price determination because electronic execution and matching techniques imply less chance of market manipulation. The new technology also allows for much easier cross-border trading, and over time for development of inter-market trading systems (ITS).

What Effect have the Changes had?

Technology revolution has following three impacts:

- **Distributed Service Provision:** The services like deposit mobilisation, credit provision, advisory services, insurance sales are becoming more and more dispersed geographically with less and less need for service providers and service users to meet face to face. The advanced telecommunications have enabled operation of widely dispersed ATMs, videoconferencing and Internet operations. Internet-based bill paying, funds transfer and other account access is already a reality in many parts of the world. In case of corporate banking (a segment in which major bank clients

include other banks, large corporations and government agencies), the major applications of Internet technology have been in foreign exchange trading and in payment mechanisms.

- **Management Information Systems:** The technology revolution has enabled financial institutions to organize their data from all branches and activities into real-time accessible form. If such database is constructed and managed properly then it can offer several advantages like: inform each part of the organisation about the activities of the whole, manage risks, arbitrage interest rate and exchange rate differences between locations to reduce the cost of funds and improve the returns, track customer profiles and build customer relationships, and observe and intervene in the activities of far-flung branches.

- **Financial Engineering:** The design of new financial instruments has helped the financial institutions to provide services tailored to the needs of clients. Such instruments include options, futures and swaps that help the clients to hedge against unexpected changes in interest rates, exchange rates, and prices. Financial engineering allows market participants to share risks according to their capacity to bear them thereby improving the market efficiency. Figure 2 summarizes recent developments in financial products and services along two dimensions: ease of commoditization and existence of entry barriers. Entry has been particularly strong in financial services that could be easily unbundled and commoditized and that offered attractive initial margins. These include many nonbanking financial services, including brokerage, trading systems, some retail banking services, and new services such as bill presentment or even payment gateways for business-to-business (B2B) commerce. Because these services are subject to less regulation, new entrants could easily innovate with new technology and could show limited or no earnings without raising supervisory concern. As these new entrants gained market share and consolidated their position, some started to diversify into more highly regulated banking services. An example is E-trade's recent acquisition of a bank to provide the full range of financial services to its retail clients.

Widely available real-time market information lowers the cost of financial services by easing uncertainty, mitigating asymmetric information, and reducing transaction costs associated with paper processing or human error. In addition, new distribution channels have opened up, search costs have fallen for consumers, and new entities (including telecom and utility companies) are providing financial services.

- **Lower Costs for Providing Financial Services**

The technology on which the financial service industry depends has become much cheaper, and in the past 20 years computer power has risen by a factor of 10,000 (World Bank 1999). Similar changes are occurring in telecommunications— in the past 20 years the cost of voice transmission circuits have fallen by a factor of

more than 10,000. Communication costs have fallen sharply in most countries, and the rapidly growing importance of broadband and wireless Internet-based communication systems—such as Bluetooth or wireless application protocol (WAP)—indicate that costs will continue to fall and Internet access will continue to widen. The Internet eliminates many processing steps and labor costs, while avoiding or reducing the fixed costs of branches and related maintenance. A typical customer transaction through a branch or phone call costs about $1, but that transaction costs just $0.02 online (**Figure 3**). Overhead expenses for Internet banks are 1 percent of assets or less compared with 2-3 percent for brick-and-mortar banks.

- **Benefits for Consumers and Corporations**

    The benefits of cheaper financial services will be shared by providers and consumers. With the advent of new types of intermediaries, such as aggregators, consumers can increasingly compare prices for financial services. Aggregators can bring together many suppliers of financial services and coordinate information flows in a rational way. The Internet also allows consumers to more easily combine financial services from different providers. This is done through comparison shopping companies and through portals. Commercial borrowers that undertake B2B transactions and treasury operations will also benefit from lower transaction and search costs and from increasing access to financial services.

Conclusion

    We think that both financial intermediaries and financial markets can be viewed as firms producing financial products and services. With this new perspective, we can better understand the new developments in the finance industry in the internet era. In particular, it helps to explain the proliferation of electronic financial institutions such as virtual banks, automated trading systems and electronic debt markets. It also sheds light on the industrial organisational structure of the finance sector and the competitive strategies of financial organisations. With the development of IT and the internet, financial institutions have to find competitive edges beyond location and physical network. Differentiation of financial products and services is crucial for business success and proprietary development of new services by utilising IT will be the key. The internet also presents challenges to financial institutions trying to fully utilise this public infrastructure. Security and quality concerns should be well addressed and Service Level Agreements can be a contracting tool for financial institutions to ensure proper performance from their service providers while concentrating on the core business of finance services.

    E-finance is not new. For example, the Fedwire used electronic communications system as early as 1918. The Nasdaq market involved the electronic trading of stocks as early as 1971. The difference today is that electronic communication and computation is now used much more widely than before. A large

number of people have access to the internet and this has vastly changed the opportunities for the use of electronic payments systems, the operations of financial services firms and financial markets. We have argued that this change raises a number of important research issues. For example, is the widespread use of paper-based checks efficient? Will the financial services industry be fundamentally changed by the advent of the internet? Why have there been such large differences in changes to market microstructure across different financial markets? We look forward to these and other questions being answered as the emerging field of E- finance develops.

Annexure 1

The New World of Financial Service Providers

Financial services are now offered through a multitude of delivery channels, from traditional brick-and-mortar branches to wireless devices. Six steps can be distinguished in the production and distribution of financial services, though in practice these steps often overlap or are vertically integrated. (see Figure 1).

Access devices (rather than a teller or branch) are becoming many customers' first point of contact with financial services. These devices include personal computers, personal digital assistants (such as Palm Pilots), televisions equipped with Internet access, cellular phones, and other wireless communication devices. These channels will be complemented by low-cost "branches," kiosks (standalone computers connected to bank systems), and other public access devices in supermarkets, convenience stores, and common areas(airports, train stations). *Portals* are becoming the critical link between access devices and financial service companies. Portals offer access to a range of financial service providers, often for free or a fixed price, but generate revenue from fees paid by providers referred through the portal. These include specialized portals developed by financial service companies as well as general portals such as the U.S.-based America Online, Lycos, Yahoo, and Microsoft along with others in emerging markets (Paxnet and Thinkpool in Korea, Terra in Latin America). Portal companies attempt to process and personalize information to capture consumers. Portals are proliferating rapidly, even in emerging markets. Korea, for example, is home to 300 portals, many of which function as a gateway for financial service providers. In addition, customers can access financial service providers through many private networks, and some financial service providers have established their own specialized portals.

Aggregators complement portals, allowing consumers to compare mortgage, insurance, or lending products offered by suppliers of financial services. In addition, quasi-aggregators are emerging that aggregate or display prices of financial products offered by different suppliers or even conduct single or block reverse auctions of mortgage loans or insurance products (as with DollarDEX in Singapore). Finally, other specialized companies are undertaking functions on behalf of larger

banks or insurance companies and developing online techniques to mine data and offer personalized financial products to consumers.

Financial institutions serve as conglomerate providers of financial services that are global brands (Citigroup, Deutsche Bank, Warburg) and as specialized financial services companies. Partly in response to the entry of new competitors and to reap the benefits of new technology, incumbents (banks, large insurance companies) are consolidating around recognized brand names to position themselves in an environment of increased commoditization and electronic delivery. Merrill Lynch and HSBC, for example, recently announced a joint venture in private banking that combines HSBC's network with Merrill Lynch's product range.

And increasingly specialized financial service providers—so-called mono-liners in all mainline financial services areas, from mortgage lending or personal loans to insurance to brokerage to payment services—are establishing online operations.

Financial products are being commoditized or tailored to the needs of customers. Such products are distributed through specialized financial service providers or financial conglomerates. *Enabling companies* support existing financial service providers as well as specialized financial service providers and virtual banks. Specialized software engineering companies such as S1, Checkfree, Sanchez, and System Access provide e-finance system solutions that are completely integrated and permit the rapid adaptation needed in today's world.

Figure 1
The New World of Financial Services
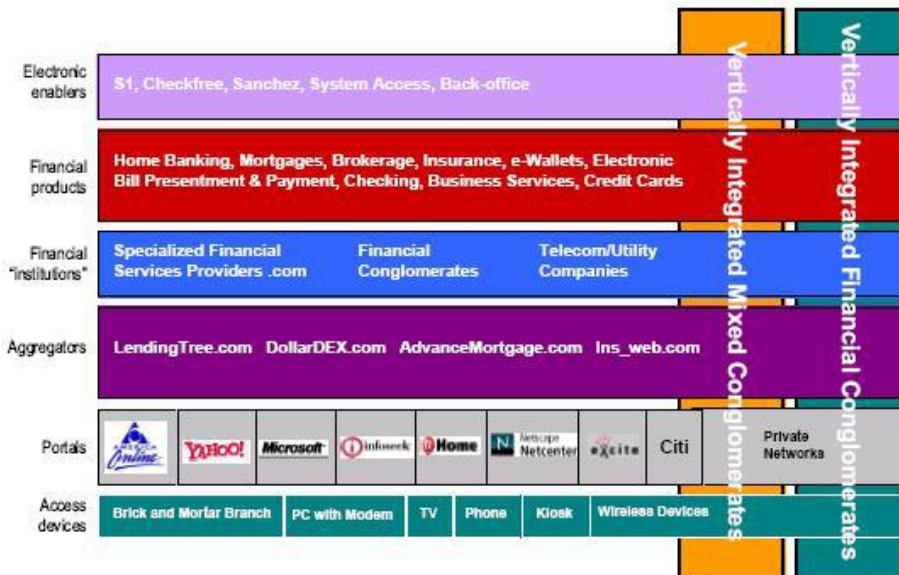
Source: Stijn Claessens, Thomas Glaessner, and Daniela Klingebiel; "Electronic Finance: Reshaping the Financial Landscape Around the World"; Financial Sector Discussion Paper No. 4

Figure 2
Potential Competition and Commoditization in Financial Services
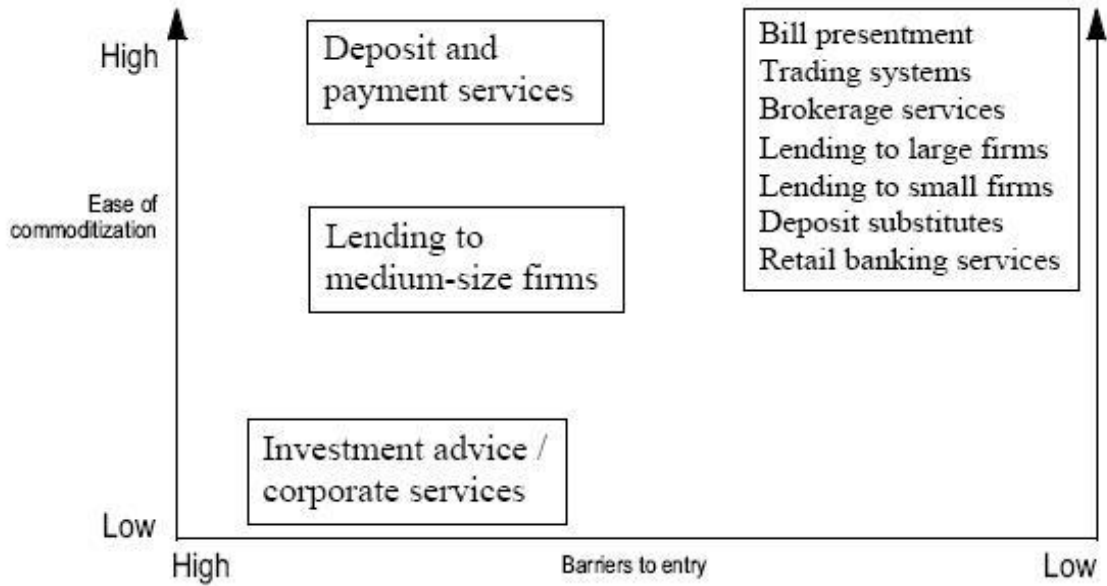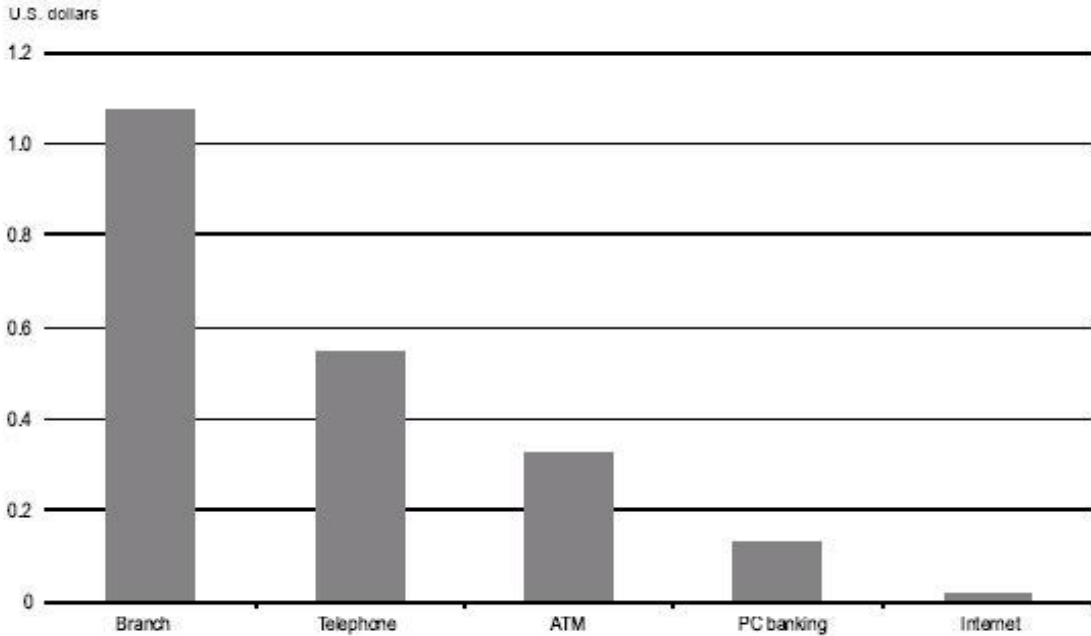

Figure 3
The Internet Slashes the Cost of Transactions
U.S. dollars

Source: Goldman Sachs and Boston Consulting Group.

Source: Stijn Claessens, Thomas Glaessner, and Daniela Klingebiel; "Electronic Finance: Reshaping the Financial Landscape Around the World"; Financial Sector Discussion Paper No. 4

References

⇒   A.K. Aggrawal & D.Mehta, "Indian Banking Services: Customer Friendly Approach", Indian Journal of Accounting, Vol. XXXIV(2) June 2004

⇒   Charles Goldfinger, http://www.gefma.com/electronic_finance.htm (2005)

⇒   Dr Bruce A Calway (2004)," Centre for eFS Position Summary-A Psychology of Electronic Financial Services", Swinburne University of Technology, Lilydale, Australia

⇒   Franklin Allen, James McAndrews, Philip Strahan, E-Finance: An Introduction, Journal of Financial Services Research, ISSN: 0920-8550 (Print) 1573-0735 (Online), August 2002, Volume 22, Issue 1–2, pp 5–27

⇒   Grosse, Robert (2004), The future of global financial services: Global dimensions in business, Oxford: Blackwell Publishing

⇒   I M Pandey, Lee Kam Heng and Ruhani Ali, "Strategic and Financial Attributes of E-commerce: An Empirical Study", The ICFAI Journal of APPLIED FINANCE, Vol. 9, No.2, March 2003

⇒   Jayanth R Varma(2004):"Electronic transperancy",http://www.business-standard.com/search/keysearchresult.php?

⇒   Lihui Lin, Xianjun Geng and Andrew Whinston, "A new perspective to finance and competition and challenges for financial institutions in the internet era"

⇒   Mark Rodrigues, "Strategic IT for Financial Services", E-Business, March 2004

⇒   Reshaping the Financial Landscape Around the World"; Financial Sector Discussion Paper No. 4

⇒   Stijn Claessens, Thomas Glaessner, and Daniela Klingebiel; "Electronic Finance:

⇒   V Srikanth, E-Business, Magazine, "E-Business in Financial Services",ICFAI Press, Sept. 2004 issue

❧❧❧

<div style="border:1px solid black; display:inline-block; padding:10px;">

4

</div>

Impact of E-Commerce on the Revenues of Indian Railways

Dr. Naresh Kumar[*]
Rakesh Kumar Bagotia[**]
Renu Sharma[***]

Introduction

E-commerce is widely considered the buying and selling of products over the internet, but any transaction that is completed solely through electronic measures can be considered e-commerce. E-Commerce is a concept covering any form of business transactions or information exchange executed using information and communication technology between companies and public administration. The following types of e-commerce are as follows:

- **B2B E-Commerce:** Companies doing business with each other such as manufacturers selling to distributors and wholesalers selling to retailers. Pricing is based on quantity of order and is often negotiable.

- **B2C E-Commerce:** Businesses selling to the general public typically through cataloes utilizing shopping cart software. By dollar volume, B2B takes the prize, however B2C is really what the average Joe has in mind with regards to ecommerce as a whole. for example indiatimes.com.

[*]   Associate Professor, Department of EAFM, University of Rajasthan, Jaipur, Rajasthan, India.
[**]   Research Scholar, Department of EAFM, University of Rajasthan, Jaipur, Rajasthan, India.
[***]   Research Scholar, Department of EAFM, University of Rajasthan, Jaipur, Rajasthan, India.

- **C2C E-Commerce:** There are many sites offering free classifieds, auctions, and forums where individuals can buy and sell thanks to online payment systems like PayPal where people can send and receive money online with ease. eBay's auction service is a great example of where customer-to customer transactions take place every day.
- **Others:** G2G (Government-to-Government), G2E (Government-to-Employee), G2B (Government-to-Business), B2G (Business-to-Government).

Figure: Key Stakeholders in the E-Commerce
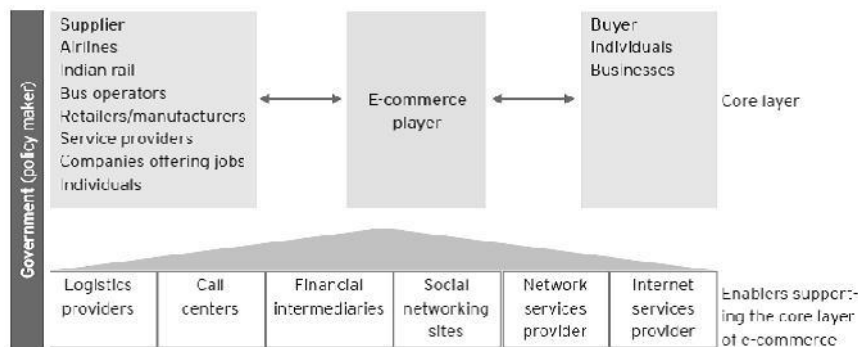
Source: Re-Birth of E-commerce in India

Review of Literature

- **Shahriari, Gheiji (2015)**, in paper " E- Commerce and its impact on Global trends and Market" concluded that E-commerce has an impact on three major stakeholders, namely society, organizations and customers. There are a number of advantages, which include cost savings, increased efficiency, customization and global marketplaces.
- **Bhardwaj and Jain (2015)**, in paper "A study of E-commerce with special reference to Indian Railways" concluded that E-Commerce has proved its self as a boon in Indian Railway and day is not very far when people will think and tickets will be booked.
- **Sunil and Anil (2014) ,** in paper "A comparative study of Indian and worldwide railways" concluded that India has gained first position as far as travelled passengers per km is concerned but is far behind in the field of latest technology used by other countries. Vision 2020 proposed by Ministry of Railways, India focuses only on the adoption of technology and HST, but we still lack behind in the Research and Development in Infrastructure.
- **Chanana and Goele (2012),** in paper "Future of E-Commerce in India" concluded that the future of e-commerce in India would be bright in the upcoming years. There are various segments that would grow in the future like: Travel and Tourism, electronic appliances, hardware products and apparel.

Objectives

- To highlight the present status and growth of E-Commerce In India
- To assess the impact of E-Commerce on the Revenues of Indian Railways
- To study the challenges of E-commerce in India.

Research Methodology

The paper has been written on the basis of secondary data. The secondary data were collected from published books, journals, research papers, magazines, daily newspaper, internet and official statistical documents. The study is qualitative in nature.

Current Status of E-Commerce and Railways in India

- More than 65 per cent of the earnings of Indian Railways come from freight and around 25 per cent from passengers.
- The E-Commerce market in India has enjoyed phenomenal growth of almost 50% in the last five years.
- Gross revenue trends of Indian Railways
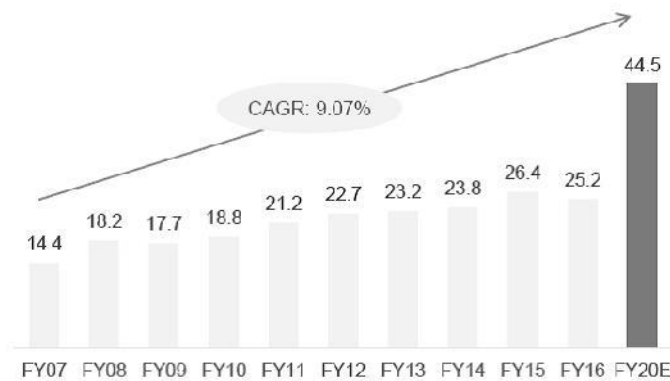
Source: IBEF Dec 2016

Indian Railways generated USD16.9 billion in earnings from commodity freight traffic during FY16.
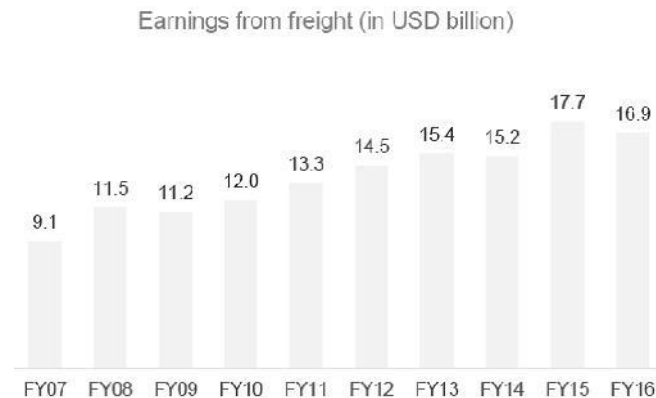
Source: IBEF Dec 2016

Revenues from the passenger segment expanded at a CAGR of 6.9 per cent, with the total revenue earnings in FY16 totaling to around USD6.9 billion

Source: IBEF Dec 2016

E-commerce size in India.

Figure 2: E-commerce size (in $) In India
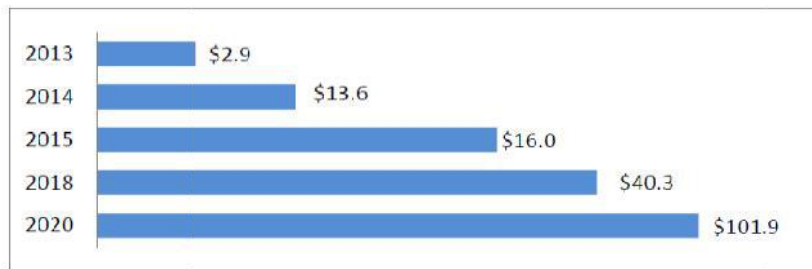
Impact of E-commerce on the Revenues of Indian Railways

With the Indian Railway Catering and Tourism Corporation (IRCTC) pushing electronic booking of tickets and scores of online travel portals entering the business, the share of tickets sold online in the total ticket revenues of the railways has doubled here are about 7.9 million active online buyers, of which 80 per cent buy travel products. The entry of travel portals like Cleartrip, Ezeego1 and Yatra into the fray has given customers more options, besides enhancing the customer profile. These portals have tied up with IRCTCand customers can buy railway tickets through these sites, too. More than 65 per cent of the earnings of Indian Railways comes from freight. Indian Railways, the world's fourth largest network, is looking to cash in on India's booming $4 billion e-commerce industry to boost revenue from its freight operations.

Challenges of E-commerce

The major challenges faced by the sellers and the buyer which carrying out business transactions through internet are as follows:

- Private and public corporation is not involved jointly to grow the business of e-commerce. Private and public joint initiative is needed to develop the

ecommerce business. Joint initiatives bring credibility inside people, which is needed for flourishing the ecommerce business.

- There is a lack of system security, reliability, standards, and some communication protocol. Customer loses their money if the website of ecommerce site is hacked. Most common problem of e-commerce website is not having enough cyber security.

- Financial institutions and intermediaries: Thus far, financial institutions and banks in developing countries are hesitant to take an active role in promoting e-commerce. However, merchants need the involvement of banks to broaden the reach and appeal of ecommerce and to help prevent fraud and potential losses attributable to credit card fraud. Butbeyond the credit card approach, banks and other financial service intermediaries are challenged to develop alternative modalities for secure and reliable online transactions in environments where credit cards are not commonplace (Anupam-2011).

- In developing countries there is a culture of buying product by negotiating price with seller, which is not easily possible in case of e-commerce in developing countries because of lack of infrastructure facility.

- One of the biggest challenges is the cutting down the price of internet. Authorities are trying to keep low the price of bandwidth low. But the high cost of spreading networks and operating expenses hinder to keep price low for internet.

- Trust is the most important factor for the use of the electronic settlements. Traditional paper about based rules and regulations may create uncertainties the validity and legality of e-commerce transactions. Modern laws adopted and impartiality implemented in the electronic transactions form the basis of trust in the developed world. Where legal and judicial systems are not developed ecommerce based transactions are at a disadvantage because of lack of security whether real or perceived. In many developing countries even today cash on delivery is the most accepted system, even cheques and credit cards are not readily accepted (Roni Bhowmik-2012).

- New methods for conducting transactions, newinstruments, and new service providers will requirelegal definition, recognition, and permission. For example, it will be essential to define an electronic signature and give it the same legal status as the handwritten signature. Existing legal definitions and permissions such as the legal definition of a bank and the concept of a national border—will also need to be rethought

Conclusion

The e-commerce industry will be a leader with popularity in electronic business world in the upcoming years. The e-commerce revolution has fundamentally changed

the business of transaction by giving new opportunities and breaking borders easily. The lifeline of transportation in India, the railway network, jumped on to the ecommerce bandwagon. While the passenger fares for travel in rail are among the lowest globally, the freight rates, on the other hand, are among the highest. This has led to a sharp decline in the share of railways in the total transportation of freight traffic. So, there is a need that railway should reconsider its fare policy so as to increase its freight traffic.

References

⇒　　Abdul GaffarKhan ,Electronic Commerce: A Study on Benefits and Challenges in an Emerging Economy, Global Journal of Management and Business Research: In Economics and Commerce, Online ISSN: 2249-4588 & Print ISSN: 0975-5853, Volume 16 Issue 1 Version 1.0 Year 2016

⇒　　D. K. Gangeshwer,E-Commerce or Internet Marketing: A Business Review from Indian Context, International Journal of u- and e- Service, Science and Technology, Vol.6, No.6 (2013), pp.187-194

⇒　　International Journal of Computing & Business Research ,ISSN (Online): 2229-6166.

⇒　　Nisha Chanana, Sangeeta Goele, E- Commerce and its impact on Global trends and Market.

⇒　　Railways Ibef (2016), https://www.ibef.org/download/Railways-December-20161.pdf

⇒　　Shahrzad Shahriari,, Mohammadreza Shahriari, Saeid gheiji , E-commerce and its impact on global trends and market , International journal of research -Granthaalayah, ISSN-　　　　　　2350-0530(O)　　　　　ISSN-　　　　　2394-3629(P) https://www.researchgate.net/publication/299512619_ECOMMERCE_AND_IT_IMPAC TS_ON_GLOBAL_TREND_AND_MARKET.

⇒　　Shine Jacob (2016), E-commerce turns to railways to reach 500 million users, http://www.business-standard.com/article/companies/e-commerce-turns-to-railways-to-reach-500-million-users-116102900012_1.html.

⇒　　Smrita jain, Sachin Bhardwaj, Vibhor jain, A study of E-commerce with special reference to Indian Railways, 784 International Journal in Management and Social Science (Impact Factor- 4.358), Vol.03 Issue-12 (December, 2015) ISSN: 2321-1784.

⇒　　Somesh Jha (2016), Railways eye e-commerce to shore up freight revenue, http://www.thehindu.com/business/Railways-eye-e-commerce-to-shore-up-freight-revenue/article14016022.ece

⇒　　Sunil and Anil (2014), A comparative study of Indian and worldwide railways, Research gate, https://www.researchgate.net/publication/262672727.

❧❧❧

$\boxed{\textbf{5}}$

A Study and Impact of Goods and Service Tax on E-Commerce in India

Dr. Manisha Dave[*]

Introduction

Electronic commerce or EC is trading of goods and services, or the transmitting of funds or data, over an electronic network, basically the internet. E commerce operator/ marketplace (e.g. Flip kart, Myntra, Limeroad etc) an entity which owns, operates or manages digital or electronic facility or platform for E commerce. Inventory based model of E-commerce means an activity where the inventory of goods and services is owned by E commerce entity and sold to the consumers directly. In the market based model an entity provides an information technology platform on a digital & electronic network to act as a facilitator between buyer and seller. The Goods and Services Tax (GST) came into effect on 1st July 2017 and it was passed in the parliament on 29th March 2017. It is one indirect for the entire country. GST is a consumption-based tax that has replaced several taxes and levies which included service tax, central excise duty, central sales tax, additional customs duty, surcharges, octroi and state level value added tax.

E-Commerce in India is growing faster and India is the second largest market for e-commerce. The size of e commerce will rise to \$37 billion by the year 2020. As almost each and every person of India is using phones, tablets and smart phones, e-

---

[*] Assistant Professor (Senior Scale), Government College, Jodhpur Rajasthan, India.

commerce business is developing faster. India has more than 100 million users and its business with US has doubled since last year. They are also facing litigation owing to their innovative business models. The Government has introduced GST to solve tax problems in E commerce and to check tax evasion.

Objectives of the Study

- To study the impact of GST on e commerce
- To compare the position of e commerce before and after GST.

Research Methodology

In this paper secondary data are used. . Data have been collected through newspapers, internet, newspaper articles and government documents.

E Commerce Development in India

The E commerce business in India in future will form the largest part of Indian economy. Up to 2020 the value will increase to approximately USD 100 billion. In 2014, the number of persons using e-commerce in India stood at around 280 million and it was estimated that the number would rise to around 640million by 2019.An increase of almost 70 million internet users in a year is very significant. The rise of cell phone users is also expected to touch 457 million by 2019. Comparing with this the projected growth, the E commerce in India by the year 2020 is expected to touch USD 100 billion.

GST for Growth of Economy

The government of India has undertaken a big taxation reform by introducing GST which is expected to enhance the growth of E commerce.GST is single destination based indirect tax that is applicable across all states on the supply of goods and services. The operational efficiency of e-commerce industry in India has increased all over India because GST act is transparent and simple.. There was problem of double taxation prior to implementation of GST Act, but after execution of the act, this problem has been eliminated.

Procedure for Getting Registered as Tax Collector

The efficiency of supply chain has been improved and the procedure for getting registered as tax Collector is simplified. It is compulsory to get registered under GST if a person has turnover more than the defined limits. E commerce operators are also required to get themselves registered under GST Act compulsorily. Registration can be done only through online mode.

The important documents required while getting registered as Tax Deductor include:

- Applicant has valid PAN or TAN.
- Applicant must have a valid mobile number.
- Applicant must have valid E-mail ID.

- Applicant must have the prescribed documents and information on all mandatory fields as required for registration.
- There must be a place of business of the applicant.
- There must be a authorised signatory of the applicant with the valid details.

The registration application of the applicant will then be processed and approved by the relevant Tax Officer and then he will be issued the registration certificate and GSTIN.

The tax collector(e commerce operator) has to register separately in each state and appoint a person in each state/UT who will be liable to pay GST.

Positive Impact of GST on E Commerce

- GST has replaced 17 indirect taxes which has reduced the cost and provided a common market.
- Due to GST there are uniform tax rates for each product, bringing offline sellers to the same level in terms of costing and pricing.
- Tax collection at source will be handed over as collection towards GST to the government.
- E commerce is used effectively in all the states.
- Inventory costs has fallen down and there is reduction in number of warehouses.
- Unregistered dealers will be removed out of e commerce space.

Negative Impact of GST on E-Commerce

- There is dual control on every business by both central and state government.
- States have no authority to change the tax rates.
- The profits of retail business houses have gone down as their taxes have gone up.
- Small business houses are finding difficulty in using the online connectivity with GST network.
- Service sector is also facing problems because they are to register themselves in every state where they are catering services.
- Huge number of invoices has to be uploaded in the software.
- There should be matching of the details of supplies and the amount collected during a calendar month and furnished by every operator in his statement with the details of outward supplies furnished by the concerned seller in his valid return file for the same calendar month or any preceding calendar month.
- The supplier would be liable to pay tax along with interest if they do not match within a reasonable time.
- Online market places will face the issue of blocked working capital.

Conclusion

In the long run GST will have a positive impact on E Commerce sector . It is expected that by the 2024, e commerce industry will go to become $56millionin India and it will be 6.5% of the total retail market. The Business Concerns and the consumers will get high benefits. . It will be easier for the supplier to supply goods in other states. Burden of tax collection and payment to the government is removed from the consumers and suppliers through E Commerce and put squarely on the shoulders of the E Commerce Operators.

References

⇒ Agarwal A. (2011), India's Goods and Services Tax – A Primer. STCI Primary Dealer Ltd.

⇒ Cbsc.gov.in

⇒ Gst.gov.in

⇒ Progress report: taxation and electronic commerce" by OECD , February 2013

⇒ Raj Kumar, Comparison between Goods and Services Tax and Current Taxation System A Brief Study, International Journal of Allied Practice, Research and Review, Vol. III, Issue IV, 2016, PP 09-16, g) Research department, The institute of Cost Accountants of India, An insight of GST in india, Volume I, October, 2015, PP 1-227

⇒ www.gstindia.com

⇒ www.wikipedia.com.

❧❧❧

$$\boxed{6}$$

Factors that Influences or an Obstacle for the Online Shopping In Rural Areas in India

Amita Chourasiya[*]

Introduction

The internet is a significant technology that is gradually affecting the communication and commerce worldwide. Thus it is starting up a new era which also includes the rural areas. When we talk about rural consumers they are more attracted or fascinated towards online shopping as it bridges the gap between the urban-suburban, rural- urban areas, for example, development of the microchip and its application to home computers. Although internet use has significant implications for rural consumers, research that focuses on internet use in rural areas is limited. As such, rural consumer's use of the internet is important to study. Online shopping may become increasingly viable for rural consumers, for those things which are not easily available for example electronic gadgets and etc. When we talk about the common behavior of a rural consumer who is at least educated to handle the computer are more likely to purchase clothes and other electronic gadgets through online shopping, even when we talk about rural shopkeepers they had also started to order products online to bridge the gap between rural and the urban. There are plenty of examples in this field who started up in bringing e-commerce to rural India. Although over the past 5 years e-commerce has grown unprecedentedly in India, it hasn't touched rural lives in any big way. Experts believe that the real e commerce boom will come with increased participation of rural consumers.

[*]   Research Scholar, Amity University, Jaipur, Rajasthan, India.

[~]   *The paper has been presented in "***International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context****" Organized by* **Inspira Research Association (IRA),** *Jaipur* **& LBS PG College,** *Jaipur, Rajasthan, India.* **02-03 February, 2018.**

While unicorns like flipkart, snapdeal and amazon have been trying to get inroads in rural markets, some e-commerce start-ups like i-pay, storeking and inthree solely focus on rural markets. Accessibility and lack of options with organized retail have driven e-commerce in India to a large extent. As of now, rural India is completely deprived of organizedretail, hence success of e –commerce in rural areas is more evident. However, supply chain and last mile connectivity are some major majorhurdles. with government efforts to connect every village with broadband connectivity, future of e- commerce in rural India looks very promising. In future it would be interesting to see how these players fare up with all other regions.

Rural online shopping is the best platform for upcoming future projects in rural areas. This is the study to know the perception of rural people about online shopping, if we talk about online shopping the main focus is on those who are that much educated to do online shopping. thus we will be focusing that group of people who will be having a little knowledge about computers. There are many such startups that have shared their stories about their objective to have a successful future in rural e commerce if we talk about metro cities who might have left the average consumer jaded with the number of different e commerce, hyper local and food delivery startups. it is rather refreshing and interesting to see startups from cities like Tumkur venturing into the e-commerce and on-line market segment.

Livegreen India is a Tumkur based online marketplace for home decor, furnishing, accessories, gardening tools, footwear, and even waste management tools. Livegreen isn't just a product selling platform but a one stop solution for all sustainability related products and services. Thus here they are mainly focusing on the sustainable products for the rural people , and going ecofriendly, if we talk about some of the people like 25% of the people of India they believe in go green concept, even if we talk about some of the solar water heater companies nobody knows how many such companies actually exists in the market scenario.

The typical internet user of twentieth century is young, professional, and affluent with higher levels of income and higher education. They value time more than money which automatically makes the working population and dual-income or single parent households with time constraints better candidates to be targeted by non- store retailers. Recent studies has showed that income and purchasing power have consistently been found to effect consumers propensity to shift from brick and mortar shops to virtual shops. many consumers with longer histories of internet usage are being found, which also effect online shopping potential. Consumers with longer histories of internet usage educated and equipped with better skills and perceptions of the web environment have significantly higher intensities of online shopping experiences and are better candidates to be captured in web world.

As bellman et. al.(1999) mention, demographics are not so important in determining online purchasing potential. Whether the consumer has a wired lifestyle and the time constraints the person has are much more influential. risk taking propensity is also a powerful factor. E-shoppers have higher risk taking tendencies. Consumers with high levels of privacy and security concerns have lower purchasing rates in online markets but they balance this characteristic with their quest for making use of the information advantage of the environment. it has been seen that many of the consumer they just add the products into the cart and doesn't go for further purchase of the product , thus it is very important to know that why there is reluctance among the consumers while shopping or further it can also happen while during shopping there can be many such problems that a consumer faces while doing online shopping thus it is important to know what are the reasons that consumers abandon their shopping carts and stop the purchasing process in the middle of online shopping. such attempts can help to understand how to turn surfers into integrators, purchasers, and finally, repeat purchases by making them enter into continuous interaction with this environment.

Common reasons for purchase reluctance are the difficulties and costs of distance shipping, getting the delivery at proper time, transactional security, especially when we talk about rural consumers they are more scared to share their details about their bank accounts, thus it is quite possible the main factor of showing the reluctance for on line shopping.

Objective and Methodology

The primary aim of this research to investigate,analyze various tactics and methods which can be used to see a growth in rural sector for online shopping as there is lot of scope in rural areas. As we talk about the rural economy it is competitively very high ascompared to the urban sector as the people of rural sector earlier had a simple life as compared to urban people thus the main focus here to increase the purchasing power of the rural people who have little knowledge about online shopping and educated, as India is developing day by day except few areas or villages every other regions are collaborating towards education because still in some places people are not able to afford education. The primary aim will be accomplished by achieving several objectives which are outlined below:

- To identify the critical challenges and issues confronting rural online marketing
- To identify the factors which to influence the rural online marketing.
- To identify the perception of rural people for online shopping.

Sampling

Number of sample=100

Sampling = Convenience sampling

Exploratory method: exploratory examination is exploration directed for an issue that has not been unmistakably characterized. It regularly happens before we know enough to make calculated refinements or set a logical relationship. Exploratory examination decides the best research outline, information gathering technique and choice of subjects. It ought to reach complete determinations just with great alert. Given its major nature, exploratory research regularly presumes that an apparent issue does not really exist.

Tools of Analysis

Questionnaire: a questionnaire was designed to fulfil the objectives i.e., to know the factors which influence online shopping in rural markets and the challenges it faces. Focus group interviews: through interview the perception of the rural people is observed.

Data Collection

- **Sample Unit**
  - Workingpeople(including men and women), basically working people who have general knowledge about computers.
  - college students
- **Sample Size**
  - Working people: 50%
  - College students: 50%
- **Area Population**
  - Neemrana   50
  - Behror   50

Data Collection Method

- **Primary Data**

  It will be collected with the help of a self-administered questionnaire. This questionnaire aims to gather information related to various Branded products.

- **Questionnaire Design**

  As the questionnaire is self-administeredone, the survey is kept simple and user friendly. Words used in questionnaire are readily understandable to all respondent. Also technical jargons are avoided to ensure that there is no confusion to respondents.

- **Focus Group Interviews**

  People who are businessmen as well as service class people are interviewed to know their perception for online shopping.

- **Secondary Data**

  It will be collected with the help of books, research papers, magazines, newspapers, journals, internet, etc.

Demographics Profile and Respondents

Details	Frequency	Percentage (%)
Male	50	50
Female	50	50
Age(between 20-30)	100	100

Here, the demographic details are showing the brief details about the sample which I have taken for my research report.

Review of Literature

The literature has borrowed framework & concepts from the mainstream marketing discipline, which has moved the growth of the topic as an independent field of academic investigation. There is an emergent need to build a distinct perspective and a good sound theoretical base for online rural marketing. The present topic on online rural marketing has been a major concern by marketers, as the rural economy has shown an unparalleled growth; companies that are doing online marketing should follow some new reliable strategies for the rural customers. The current literature review is thus tells about the basic rural customers behavior towards online shopping, and factors influencing the rural customers towards online shopping and the main problems which are being faced by rural people and all this we come to know from various research studies which were being conducted by various other researches .

It has been surveyed that only 44% of the sample size were aware of online marketing but they don't use it and 35% were not even aware of it , this research was conducted by Hardikkumar V. Desai (Bsc.,MCA) and Mr. Marolia Jamshed R(M.Com, B.Com) @IJARCET. Thus many such challenges were found in this sector like the lack of touch and feel factor of the product, the fear of carrying the money transaction over the internet, lack of proper courier services in villages, the lack of support of credit card facility. Through these findings they also has come to various suggestions i.e. knowledge to the consumers, transparency of the pricing policy, widen the scope and the area of operations, clarify about the various payment options. When we talk about behavior term is a famous saying by (Schiffman, et,al,1978). Across the world , irrespective of the development status of the economy, urban consumer decisions plans are different from the rural ones(park, C. Whan & Richard J, Lutz, 1982)

Data Analysis

In order to achieve the objectives of the research a structured questionnaire was designed and supplied to respondents for collecting the primary data. The data was collected from various respondents of different sections including employment, homemaker, agriculture, business etc. There were 100 complete and usable questionnaire collected, tabulated and analyzed for the purpose of the study. The collected data was analyzed for the purpose of the study. Results shows that 80% of the respondents have online exposure and the rest 20% does not have exposure,

most of the respondents (73%) are male and the remaining are female (27%). Half of the respondents they had a family, and half of them are of age group of above 20 years. An interesting fact is that most of them are educated because here we are targeting those people who are educated and have some knowledge about computers.

Online Shopping Exposure

- below 20
- above 20
- above 30
- >30

Inferences

Here the highest online exposure is seen in the section of above 20 years

Items which are taken Online

- items which are taken online
- household items
- garments
- electronic gadgets
- none
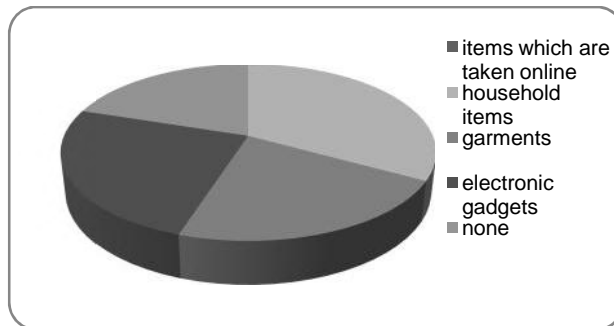
Inferences

Here through this pie chart it is very clear that household items are purchased more i.e. most of the household goods are purchased by the rural consumers.

Opinion for Online Shopping

- Opinion for online shopping
- good
- very good
- bad
- very bad
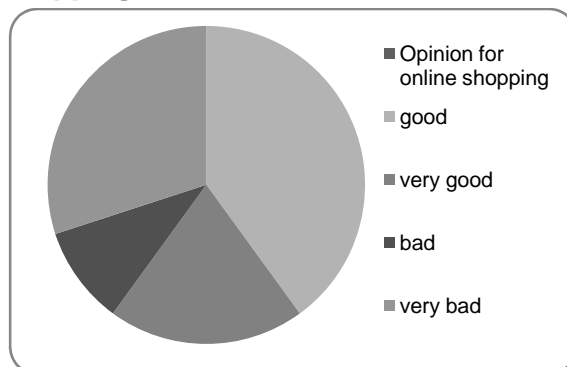
Inferences

Here the respondents showed good opinion for online shopping.

Online shopping v/s Traditional shopping
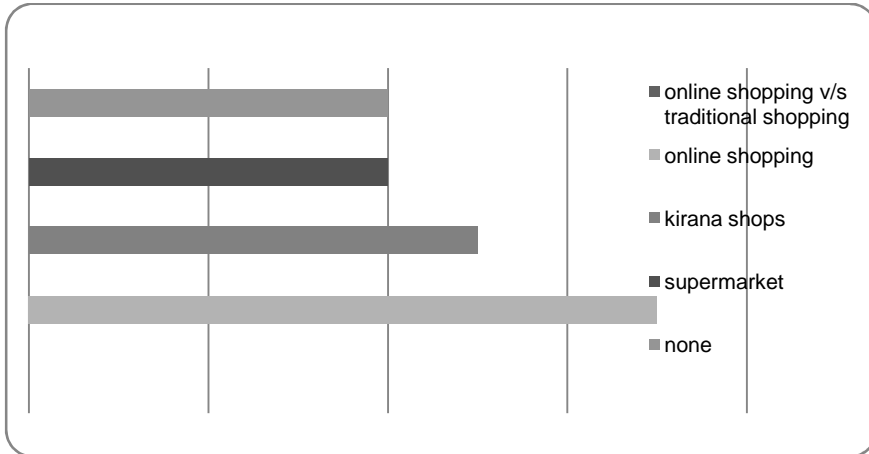
Inferences

Here online shopping has showed an improvement as compared to kirana shops

Prefer to buy online
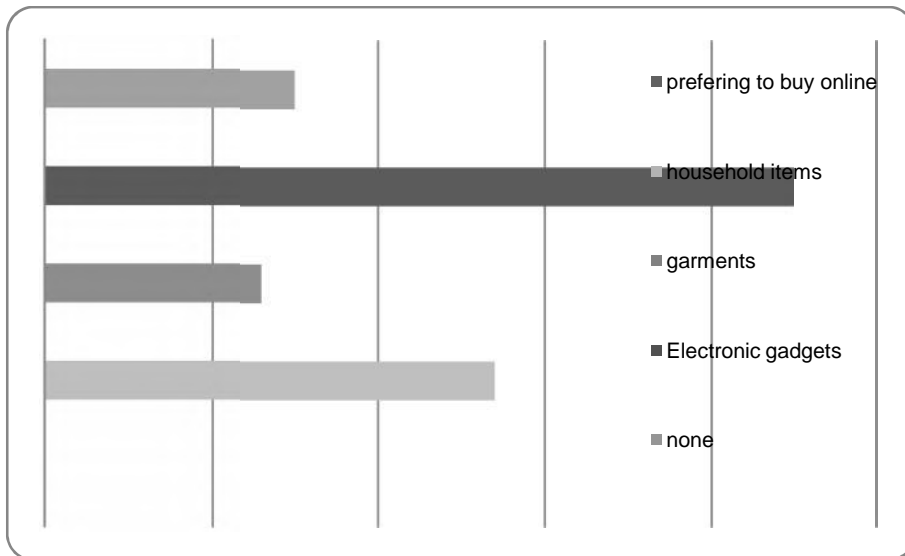
Inferences

Mostly customers in rural areas are attracted to buy electronic gadgets through online media.

Using online platform for shopping
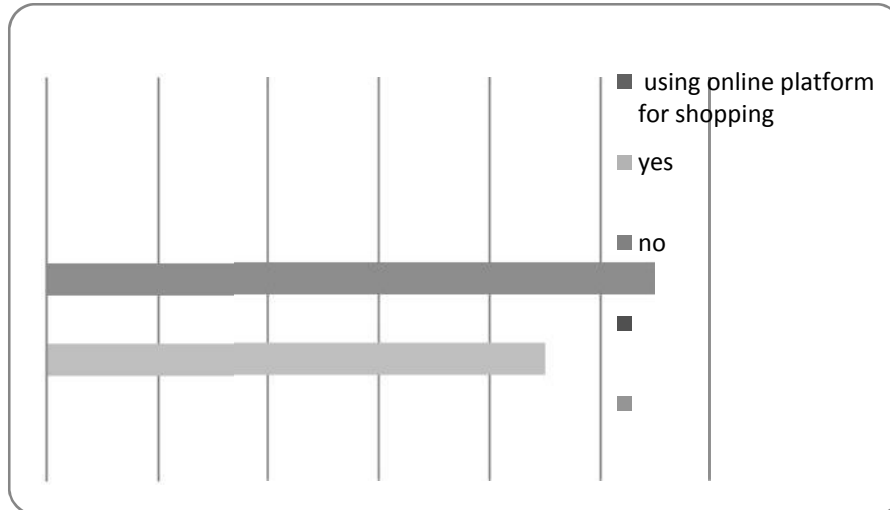
Inferences

Still we can see everybody is still not using the online platform.

Focus Group Interviews

50 respondents were taken for the interview and were asked about the perception for online shopping they said online shopping is the best way to shop nowadays even they are happy to use such apps online to purchase their items as well as most of them are using it for ordering their demands for goods and services frequently .when they were asked about the problems they are facing to shop online they only said that sometimes they are facing problem in delivery of the product in some of the areas. Sometimes the orders gets cancelled due to the address. Some said that they doesn't feel safe to shop online and mostly found in above 30 category. thus some found it very handy to shop online and are very happy with this kind of development in their areas.

When some of the whole sellers and shopkeepers were interviewed even they are looking forward in ordering their material online in bulk, they said that nowadays it has become very easy to order online and they are happy as compared to traditional shopping even some of the customers who doesn't have any knowledge about internet even they are coming to them to ask them to shop online for their family relatives and friends or for their own use.

Findings

Thus we can say that the factors which are effecting the rural online shopping are the security factors which has to be solved that fear among the consumers to shop online has to be removed, but the good part is only a few section of people are having this fear to shop online otherwise most of the consumers are shopping online

as we compare to their age only people who are above 30 years have that issue and the second most common problem which they are facing is delivery at the exact place for which most of the companies has already started working, due to remote areas many companies like flipkart , amazon are facing the transportation problems. As well as the cod fantasy among the rural consumers has become the problem for the e-commerce companies. The unavailability of the third party logistics has made the e-commerce companies to tie up with pan India which provides the special courier service but due to this it doesn't allow companies to accept COD. Many of the people in rural India does not have the bank cards and those who have they are afraid to make any transactions through that thus there are technological as well as operational challenges for those who are living in rural areas.

Factors that are Influencing Online Shopping

- To be developed as urban areas.
- To get easier and handy procedure to buy online.
- Education has become the primary factor to create awareness among the people.
- The craze among people to be like urban modern people.
- The affect in their lifestyle.

Conclusion

The results shows that most of the respondents have online shopping exposure majority of the respondents are male and mostly are educated and have the basic knowledge about computers and are in the age of 20 and above and are having the graduating degree even though they are located in rural area. Out of the total respondents most of them are employee and businessman. Here we are mainly focusing on the factors which are influencing as well as proving an obstacle for the online shopping in rural areas. After conducting this survey it was very clear that the upcoming era or the generation is more focused in development of their own living standards or their own lifestyle. Only some factors which are actually becoming the obstruction mostly the delivery part and the safety while doing online shopping. The study reveals that the low price offered by the online companies, compared to the retail market price is the most positively influencing factor towards online shopping. Purchase through Online helps to save time. A considering number of respondents are impacted with this point of interest. While considering the disheartening components, it is found that provincial buyers like to inspect the items, physically before making any buy. The points of interest given in the destinations are insufficient for them to make the choice to purchase. They were likewise all advertising exercises are confined by the organizations in view of the conduct of buyers. How they think, and respond to different advertising systems does make a difference on the execution and achievement of the organizations. For the most part rustic customers are aloof in

buy choices. So by leading profound study and examination, advertisers can embrace proper promoting systems to pull in new customers and hold existing buyers. Tastes and conduct are changing inside no time, so persistent learn about the shopper conduct is essential and supportive for organizations to receive appropriate showcasing methodologies to draw in them towards the business is definitely not up to the desire of the country shoppers. The item is not conveying to the majority of the country ranges.

References

⇒ Amit Saha. (n.d.). A Study on "The impact of online shopping upon retail trade business" . IOSR Journal of Business and Management , 74-78.

⇒ Cheema, U. (n.d.). The trend of online shopping in 21 century:Impact of enjoyment of TAM model. Asian Journal of Empirical Research , 131-141 .

⇒ Qinghe, Y. (2014, janurary). The online shopping change the retail business model: A survey of the people use online shopping in China. IOSR Journal of Business and Management, 15(5), 77-110.

⇒ S, R. (2014, Janurary). Assessing the impact of online retailing on mall shoppers and internet users. International Interdisciplinary Research Journa, 2(1), 172-177.

⇒ Suki, N. M. (2013). Consumer Online Shopping Behavior: The Effect of Internet Marketing Environment, Product Characteristics, Familiarity and Confidence, and Promotional Offer. International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, 7(3), 814-819.

❧❧❧

<div style="border:1px solid black; display:inline-block; padding:10px;">7</div>

New Emerging Trends and Developments in Digital Banking in Uttar Pradesh

Sandeep Saxena[*]

Introduction

Indian banking system is rapidly changing and reforming and makes even itself to the new competitive business environment. Indian Banking Industry is in the centre of the Information Technology Revolution and its changes have put forth the competition among the Banks worldwide.

In 1969, a great change was happen in the Financial Sector of India, when fourteen Banks were nationalized by the center. It is a pride for India to mention that during the economic meltdown condition in 2008-09, our Indian Bank system remained unaffected and stood strong . This was very shocking to know that few Banks of the developed countries crumbled down but Indian Bank system stood firm and witnessed many positive progress in this service industry. The Banking sector of India has faced various reforms itself to the new competitive business era. Technology has come as a boon to the customers of banking sectors. With the use of Technology , the Bank branches becomes only one of the many channels that are easily accessible to serve customers by performing day to day banking transactions. Today, we are having a well developed banking system with different types of banks –

[*]   Research Scholar, Rama University, Kanpur, U.P., India.

public sector banks, foreign banks, private sector banks – both old and new generation, regional rural banks and co-operative banks with the Reserve Bank of India as the Head of the system.

In the field of banking, there has been an unprecedented growth and diversification of banking industry has been so stupendous that it has no parallel in the annals of banking anywhere in the world. There has been considerable diversification and innovation in the business of major commercial banks. Some of them have engaged in the areas of consumer credit, credit cards, merchant banking, leasing, mutual funds etc.

Some financial institutions and banks have already set up subsidiaries for mutual funds merchant banking and leasing and many more are in the process of doing so. Few banks have commenced factoring business. The banks were quickly responded to the reforming and changes in the industry; especially the new era banks. The continuance of the trend has re-defined and re-engineered the banking operations as whole with more customization through leveraging technology. As technology makes banking more convenient, customers can access banking services and do banking transactions any time and from anywhere. The importance of physical branches is decreasing regularly.

Literature Review

Garg (1994) studied that Indian scheduled commercial banks have achieved remarkable progress in last two decades under study, particularly in branch expansion in rural areas, deposits mobilization and credit deployment to priority sector and small borrowers. Banking sector reforms is an integral part of the Indian economic. The reform was involved promotion of market-based system of credit allocation, the liberalization of interest rates, enhancing competition, and efficiency of the regulatory and supervisory framework (Jegede et al. 2004).

Financial reforms were designed to enable the banking industry development the required resilience to support the economic development of a nation by proficiently performing its function of financial intermediation (Lemo, 2005). Biresh et al. (2011) examined the performance of banks in India in post transition period and concluded that the positive trend of the reform process is visible through the increase in technical efficiency over the post transition period. B.Ananda Raj (2016) concluded that trace the utility of technology in Banking with special reference to India.

The banking sector in India is progressing with the increased growth in customer base, due to the newly improved and innovative facilities offered by banks. The economic growth of the country is an indicator for the growth of the banking sector. The Indian economy is projected to grow at a rate of around 5-6 percent the country's banking industry is expected to reflect this growth. Dr. Karuna Gupta, Mr.

Ravindra Arya, Mr. Vineet Goel(2017) explain that The Banking sector is now witnessing a new waave of evolution with innovations in the fintech space, espically with the proliferation of prepaid wallets. Indian Banking Industry has shown considerable changes during the return period. The second generation of Indian banking system will play a crucial role in further strengthening the banking system. Indian banking system will grow in size and complexity while acting as an important agent of economic growth and intermingling different segments of the financial sector. It is sure that the future of banking sector will offer more sophisticated services to the customers with the continuous process innovations. Finally the banking sector will need to master a creative model of business by building management and customer services. Banks should contribute intensive efforts to render better services to their customer. Nationalized and commercial banks should follow the Recent trends and to get advantage of opportunities in this changing scenario of banking system.

Research Objectives
- To study the recent trends of digital banking in India.
- To study the new challenges faced by digital banking.
- To study the utility of green banking.

Research Methodologies

- **Sampling**

It was a descriptive study therefore, survey was considered appropriate for this study. Government bank employees of Kanpur city Uttar Pradesh were taken as a sample.

- **Instruments and their Development**

In this survey, a questionnaire on five points (Likert Scale) was used for the collection of data. A questionnaire was developed on five point (Likert) to know the opinion of bank employees. The finalized research tool was administered on the respective sample for the collection of data. Collected data was analyzed through percentage and mean score. Responses of 100 respondents were interpreted and presented in percentage.

Data Analysis and Discussion

Table 1

Sl. No	Recent Trends In Banking	SA	A	UNC	DA	SDA	%	Mean
1	Mobile banking	40	37	0	10	13	77	3.81
2	ECS (electronic clearing method)	33	47	0	15	05	80	3.88
3	RTGS(Real time gross settlement)	58	22	0	12	08	80	4.10
4	NEFT(national electronic fund transfer)	70	12	0	08	10	82	4.24
5	ATM(automated teller machine)	52	30	0	10	08	82	4.48
6	Electronic Payment	40	25	0	25	10	65	3.60
7	Point of sale terminal	51	27	0	13	09	78	3.98
8	IMPS(Immediate payment service)	45	35	0	15	05	80	4.00

S.No	New Challenges Faced By Banking System	SA	A	UNC	DA	SDA	%	Mean
1	Losses in rural branches	42	40	0	12	06	82	4.00
2	Competition with foreign banks	51	27	0	13	09	78	3.98
3	NPA(Non Performing Assets)	43	33	0	24	10	76	4.05
4	Competition from non-banking financial institutions	38	42	0	10	10	80	3.88
5	Advance to priority sector	42	27	0	23	08	69	3.72
6	Political pressure	37	33	0	17	13	70	3.64

Scale value for this table is SA (Strongly Agree) =5, A (Agree) =4, UNC (Uncertain) =3, DA (Disagree) =2 and SDA (Strongly Disagree) =1

Table 2

Option of fast electronic fund transfer	Frequency	Percentage
IMPS	45	45%
RTGS	23	23%
NEFT	21	21%
M-Banking	11	11%
Total	100	100%

Finding and Suggestions

It is evident from the table 1 that most revolutionary trend in banking is ATM (mean 4.48) which is most useful. NEFT has mean 4.24 which shows it is very useful for transferring money but is slower than RTGS and IMPS process .RTGS (4.10 mean)is fast process and use for more than rupees 200000. IMPS (Mean 4.00) has money limit rupees 200000 and it is fastest process. POS Point of sale terminal is new trend of purchasing with mean 3.98. ECS (Electronic Clearing Method) has mean 3.88 which shows usability of new trends of banking.

Now days, Mobile banking is also increasing with mean 3.81. Electronic Payment has mean 3.60 which shows less usability of it.

According to data analysis, NPA is most important challenge (mean 4.05) for Indian banking sector. Second most important challenge is losses in rural branches (mean 4.00) because employees do not have interest in rural areas. Competition with foreign banks and Competition from non-banking financial institutions are also big challenge with 3.98 and 3.88 mean respectively. Advance to priority sector and Political pressure are challenges faced by banking sector with mean 3.72 and mean 3.64 respectively.

The table 2 shows, 45% employee beliefs on IMPS as fastest method for transferring money. In research, Mobile banking is least usable 11% due to less awareness of mobile Apps of banks. My suggestion is that this research is conducted

in cities of Uttar Pradesh (most populated state of India) and sample size is 100 employees of government bank. Result may be varying in other cities.

Green Banking

Green banking symbolizes the practices that consider all the factors that are related to society and environment it aims to make use of Information Technology and banking processes with minimal negative impact on the environment. Green banking will help in development and improvement of the asset quality of the banks. Green banking suggests promoting and improving environmental friendly process and reducing carbon footprint from activities of bank. It comes in many forms like:

- Using online banking instead of branch banking.
- Paying bills online instead of physical process
- Opening up accounts through digital banking, instead of physical multi branch banks.
- Finding local bank in public area that is taking biggest steps in supporting local green initiatives

The first green bank State Bank of India, India's largest commercial bank, who initiated to setup a highly sustainability standards and completed the first step in "green banking" with Shri O.P. Bhatt, chairman, SBI, Inaugurating the bank's first wind farm project in Coimbatore. After that green bank initiative include: ATMs, paperless banking for customers and building of wind mills in rural area. Green banking offers the following benefits:

- Green banking avoids paper work and makes use of online transactions such as Internet banking, SMS banking and ATM banking. Less paper work means less cutting of trees.
- Green ethical banks adopt environmental standards for lending which would benefit future generations.
- Green banks gives more importance to environmental friendly factors like ecological gains thus interest on loan is comparatively less.
- Free electronic bill payment services.
- Online account opening form for opening green account.
- Cash back will be credited to all new customers, opening "green accounts"

Conclusions

Indian banking system will further grow in size and complexity while acting as an important agent of economic growth and intermingling different segments of the financial sector. The conclusion is that, the Indian banking sector is developing due to the improved technical facilities offered by banks and with the increased development in customer base. The economic growth of the country is an indicator for the growth of the banking sector. The Indian economy is likely to grow at a rate of 5-6 percent the

country's banking system is expected to reflect this growth.   By the support of government and a successful re-evaluation of existing business techniques can set the stage for Indian banks to become stronger and bigger, thereby setting the stage for expansions into a world consumer base.

References

⇒   Ahluwalia, M. S. (2000). Economic Reforms in India Since 1991: Has Gradualism Worked? Journal of Economic Perspectives, 16 (3).

⇒   ET Banking Survey 2009. (2009, December 21), Economic Times, p.11.

⇒   Gupta, Dr. Karuna., Arya, Ravindra., & Goel, Vineet. (2017). Emerging Trends in Banking Sector in India (With Special Reference to Digitization). International Journal of Science Technology and Management, 6(3), 260-268

⇒   Mohan, R. (2005). Financial Sector Reforms in India: Policies and Performance Analysis. Economic and Political Weekly, 40 (12).

⇒   Raj, B. Ananda. (2016). A Study on Recent Trends in Indian Banking Facilities. National Conference on Emerging Business Strategies in Economic Development– Special issue, 69-72.

⇒   Report on Trend and Progress of Banking in India, Reserve Bank of India, Mumbai, Various Issues.

⇒   Sharma, Himani (2011). Banker's Perspective on e-banking. NJRIM, 1 (1), 71- 84.

⇒   Uppal, R. K. (2011). E-Age Technology- New Face of Indian Banking Industry: Emerging Challenges and New Potentials. Journal of Social and Development Sciences, 1 (3), 115-129.

⇒   Uppal, R. K. (2011). E-Delivery Channels in Banks-A Fresh Outlook. Researchers World-Journal of Arts Science & Commerce, 2 (1), 180-191.

❧❧❧

$$\boxed{\textbf{8}}$$

Shift of Consumer Preferences towards M-Wallet Options and its Prospects in India

Priya Jain[*]
Chitransh Waghmare[**]

Introduction

In today's world, smart phones has become an important part of everyday life. Along with smart phone production, plenty of services have been created to utilize the possible functions of smart -phones. Not only smart phones are used as communication devices, but also to be used as socialized tool, entertainment tool, internet access tool, and even payment tool (Rajgopal,2012). Thanks to the technology, as mobile users, can nowadays use their smart phones to perform financial transactions or to make payment by using the applications installed in their phones. When these applications can function as leather wallets, it is called as "digital wallet", widely known as "mobile wallet".

The primary objective of this research is to understand about the consumer adoption status of mobile wallet. This paper encompasses data and its interpretation relevant to M- wallets, providing a brief statistical snapshot. The conclusions and instances so provided are important in context of understanding the changes happening in the payment industry, and how this advancement is influencing our times, and consumer behavior as a whole.

[*]   Ph.D. Scholar, AKS University, Satna, M.P., India.
[**]   M.com (Finance) UGC NET
[~]   *The paper has been presented in "***International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context****" Organized by* **Inspira Research Association (IRA),** *Jaipur* **& LBS PG College,** *Jaipur, Rajasthan, India.* **02-03 February, 2018.**

Research Methodology

This paper is based on secondary data, and though every measure is been taken to prevent errors, it may carry the limitations associated with the secondary information derived. We referred number of research papers and recent statistical reports pertaining to the topic, and other publically available resources.

Overview of the Digital Payment Industry

Traditionally, in India cash money was the major source of payment. However, the usage of smart phones increased due to which the country is adopting cashless mode of payments that is digital payment methods. The market of digital payment is dominated by both debit and credit cards in terms of value as well as volume. 60% of the total digital transactions volume has been accounted for card transactions in FY17 while this statistics has declined since FY13 by 14% due to increase in usage of other payment modes. The fastest growing mode of digital payment is prepaid instruments (PPIs) which has grown from 1% in FY13 to 10% in FY17 this shows a growth of 9% in PPIs as well as mobile banking has increased from1% in FY13 to 5% in FY17 this shows a growth of 4% in mobile banking. Mobile wallet is the largest category with in PPI but the segment also includes prepaid cards such as gift cards as well as other vouchers.
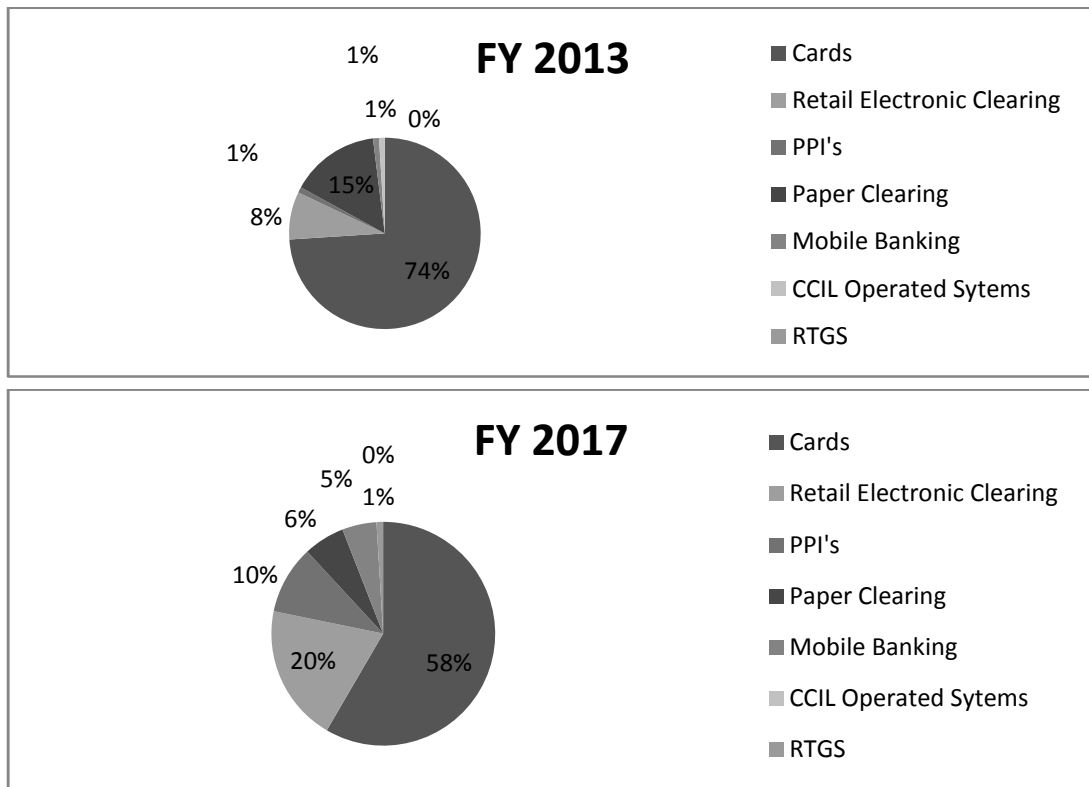
Source: RBI Data, Deloitte Analysis

Overview of M-Wallet Market in India

In the past five years, the industry of m-wallet has been on a strong growth trajectory between FY13 to FY17. Transaction volume and values saw phenomenal growth of 120%, both nave been doubled between 2016 to 2017 itself. The volume of transaction has increased from 33 (INR million) to 1630 (INR million). (See Graph)
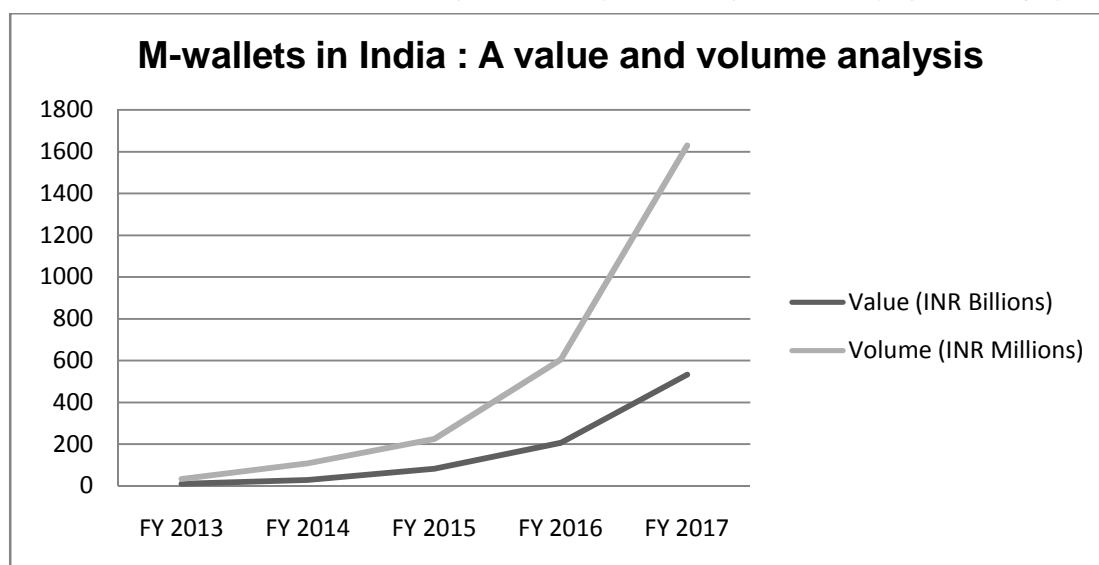
Source: RBI Data, Deloitte Analysis

The Reasons behind such rapid adoption of M-wallets is to be discussed further in this paper. The same is looked upon in the light of human behavior and habits.

Behavioral Factors Responsible Behind Payment Choice

While coming up with the points focusing on behavioral instincts of consumers while making a payment choice, we primarily relied on "Mobile Commerce Adoption in China and the United States: A Cross-Cultural Study (Hua Dai,2009); Mobile Commerce Success Factors for the Various Business Models (Ismail M. Romi, 2012), Innovation Diffusion Theory (IDT) (Rogers 1995); The Theory of Reasoned Action (TRA) (Fishbein and Ajzen 1975); the Technology Acceptance Model (TAM) (Davis 1989); Also miscellaneous sources of secondary data from the internet.

These factors were found responsible for influencing payment choice:

- Perceived Advantage
- Innovativeness
- Attitude Shift
- Ease to Use
- Perceived Enjoyment

- **Perceived Advantage**

Perceived advantage implies "value-addition that m-commerce creates for customers in a different manner than conventional business." (Tsalgatidou and Pitoura, 2001) The perceived advantage factor greatly influence the consumer in case of payment channel. And though, in instances where the perceived advantage remains to be attained, yet the underlying principal of Human urge and curiosity, keeps the interest and Preferences towards faster mode of payments intact as before. The Higher perceived advantage, the higher is the possibility of the adoption.

- **Innovativeness**

Innovation is a personal and unique attribute of every product or service and "Innovativeness has been employed to predict consumer innovative tendencies to adopt a wide variety of technological innovations." Citrin et al. (2000). This factor works upon bringing about a paradigm shift in mindset of potential users due engaging technology and attractive elements of user advantage. This has a tremendous impact on consumers due to shifting their Attention on an entirely new area of development and fascinating possibilities.

- **Attitude Shift**

GJ Udo in his 2002 Analysis "Privacy and security concerns as major barriers for e-commerce: a survey study" gives insights about how security perceptions have an impact on adaption of e commerce options in general, which is equally apt as in the case of m-wallets. In the indian context, the post demonetization scenario proves that, consumer attitude still remains a major catalyst in payment choice. The consumers' security perception greatly affect the choice of payment gateways. Failing to provide a secure system of m-commerce will significantly dampen consumer adoption rates (Ghosh and Swaminatha, 2001).

- **Ease to Use**

Innovation Diffusion Theory (IDT) (Rogers 1995) elaborates ease to use as "Complexity" or "the degree to which the innovation is easy to learn and use." This factor implies minimum shift of user from his existing behavior in course of adopting new technologies. Gera and Chen (2003) defined the concept as "compatibility" and "the degree to which an innovation is consistent with existing facilities and practice." The ease in adapting lessens the probability of the end user being reluctant or uncomfortable with the product, service or technology.

- **Perceived Enjoyment**

Perceived enjoyment stands out as an important motive for using experiential mobile services**.** Nysveen et al (2005). It shapes both attitude and intention of adaption of technologies which are suggested as "experimental" and "innovative". And though usefulness and perceived advantage is a much instrumental in consistent

usage, The delight to use evoke the intent to use a particular product or service. The delight or enjoyment is a secondary psychological phenomenon influencing payment choice.

A Glance at its Future: The Future Prospects of M- Wallet

Those who gear up the talk about the future of M-wallet are nowhere pessimistic. According to ASSOCHAM India's recent report - "The M-wallet market has witnessed promising innovations, and has grown immensely over the past few years, [With] Research and Innovation towards discovering more efficient and convenient ways of doing m-wallet transactions is at its peak; and it is expected that the industry will overcome all the current limitations and evolve itself through several novel advancements. In FY 2016, the total m-wallet transaction was 0.6 Billion; and it is expected to reach 260 Billion by FY 2022, growing at a CAGR (compound annual growth rate) of 163%" (See Graph)

Transaction Volume of M-wallet (Billons)

FY 2016 to FY 2022
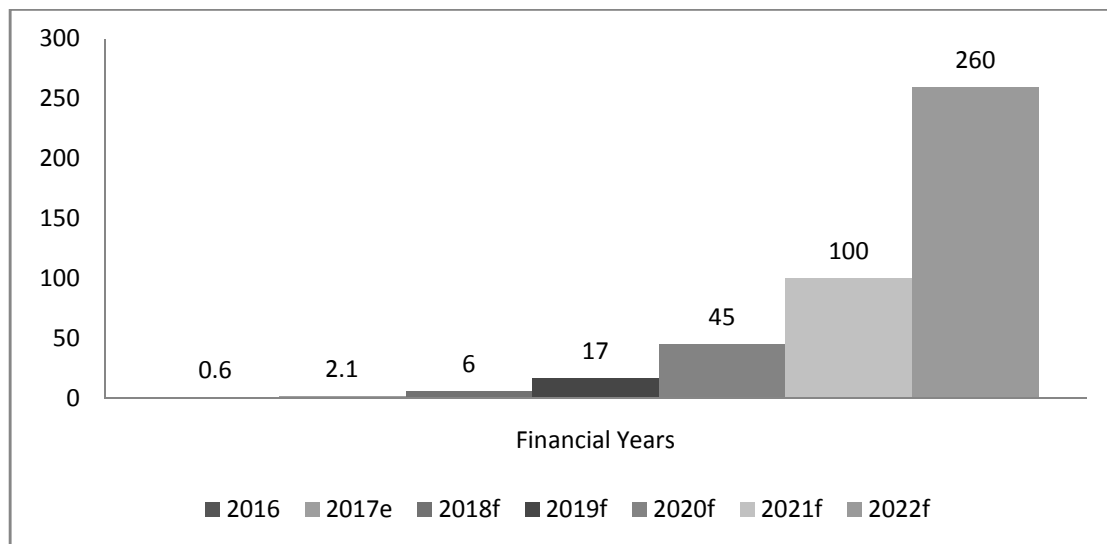
Source: ASSOCHAM India; Data Source : RBI, RNCOS

Note: e/f = RNCOS Estimation/Forecast

Alongside that, the various utility factors as discussed in this paper, the user issues that these wallets address, gives a major boost to their prospects, and primary factors like the revenue generation models of M-wallets assures us about the feasibility and consistent existence of this payment method.

Conclusion

This paper aimed at studying and inspecting the advent and growth of M-wallets as a payment method in India. We compiled statistical evidences in support,

and inferred the future potentials of this payment gateway. Owing which, this paper is an attempt to present clear picture of the diversion or changes in payment trends and consumer preferences towards newer payment options. Also, we examined the human or Behavioral factors influencing such payment choice, *i.e.* Perceived Advantage, Innovativeness, Attitude Shift, Ease to Use and Perceived Enjoyment. The analysis of which, gives us the conclusion that the habits and behavior still remains a major catalyst and the user compatibility issues should be addressed better by M- Wallet enterprises to gain relevance and acceptability.

References

⇒ ASSOCHAM India, Scenario Post – Demonetization.

⇒ Citrin, A. V., Sprott, D. E., Silverman, S. N., & Stem, D. E. (2000). Adoption of Internet Commerce : requirements and properties. Computer Networks, 37(2001): 221-236

⇒ Dai, Hua, and Prashant C. Palvi. "Mobile commerce adoption in China and the United States: a cross-cultural study." ACM SIGMIS Database 40, no. 4 (2009): 43-61.

⇒ Ghosh, Anup K., and Tara M. Swaminatha. "Software security and privacy risks in mobile e-commerce." Communications of the ACM 44, no. 2 (2001): 51-57.

⇒ Montano, Daniel E., and Danuta Kasprzyk. "Theory of reasoned action, theory of planned behavior, and the integrated behavioral model." Health behavior: Theory, research and practice ((2015).

⇒ Nysveen, Herbjørn, Per E. Pedersen, and Helge Thorbjørnsen. "Intentions to use mobile services: Antecedents and cross-service comparisons." Journal of the academy of marketing science 33, no. 3 (2005): 330-346.

⇒ Rajgopal, K. (2012). McKinsey on Payments. Payments wave, commerce ocean: The arrival of the mobile wallet, 38-46.

⇒ Tsalgatidou, Aphrodite, and Evaggelia Pitoura. "Business models and transactions in mobile electronic commerce: requirements and properties." Computer Networks 37, no. 2 (2001): 221-236.

⇒ Udo, Godwin J. "Privacy and security concerns as major barriers for e-commerce: a survey study." Information Management & Computer Security 9, no. 4 (2001): 165-174.

❧❧❧

<div style="border:1px solid black; display:inline-block; padding:10px;">

9

</div>

Digital Tourism: Importance of Digital Marketing in Travel Industry

Kavita Purohit[*]

Introduction

The word 'tour' has a source from the Hebrew word 'torah' which means learning, studying or searching. The word 'Tourism' which is related to tour is derived from Latin word 'tomos' which means a tool for describing a circle. History reveals that man has been fascinated by travel and has the urge to discover the unknown, to explore new different places and to undergo new experiences. Progress and growth in communication and transport, growth in the educational standard, emergence of a class with changed attitude in life style and spending habit, increased stress and strain in life made the people to have more affinity towards tourism. With the launch of internet technology, the rules of marketing have been redefined all over the world. Today Digital Marketing has become one of the main areas for businesses all over the world. One of the main reasons of the success of digital marketing vs. traditional marketing is the fact that the former allows marketers to track user behavior in real-time. This is a whole new concept to the marketing research to understand the needs of the customers like never before. Thus, the need to include digital marketing in the overall marketing strategy of the business shall only contribute to the better achievement of the overall marketing and business goals by enabling brands to gain insights about consumer behavior and better satisfy their needs.

[*]   Research Scholar, Department of EAFM, University of Rajasthan, Jaipur, Rajasthan, India.

~   *The paper has been presented in "***International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context***" *Organized by* **Inspira Research Association (IRA),** *Jaipur* **& LBS PG College,** *Jaipur, Rajasthan, India.* **02-03 February, 2018.**

Understanding Digital Marketing

After reviewing the existing literature digital marketing can be understood as follow:

- Internet marketing and online advertisement, also called e-marketing, web marketing, online marketing, or e-marketing, is the advertising of products and services over the Internet. (Ruzic, D. 2003).

- "The application of the Internet and related digital technologies in conjunction with traditional communications to achieve marketing objectives." (Chaffey, 2012)

- Internet marketing is the use of the Internet and other digital technologies with traditional methods in order to achieve marketing goals. Marketing using electronic media such as the web, email, interactive TV, IPTV and wireless media in conjunction with digital data about customers characteristics & behaviors. (Chaffey, D., Ellis-Chadwick, F., Mayer, R., Johnston, K. 2009).

- Traditional Marketing involves collecting data through the process of market research and then analyzing the same to help understand the audiences better. The digital nature of the Internet technology provides a comprehensive and detailed insight into the characteristics of consumers and their behaviour in the electronic environment. (Batini , 2015)

Research Methodology

Being an explanatory research the study focuses on extensive study of Secondary data collected from various books, annual reports, articles, newspapers and magazines, National & international Journals, government reports, publications from various websites which has been published and focused on various aspects of Digital Tourism. According to the objectives of the study, the research design is of descriptive in nature.

Objectives of the Study

The major objectives of the present study are to:
- To understand the new trend of digital marketing
- To explain the characteristics of a successful digital marketing campaign
- To analyze the importance of digital marketing in tourism industry.

Characteristics of a Successful Digital Marketing Campaign for the tourism industry

Digital marketing methods have revolutionized the tourism and travel industry in various ways. From convenient booking engines to creating customized experiences, digital marketing has helped the travel industry reach out to a wider audience, which was not possible with traditional marketing. Today, we all have computers, laptops, mobile devices etc, and have easy access to information for all aspects of the tourism industry from accommodation, travel, to food and activities,

effective digital marketing is the best way to reach a large audience in a quick way at a lower cost. The tourism industry includes all the people, activities, and organizations involved in providing services for people on holiday, for example hotels, restaurants, and tour guides. Post understanding what digital marketing is all about, it is also important to understand the top nine characteristics of successful digital marketing campaigns:

- **Quality website**

A quality website today is a prerequisite before establishing a business online. Marketing experts must come up with attractive websites, find a way to attract customers to visit the web site, keep them there for a while and make them frequently come back to their website. For newer or smaller destinations, a website might be the first touch point that someone has with the location. High-quality website is very important. The website content should be concise and the USPs should be clearly visible. A good website should have all the services clearly listed down along with the relevant information. The website must be built in a way that it allows the users to make a purchase without the need of any kind of assistance. It must be updated on a regular basis keeping in view the changing customers' needs and choices. A good website represents the quality the business stands for and thus it should be developed and maintained keeping in mind the functionality of the industry.

The design and appearance of a site are important factors. Content and site features are the other half of the puzzle. Tourists might also be looking for ways to book accommodations or entertainment while they are visiting.

- **Maintaining an Active Social Media Presence**

It is clear that digital marketing is revolutionizing the travel and tourism industry. Social media has already replaced a large area of the traditional communication. For example, if we are planning to travel somewhere, we have a tendency to look at the existing pictures available on internet, reviews post written by people, and other Twitter or posts. Social Media platforms like Facebook, Twitter, LinkedIn, Instagram enable businesses to reach out and talk directly to their users. Presence on these platforms is not just about promoting the latest packages and facilities; it is much more than that. We have reached a new interactive era where travel industries can take advantage of social media networking tools to promote the business at low cost, attracting visitors and generate interest of public. Creating a group on these social media platforms can be inexpensive but regular messaging from the page is required. Generating content to keep profiles active is typically the most time-consuming part of social media. There is no secret that social media influences most of our spending habits. Travel, today, is more a social activity than ever before. Travel companies should take advantage of this constant quest by creating lasting relationships with the travellers. Helping travellers choose a

destination and providing them with local information of the destination creates a positive online reputation for the travel company.

- **Search Engine Optimization**

SEO is an insignificant part of digital marketing today. It plays a very important role in determining the website traffic. Use of 'Keyword Planner' to find the most relevant keywords for the tourism business is the first step towards effective SEO. Google, the biggest search engine, understands synonyms so keywords must be carefully chosen. The online ranking of a business on various search engines determines the online popularity and helps increase website visits. There is a myth that SEO efforts would lead to immediate results. It is important to understand that SEO is an ongoing process and takes time to show results.

- **Email Marketing**

'The regular use of email marketing creates the opportunity to offer any potential interested guest to arrive at the right time at the minimum cost, and the results of such activities must be measurable, which creates a basis for decisions on future marketing activities.' (Kotler, P., Koller, K.L. 2008). Sending personalized emails to users increases the chances of getting instant replies along with showing that a business cares. Email Marketing enables users to know about the latest offers by the hotels, special deals on holiday packages, membership clubs, room availability and so much more. Transactional emails are sent to users to keep them updated about the status of their bookings. Special mailers are sent to customers on their birthdays and anniversaries by offering a special price on the services. This provides an incentive to the customers to make a purchase while visiting the competitors.

- **Creating Original Content**

Content is the essence of digital marketing. Good quality content must add value to the everyday lives of the audiences. Businesses need to ensure that they post relevant content across various platforms at the right time. In the tourism industry, videos and info graphics are an interactive content type to get noticed and engage the users. Due to the fact that tourists first investigate before making a decision about their travel destination, being present on blogs or specialized websites is an opportunity to answer any questions as quickly as possible and influence their decision. The owner should not focus on services only but on visitors' needs, providing the required information. Creating informative and engaging original content is the most effective way to accomplish this. Blog posts, videos are examples of original content that can be used to create resources for visitors.

- **Mobile-Friendly**

Everything that a business does digitally today should be mobile friendly. Majority of online users today access the internet on their mobile phones and this

should reflect in every aspect of online marketing considerations. The website, app, updates on social media, emails, SEO or any other aspect of digital marketing, being mobile-friendly is a prerequisite in today's times. Digital consumption today is very different from what it used to be, even a few years ago. The use of mobile devices is on the rise. People use various devices to book their airplane tickets and hotel rooms. In addition, thanks to Wi-Fi with access in hotel rooms and public locations such as tourist attractions, planning a trip on the spot has become fairly easy for travellers. In order to make the traveling process easy for the target audience, many travel professionals, hotel owners, and travel agents have turned to the digital marketing agency. The shift from traditional methods of planning to digital marketing strategies (for making reservations, purchases and booking online), more and more travel.

- **Better Customer Service**

    Travel and hospitality brands have really had to up their game. Twitter is often the first place a customer will go to make a complaint and they expect a quick response. 72% of customers expect a response within an hour, yet apparently 70% of companies ignore customer complaints. Social media can be a great social listening tool to help give insight to what your customers value – this can help your brand deliver an exceptional experience.

- **Recommendations are king**

    A growing trend of websites and the move to social media means recommendations from travelers are increasingly important when considering booking a holiday. It simply means bad reviews should be dealt with very delicately and customer complaints should be addressed carefully.

- **Virtual reality**

    Virtual reality has seemed like being the next big thing for long time. VR allows the possibility of giving holidaymakers the chance to 'try before you buy' in a way that has previously been impossible. You try on clothes to see how they look before taking your credit card out, but you have to take a travel companies word for it that their beach resort really does offer 'pristine white beaches'. In future, you'll be able to look around the resort, see your room and check out just how big the pool is.

Current Trends in Digital Tourism

    Digital technology has many different names, such as IT- Information Technology, ICT – Information and Communication Technology, DT - Digital technology, and DICT - Digital Information and Communication Technology, and its application in tourism as DT – digital tourism, e-Tourism - electronic tourism and e-tourist – electronic tourist. IT is usually defined as a term given to digital computer and communication technologies used for the acquisition, processing analysis, storage, retrieval, dissemination and application of information. E-tourism represents the digitalization of all the processes in the tourism and travel industry that enable

managers to maximize their organisations efficiency and effectiveness. E-tourism includes all e-business functions: e-commerce, e-management, e-marketing, e-finance, e-accounting, e-HRM, e-procurement, e-strategy and e-planning.

Conclusion

There should not be any doubt now that a tourism website is the best tool for the promotion of the destination. Nevertheless website is such a promotional tool where there is always ground for improvement and advancement. The contents and facilities of the website should be upgraded to meet with tourist needs as per the current demand of the time. Following are some conclusions basis on the study:

- Digital information technologies have had, and will have increasing profound impacts on the tourism industry.

- Travel will continue to be one of the most popular online interests to consumers.

- Access to Internet and the mobile communication devices will increase the number of electronic connections between customers and the tourism industry.

- The growing up of the digital generations changing the demographic profile and behaviours of internet users, will result in internet will be considered the primary source for travel information and travel experiences support.

- Experience and emotion-oriented communication will grow in importance as emotionally intelligent interfaces are developed, incorporating emotional-psychological need context to provide supportive interactions.

- User generated media such as blogging, podcasting, live-streaming, pictures sharing, and social networking are expected to play an even more important role in supporting travel planning activities as well as in the construction of memories and extended experiences in the post-consumption phase of travel. It will be an increased need to integrate such applications on tourism and travel websites and apps.

- New technologies are being developed in an increasing speed, that will have a significant impact on tourism. These will disrupt existing value chains in tourism, and lead to the emergence of new players in the tourism industry, and significantly influence consumer experiences.

References

⇒ Gurneet Kaur. (2017). "THE IMPORTANCE OF DIGITAL MARKETING IN THE TOURISM INDUSTRY." International Journal of Research - Granthaalayah, 5(6), 72-77. https://doi.org/10.5281/zenodo.815854.

⇒ Quaestus multidisciplinary research journal. Digital tourism: luiza caraivan

⇒ https://three29.com/tourism-marketing-strategy/

⇒ https://www.poweredbysearch.com/blog/digital-marketing-tourism-industry/

❧❧❧

<div style="text-align:center">

10

</div>

Impact of E-Commerce on Supply Chain Management

Harsahai Meena[*]

Introduction

In recent years, business processes and business management has gone through a phenomenal change as a result of revolutions in two areas - enterprise resource planning and supply chain management. While the concepts in these two areas have been around for awhile, in theory and in practice, recent technological and business process changes have made these concepts more feasible to implement (Giannakis and Louis, 2011).

The tools and technologies in these two areas however were still developed for a rather traditional approach towards business processes. Most of the early versions of these tools support rather monolithic organizations interacting with each other in a linear fashion (Iyer et al., 2009).These tools and concepts served well for organizations that fit that structure and thus the implementations of the enterprise resource planning (ERP) systems and supply chain management (SCM) process changes for such organizations was quite successful. The major change that highlighted the inflexibility of these ERP systems and SCM resources was rise of a whole new business medium - the Internet (Rabinovich, 2007). As the medium of internet get matured, it was soon conceived that all the eyeballs attracted to the information could be persuaded to buy related product or the information itself. E-commerce was born (Wu and These changes gave rise to a multitude of business

[*]   Research Scholar, Department of EAFM, University of Rajasthan, Jaipur, Rajasthan, India.

[~]   *The paper has been presented in "***International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context****" Organized by* **Inspira Research Association (IRA),** *Jaipur* **& LBS PG College,** *Jaipur, Rajasthan, India.* **02-03 February, 2018.**

relationships, and therefore, business models. These business models were dynamic in nature because of the loose coupling between storefront infrastructures of various vendors through hyperlinks. They also demand afast turnaround time to respond to the rapidly changing business relationships. Models such as auctioning, reverse auctioning, and B2B market exchanges exemplify this. The technical simplicity of forging or breaking a business alliance translated into a new set of business level complexities in which issues such as role of intermediaries, revenue sharing and customer loyalty became tricky. For example, increasingly, the traditional channel partners of manufacturing companies are turning their on-line business into a referral site that takes the visitor to the manufacturer's site. The manufacturer then splits the revenue for such business in an agreed-upon manner (Iyer et al., 2009).

This dynamism in the business environment invariably translates into significant implications for SCM policies of a company as well as the ERP systems used to facilitate the operation of the business. A dynamic business model also means that the upstream and downstream nodes in your supply chain are changing more rapidly than the traditional static relationship. Thus, the SCM policies designed to optimize traditional business relationship are not suitable in the e-commerce world because they cannot respond fast enough. Also, the ERP systems that assume a rather static environment for various resources available to a company can fail to help the e-commerce environment. An example of this would be positioning ofmySAP.com and SAP. This study entails the inter-relationships between e-commerce business models with supply chain management and ERP system implementations (Chen and Su, 2011). Specifically, we analyze how choice of an e-commerce business model can affect SCM issues and how can that knowledge be used to make informed choice between competing e-commerce models.

We use the following two main dimensions to scope the problem space and boundaries for the analysis:

- E-commerce business models,
- Supply chain issues faced by a business.

In the following discussion, we look at each of these dimensions. We define these dimensions independently first and then look at the co-relations among them to identify the problem and the solution space. In our today competitive world, there is no room for previous managerial methods with little integration of processes. Therefore, companies need to find a regular integration in all their processes. Supply chain management is an integrated process for suitable management of materials and goods, information and monetary process with completely satisfying these conditions.

From among all major processes of supply chain, we have information management with high level of importance and as a key factor in creation, the required integration among its members. On the other hand, any created advances in

e-commerce may instruct companies and industries to pay more attention to this subject and try to find a solution for reducing their production cycle. Then it is possible to benefit from the modern progress in different fields of science, management and technology (including internet, world developed network and IT) (Milani, 2005).

With more effects on world economy, e-commerce had a lot of changes as well. Right now e-commerce cannot be presented as an option but as an inevitable principle for further competitive advantages for more organizations and companies (Akbari, 2002).E-commerce is a phenomenon of information time which has developed throughout the world like a globalization wave. From a managerial viewpoint, ecommerce is not free from organizational and managerial theories, and there is no special and unique description for it. What is concluded is the appearance of virtual organizations and considerable reduction of costs, increasing the efficiency, considerable increase of profits, general betterment of functions and upgrading of customer services. Some of the current reasons for changing supply chain are as a result of changes out of technology in market, changing of business methods, inspections of current partners and finally, demands for more created vale by final end user.

Some of the competitive necessities in different industries are the integration of supply chain activities incompliance with relevant technologies. For this purpose, it is necessary for the organizations to harmonize themselves with such a situation through applying of supply chain technologies and e-commerce. Otherwise not only would they not find any way to new markets but also may lose their existing market share (Milani, 2005).

All applied replacements in relevant tools of supply chain management may cause further fundamental changes and finally ease application of these concepts with a better meaning for electronic supply chain management. E-commerce is a new method for performing commercial activities. Daily-increase access to internet from one side and low level of costs for commercial activities through internet on the other could make it the most acceptable method for commercial transactions.

Since most of the active managers in governmental and private organizations have enough experiences and specialties, therefore, by appearance of e-commerce and entrance into world markets, it may enable all managers to find basic challenges in the field of supply chain and provide maximum efficiency and reflection as the major goals of e-commerce. In addition, to have an efficient supply chain, it is possible to expect an organization to find an effective competitive advantage in contact with today's competitive world.

Framework of Ecommerce

Any growth and development of IT could fundamentally change the economy. Any search for finding effective methods for commercial affairs has resulted to another revolution in business. It is named electronic commerce(e-commerce). E-commerce

and electronic business are common terms which differs from each other. These terms are in fact equal to commercial transactions, submission of services to customers and commercial duties through digital methods. Firstly, it is necessary to explain different terms in this field including IT, ecommerce and electronic business (Obrein, 2001). IT points out to the technological aspect of an information system. Technology includes hardware, software, database, networks and other tools which could be considered as an indirect system. Sometimes we use IT for any exchange of information and/or apply it for explaining different information systems, users and management. At least, e-commerce has been in existence for the last20 years; however, recently it has been on a daily increase usage and has recorded a considerable growth to the economy. It is mostly relying upon internet and worldwide web for easy access to internet (Heeks, 2001).

E-commerce is a tradition which is applicable by the use of IT and focusing on electronic data transfer and through value added networks (VAN). It is electronic data transfer by the use of information systems among different organizations. In fact, electronic transfer of data involves the usage of hardware, software and different standards for further electronic exchange of data (Obrein, 2001).Worldwide internet sites have changed into major and an active factor of e-commerce because they are widely applied and involve the use of new media. Norm Archerat Mack Master University of Canada believes that ecommerce is a new method of handling business and it involves all aspects of business activities including commercial fields like marketing, engineering and production and also support fields like finance, information systems, human resources, accounting, purchase, transportation, receipt of goods and management (Turban et al., 1999). Choi et al. (1997)explains e-commerce with following three elements:

Processes: It means complex activity that occurs in ecommerce. These activities are selling, buying, payment and so on.

Institutions: It means all persons involved in the field of e-commerce including government, intermediates, consumers, suppliers and companies.

Supply Chain Parlance
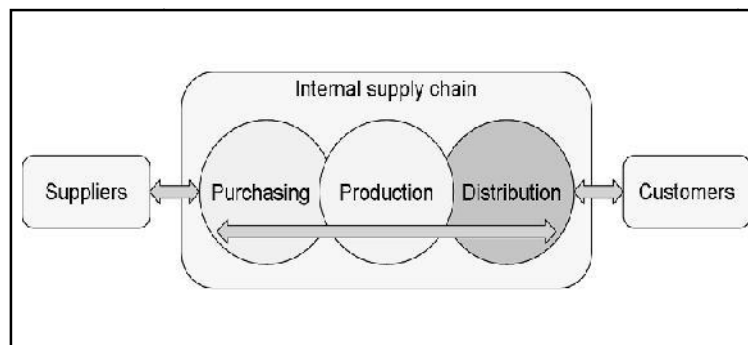
Supply chain in simple words means the movement of raw material to the factory and the final finished goods to the consumers. This function has been a critical a part of the manufacturing industry since ages and is an integral part in the complete product manufacturing set-up. Every enterprise typically manufacturing have a full integrated supply chain division ensuring smooth production of goods and seamless as well timely delivery to the consumers. With the advent of e-commerce, this function has taken an all new meaning where the functioning of supply chain can actually ruin or build an enterprise.

Supply Chain and E-Commerce

Since E-Commerce is buying and selling of goods over the Internet, hence besides payment between the two parties, it is movement of goods that also needs to happen in a correct and timely fashion, hence the need of supply chain. For businesses to boom in time of E-Commerce, supply chain becomes the most critical aspect which needs to be quick, un-interrupted and secure. The competition is fierce as there are not one or two but hundreds of E-Commerce firms fighting for market share, each identifying and developing unique selling and delivery strategies. Consumers today want quick results, if they can order and have a good delivered at their doorstep today, they would not want to wait for 2 days to have it delivered; they would go with the firm that offers quick and hassle-free delivery.

The 2 way Supply Chain

E-Commerce works on a 2 way supply chain business from warehouse to consumer and consumer and back. Yes, E-Commerce firm offers the flexibility and scope to the consumers to return a product in case it's faulty or not of their choice. This in-turn lead the companies to also plan and support a reverse supply chain of getting it back from the consumer to their warehouse.

Effect of E-Commerce on Supply Chain Management

The effect of e-commerce on supply chain management is special and it may practically facilitate any inter organizational communications and reduce time intervals with further cooperation. E-commerce is a chance for an organization which intends to develop its markets throughout the world. When a company specifies its products and services, it is possible to expect an increase in demands. This is the responsibility of supply chain management system to reply all increasing demands in an effective form. Also, supply chain management should be on-line enough to reply all special necessities of customers. This is possible through programming systems and/or virtual agencies. E-commerce will extend further communications and network opportunities.

E-commerce supports complete integration of commercial partners. This type of business may increase the costs. Furthermore e-commerce makes an increase in group works and new relations between management and customer for designing of new products and better feedbacks of customers. Therefore it is possible to have

effective reply to the changing markets. Regarding the current process of e-commerce, there are great numbers of companies which are intending to sale their services and products by electronic means. There are various e-commerce types which are different from each other based upon their type of transactions. For instance, agency to agency, customer to agency and customer to customer are different models of e-commerce. There are useful tools for data transfer of products and services between customers and suppliers such as internet, web and electronic data transfer. Most companies have little knowledge and skills about ecommerce.

The real reason is the lack of under standinge-commerce and lack of adequate knowledge on investment in this type of business. Governmental support is required for execution and benefiting from ecommerce and finding internet services and web-site development. Right now there are a lot of problems facing e-commerce, some of which are internet speed, lack of governmental support, management of customer relations, safety and behavioral parts which should be considered at the time of execution on agency to agency basis.

Joiner and Bitty (2004) studied the benefits of electronic data transfer in a supply chain. Mir et al. (2003)evaluated any effects of A2A and C2A types of ecommerce on logistic services suppliers in European Union. Grain and Shaw (2004) showed that information share among business partners (producers and retailers) in supply chain will increase the integration and coordination of them and will reduce the stock volume, sale rate, better recognition of customers' needs and orders of products. Dasilva and Fishman (2007) studied the effects of applying electronic data transfer among food industries and retail markets especially inter organizational relationships. The followings are the advantages of e-commerce in supply chain in general:

- Receipt of orders through web.
- Replying to the orders.
- Electronic payments.
- Reduction of stock level.
  Current operational fields in the supply chain are as follows:
- Marketing and financial sale
- Research and development
- Purchase and logistic
- Business processes

All the above-mentioned items are collection of different activities for value creation for customers throughout the supply chain.

E-commerce and internet are influenced in supply chain economic efficiency in five ways as follows:

- Reducing the distribution and transactions costs.
- Increasing the speed of product development.

- Providing more information for buyers and sellers.
- Increasing the options of customer and their access to suppliers.
- Reducing the time intervals.

Electronic Supply Chain Management and Competitive Advantage

Competition is a process which any organization intends to find better functions and changed into a pioneer. One of the basic challenges of different countries at international level is obtaining competitive facilities in today's world. Competitive advantage means attraction of companies' proposals in comparison with competitors for customers. Competitive coefficient means the specifications and/or dimensions of any company for presenting better services to customers than other competitors. Generally, we can say different elements of competitive advantage include value creation, market tendency, and customers' satisfaction, and potential power, movement of practical power, motivation, skills, suitable price, reliability and innovation. Competitive advantage includes different elements for securing organizational survival.

Conclusion

What has happened in recent decades for business is changing of business nature due to high effects of IT. Internet has basically changed the international business environment. These changes may cause fundamental changes in used methods in supply chain management. All supply chain management discussions in current electronic world are presented in electronic and internet markets.

Today we have supply chain management as one of the infrastructure basics for implementation of electronic business in the world. In current world competitions we should provide various products with regard to the request of customer. What makes an increase in further pressures is request of customer of high quality and quick services non-similar to the past. As a result, it is not possible for companies to do all jobs in person. The real reason is finding competitive advantage (s) with the goal of finding more market shares.

Accordingly, there are some activities including supply and demand programming, supplying of materials, production and programming of products, products maintenance, stock control, distribution, delivery and services to customer which have been transferred to supply chain level which were performed previously inside the company. The key item of a supply chain is management and coordinated control of all these activities. SCM is a phenomenon which may perform this job for customers in order to enable them to receive reliable and quick services with high quality and low costs.

Organizations are in need to have considerable competitive advantage for further activities in an active business world and with different customers whose needs and requests are under changing. This is performed not only for further

residence in market and relevant industry but also for better speed than competitors and change into a pioneer in market and industry.

References

⇒   Akamai (2017), Q1 2017 State of the Internet Connectivity , Report. Available at:

⇒   Bearzotti LA, Salomone E, Chiotti OJ (2012). An autonomous multiagentapproach to supply chain event management. Int. J. Prod.Econ., 135: 468-478.

⇒   Chen PK, Su CH (2011).The e-business strategies fit on different supplychain integration structures. Afr. J. Bus. Manage., 5: 7130-7141.

⇒   Giannakis M, Louis M (2011). A multi-agent based framework for supplychain risk management. J. Purch. Supply Manage., 17(1): 23-31.

⇒   Grieger, (2003). Electronic Marketplaces: A Literature Review and a Call for Supply Chain management Research. European Journal of Operational Research 144, 80-294.

⇒   Monk, Ellen, F., and Wagner, Bret, J.(2013), Concepts in EnterpriseResource Planning, 4th edition, Cengage,: pp. 210-231.

⇒   Statista   (2016),   Digital   Market   Outlook.   Available   at: https://statista.com/statistics/220177/b2c-commerce-sales-cagr-forecast-for-selected-countries/Think with Google (2016), How people shop on their phones. Available at: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwiKrpG38snVAhXEuI8KHZdRCfYQFgglMAA&url=https%3A%2F%2Fwww.thinkwithgoogle.

⇒   Turban, E., and Volonino, L., Information, (2012). Technology forManagement 8th edition, John Wiley & sons Inc.

⇒   https://www.akamai.com/us/en/about/our-thinking/state-of-the-Internet-report/

❧❧❧

<div style="text-align:center;">

11

</div>

Analysis of Private Cloud Computing on Online Code Editor

Bhaskar Seth[*]

Introduction

Recently, computer software in writing computer program source code is very popular. Even though, the ability of software is less capable than the Integrated Development Environments (IDE), many programmers who want to edit the source code urgently might not access convenient resource without installing any application on the computer or notebook. Text editors are good tools for programmers to use within small resources. Nevertheless, text editors also need to be installed on the computers before using. Therefore, programmers need to have at least one computer in order to edit program source code. If one does not own any computer, to urgently modify any source code is impossible. Thus, Online Code Editor was proposed to solve this problem. It helps programmers to write or modify their source code at any place and any time they want. The online text editor was built and run on Private cloud computing based on web-based application. Open source software called Ace was used to highlight the text. Programmers can compile and run source code via web browser and the code will be done at server-side.

Then, the output from the compilation will be displayed at the browser of client-side. Programmers can use any computer or even tablet PC to write the computer program, without having to install software they just use only internet and browser. It

[*]   Research Scholar, Rajasthan Vidhyapeeth University, Udaipur, Rajasthan, India.

~   *The paper has been presented in "***International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context***" Organized by* **Inspira Research Association (IRA),** *Jaipur* **& LBS PG College,** *Jaipur, Rajasthan, India.* **02-03 February, 2018.**

helps the organization to reduce the expense in purchasing many personal computers. I use cloud 9 online code editor here.

Cloud Computing and Text Editor

- **Cloud Computing Definition**

  The definition of Cloud computing was identified by many researchers. National Institute of Standards and Technology (NIST) introduced Cloud computing as the following: "Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model is composed of five essential characteristics, three service models, and four deployment models."

  Basically, Cloud computing has 3 services, 3 deployment models.

- **Cloud Service Model Architectures**

  There are 3 basic types of Cloud computing architectures:

  - **Infrastructure as a Service (IaaS):** IaaS provides the infrastructure for information system. The hardware service will be provided by cloud providers. By using this service, the users can own just only computer without any operating software. This service provides the most flexibility in using resources. The users need to manage installing platform and software on it. IaaS provides flexible coding management and deploys programs to be used in cloud without the restriction in program development. It also provides scalability which is one of the essential features in Cloud computing and it can be done by the users. The server rental service is one example of IaaS. The billing can cost monthly or per processor or per storage.

  - **Platform as a Service (PaaS):** PaaS provides hardware, software platform and framework for distributed application development. Providers can create Application Programming Interface (API) for users to use and run on the providers' platform service and deploy to Cloud. The advantage is, API was guaranteed to be ready to use and up-to-date. In contrast, if programmers used complicated structure of API from one of PaaS providers, it might be difficult to move to other platform of different providers.

  - **Software as a Service (SaaS):** SaaS provides application software for every user. The users can ignore the location of software and the resources which is the responsibility of the providers. The users only need to pay the bill for the services. The SaaS service is higher level than PaaS because its infrastructure, platform, and software will be provided from the providers. In order to use this service, the users only need the internet connection without the requirement of hardware or platform technical knowledge. Normally, users

of IaaS and PaaS are developers or application software providers but not end-users. The application software providers develop the software to deploy in Cloud computing for end-users.

Cloud Deploying Models

In Cloud computing technology, many types of services are classified by many researchers. In this paper, 3 basic models of deployment: Public cloud, Private cloud, and Hybrid cloud are described

- **Public Cloud:** It is available for all users in general public. Customers can access the Public cloud via the internet from third-party providers. They can use IaaS, PaaS, or SaaS in pay-as-you-go model. Amazon, Microsoft and Google are examples of Public cloud vendors.

- **Private Cloud:** It is for business or organization or internal use only. The organization provides the services based on its resources such as servers, networks or data centers via intranet within the firewall. Government organizations or large companies prefer to use Private cloud due to secured environment data and ease of data controlling. Nonetheless, the development or maintenance requires in-house hardware

- **Hybrid Cloud:** It is the combination of Public cloud and Private cloud. Whenever, the capacity of Private cloud in business or organization is insufficient, external hardware or other resources can be requested from Public cloud providers. By using this model, the organization can protect some critical data to a certain extent within the firewall. Both intranet and internet will be used in Hybrid cloud model.

Development Tool for Editor

Text editor is a tool in writing computer programs such as Java, C, HTML, PHP, and etc. It has the capability to distinguish text in the program code with the difference of color highlight. The programmers can easily recognize the language structure and modify the code by using the highlight feature. Notepad1, EditPlus2, and Dev-C++3 are the examples of text editors. Other important features for the editor are to compile and run the program to execute the output which provided in Integrated Development Environment (IDE) (or Interactive Development Environment) such as NetBeans4, JCreator5, or Eclipse6, and Cloud9 IDE7. Some open source code editors are described below:

- **Ace**

Ace is an open source software using JavaScript Language. It provides the basic characteristics for creating text editor such as Undo, Redo, and Syntax highlight which can be adjusted depending on the language that programmers prefer.

Moreover, Ace can implement its own keyboard handler. Ace is used in many kinds of production applications because it provides many features8.

- **Cloud 9 IDE**

Cloud9 IDE is a freeware online integrated development environment. It supports more than 40 programming languages, including PHP, Ruby, Python, JavaScript with Node.js, and Go. It enables developers to get started with coding immediately with pre-setup workspaces, collaborate with their peers with collaborative coding features, and web development features like live preview and browser compatibility testing. It is written almost entirely in JavaScript, and uses Node.js on the back-end. The editor component uses Ace. As of July 2014, it uses Docker containers for its workspaces, and is hosted on Google Compute Engine.

Online Code Editor Architecture

Online Code Editor is deployed on Private cloud computing in SaaS layer, which can be accessed with many platforms such as desktop computers, notebooks, or tablet PCs via organization intranet.

- **Component of the Editor**

The layer of Online Code Editor
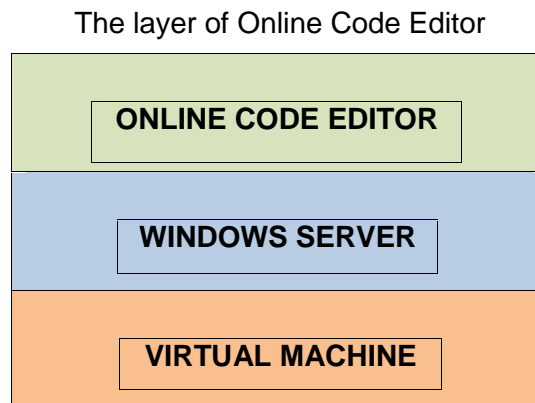
In Private cloud computing, ESXi which is Hypervisor will be installed as the first layer. It manages the server resources to create Virtual Machine (VM). Therefore, Hypervisor then becomes a VM which is a virtual hardware creating from ESXi in IaaS layer. The users can use it to install an Operating system or software in PaaS and SaaS, and the last layer is VM. In this experiment, VMware vCenter Server (vCenter) was used. It is the management software to create VM on Private cloud computing. According to Fig. 1, Windows Server is installed in PaaSlayer. It is used for managing the resources from VM in IaaS layer.

The editor is installed in SaaS layer after Windows Server has been installed. In order to support the Online Code Editor, Appserv which consists of PHP, Apache, MySQL, and phpMyAdmin, including FileZilla server are installed. It consists of the

main component which is used to compile and run program source code. The main component consists of 2 parts: Server Side Engine and Client Side Engine which use HTTP(s) in communication. Ace will be used as a Front-End to support the editor. Since, the Online Code Editor is Web based application, therefore; the users can access it via Web browser by using the account on Private cloud.

- **Functions of the Editor**

In this paper, the Online Code Editor was developed using JavaScript. It called some functions in Ace which is Front-End editor, such as Undo, Redo, and Syntax Highlight. For users, there are 4 steps in using the editor. First, the users need to login after registration. Second, the users create a project which means that a folder is created in order to store files in it.

Architecture of Online Code Editor
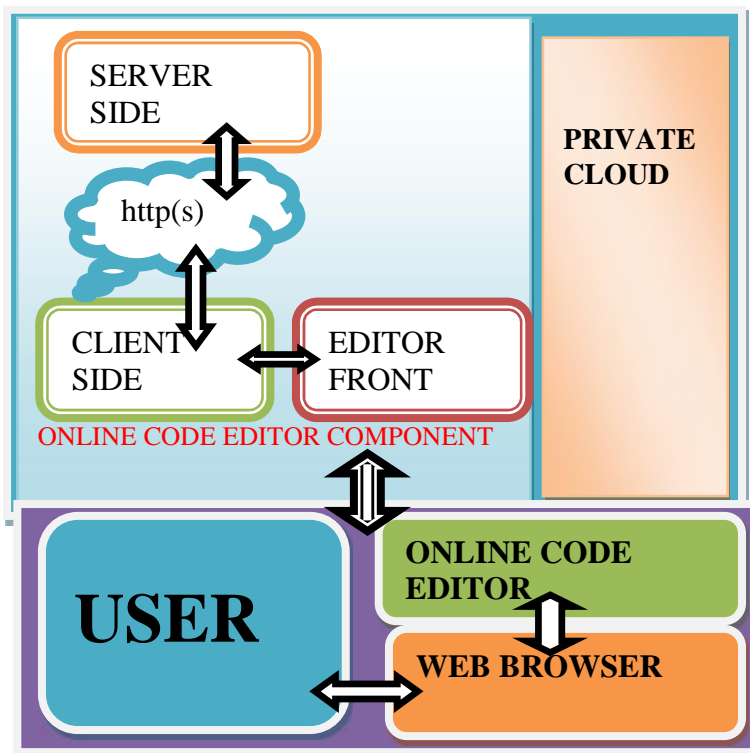
Third, the users can create files under the created folder.With this Editor, the users can Import, Export, Undo, Redo, Save, and Run projects or files, etc. The editor supportsHTML, PHP, CSS, and JavaScript.

The Use of Online Code Editor

CLOUD 9

The use of Online Code Editor and its functions can be described as shown below:

Make a account in cloud 9
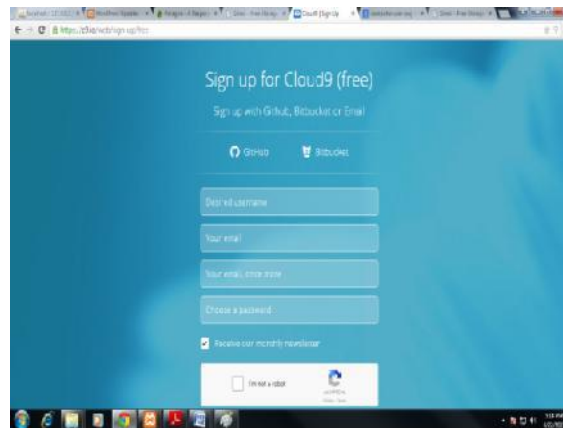
Then sign in account.
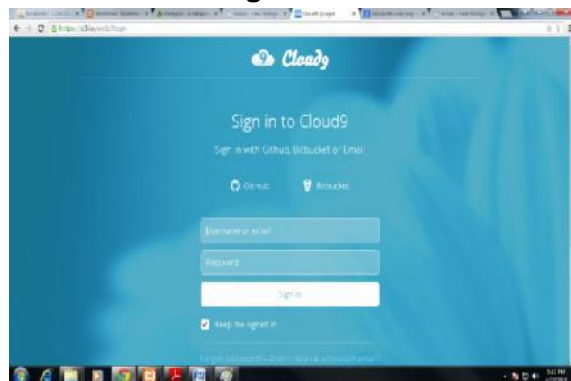
Create a NEW WORKSPACE
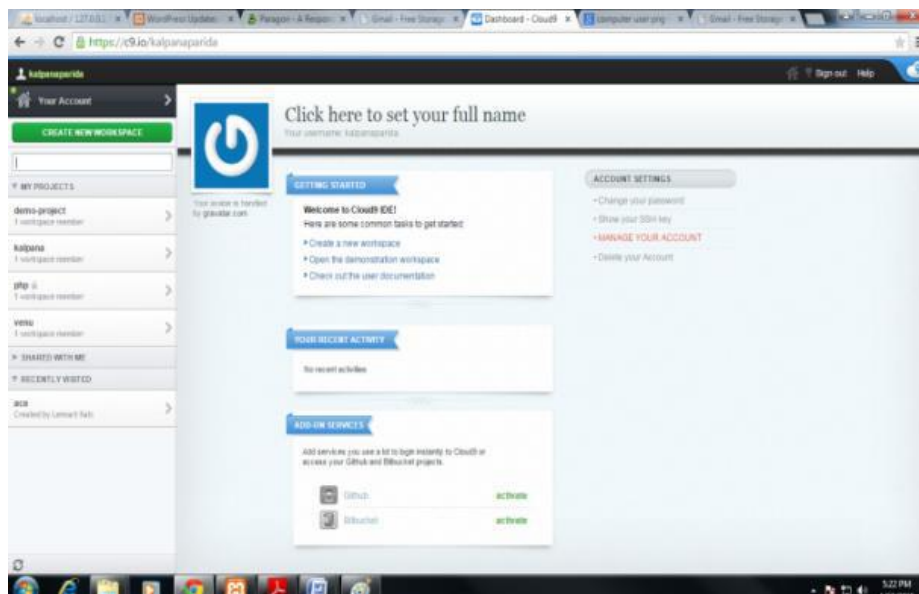
Create Folders and Save Files

After the user's registration as shown in above figure, the system will create a folder by using the user's registration name. All files that created by the user later will be stored in this folder. After the user creates a project, e.g. Project A, the system will store the detail of the "Project A" such as creating date and time and modification date and time of each folder. Moreover, the editor has ability to automatically change the project name when the user accidentally creates the same name, the editor will automatically save as "Project A (1)". After the project was created, the user can then create files such as HTML, PHP, CSS, and JavaScript. The file creation is classified into 2 steps as the followings:

File Creation

After creating the file, the user can write program source code in the right space on the web page, as shown in Fig. The system will create essential basic syntax of each language and then store the file within the project folder. Online Code Editor used Ace to highlight syntax in each language. The editor also used Undo and Redo libraries source code. More functions were added in this editor as described in the followings:

- Import and Export files in HTML, PHP, CSS, and JavaScript.
- Open file, Close file, Create file, and Delete file and project.
- Compile and Run program in only the edited file or within the project.
- Auto save written code in every 5 seconds.
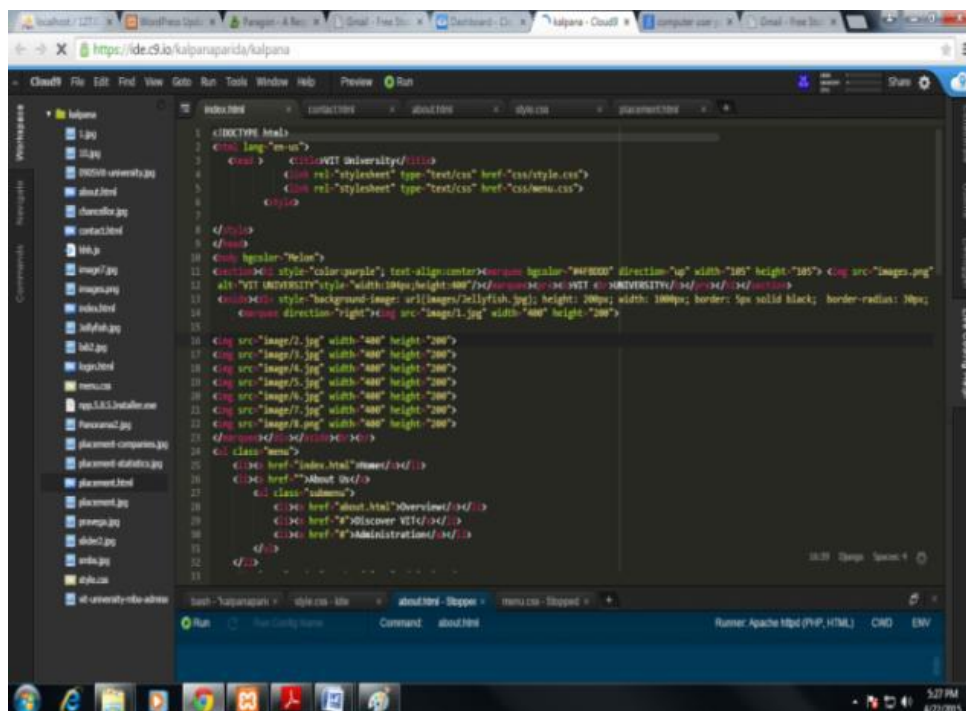
The Comparisons of Functions in the Online Code Editor with Other Software

Function	Notepad++	EditPlus	Online Code Editor
1. Save File	✓	✓	✓
2. Import File	x	x	✓
3. Export File	x	x	✓
4. Redo Code	✓	✓	✓
5. Undo Code	✓	✓	✓
6. Open File	✓	✓	✓
7. Open Project	x	x	✓
8. Run File	x	x	✓
9. Run Project	x	x	✓
10. Syntax Highlight	✓	✓	HTML, CSS, PHP, JavaScript
11. Create File	✓	✓	✓
12. Create Project	x	x	✓
13. Delete File	x	x	✓
14. Delete Project	x	x	✓
15. Close File	✓	✓	✓

Running Code on the Online Code Editor

One simple program is shown in fig.1
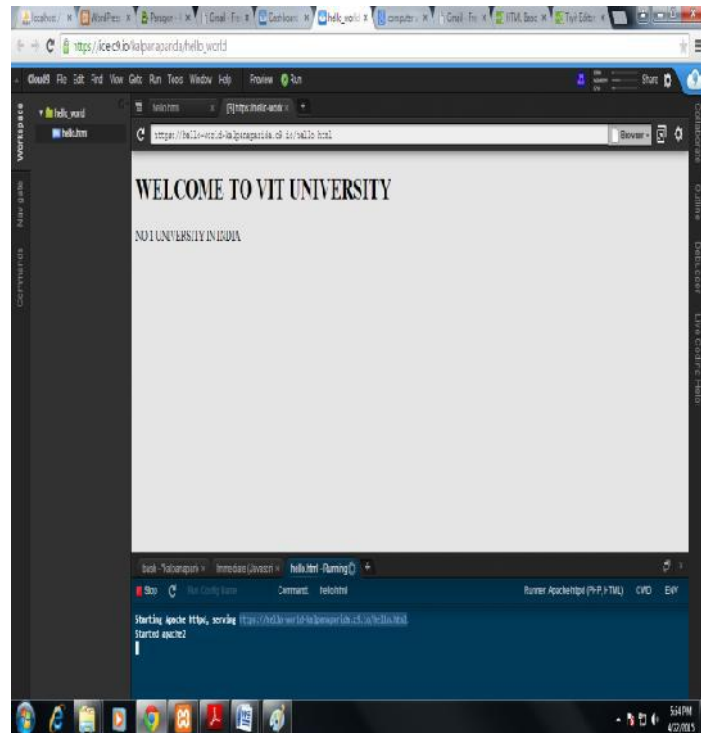
Conclusion

In this paper, the Online Code Editor was created and deployed on in Private cloud computing in SaaS layer. Ace open source software was used to create Undo, Redo, and Syntax highlight. In addition, the functions which are Import/Export files, Save file, Open file, Open project, Create file, Create project, Delete file, Delete project, Close file, Compile, Run file, and Run project were created to make this editor complete. In addition, the advantage of deploying on Private cloud computing is the programmers in the business or organization can urgently write or modify program source code without any specific physical computers or without installing the editor program. Only 4 computer languages; HTML, PHP, CSS, and JavaScript can be written within this editor. In the future, other computer languages such as C++, C# can be written using the Online Code Editor.

References

⇒ B. Furht and A. Escalante, Handbook of Cloud Computing, Springer, 2010.

⇒ D. Zissis and D. Lekkas, Addressing Cloud Computing Security Issues, Future Generation Computer Systems, Vol.28, No.3, Elsevier B.V., 2012, pp. 583-59

⇒ M. A. Babar and M. A. Chauhan, "A Tale of Migration to Cloud Computing for Sharing Experiences and Observations," Proceedings of the 2nd International Workshop on Software Engineering for CloudComputing, 2011, pp. 50-56.

⇒ P. Mell and T. Grance, "The NIST Definition of Cloud Computing," National Institute of Standards and Technology : U.S. Department of Commerce, NIST Special Publication 800-145, September 2011.

⇒ R. Buyya, J. Broberg, and A. Goscinski, Cloud Computing : Principles and Paradigms, A John Wiley & Sons, Inc., 2011.

❧❧❧

<div style="text-align:center">

12

</div>

Impact of Age on E-Buyers Behaviour towards Web Retailing

Arpita Mehta[*]
Dr. Ranu Sharma[**]

Introduction

Internet is altering the way consumers shop and buy goods and services. The preliminary success stories of online shopping have enforced the marketers to slip in the use of internet based technology for endorsement and selling of their products and services. It is viewed as an alternating channel of distribution network for cutting marketing costs, thereby reducing the price of their products and services in order to stay ahead in highly competitive markets. On the other hand customers find web retailing as an easy convenient platform not only for ordering the product online, but also to compare prices, product features and after sale service facilities provided by competitive marketers before making such buying decisions. So, the success and outlook for web retailing based business-to-consumer (B2C) electronic commerce depends not only on consumer acceptance of Internet technologies as viable transaction means, but on consumer recognition of Web retailers as reliable merchants. In light of this, a comprehensive model describing the factors that drive consumers to accept e-commerce and on-line transactions would be useful for both academicians and practitioners, in that it would help them to better understand consumer on-line behavior in the emerging web retailing e-commerce environment. This paper integrates two important streams of literature under the homological

---

[*]   Assistant Professor, Poornima University, Jaipur, Rajasthan, India.
[**]   Associate Professor, Poornima University, Jaipur, Rajasthan, India.
[~]   *The paper has been presented in "***International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context***" Organized by* **Inspira Research Association (IRA),** *Jaipur* **& LBS PG College,** *Jaipur, Rajasthan, India.* **02-03 February, 2018.**

structure of the theory of reasoned action (TRA) and the technology acceptance model (TAM) with Buyers behaviour items. In 1989, Davis proposed the Technology Acceptance Model (TAM) to explain the potential user's behavioural intention to use a technological innovation. TAM is based on the Theory of Reasoned Action (TRA), a psychological theory that seeks to explain behaviour (Fishbein & Ajzen, 1975), and involves two primary predictors - perceived ease of use (PEOU) and perceived usefulness (PU) and the dependent variable behavioural intention (BI), which TRA assumed to be closely linked to actual behaviour.

Review of Literature

Jarvenpaa et al. (1999) suggested that reducing the risk associated with buying from an Internet store would increase the probability of a consumer purchasing from it. Perceived risk has been shown to negatively influence transaction intentions with Web retailers (Featherman et al, Pavlou, 2002) Chircu, Davis and Kauffman(2000), integrate trust with the model, arguing that trust relates to perceived usefulness and ease of use.

Gefen and Gefen and Straub (1997), also integrate trust, perceived usefulness, and ease of use in the context of e- services .Consumer trust could be described as a function of the degree of risk involved in the situation (Koller, 1998). Trust is crucial in economic transactions because it reduces the risk of falling victim to opportunistic behavior [Fukuyama(1995), Williamson(1985)]. A Web retailer's reputation is an important antecedent of trust, perceived risk (Doney, Zucker, 1986), and purchase intentions (Jarvenpaa,1999).

According to the fall 2000 Greenfield Online Shopping Index, on-line experience is the strongest indicator of a consumer's likelihood to buy (Romita,2001).One of the consequences of trust is that it reduces the consumer's perception of risk associated with opportunistic behaviour by the seller (Ganesan, 1994). Kim and Benbasat (2003) identified four categories of trust related issues: "personal information, product quality and price, customer service, and store presence"

Objectives of the Study

The Major Objective was to analyze the e-buyers behaviour with web retailing. The other objectives were:

- To evaluate the dimensions of online buyers
- To identify the impact of age on identified dimensions of buyers behaviour with web retailing
- To suggest the suitable strategies to Online Retailers

Hypothesis Formulated

Following hypotheses were formulated for the study and tested at 5% level of significance:

H$_{0(1)}$ Delighted Buyers e- buying behavior with web retailing is not significantly dependent on age of buyer.

H$_{0(2)}$ Information seeker Buyers e- buying behavior with web retailing is not significantly dependent on age of buyer.

H$_{0(3)}$ Skeptical Buyers e- buying behavior with web retailing is not significantly dependent on age of buyer.

Research Methodology

- **Type of Study**: Exploratory in nature.
- **Type of Sampling**: Judgemental convenient sampling. (The collected Data Stratified later by age(in yrs) 35 and >35
- **Sample Size**: 110 (Five Questionnaire dropped out of 115 collected questionnaire due to insufficient data provided by the respondents)
- **Data collection tool**: Primary data was collected with the help of structured questionnaire Prepared using TRA & TAM scale with additional Items on Buyer behaviour on 1-7 (Strongly disagree to strongly Agree) point likert scale
- **Tools used for data Analysis**: Factor Analysis, Independent sample T test. Data were analyzed with the help of SPSS16.

Results and Discussion

Age profiling of the respondents is given in following table. More than 81% of respondents were below 35 years of age and only 18.18% were in the age group of above 35 years of age.

		Frequency	Percent
Valid	less than 35	90	81.81
	>35	20	18.18
	Total	110	100.0

Factor analysis was performed using a Principal Component Analysis (PCA) and the Varimax rotation method. The exploratory nature of this study led to the selection of PCA to make the findings more meaningful. Factor analysis has rduces 42 items of questionnaire in to four factors. Four questions were dropped as factor loading was found to be less than 0.3 The results of the factor analysis are given in Table 1, which shows that variables are grouped into three factors, with the highest score of each variable given in the bold type face highlighting the membership of each variable within these factors. Total 51 % of variances are explained by these three factors. These extracted three were named as: **Delighted, Information Seeker and Skeptical buyers** with web retailers

Table1: Factor Analysis

	1	2	3
V7	**0.734**	-3.91E-02	6.13E-02
V8	**0.592**	0.328	0.268
V9	**0.665**	0.317	0.202
V10	**0.482**	0.264	0.47
V11	**0.731**	0.11	-2.08E-02
V12	**0.637**	1.58E-03	0.149
V13	**0.673**	0.131	-3.87E-02
V14	**0.697**	0.435	5.68E-04
V15	**0.63**	0.309	0.153
V16	4.26E-02	**0.667**	8.61E-02
V17	0.173	**0.509**	0.164
V18	4.89E-02	**0.648**	-6.26E-02
V19	1.42E-02	0.217	**0.61**
V20	**0.6**	0.329	8.74E-02
V21	**0.514**	0.479	7.69E-02
V22	**0.44**	0.206	0.279
V23	-0.254	0.143	**0.447**
V24	**0.762**	-0.172	8.55E-02
V25	**0.815**	8.85E-02	2.31E-03
V26	**0.788**	0.132	7.24E-03
V27	0.118	0.301	**0.485**
V28	0.1	**0.315**	0.251
V29	-6.97E-02	**0.502**	0.182
V30	**-1.64E-03**	**0.187**	**0.29**
V31	0.216	**0.412**	0.283
V32	0.333	6.87E-02	**0.457**
V33	**0.639**	6.71E-02	0.311
V34	0.445	-8.61E-02	**0.493**
V35	**0.618**	-0.136	0.313
V36	0.233	8.49E-02	**0.47**
V37	0.396	3.73E-02	**0.582**
V38	**0.219**	**0.139**	**0.162**
V39	**-5.70E-03**	**0.283**	**0.244**
V40	**-3.28E-03**	**-8.79E-03**	**0.251**
V41	9.74E-02	9.83E-02	**0.472**
V42	0.217	**0.515**	0.101

Delighted Buyers: These buyers intended to use the existing web retailer even in near future, not only they were the frequent buyers with the web retailers but also recommended the use to others as they were satisfied and comfortable with web retailing access and received desired values and thought that these web retailing were functional and trustworthy. Extracted attributes of Delighted buyers are given in table 2.

Table 2: Attributes of Delighted e- Buyers of web retailing

	Delighted Buyers
frequently used	0.734
intend to use this retailer's Web site	0.592
predict	0.665
near future	0.482
trustworthy	0.731
keeps promises and commitments	0.637
they keep my best interests in mind	0.673
useful	0.697
valuable	0.630
useful to me	0.600
functional	0.514
dependable	0.440
satisfied	0.762
satisfied	0.815
recommend	0.788
desired values	0.639
always comfortable	0.618

Information Seekers: they were influenced by the advertisement but did not take final decisions for web purchasing and were susceptible to friends and relatives suggestion. They believed that the prior knowledge of web purchasing was required and they weighed the other available alternatives before accessing the web retailers. Extracted attributes of Information seeker buyers are given in Table 3:

Table 3: Attributes of Information Seeker e- Buyers of Web Retailing

	Information seeker
influenced by advertisements	0.667
friends & relatives suggested	0.509
susceptible to the suggestions	0.648
through Internet Access	0.315
I don't take final decision	0.502
over other good alternatives.	0.412
background knowledge of E-purchasing is required.	0.515

Skeptical Buyers: They could be diverted to other websites if the existing web retailer's reputation was at stake and the cost effectiveness is questionable. They believed that a bit risk was associated and it paid them a lot. Usually they thought that if they accessed these web retailers then they would be termed as techno savvy buyers and accessing should be done only in a group. Extracted attributes of Delighted buyers are given in Table 4:

Table 4: Attributes of Skeptic e- Buyers of Web Retailing

	Skeptical Buyers
diverts my attention to others website.	0.61
bad reputation in the market	0.447
switch over	0.485
this web retailer is cost effective	0.457
sign of techno savvy buyers	0.493
risk associated	0.47
risk associated & paid me a lot	0.582
accesss this web retailer in group	0.472

Further the findings revealed that age wise there was no significant difference observed for e- buying behavior of web retailing for Delighted buyers, Information seeker buyers and Skeptical buyers (**Table 5**). So, hypotheses $H_{0(1)}$, $H_{0(2)}$ and $H_{0(3)}$ were not rejected. The study also revealed that the respondents below 35 years age group were found to be more delighted and more information seeker for e- buying and (Table 6) describes the Age wise Mean and Standard deviation for e- buying behavior towards web retailing.

Table 5: Age wise T test for e- buying behavior towards web retailing

	T value	df	Sig. (2-tailed)
Delighted Buyers	1.289	100	.200
Information seeker	.889	100	.376
Skeptical Buyers	.404	100	.687

**Table 6: Age wise Mean and Standard deviation for
e- buying behavior towards web retailing**

	Age	N	Mean	Std. Deviation
Delighted Buyers	less than 35	86	4.8824	1.09154
	>35	16	4.4853	1.33509
Information seeker	less than 35	86	4.4718	1.00588
	>35	16	4.2232	1.13565
Skeptical Buyers	less than 35	86	4.2049	0.91974
	>35	16	4.1016	1.05200

Conclusion

This paper integrates two important streams of literature of the theory of reasoned action (TRA) and the technology acceptance model (TAM) with Buyers behaviour items and has explored the useful dimensions of e- buying behavior for web retailing. The study also revealed that the extracted factors of e- buying behavior for web retailing namely **Delighted buyers, Information Seeker and Skeptical buyers**

have shown similar influence on different age group of respondents. These explored dimension of e buying behavior can be used an opportunity factor for formulating and developing web retailing strategy by the marketers.

References

⇒   Chircu, A.M.; Davis, G.B.; and Kauffman, R.J. Trust, expertise and ecommerce

⇒   Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly , 13(3), 318-340.

⇒   Doney, P.M., and Cannon, J.P. (1997)An examination of the nature of trust in buyer-seller relationships, journnt of Marketing, 61, 35-51

⇒   Featherman, M., and Pavlou P(2002). Predicting e-services adoption: A perceived risk facets perspective. In J. DeGross (ed.). Proceedings ofthe Eighth Americas Conference on Information Systems. New York: ACM, pp. 1034-1046.

⇒   Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behaviour: an introduction to theory and research , Addison-Wesley, California.

⇒   Fukuyama, F. Trust: The Social Virtues and the Creation of Prosperity. New York: Free Press, 1995.

⇒   Ganesan, S.(1994), "Determinants of Long-Term Orientation in Buyer-Seller Relationships", Journal of Marketing, Vol. 58, No. 2: 1-19.

⇒   Gefen, D(1997). Building users' trust in freeware providers and the effects of this trust on users' perceptions of usefulness, ease of use and intended use of freeware. Ph.D. dissertation, Georgia State University

⇒   intermediary adoption. In J. DeGross (ed.) (2000). Proceedings ofthe Sixth Americas Conference on Information Systems. New York: ACM, pp. 710-716.

⇒   Jarvenpaa, S.L., and Tractinsky, N. (1999). Consumer trust in an Internet store: A cross-cultural validation, journal of Computer-Mediated Communication, 5, 2.

⇒   Jarvenpaa, S.L.; Tractinsky, N.; and Vitale, M (1999). Consumer trust in an Internet store. Information Technology and Management, 2,12, 45

⇒   Koller, M (1988). Risk as a determinant of trust. Basic-and-Applied-Social Psychology, 9, 4, 265-276

⇒   Pavlou, P.A. (2001). Integrating Trust in electronic commerce with the technology acceptance model: Model development and validation. In J. DeGross (ed.). Proceedings ofthe Seventh Americas Conference in Information Systems. New York: ACM, pp. 816-822.

⇒   Romita, T.(2001). Familiarity breeds net sales. Business 2.0 , 98.

⇒   Williamson, O.E.(1985). The Economic Institutions of Capitalism. New York: Free Press.

⇒   Zucker, L.G. (1986) Production of trust: Institutional sources of economic structure, 1840-1920. Research in Organizational Behavior, 8, 53-111.

❧❧❧

$$\boxed{\textbf{13}}$$

E-Marketing in India: Challenges and Opportunities

Harinder Singh[*]

Introduction

With the help of globalization, not only nations are coming closer to each other but also different businesses and industrial sectors undergo huge changes. Marketing is also affected by it and experiencing so many changes continuously. The process of selling our product and services through internet or digital media is known as E-marketing. E- Marketing is also known as web marketing and online marketing. It helps to find out the right customers to whom goods and services are to be sold by the business organizations. It consists of all the actions, activities and processes with the intent of finding, attracting, winning and retaining the customers. The creative use of internet is done by availing various multimedia, text, graphics etc. with different languages to create interactive and catchy advertisements and e-shops where product and services can be viewed, promoted and sold. . The scope of E- Marketing is so broad that it does not only use to promote products and services over the internet but also helps in marketing them through e-mail and wireless media. The usage of e-marketing can be done through promotional techniques like social medial marketing, search engine marketing, interactive online ads, e-mail marketing, online directories, viral marketing, affiliate marketing and so on.

E-marketing is a cost efficient tool where customization becomes very easy and affordable along with cheap prices. Various methods are used by the advertisers

[*]   Research Scholar, Department of Business Administration, University of Rajasthan, Jaipur, Rajasthan, India.

i.e., pay per play pay per click, pay per impression or pay per action. In this way organizations can able to determine that which message is appealing to the customer and which message is not.

Need of the Study

India will likely see the boom in the world of internet by 2015 to 2020 with incredible growth in the field of E-Commerce, E- Advertising, Social Media, Search engines, Online Content etc. As we all know, India is the fastest growing member in the world of Digital Marketing as more and more Indians are spending time on the internet as compared to China and US. So we can study the importance of e-marketing as per Indian context.

Objective

In this paper we will try to study the concept of E-Marketing .We will try to fulfill following objectives through our paper:

- To review the present status of E-marketing in India.
- To identify the problems in E-marketing from the point of view of providers and consumers.
- To provide suggestions to popularize E- marketing and to increase the profitability of companies engaged in E- marketing in India.

Types of E- Marketing

There are several types of E- marketing, some which work alone, and others which work in collaboration with others. Here are some types of internet marketing:

Search Engine Optimizer

Search engine optimizer is possible for popular search engine to index a website and boost it up to the top of the result page.

Social Media Marketing

Social media marketing is the process of gaining attention through social media sites. The aim of this technique is to produce or develop the content that users will share with their social network to help a company in increasing their brand exposure and broaden their customer reach.

Blog Marketing

Blog marketing is any process that publicizes or advertises a website, celebrities, business, brand or service through the medium of blogs.

Pay Per Click Advertising

Pay-per-click is a technique of e- marketing in which companies pay a fee each time one of their ads is clicked. Essentially, it's a way of buying visits to your site, rather than attempting to earn those visits organically.

E-mail Marketing

E-mail marketing is a tool to reach customers directly through the electronic mail. Unlike spam, direct email marketing reaches those customers who interested in our products and services.

Importance of E-Marketing

Some of the importances of e-marketing are as follows:

- **Cost Effective**

E-Marketing is one of the inexpensive ways of advertising because promotion of products and services on the internet is less costly in comparison with general marketing as there is absence of middlemen in online marketing as well as less expenses incurred on the physical outlet of the showrooms and the use of marketing products and services on social media by establishing an online store is minimal.

- **Convenient**

E-marketing enables the customers to get 24*7 services without getting worried about the opening and closing hours of a store in the market. It is also convenient for the customers because they can browse the products and services from online store of companies at any time and from any place at their own convenient time.

- **Increase Online Traffic**

The use of social media, blogs as a marketing strategy will help to increase attention to a business website. The more people visiting the site the more will be the chance of closing sale leads by generating the interests of people in the products and services.

- **One-to-one Marketing**

E-marketing overcomes the hurdle of distance and organizations can sell their goods and services in any part of the world without opening up their outlet over there.

- **Improves Customer Seller Relationship**

E-marketing provides better ways to build relationships with customers for increasing the customer retention level. For example when a customer has purchased a product, first step to begin the relationship by sending a follow up e-mail to confirm the transaction and then thank the customer. You can also invite the potential customers to give product reviews on your website regarding the existing product and this will help to build a sense of community.

- **Personalization**

E-marketing guides the organization by building a systematic profile of the purchasing history, preferences of the customers and it helps a business to personalize offers for customers.

- **Increases Sales**

E-marketing will definitely boost the sales of an organization because it provides the consumers an opportunity to purchase the products online rather than physically going to a place or sending an order form by mail. This will increase the rate of impulsive buying and it will increase the revenue of business organizations and can give excellent return on their investments.

- **Always Available to Consumers**

Using the E- marketing tools businesses can gave their consumers a 24 hour outlet for finding the products and services they are willing to buy rather than buying it from physical outlets in only normal working hours and which will impact their work schedule and lifestyle .

Unique Challenges of E-Marketing and the Ways to Overcome Them

Since late 2000, there is a huge flood in the use of internet .hence, so many IT- companies have been starting up every day.

But every coin has two sides. There are some problems which are faced by the industries engaged in the e-marketing world. Some of them are as follows:

Security and Privacy

Most people do not completely trust websites and, thus, they hesitate in sharing information regarding them on the virtual world. When companies collect data are exposed to scammers and spammers, it creates problem for the customers. To adopt a sound policy and implement a fool-proof security measure, it becomes imperative for e-businesses.

Impersonal service

The methods used by organization for providing customer service through internet such as posting and emailing info on the website to answer possible user questions. Sometimes customers feel that this is just too impersonal or uncaring. Organizations must develop efficient methods for selling goods and services through internet. Hiring call handling services can also be taken into account, so that customers can talk to organization when they have inquiries about problems that need instant answer.

Improving Brand Awareness

A huge challenge for the organizations is to use the internet to sell their products and services This is because, online advertisements can be shut off by users unlike traditional advertising, (such as television, radio, billboard, and print) in which the campaign's message can be reinforced and repeatedly introduced to consumers at the marketers' will. So the challenge faced by organizations is to be more innovative in terms of promotion and advertising.

Dealing with the IT Department

There is a trend of IT vs. marketing for a long time. But now it's the high time to understand that we need to be partner with our IT giants to implement our marketing programs more efficiently and effectively. In simple sense, we need them and they need us or we can say that both requires each other for their survival in the market.

Continuing Education

Constant innovation and learning is required by the organizations of 21st Century. It is a famous saying that "knowledge in marketing comes with a expiry date" and continues professional development is a necessity for up-gradation. So organizations must upgrade them periodically to meet the challenges of the e-marketing world.

Poor Marketing Plans

Anyone can call themselves a web designer, marketer, consultant, SEO expert and so on. Poorly designes , planned and executed marketing programs degraded the sales and also create mistrust among customers and other related parties. By doing marketing in a right time or way helps you to take edge over competitors and helps the organization in long term.

Lack of Trust

In general, identity theft, Spam, intrusive advertising and technological glitches have left many mistrusting the concept of e-marketing. So it's the duty of organizations to create trust among customers regarding e-marketing.

Know-It-Alls

Nobody in this world is able to fully understand all aspects of marketing. There is simply too much to know, and whatever organizations are doing to know is changing at supersonic speed. So if organizations want to excel in e-marketing then they will have to develop their specialization in the field of e-marketing.

Ethical Practices

There is flood of un-ethical businesses that has been spawned on the Internet. There have always been scam regarding bottom feeders and artists, but the Internet seems to have brought them out in epic numbers. So it is the duty of organizations to follow the practices which are clean and ethical in nature and which will make their image positive in front of the customers.

Customer Expectations

The Managing your customer's expectations is important for every organization, because if we don't know our customer's will, then we are not able to survive in long term in the market. Without customers we will not have a business because customer is treated as a king of market, so take the time to get to know them, treat them with due care and respect.

Intellectual Property

It is wrong to steal someone else's hard work. Everyday everything from music to software, movies and images are lifted from the Internet. This is a corrupt practice and organizations should follow the rules related to patents or intellectual property then only customers will develop their faith towards the efforts of organizations towards e-marketing.

Conclusion

E-m rketing not only helps in selling the product or services but also offers organizations an opportunity to gather data about their consumer base to an extent that has till now been very difficult to achieve through ancient marketing tools. The development of e-marketing has lead to extension of businesses in a positive manner in recent years. In the next few years, e-marketing in Indi will strengthen even further. However, long-standing sustainability directly depends on f ctors like ch nges trends in the m rket, creativity and innov tions nd inter ctivity of organizations with the customers. Owing to incre sed penetr tion of credit c rds nd e sy ccess of computing witnessed   promising growth. Moreover, b rg in-power of consumers re l tching on this trend s Internet ret ilers re known to offer products t speci l discounted prices comp red to store-b sed ret ilers. Consumers in the country c n now truly expect   well stre mlined, efficient nd world-cl ss shopping experience supported by the best technology.

References

⇒ Baourakis, G., Kourgiantakis, M. & Migdalas, A. (2002), The Impact Of E- Commerce On Agrofood Marketing: The Case Of Agricultural Cooperatives, Firms And Consumers In Crete, British Food Journal, 104, 580-590.

⇒ Barletta, M. (2003). Marketing To Women: How To Understand, Reach, And Increase Your Share Of The World's Largest Market Segment. Chicago, IL, Dearborn Trade Publishing.

⇒ Devi .C.S and Anita.M (2013) :   E marketing challenges and opportunities pg. 96 – 105 retrieved from www.ijsrm.in

⇒ Heine, K. (2012). The concept of luxury brands. Berlin: Bartek Goldmann.

⇒ Hoffman, J.,& Maniere, I.C. (2011). Luxury strategy in action. UK: Palgrave Macmillan.

⇒ internet-marketing-in-relation-to-business-e.html

⇒ Mohammed R.,   Internet Marketing , McGraw Hill, New York, Vol. 4, 2001

⇒ Shanker, Ravi (1998), Marketing on the Net, (Dissertation), Banaras Hindu University, Varanasi, India.

⇒ http://gatton.uky.edu/faculty/sudharshan/publications/InternetMarketingResearch.pdf

⇒ http://www.bournemouth.co.uk/business/become-a-partner/e-marketing-opportunities

❧❧❧

$$\boxed{14}$$

Digitalization in India

Suman Jakhar[*]

Introduction

Digital India was initiative taken by our PM Shri Narendra Singh Modi in 2015 to make India digitally equipped knowledge economy. Digital India drive aims at providing government services to common man electronically that will reduce paper work , connect rural India with high speed internet and to increase digital literacy. The project aims to connect the 2.5 lakh villages across India through broadband highways, public internet access, universal access to mobile connectivity, e-governance, e-kranti, information for all, a robust electronic manufacturing regime, early harvest programmes, and IT for jobs—known as the nine pillars of Digital India. The cost of this project was estimated at Rs 1,13,000 crore. The Digital India Advisory Group was chaired by the Cabinet Secretary and monitored by the Prime Minister and his office. For the Digital India initiative, the original design and programme content of the e-governance project have been distinctly improved upon.

Vision of Digital India

The vision of digital India is centered on three key areas. They are as follows:

- **Digital infrastructure** which seeks to provide every citizen with high speed internet facility, mobile phone and bank account, access to common service centre, and safe and secure cyberspace.

- **Governance and service to** be available in real time for online and mobile platforms, seamlessly integrated across departments and jurisdictions. All

[*]   Research Scholar, Jaipur National University,Jaipur, Rajasthan, India.

citizen documents to be made available on the cloud platform; as a result, citizens will not be asked to produce such documents again and again for availing services. In addition, there should be provision of cashless electronic transactions that will help in generating business. Geographical Information Systems (GIS) will be integrated with the development schemes.

- **Empower citizens**, especially rural citizens, by making them digitally literate. This will be done through collaborative digital platforms and by making available the digital resources in their native language so that each and every person can be connected with a view to making their participation a reality.

Programme Pillars of Digital India

Government of India has taken below projects under this programme:

- Broadband Highways
- Universal Access to mobile connectivity
- Public internet access programme
- E-Governance-Reforming government through technology
- E- kranti-Electronic deliver of services
- Information to all
- Electronic manufacturing
- IT for jobs
- Early harvest programme

Objective of the Study

This paper has below objectives:

- To study concept of digital India.
- To study achievement of the programme.
- To study major hurdles which impact success of this programme.

Methodology

An attempt has been made to analyze the secondary data available on website like www.digitalindia.gov.in, journals etc

Detailed Study on Objectives

- **Concept of Digital India Contains 9 Pillars**
  - **Broadband Highways** : it contains:
    - ~ Broadband for all rural: It was suppose to cover 250,000 GP and its expected time line was December 2016.
    - ~ Broadband for urban: Virtual network operator to be made available for service delivery and mandate communication infrastructure on new urban development and buildings.

~ National information infrastructure: This programme was integration of SWAN, NKN, NOPN.

- **Universal access to phones**: The expected time for this is FY 2014-18.

- **Public internet access programme**: Under this programme the post offices was suppose to be made as multi service centers.

- **E-governance reforming government through technology**: This pillar includes Government business process Re-engineering using IT to improve transaction and Electronic databases in which all data bases and information to be effective not manual.

- **E-kranti electronic delivery of services**: E-Kranti was suppose to include technology for education, technology for health, technology for planning, technology for farmers , technology for security, technology for financial inclusion and technology for justice.

- **Information for all**: It includes online hosting of information & document. Government pro actively engages through social media and web based platform to inform citizens about MyGov.in and two way communications between citizens and government and online messaging to citizens on special occasions/ programmes.

- **Electronic manufacturing target net zero import**: Under this pillar the focus areas were Fabs, Fab-less design, set-top boxes,Vsats, mobiles, consumers and medical, electronics, smart energy meters, smart cards, micro –ATM.

- **IT for jobs**: It includes training people in smaller towns and villages for IT sector jobs, train service delivery agents to run viable business delivery IT services, telecom service providers to train work force to cater to their own needs.

- **Early harvest programmes**: IT platform for messages, Government greetings to be E-greetings and Biometric attendance.

Achievements of the Programme

- India became second largest market of smartphones in the world. No. of internet users increased to 50 crore as of May 2017. In June 2014, no. of internet users were 24.3 crore.

- Indian government started promoting content in local languages in internet.

- India improved its rank in 'United Nations e-Governance Index' by 11 positions compared to 2014. In 2016, India's rank is 107. In 2014, it was 118.

- No. of e-governance transactions per day has increased.

- 'Digi Locker', launched in 2015 enables citizens to securely store and share documents electronically has 72.66 lakh registered users as of 2017.

- All central ministers are present in social media and are utilizing social media to receive complaints and feedback from citizens.

- Now, people can share their views, ideas and suggestion directly to the government electronically through Narendra Modi app.

- 'Bharat Interface for Money (BHIM)' app, a simple UPI based mobile app for digital payments was launched in December 2016. UPI-based transactions grew more than 20 times since then. However this growth can be attributed to demonetization move.

- 'BHIM Aadhar' was started for digital payments at merchant outlets. With this, payer need not have mobile phone to make digital payment.

- Digital payments training and awareness campaigns were conducted. 2.04 crore people registered for this and were trained as of 2017.

- 'UMANG' app was launched to drive mobile governance in India.

- 'Pradhan Mantri Gramin Digital Saksharta Abhiyan '(PMGDISHA) was started with the aim of making 6 crore persons digitally literate. 82.7 lakh people are trained under this scheme as of 2016.

- Efforts were taken by government of India to make government apps available in regional languages as well.

- Indian government has installed free public wifi hotspots at many public places like airport, railway station, park etc.

- eNAM was setup to connect agriculture produce markets. 36.4 lakh farmers registered for this as of 2017.

- Direct benefit transfers were increased.

- 'National Knowledge Network', a revolutionary towards creating a knowledge society without boundaries connected 1635 institutions as of 2017.

- 'National Cyber Coordination Center' is operating from June 2017. It ensures cyber security and is a backbone to the vision of Digital India.

Challenges to digital India Programme

- **No Internet in Rural Area:** Many people in rural areas have no Internet connection, and also the content in regional languages is not sufficient to keep the readers engaged. Only 15% of the households can access the Internet, and few people can access mobile broadband, which has as little as 5.5 subscriptions for every 100 people. This is despite the increasing affordability of ICT environment in the country.

- **Literacy Rate in India:** According to WEF 2016 report, nearly 33% of Indian population is functionally illiterate (rank: 95), one-third of youth do not attend secondary education (rank:103).

- The WEF report applauds the achievements in providing online services and making people participate in e-governance projects, this poor as compared to globally the best services.

- **Basic Need in Rural Area is till Electricity:** There are vast differences in urban centers such as metropolitan cities and remote rural areas, where even basic services such as electricity is unavailable to run the Digital India program. Even after 70 years of independence we are not able to provide electricity to 100% villages.

- **Execution of Digital India Programme: E**ffective execution of the Digital India Program is a major challenge. The initiative is coordinated by DeitY, and implementation is carried on by government departments, state and the Union territories.

- **Smart Cities and Make in India Programs:** It entail considerable investment in developing manpower, upgrading technology, digital literacy, and a legal framework.

Conclusions

India has come a long way in digitalization and has a long way to go to achieve the vision of Digital India. We can clearly see the difference in no. of internet users and improved e-governance. But there is still digital illiteracy in many parts of India. 'Digital India' will be a success, when its benefits are available to each and every citizen of India. Despite a few remarkable achievements, many more initiatives need to be undertaken. The WEF Report is a reminder to the government in this regard, and underlines the need to realize the positive impact of Digital India and other related programs.

References

⇒ Digital India, a programme to transform India into a digitally empowered society and knowledge economy, Department of Electronics and Information Technology, Government of India, available at www.digitalindia.in

⇒ M.M.K Sardana(2012)," Vision of Digital india challenges ahead for political establishment DN2012/09,ISID.

⇒ Himakshi Gowswami,2016"opportunities and Challenges of digital india programme"Research paper,Education,E-ISSN No -2425-9916,volume 2,issue 11,Nov 2016

⇒ Recommendation of the council on digital Government strategies, adopted by the OECD council on 15thJuly 2014, OECD.

⇒ E-governance: Reforming government through technology

⇒ E-kranti: Electronic delivery of services.

⇒ http://digitalindia.gov.in/

⇒ http://www.groupdiscussionideas.com/digital-india-how-far-was-it-a-success/

❧❧❧

Digital Marketing in Indian Tourism Industry: An Overview

Komal Soni[*]

Introduction

Media communication technologies are imperative for frontline investments for sustainable globalised tourism development indicators. The powerful effects of media communications can bring sweeping changes of attitudes and behaviour among the key factors in local, national and global tourism for peace, security and sustainable development. The social, cultural, economic, political and environmental benefits of tourism would usher in monumental and historic changes in the country. It aims at the delivery of services and the interface between service deliverers and beneficiaries where people are empowered to by informed choice, education, motivation and facilitation effecting the expected changes. This can be done by media advocacy targeting all key stakeholders involved in the tourism industry. Effective use of communication techniques can break barriers and promote better uses of participatory message design which combines both traditional and modern media. The internet granted the freedom enjoyed by print media and common carriers such as letters, mails, and cable to the public media. Through audio streaming it is possible to enhance the reach of radio signals to any part of the world. The vast capacity of internet enables each media house to exhaustively investigate and publish depth analyses. Internet radio is not limited to audio as pictures, images, digital files and graphics are accessible to the users. Advertisers and their audiences can easily interact via the internet broadcasts.

[*]   Research Scholar, Department of ABST, University of Rajasthan, Jaipur, Rajasthan, India.

With the launch of internet technology, the rules of marketing have been redefined all over the world. The internet has upended how consumers engage with brands. It is transforming the economics of marketing and making obsolete many of the function's traditional strategies and structures. For marketers, the old way of doing business is unsustainable .Digital Marketing today has become the one of the key focus areas for businesses all over the world. It started as a mode of communication and has evolved not just into another source of additional revenue but most importantly, to develop and maintain long-term relationships with the various parties in the market. Interactivity, as the main feature of the Internet, has enabled a new dimension of connection between all the participants in the market. Internet users today interact not just with each other but also with their preferred brands. This has opened an opportunity for brands to talk directly with their users and to know them better. One of the main reasons of the success of digital marketing vs. traditional marketing is the fact that the former allows businesses to track user behaviour in real-time. Thus, the need to include digital marketing in the overall marketing strategy of the business shall only contribute to the better achievement of the overall marketing and business goals by enabling brands to gain insights about consumer behaviour and better satisfy their needs.

The reach for the tourism industry is global and it covers the entire expanse of the globe for people of different countries to be able to visually see the destinations online on the social media and the rooks of the hotels including the rates of the rooms in hotels making it easier to take a decision of affordability. Earlier this was not possible because a tourist had to travel to be able to see the place and understand what they had paid for sometimes returning with bad experiences. Advertising in the social media is one of the primary sources of advertising in today's market. Most of the organizations have websites with online portals that can be accessed by consumers and potential customers which makes the costs.

Characteristics of a Successful Digital Marketing in Tourism

- **Quality Website**

A quality website today is a prerequisite before establishing a business online. It not only helps your business transcend geographical boundaries to reach newer prospects, but also work as digital destinations for your audiences who can access it 24x7!

- **Strong Social Media Presence**

Social Media platforms like Facebook, Twitter, LinkedIn, Instagram enable businesses to reach out and talk directly to their users. Presence on these platforms not only helps brands to establish credibility, improve customer services but also provides insights on what your customers are up to.

- **Search Engine Optimization**

SEO is an integral part of digital marketing today. The online ranking of a business on various search engines determines the online popularity and helps

increase website visits. There is a lot of misconception that SEO efforts would lead to immediate results. It is important to understand that SEO is an ongoing process and takes time to show results. Businesses need to ensure that a dedicated team works on ensuring that both on-page and off-page SEO initiatives are undertaken.

- **Email Marketing**

    Email Marketing isn't all about bombarding the inbox of your audiences with emails. It needs to be planned and executed well to ensure maximum returns. Sending personalized emails to users increases the chances of getting instant replies along with showing that a business cares. Customize offers and communication for various user groups based on where they lie in your business relationship cycle.

- **Engaging Content**

    Content used across various online platforms should lead to increased engagement rates. Businesses need to ensure that they post relevant content across various platforms at the right time. Blogging is an excellent way to engage with audiences and move beyond than just selling products.

- **Mobile-Friendly**

    Everything that a business does digitally today should be mobile friendly. Majority of online users today access the internet on their mobile phones and this should reflect in every aspect of online marketing considerations.

Review of Literature

    The term social media is generally understood as Internet-based applications that contain consumer-generated content and facilitate a higher level of social interaction among travellers. From customer's viewpoint, the value of using social media lies in its richness on personal experiences and trustworthiness as electronic word-of-mouth. The impact of user generated content by social media on a traveller's decision making is well recognised in various market research reports. A number of prior studies have also examined the effect of social media on travellers' information search behaviour suggested that travel reviews on social media sites help add fun to the planning process and increase confidence for travellers' decision by reducing risk.

Research Methodology

    Being a descriptive research it is based on secondary data of journals, articles, newspapers and magazines. Considering the objectives of study descriptive type research design is adopted to have more accuracy and rigorous analysis of research study. The accessible secondary data is intensively used for research study.

Objectives of the Study

- To understand the concept of digital marketing
- To examine the characteristics of a successful digital marketing
- To understand the role of digital marketing in Indian tourism industry

Impact of Media in Promoting Tourism Industry

- It protects the environment and minimizes the negative social impact of tourism.
- It generates greater economic benefits for local people and enhances the well-being of host communities.
- It makes positive contributions to the conservation of natural and cultural heritage and promotes the world's diversity.
- It provides more enjoyable experiences for tourists through more meaningful connections with local people.
- It helps to understand the local cultural, social and environmental issues.

Benefits of Online Marketing for Travel Agencies

- Providing easy access to information on tourism products and services.
- Providing better information on tourism products and services. 3. Providing convenience for customers.
- Expanding choices for customers
- Creating new markets
- Establishing interactive relationship with customers
- Improving customer service
- Improving image and public recognition of the agency
- Saving time for providing tourism services
- Providing customized & specialized tourism products and services

Barriers of Online Marketing for Travel Agencies

- Limited knowledge of available technology
- Lack of awareness of online marketing
- Cost of initial investment
- Lack of confidence in the benefits of e-commerce
- Cost of system maintenance
- Cost securing skilled human resources
- Shortage of skilled human resources
- Difficulty with integrating online marketing and existing system
- Cost of training human resources for online marketing
- Insufficient infrastructure

Highlights of Digitalization in Indian Tourism

- Increase in GDPC making the tourism industry a unifying force
- Helping to preserve retain and enrich our cultural heritages
- Increase in international trade
- Multi-socio cultural Activities
- Giving more innovative promotional measures for tourism
- Focus on Rural Tourism
- Offering more tourism education
- Growth in Health Care Management
- Expansion in transport [both urban and rural], air travel and shipping

- Motivating private sectors to attract more tourists
- Enriching peripheral services to add additional attractions, like developing websites for Indian tourism and offering hotel, hospitality, travel assistance, booking tickets online

Conclusion

Digital Marketing today is all about using the internet technologies to reach out to existing and newer audiences and engage with them. Today digital marketing has disrupted industries and changed the way businesses reached out to customers. The main difference between traditional and digital marketing is the latter's ability to track data about user behaviour and campaign performance in real-time. In the tourism industry, the disruption was felt few years ago and has transformed the way businesses reach out to users. For any business to be successful digitally in the tourism industry, the above mentioned six points- quality website, SEO, Email marketing, Presence on social media, content, mobile-friendly play a very crucial role.

Research Gap for Further Study

The present study is conceptual in nature. The paper focuses on the linkage between social media and tourism marketing. This research paper can focus on the ascertaining the effectiveness of various social media tools in respect to tourism marketing and also look into the tourist preference for various special media sites in the soliciting the opinion about a destination.

References

⇒   (Sirakaya & Woodside, 2005) Sirakaya E, Woodside AG (2005). Building and Testing Theories of Decision Making by Travelers. Tour. Manage. 26(6): 815-832

⇒   Batini , "Role and importance of internet marketing in modern hotel industry". Journal of Process Management – New Technologies, International, Vol. 3, No. 3, pp.34-38, 2015.

⇒   Chaffey, D., Ellis-Chadwick, F., Mayer, R., Johnston, K. (2009). Internet Marketing: Strategy, Implementation and Practice. 4th Edition. Prentice Hall.

⇒   E Marketer, (2010) Healthy Growth of Ecommerce sales in 2010, www.emarketer.com

⇒   Gretzel, Yoo & Purifoy (2007) Gretzel, U.,Yoo, K.H. and Purifoy, M. (2007) Online Travel Review Study: Role

⇒   Lilien, G. L., Rangaswamy, A., De Bruyn, A. (2007). Principles of Marketing Engineering.

⇒   Miller, M. (2011). The Ultimate Web Marketing Guide, Pearson Education

⇒   Strauss, J., Frost, R. (2009). E-Marketing. 5th Edition. Pearson Prentice Hall. Strauss

⇒   Thomas,Joe.(2014) Social Media Effects on Tourism, Tourism and Travel Manual,

⇒   Zen, Benxiang, Genitsen, Rolf (2014) What Do We Know About Social Media in Tourism? A Review, Australia Tourism Management Perspective, Charles Darwin University, Australia, Researchgate

❧❧❧

<div align="center">

16

</div>

Rural India: The Untapped Potential for E-Commerce

Meghna Meena[*]

Introduction

Earlier e-commerce companies had no reach to the rural aresa of the India. However, lately there have been certain developments in the country, which have connected even the rual areas to the latest technological. There are various e-commerce companies which have reached the rural India. Generally these companies' uses the third party system for delivery which includes postal service as well. In India, the postal service has the power to connect the whole of the country. Postal service has its reach to almost all the villages. The past few years have witnessed remarkable growth of postal service. The reason being the postal department which had been in losses for so many years has collaborated now with over 400 e-commerce websites that includes Amazon, Snapdeal, Flipkart, etc for delivery of goods. There are more than 1,55,000 post offices in India and they are now committed to deliver the goods to rural India.

Amazon, flipkart, etc are the main online retailers of the country and they have amplified their income many times with the coverage of rural areas. Other online reatailers like snapdeal, Myntra, Jabong, etc. have also started to deliver goods in villages and towns of the country. However, some of the online retailers are still out of the reach of rural areas. Set up in 2017, IndiaBuys, assisted e-commerce start up, which helps rural people to buy goods online through, what they is generally called as, 'phygital stores' (Physical + Digital). These stores give comprehensive information and

[*]   Research Scholar, Department of Economic Administration and Financial Management, University of Rajasthan, Jaipur, Rajasthan, India.

assistance about online shopping. Their first store was set up in Rajahmundry, then in Tenali and Karimnagar. Today, rural area is an attractive sector for all the e-commerce companies as there are enormous opportunities in this segment. Still more than 65% of Indian population lives in villages and around 138 million of them are versed with the handling of computers and smart phones. Internet penetration is increasing. These e-commerce companies are expecting that by the end of next two years all the villages will be connected to the e-commerce. Indian e-commerce still has a long journey to go. Also there are several e-commerce companies that are exclusively targeting the rural markets, like In three – Boon Box, Ipay Storeking, MVikarsha, eDabba, etc. By keeping in mind the limitations of rural areas with internet connectivity, these companies have made certain innovations to their designs and working.

Objective of the Study

- To identify the rural consumer's attitude towards e-commerce.
- To determine the challenges in the way of e-commerce in rural India.
- To analysis Indian government's role in encouraging e-commerce in rural areas.

It is expected that almost half of all Indian internet users will be from rural areas in 2020, according to a recent article from The Boston Consulting Group (BCG). The number of active individuals in rural India is expected to grow from 120 million in 2015 to roughly 315 million by 2020, an average increase of 30% per year. According to a survey, India's e-commerce economy is on pace to triple in size by 2020 to $200 billion. Though, at present e-commerce activity in rural areas is still quite small. Only 15% of connected active users are from rural India, who use the internet to either research a product, purchase a product, or submit a product review, estimates BCG.

Rural residents also order items seen on TV ads and those they've heard of by word of mouth. With increasing penetration of mobiles in rural India, mobile apps are working well for shopping, and the lack of PCs is hardly a hindrance now. E-commerce companies are also providing employment to a large extent to rural youth as delivery men. E-commerce is promoting consumerism in rural areas and is helping to urbanize them. This is because it produces a win-win situation. The time and energy used in actual shopping and going to a big city are also saved. That's why e-commerce has spread so rapidly and rural India is now getting the benefits of this uprising. As majority of Indian population still lives in the rural areas, the true potential of India's online shopping will only be unlocked if e-commerce companies can figure out ways to reach out to the underserved rural market

Challenges Faced by Ecommerce Companies in Rural India

- **Unawareness & Reluctance:** In rural India, internet penetration is increasing persistently, but people are still unaware of all the benefits of online shopping, like getting better deals, saving time & money, getting things delivered at home conveniently, and so on. Moreover, those who do know about e-commerce benefits

are still reluctant to shop online because of sheer unfamiliarity. The same challenge e-commerce companies faced when online shopping first began to ripe in India around 2006-07. At that time, it was taken care of by initiatives like Cash-on-Delivery payment method, money return guarantees, etc. Same trick can work for the rural India as well.

- **Poorly connected transportation network**: Another big & a more formidable challenge is the poor transport infrastructure in most rural areas of the country. Products which are delivered in metropolitan areas in a few days take weeks' time to reach a rural destination (and that too only if delivery is provided in the given area in the first place).

- **Payment Collection:** Banking has not been able to penetrate completely into rural India till now. With a lack of awareness and lack of proper internet connectivity, online money transfer is still an unknown to the majority of the rural population.

- **Problem to Scale up Operations:** India has a huge range of demographics. Setting up operations and scaling it up at pan-India level is very challenging with limited funds. There are many hurdles that e-commerce companies have to crop up starting from political grudges to downright local factors. Scalability is not for all time just simple number of downloads. On-ground scalability is much more than that. Startups need a suitable strategy and may need to collaborate with various agencies to reach and scale up operations in the areas they think needs improvement. However, on the bright side, e-commerce companies slowly but surely are understanding rural India demographics and their needs, and are working in with Indian government, local government and communities to penetrate this immensely potential but under served market share. Rural population is learning this process of search-and-pick at rapid speed, and this is reflected in the increase of online sales in rural areas.

Government has a Role to Play

With the initiative, 'Startup India', the present Government of India has made it considerably easier for new startups to establish themselves in the country. The whole Indian startup ecosystem has acknowledged a advance from such policies, which will surely improve ecommerce's performance in rural India as well. The government of India has also now made it easier for foreign e-commerce companies to come and set up shops in the India, particularly in the rural areas. The present state of e-commerce in India is similar to that of China, a few years ago. Thus, it would be a good for startups to know how Chinese e-commerce companies overcame challenges to serve their rural population better. Also there is a tie-up between e-commerce companies and the Indian government in order to roll out e-commerce services into the rural areas. This is because it might not be quite profitable for e-commerce companies to go it alone in places with poor infrastructure and where they are likely to spend more money on marketing and penetration. These tie-ups have smoothened

the way for e-commerce companies to roll out their services in places that they would otherwise ignore.

The Role of Indian Postal Services

In the urban India especially in the big cities such as Mumbai, New Delhi or Bangalore, e-commerce companies can charge low and competitive shipping costs and deliver the products by themselves. Though, in the remote rural areas of India, this model is not always feasible. It would amount to high shipping costs that either take down the margins or will take away the consumers. These e-commerce companies are working hard to penetrate the market of rural India and of most of them, the Indian postal service has come to the rescue. When it comes to the shipping e-commerce products to end consumers in the remote villages in rural India, Indian postal service fits into the much-needed reliability and competitiveness.

Global e-commerce company Amazon has create great uses for Indian postal infrastructure in its e-commerce deliveries. In rural India most of Amazon's deliveries are done via India-Post which has a ubiquitous reach in the country. All Thanks to these opportunities in e-commerce, India-Post has also immensely increased its reliability and quality of service substantially. Indian's access to mobile phones which can present a unique and massive opportunity e.g. through a retail shopping mobile app which can be used anywhere in India. With the mobile internet users growing by 33% in the rural areas of India, this is an opportunity that cannot be missed. When all these efforts are synergized, the Indian rural market will undoubtedly emerge as the next frontier in e-commerce.

Conclusion

In urban India, the competition among e-commerce companies is soaring high. And considering above-mentioned ongoing developments (through the collective efforts of e-commerce companies, government, & infrastructure builders), it is certain that rural market will be the next battleground for the e-commerce companies in India. It is important for both established players and new entrants to understand the market demand and plan their strategy accordingly so that they can be prepared for the future opportunities.

The increasing internet penetration in rural India is forcing big companies to flock to rural markets. But at the same time, there are also major challenges for marketers. In rural markets, customs and beliefs play important role in success or failure of any product. Development of infrastructure and proper implementation of law and order will surely solve the problem in rural India. Here the role of government is also very vital in solving these problems. So, every marketer should concentrate on rural Indian markets apart from the matured urban markets. The companies need to reduce the risks which stop the consumers shop online. The goal of e-commerce companies should not to convert all shoppers to online shopper, but to show them e-

commerce companies as an option. Also, efforts need to be taken to educate the rural people on the steps that need to be undertaken at the same time as making an online purchase. Furthermore, the feedback of an online buyer should be taken care of to identify flaws and improve their service. This can also be done with the help of online communities and blogs that act as marketing and advertising tools and a source of feedback for these companies. Though it is a challenge for E-marketers to convert low frequency online buyers into regular buyers but it can be done by successful website design and by addressing concerns about reliable performance. Today, the e-commerce in rural India raises more issues than the benefits it offers. The quality of products offered online and procedures for service delivery are yet to be standardized. Till the same is done, the rural people are at a higher risk of frauds.

References

⇒   Aaker, D. A., (1991). "Managing Brand Equity: Capitalizing on the Value of Brand Name". The Free Press, New York.

⇒   Alba.Joseph.W and J.Wesley Hutchinson, (1987), "Dimension of Consumer Expertise" Journal of consumer research, 13 (March), p-411-454

⇒   Dobni, D. and Zinkhan, G. M. (1990). "In Search of Brand Image: A Foundational Analysis" in Goldberg, M.E., Gorn, G. and Pollay, R. W., Eds, Advances in Consumer Research, Association of Consumer Research, Provo, UT, pp. 10-19.

⇒   Rural Marketing R.V.Badi and N.V.Badi, Himalaya publishing house

⇒   The rural Marketing book Pradeep kashyap & Siddhartha Raut (2010):"Rural Marketing" 76-77 Bitartrate WEBSITES

⇒   http://blogs4bytes.wordpress.com

⇒   http://pinterest.com/pallabkakoti/digital-marketing-tips/

⇒   http://pinterest.com/pallabkakoti/email-marketing-tips

⇒   http://pinterest.com/pallabkakoti/seo-best-practices/

⇒   http://swaroopch.com/2008/11/03/internet-usage-in-india/

⇒   http://techcircle.vccircle.com/2013/02/01/2013-india-internet-outlook

⇒   http://www.businessinsider.com/rural-india-is-driving-e-commerce-growth-in-the-country-2016-8?IR=T

⇒   http://www.huffingtonpost.in/dr-anil-k-rajvanshi/how-online-shopping-is-ch_b_10583202.html

⇒   https://www.ohoshop.in/blog/ecommerce-shopping-is-now-emerging-in-rural-parts-of-india/

⇒   https://www.quora.com/How-do-I-get-small-sellers-from-rural-India-online

⇒   https://www.thenewsminute.com/article/ecommerce-goes-rural-startup-helping-villagers-buy-amazon-70580

⇒   http://www.yo-kart.com/blog/ecommerce-in-rural-india-untapped-potential-challenges-road-to-improvement/

❧❧❧

17

Mobile Marketing: The Most Influential Medium for Digital Marketing in Today's Era

Swati Khanna[*]

Introduction

Mobile users started acquiring information on through internet facility available on their devices, soon after the launch of 3g digital services in digital. Mobile phones made it easier for customers to access social media just by a single click thereby making it a very handy and friendly tool. This increasing trend of mobile phone usage gave rise to a new generation of marketing known as mobile marketing. Mobile marketing helped the marketers in reaching a large variety and group of potential customers comparatively easy. Various operating systems like IOS and android supported applications. The marketers used this to their advantage. Within no time mobiles were able to capture a huge market and this was a boom for mobile marketing as it became a very popular and friendly medium of marketing. The marketers were quick to act up and encash this new generation of marketing to reach more number of customers and increase their market share. Mobile marketing helped the marketers in reaching end consumers at a very cost effective rate and also helped in building seller customer relationship. This relationship helped the marketers in customizing the products as per consumer needs and made it easier for them to understand the potential market. Mobile marketing comprises of promotions which are sent through MMS multimedia messaging, text messaging, mobile websites, in app or in game marketing or by push notifications through downloaded apps. Location based

[*]   Faculty, ICFAI Business School, Jaipur, Rajasthan, India.

services helps in alerting the geographic locations of the users to service providers thereby making it easier for marketers to provide location based information to the potential customers. A research by Morgan Stanley clearly showed that there is a huge increase in number of mobile users globally from 1100 million users in the year 2007 to 1700 million users in the year 2015. If we talk about the Indian market scenario, marketers believe that mobile is a very challenging and growing component of digital media and advertising. The previous forecast for digital and mobile internet advertisement spending in India was estimated at $173.2 million in 2015, and almost doubled to $346.5 million by the end of the year. This will amount to 29.5% of digital advertisement spending, or 4.9% of total media budgets.

It has been estimated that by the year 2019 there will be a manifold increase in the spending on mobile placements by advertisers in India which would nearly amount to $1.32 billion. Thereby we can state that almost60.9 percent of the digital advertisement spending and about 15.5 percent of total advertising would be accounting to mobile marketing.

Literature Review

- Mobile marketing can be defined as an innovative tool for linking companies with each of their clients through mobile devices in the right time, at a right place and with suitable direct message (Dushinski 2009).

- Becker I Arnold (2010) has emphasized on the definition of mobile marketing which was given by Mobile Marketing Association1, stating that mobile marketing are a set of procedures that help in communicating with the target audience of the company on a relevant and interactive way through mobile devices.

- Mobile marketing is a new form of marketing channel which has been established during the evolution of e-commerce. Although it is likely to reach out target groups through mobile devices, Tanakinjal et al. (2011) expresses that it's important to explore and make an effort to actually make it work and count.

- According to Andrews et al. (2012), mobile marketing is any form of marketing communication that has been using mobile devices during the creation of potential opportunities and benefits for customers, what includes location based mobile services and services for the delivery of mobile content.

- Marketing experts agree with the fact that activities that have been going on with the mobile devices, in the last decade, had a huge impact on a development of mobile marketing and on intent for purchase of potential customers in the future (Chinomona I Sandada, 2013).

- Mobile marketing is a driver and a foundation for the exchange of content and direct response, while mobile advertising is form of a message which has been sent via mobile device. Tanakinjal et al. (2011).

Objectives of the Study

The objectives of the study include:

- Concept of mobile marketing.
- The trend of mobile marketing in India.

Types of Mobile Marketing

- **SMS Marketing:** The oldest form of mobile marketing is sending text messages to potential buyers. In 1990s the modern mobile phones were only featured to receive text messages and thus as a result of that the marketers had only this medium available. As we have heard several times technology is ever changing, there was a huge advancement in the field of mobile devices and mobiles are now more capable and featured laden then they were before. Even after much new advances SMS marketing still remains the most popular medium since text messages are short and crisp and quite a huge number of the people read still all the text messages they receive. SMS marketing also remains in the mainstream because it is the least expensive medium.

- **MMS Marketing:** MMS marketing is also a very popular medium as some companies opt for this rather than text marketing. MMS marketing is said to be able to make a better impact on the receiver as it includes video, image and sound in its features thereby creating a similar effect to that of a television advertisement. MMS marketing is comparatively a more expensive technique and also it has a slightly lower reach than text messaging as not all mobile handsets have MMS feature.

- **App-Based Marketing:** With a large increase in the usage of mobile phones the mobile manufacturers have made the devices more features laden and as a result smartphones have become more powerful. Marketers are trying to develop mobile friendly techniques for reaching larger audience. This has given a new segment under mobile marketing as app based marketing. Marketers are generating apps in order to achieve target marketing. The marketers aim to make apps more reachable and visible in the app store to enhance their download for direct reach to the potential customers. This helps in reaching the target audience and thereby acquiring huge market share which in turns increases the profitability of the company.

- **Bluetooth Mobile Marketing:** This is a type of marketing that involves the usage of Bluetooth technology. This type of marketing allows the marketers to deliver MMS and text messages to potential customers within a defined

geographical region for free of cost. Thus this type of marketing can be used for local oriented business. However there are certain drawbacks in this type of marketing as the mobile users are required to be in a certain specific distance of Bluetooth enabled device and they must be willing to accept the messages.

- **Mobile Internet Marketing:** Mobile internet marketing is also known as mobile web marketing. It involves the use of both mobile phones and world wide web. Mobile internet marketing can be classical web marketing which characterizes pop out ads and can also include optimizing a website so as to make it mobile friendly and also work as a search engine. There is a huge and rapid increase in the number of mobile phone users operating and connecting to the internet in today's times and thus mobile internet marketing is one of the fastest growing techniques for marketers to watch out for. Mobile internet marketing has become an important and integral part of marketers' strategy.

- **Mobile Banner Ads:** This type of mobile marketing is a rare concept and is basically used as a creative tool. Under this the marketers try to add something extra to attract customers' attention. It involves the technique under which an advertisement is displayed on the screen of a fancy mobile phone when a customer visits a particular website.

- **Location-Based Marketing:** This type of marketing is basically related to local regions. Under this type of mobile marketing marketers try to use GPS and other strong software's to locate potential customers and then send advertisements and information which are usually in the form of multimedia based on their current location.

- **Voice Marketing:** Voice marketing comprises of prerecorded messages that are usually broadcasted from a computer generated listed.

- **Mobile Games Marketing:** Mobile games marketing makes the user responds to advertisement. Under this when a user downloads a particular game an advertisement pops up either in the form of a short video or a pictoral representation about the products and services.

- **Bar Codes/QR (Quick-Response Barcodes):** Under this type of marketing the users can obtain particular information by simply scanning the bar code using their mobile handset.

Benefits of Mobile Marketing

- **Immediate:** Mobile campaigns are comparatively easier to create and execute and also it reaches a large number of customers within no time.

- **Affordability:** Mobile marketing is comparatively cheaper as the ratio between the price paid and number of customers is very nominal. Therefore mobile marketing is very cost effective

- **Distribution:** Mobile marketing makes the marketers reach a large number of customers from sitting at a single location and guarantees the delivery of information and advertisements.

- **Response Rate/Effectiveness:** It has been clearly observed that tha average response rate is much higher at about 15 percent when compared to other mediums that is hardly about 2-3 percent

- **Personal/Targeted:** Mobile marketing helps in customizing messages for customers depending upon their needs.

- **Mobility/Reachability:** Through mobile marketing messages can be sent to the customers to any place or region. There is no need for the customers to be around the radio or television or a computer. It has been said that nearly 80 percent of the time mobile handsets are within the reach of the customers.

- **Interactivity:** Mobile marketing also helps in reaching customers on the go and creates an effective two way communication process between the customers and the marketers.

Trends of Mobile Marketing in India
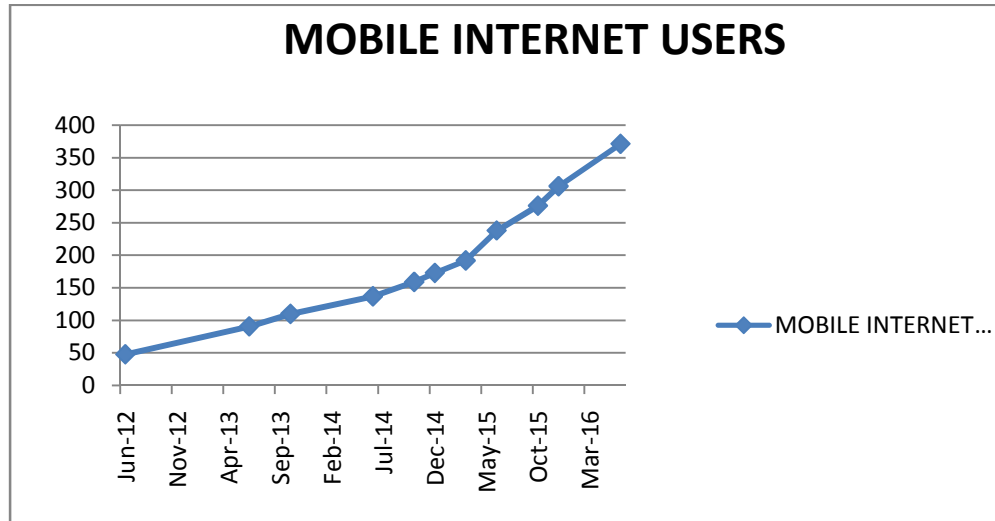
The figure shown above was published in IAMAI in the year 2016(images.dazeinfo.com/wp-content/uploads/2016/02/mobile-internet-users-in-india-2016.jpg).It depicts a comparative analysis on the rising trend of mobile internet users in India between the period ranging from 2012-2016. It can be understood that there is a rapid upsurge in mobile internet users and thus a vast scope in India for digital marketing.

Digital marketing outlines that Social media has been playing an auxiliary role to marketing. Over the years, it has been witnessed that 92% of social media users are from the mobile devices. This enables the size of digital marketing industries.

MOBILE PHONE SUBSCRIBERS IN INDIA
(Figures in Million)

SOURCE: TRAI, SEPTEMBER 2015
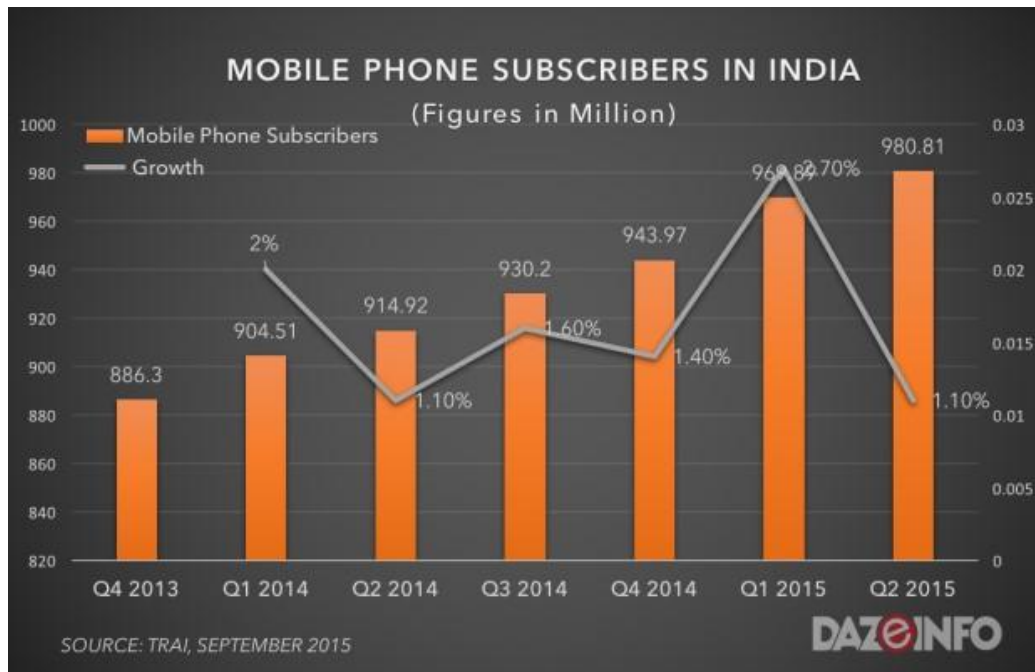
Mobile Phone Subscribers in India

As per the research stated by the Internet and Mobile Association of India (IAMAI, 2008), The Indian telecommunications market has incredible growing prospects and according to IAMAI telecommunication market has almost exceeded to 500 million by 2010. According to TRAI, the mobile subscriber based in India rose to 980.81 million users in 2015 in the second quarter. Usage of mobile phones is increasing three folds day by day.

Conclusion

Mobile marketing though a relatively new concept has seen immense growth in recent times. It involves reaching the potential customers through interesting and interactive ways via internet connections and mobile phone devices. It is a separate unit of marketing which attracts maximum customers as we have already discussed the increasing trends in recent years. With the emergence of mobile marketing the marketers have got an effective tool to reach large number of potential customers at a lesser cost in a more efficient and effective manner. Marketing experts need to understand the trends and need to upgrade their knowledge and technology to move forward with the world if they want to survive in this challenging market. We can clearly conclude that mobile marketing has become one of the most effective and common medium of digital marketing. Business houses have realized and started

developing various mobile apps and mobile websites to reach customers and acquire greater market share as the number of mobile users is growing manifold and would continue to do so in coming years. It must however be ensured that various mobile marketing techniques should be used in combinations to make it more effective and approachable. Mobile marketing has become an important aspect of digital marketing and it not only helps in targeting the youth but also other generations of people. Therefore it is important to make rigorous efforts to make use of mobile marketing for a more developed digital world. Proper skill development programs should be organized to generate better mobile websites and applications to make it easier and user friendly so as to attract more potential customers to increase market share and profitability of the company. Digitalization through mobile marketing is the future ahead.

References

⇒　　Andrews, L., Drennan (2012), European Journal of Marketing, 46, pp.357 – 386.

⇒　　Becker, M., Arnold, J., (2010). Mobile marketing for dummies. Wiley Publishing, Inc.

⇒　　Chinomona, R., Sandada, M., (2013). The Influence Of Market Related Mobile Activities On The Acceptance Of Mobile Marketing And Consumer Intention To Purchase Products Promoted By SMS In South Africa, Journal Of Applied Business Research, 29(6), pp. 1897-1908.

⇒　　Dushinski, K., (2009). The mobile marketing handbook. New Jersey: Information today. Hazlett.

⇒　　images.dazeinfo.com/wp-content/uploads/2016/02/mobile-internet-users-in-india-2016.jpg.

⇒　　Tanakinjal, G., H., Deans, K., R., Gray, B., J., (2011). Intention to Adopt Mobile Marketing: An Exploratory Study in Labuan, Asian Journal of Business Research, 1(1), pp. 9-21.

⇒　　www.digitalvidya.com/blog/growth-of-digital-marketing-industry-in-india.

❧❧❧

<div style="border:1px solid black; display:inline-block">18</div>

A Study on Customer Awareness and Satisfaction towards Online Banking Services for Future Sustainability and Enhanced Customer Service

Mamta Chaudhary[*]

Introduction

Banks assumes an essential part in the monetary advancement of creating nations. Monetary improvement includes interest in different segments of the economy. The banks gather funds for interest in different tasks. In typical banking the banks perform office services for their customers and helps financial advancement of the nation. They buy and deal in securities, shares, and influence installments, to get membership supports and gather service bills for the government office. In this way banks spare time and vitality of occupied people groups. Bank orchestrates outside trade for the business exchanges with different nations. Banking area is not just gathering reserves but rather likewise fill in as a manual for the customer about the speculation of their cash. Current banking area has thought of a great deal of activities that situated to furnishing a superior customer services with the assistance of new advances. Banking segment reflects the bigger economy its linkages to all parts make it intermediary for what is going on in the economy overall.

Indian banking part today has a similar feeling of favour and opportunity that is confirm in the Indian economy. The going improvements in the worldwide markets offer such a significant number of chances to the banking part. In the focused banking word change step by step in customer services is the most helpful device for their

[*]   PhD Scholar, Department of Management Studies, Jiwaji University, Gwalior, M.P., India.

better development. Bank offers such a significant number of changes to get to their banking and different services which are innovation based. Technology driven various innovative practice used widely in different areas of banking sector are Electronic Payment Services-E Cheques, Real Time Gross Settlement (RTGS), Electronic Funds Transfer (EFT), Electronic Clearing Service (ECS), Automatic Teller Machine (ATM), Point of Sale Terminal, Tele Banking, Electronic Data Interchange (EDI). To compete in an economy which is opening up, it is imperative for the Indian banks to observe the latest technology and modify it to suit their environment. Information technology offers a chance for banks to build new systems that address a wide range of customer needs including many that may not be imaginable today.

Literature Review

Firdous and Farooqi (2017) done a study to make an original contribution to the existing knowledge by investigating the impact of internet banking service quality on customer satisfaction. Their results revealed that efficiency, privacy and website design are the major integral determinants of internet banking services quality and also there is a direct relationship between internet banking service quality dimensions and customer satisfaction in the banking industry. Reddy and Reddy (2015) in their study, identified and measured consumer perception toward the convenience and willingness to use E-banking services and concluded that around 70 % of people have positive perception & are satisfactory with E-Banking Services. Rod, Ashill, Shao and Carruthers (2009) examined the relationships among three dimensions of service quality that influence overall internet banking service quality and its subsequent effect on customer satisfaction in a New Zealand banking context. Results showed here significant relationships among online customer service quality, online information system quality, banking service product quality, overall internet banking service quality and customer satisfaction. Suresh (2008) highlighted that recently developed e-banking technology had created unpredicted opportunities for the banks to organize their financial products, profits, service delivery and marketing. Verhoef (2003) investigated the differential effects of customer relationship perceptions and relationship marketing instruments on customer retention and customer share development over time. The results shown that affective commitment and loyalty programs that provide economic incentives positively affect both customer retention and customer share development, whereas direct mailings influence customer share development and also indicated that firms can use the same strategies to affect both customer retention and customer share development.

Objective of the Study

- The primary objective of the current research paper is to study the customer awareness and satisfaction level towards online banking services.
- The secondary objectives of the study are:

- To find out the reasons for preferring online banking services
- To find out the current problems, opportunities and upcoming trends of technology driven Innovative practices.

Methodology

A total of ninety (N=90) consumers who are using or are willing to use or adopt Internet banking in Gwalior region were surveyed by using convenience sampling for the purpose of the study. A questionnaire was designed by the researcher incorporating questions that were aimed to reveal the customer awareness and satisfaction towards online banking services. The questionnaire was self-administered by their searcher to all the subjects. The main ethical issue was that the identity of participants must be protected. Their right to confidentiality in regard to their personal information disclosed in the course of the research was respected. The use of a tailored questionnaire was regarded as the most appropriate manner to conduct research in this area. It had the advantage of complete confidentiality of the responses of the participants and so was more likely to elicit candid replies. The questionnaire format was also suitable for statistical analysis. Secondary data was collected through research articles, newspapers, journals, websites, books, project reports, periodicals, magazines and so on. For analysing the data frequency distribution as a statistical technique was used.

Analysis and Result of Study: A detailed analysis of responses to the individual questions revealed the following:

Table 1: Frequency Distribution of Respondents on the Basis of Gender

S.No.	Gender	No. of Respondents	%
1	Male	52	58
2	Female	38	42
	Total	**90**	**100**

Table 2: Frequency Distribution of Respondents on the Basis of Age

S. No.	Age	No. of Respondents	%
1	0-25 Yrs.	23	26
2	25-45 Yrs.	36	40
3	45-65 Yrs.	22	24
4	65 Yrs. and above	9	10
	Total	**90**	**100**

Table 3: Frequency Distribution of Respondents on the basis of Education

S. No.	Education	No. of Respondents	%
1	Upto12[th]	18	20
2	Graduate	24	27
3	Post Graduate	26	29
4	Professional Qualification	22	24
	Total	**90**	**100**

Table 4: Frequency Distribution of Respondents on the Basis of Occupation

S. No.	Occupation	No. of Respondents	%
1	Service	25	28
2	Business or Profession	26	29
3	Others	39	43
	Total	**90**	**100**

Table 5: Frequency Distribution of Respondents on the basis of Monthly Income

S. No.	Monthly Income	No. of Respondents	%
1	UptoRs. 25000	34	38
2	Rs. 25001- Rs.50000	31	34
3	Rs. 50001- Rs.75000	21	23
4	Rs. 75001 and above	04	5
	Total	**90**	**100**

Table 6: Do You Use the Online Banking Services?

Category	No. of Respondents	%
Always	19	21
Mostly	40	45
Somehow	20	22
Rarely	11	12
Total	**90**	**100**

From the responses received 45% respondents says that they are mostly using the online banking while 12% respondents are rarely using it. The response reveal that majority of them are aware about online banking services and a considerable number regularly use it.

Table 7: What Online Banking Operations do You Use the Most?

Category	No. of Respondents	%
Pay Bills	9	10
Consult Balance/Bank Statements	10	11
Opening Account	6	7
Fund Transfer	17	19
Investments	14	15
Savings	11	12
Insurance	6	7
Loans	10	11
Contacting Bank Advisor	7	8
Total	**90**	**100**

Most of the online banking users' i.e.19% respondents use it for fund transfer, 15% for investment purpose, 12% for savings operations and only 7% of them used it to openan account in bank and insurance policy.

Table 8: Do You Trust Banks that Only Operate Online?

Category	No. of Respondents	%
Completely	45	50
Somewhat	23	26
Dubious	22	24
Total	**90**	**100**

From the collected responses it is clear that 50% respondents i.e., majority of them trust online banking services and only 24% of them think to be dubious.

Table 9: Do You Trust the Security of Online Banking Services?

Category	No. of Respondents	%
Completely	51	57
Somewhat	29	32
Dubious	10	11
Total	**90**	**100**

After analysis it was found that 57% of respondents completely trust the security of online banking service, and only11% feel dubious about security of online banking.

Table 10: Do You Think that Human Contact Is Important for Banking Relation?

Category	No. of Respondents	%
Completely	29	32
Somewhat	34	38
Dubious	27	30
Total	**90**	**100**

Table reveals that majority of respondents (38%) feel somewhat the human contact is essential for banking relation and 30% of respondents feel otherwise.

Table 11: What are for You the Main Disadvantages of Visiting a Bank Branch?

Category	No. of Respondents	%
Waiting	40	44
Distance (Proximity Problem)	24	27
Quality of Service	18	20
No Disadvantages	8	9
Total	**90**	**100**

Above table shows that 44% of respondents don't like to stand in queue or don't like to waste their time in waiting due to rush in banks, 27% of respondents had proximity problem, 20% didn't like the quality of service the banks provide physically and only 9% of respondents don't have any problem in visiting banks.

Table 12: What would Encourage You to Use More Online Banking Services?

Category	No. of Respondents	%
Ease of Doing	25	28
Higher Security	32	35

Phone aid	6	7
Free Transaction	4	4
Saving time	23	26
Total	**90**	**100**

A considerable number of respondents i.e., 35% are encouraged to use online banking services due to higher security, 28% for easy of doing, 26% for saving time, 4% for free transaction and 7% for phone aid.

Table 13: What are the Main Disadvantages of Online Banking?

Category	No. of Respondents	%
Overall difficulty of using online banking system	12	13
Lack of assistance	10	11
Security Concerns	13	15
Limited Service (doesn't enable all banking operations)	10	11
Impersonality of the service	9	10
Dependence on internet service	17	19
No disadvantages	19	21
Total	**90**	**100**

Analysis shows that 21% of respondents feel there is no disadvantage in online banking services, 15% have security concern,19% internet dependence is the biggest disadvantage, 10% impersonality of the services,11% limited service, 13% overall difficulty of using online banking system and 11% lack of assistance.

Table 14: Do You Feel Further Improvement is Needed in Banking Technology?

Category	No. of Respondents	%
Completely	21	23
Somewhat	38	42
Can't Say	31	35
Total	**90**	**100**

From the responses received 42% of them of the view that somewhat further improvement is needed in banking technologies, 35% have no idea if any improvement is needed and 23% of respondents feel there is dire need for improvement in banking technology.

Table 15: Are You Satisfied with Online Banking Services?

Category	No. of Respondents	%
Yes	67	74
No	23	26
Total	**90**	**100**

The table reveals that a whopping 74%of respondents are satisfied with online banking services as compared to on 26% unsatisfied customers.

Findings

- Fund transfer is widely used online banking service.
- Physical appearance is not a hurdle in banking services for majority of the respondents.
- Security concern is the main hurdle in online banking service for considerable number of respondents.
- Hassle free banking, encourages most of them to use online banking service as it saves their valuable time.
- Majority of the customers are satisfied with online banking services.

Conclusion

Financial Innovation is the need of great importance and India is picking up its validity and worldwide nearness with its assistance. Innovation will have a major effect later on in the banking part. It will get effectiveness, enhance the MIS and help to settle on choices in light of investigation.

Based on the finding of the study concludes that everyone today is convinced that the technology is going to hold the key to future of banking. The achievements in the banking today would not have make possible without IT revolution. Therefore, the key point is while changing to the current environment the banks has to understand properly the trigger for change and accordingly find out the suitable departure point for the change. Although, the adoption of technology in banks continues at a rapid pace, the concentration is perceptibly more in the metros and urban areas it should be also apply to rural areas with the same pace. Banks tie-ups with other banks have helped customers to transact between accounts of various types of banks.

It is basic to convey the correct sort of innovation and choose the correct kind of individuals for the same. Banking system in India emphasizes the need for automated banking. Online Banking allows the customers to satisfy many needs with minimum human intervention. Online banking is a unique weapon for survival of banks and retains the customers' loyalty. But the security under internet banking is always questionable one. If the bank creates trust about the securities system among the customers it easily accomplishes its milestone and online frauds, which is the need of an hour for banks to works towards it.

References

⇒ Avasthi, G. P. M., & Sharma, M. (2000). Information technology in banking: Challenges for regulators. Prajanan, 29(4), 17.

⇒ Chellaswamy P. (2010), Modern Banking Management, Himalaya Publishing House.

⇒ Firdous, S., &Farooqi, R. (2017). Impact of Internet Banking Service Quality on Customer Satisfaction. The Journal of Internet Banking and Commerce, 22(1), 1-17.

⇒ Goyal, K. A., & Joshi, V. (2011). Mergers in Banking Industry of India: Some Emerging Issues. Asian Journal of Business and Management Sciences, 1(2), 157-165.

⇒   Kulkarni, R. V. (2000). Changing Face of Banking from Brick and Mortar Banking to E-Banking. IBA Bulletin (January).

⇒   Mishra AK (2005), "Internet Banking in India Part-I", http://www.banknetindia.com/banking/ibkg.html.

⇒   Nyangosi, R., Arora, J. S., & Singh, S. (2009). The evolution of e-banking: a study of Indian and Kenyan technology awareness. International Journal of Electronic Finance, 3(2), 149-165.

⇒   Pathrose, P. P. (2001). Hi Tech. Banking Prospects and Problem. IBA Bulletin, 23(7), 15-18.

⇒   Reddy, D. K., & Reddy, D. M. S. (2015). A Study on Customer's Perception and Satisfaction towards Electronic Banking in Khammam District. IOSR Journal of Business and Management (IOSRJBM), 17(12), 20-27.

⇒   Reddy, Y. V. (2005). Banking sector reforms in India: an overview. Bank for International Settlements, http://www. bis. org/review/r050519b. pdf.

⇒   Reserve Bank of India (2013, June 30),Report on Trend and Progress of Banking Sector in India. Retrieved from http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/0RTP21112013_F.pdf

⇒   Rod, M., Ashill, N. J., Shao, J., &Carruthers, J. (2009). An examination of the relationship between service quality dimensions, overall internet banking service quality and customer satisfaction: A New Zealand study. Marketing Intelligence & Planning, 27(1), 103-126.

⇒   Shastri, R. V. (2003). Recent trends in banking industry: IT emergence. Analyst, (March), 45-46.

⇒   Toor, N. S. computer and banking" handbook of banking information,skylark publications.

⇒   Uppal, R. K. (2008). Customer perception of e-banking services of Indian Banks: Some Survey Evidence. The IUP Journal of Bank Management, 7(1), 63-78.

⇒   Verhoef, P. C. (2003). Understanding the effect of customer relationship management efforts on customer retention and customer share development. Journal of marketing, 67(4), 30-45

❧❧❧

19

A Study of Carbon Credits (CERs): Impact on E-Commerce and Global Economy

Lokesh Agarwal[*]

Introduction

The emergence of carbon credits trading is a result of high awareness about environment and pollution. E-commerce has increased the e-trading during the last decade (Zysman, Weber et al., 2001). Carbon Credits result of Kyoto Protocol in 1997. Carbon credits are the main source of emission trading schemes to reduce the impact of global warming. These are tradable commodity or a stock tradable at the prevailing market price transferred between countries. Each international transfer is validated by the transfer is authorized by United Nations Framework Convention on Climate Change (UNFCCC). This ownership transfer within the European Union is additionally validated by the European Commission.

Objectives

- This study is concentrates on the carbon credit trading with the main aim of creating awareness about this era of e-trading and digital marketing.
- This study suggests a huge revenue market in E-trading of CERs for Indian industries.

What is Carbon Credits: The "currency" for emission trading is called Carbon Credits and also known as Certified Emission Reduction (CERs). Symbolically we can present as: 1 unit of CER = 1 metric ton of CO_2 (or equivalent gases)

---

[*]   Research Scholar, Department of ABST, University of Rajasthan, Jaipur, Rajasthan, India.

For example: If a project generates energy using wind power instead of burning coal, and in the process saves, say 80 tonnes of carbon dioxide per year, it can claim 80 CERs (One CER is equivalent to one tonne of carbon dioxide reduced).
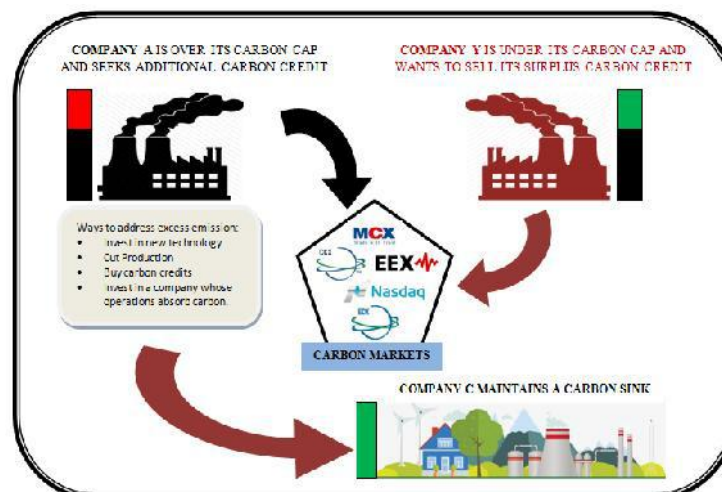
How to Trade Carbon Credits in Carbon Markets

In order to manage carbon footprint, business engaged in carbon investive activities are selling carbon credits. Emission trading is a system that enables firms to select solutions which are cost effective to achieve environmental goals.

Emission trading will allow countries and individual companies to buy and sell carbon created by activities that reduce the level of Green House effect. Since carbon dioxide gas is the main reason of green house effect. Carbon is traded in carbon Markets like any other commodity which is known as the "carbon market." Carbon credits are traded at CO2e exchange in:

- European Climate Exchange (ECE)
- Chicago climate Exchange (CCX)
- Multi Commodity Exchange (MCX) in India.
- National Commodity and Derivatives Exchange (NCDEX)
- NASDAQ OMX Commodities Europe
- Powernext

At present, in the European exchanges, futures contracts in carbon credits are actively traded. In order to manage carbon credits risk and other related risks such as project risk, policy risk, etc. so trade in future market due to these risks associated with carbon credits, trading of carbon credits is now a great weapon in the hands of every country.

Figure 1: Carbon Credit Trading

Source: https://www.linkedin.com/pulse/african-climate-potential-impact-change-business-efemena-majoroh

In India, the two important Commodity exchanges which provide trading in Carbon Credits are:

- Multi Commodity Exchange (MCX)
- National Commodity and Derivatives Exchange (NCDEX)

Multi Commodity Exchange (MCX) is India's largest commodity exchange which provides a platform for futures trading in carbon credits. Chicago Climate Exchange (CCE) and the European Climate Exchange also trade in carbon credits. India is integrating with other global market to derive better prices for their carbon credits. The Indian exchange has tied-up with CCX. Future contract in carbon credit ha started on 11th April 2008 in NCDEX for delivery in December 2008.

MCX is a platform for futures exchange where traders get prices for the carbon delivery in next five years. But this exchange is exclusively for Indian companies. Carbon Credit contract expires in December of every year by setting off the contract i.e. give & take delivery. Contracts can be exercised December but mostly people wait for December to get better prices. Business organizations and individuals deals in Carbon Credit through a broker called an offset aggregator who is held responsible for handling all Carbon Credit sales. Income generated by selling carbon credits is not enough to offset the costs of joining and doing business directly with the CCX. Organizations have to get an offset aggregator approved by CCX.

Conclusion

It provides a great opportunity to India as it can be used the best way to mitigate climate change. The countries like US, Germany, Japan and China are biggest buyers of carbon a credit include countries and provides benefits to India. This study suggests in brief that Carbon trading is used as an effective tool to earn extra benefits by developing and non-developed countries. Although India is one of the greatest beneficiaries of carbon trading and has huge number of carbon credits sellers but it still does not have a proper mechanism and guidelines for trading in carbon market leaving many opportunities untouched. Carbon Trading will create great opportunities in India Market and this will definitely accelerate Indian economy. If we take a view on some headlines of daily newspapers, we will find that this carbon market has opened totally new dimensions of opportunities for the industries and investors. Still there is no proper accounting framework and guidelines for recording this revenue.

References

⇒ America Climate Choices (2011), Washington D.C., the National Academics Press, pp. 15.
⇒ Birla, b., singhal, g., birla, r. And gupta, v. (2012): carbon trading–the future money venture for india, international journal of scientific research engineering &technology (ijsret) volume 1 issue1 pp 019-029.
⇒ Carbonexchange.com

⇒ Chanawongse, k., poonpol, p. And poonpool, n. (2011): the effect of e-commerce competence on accounting information quality: an empirical study of e-commerce firms in thailand, review of business research (rbr), volume 11, number 1, 2011 issn: 1546-2609.

⇒ "EU climate change policies: Commission asks member states to fulfill their obligations". EUROPA - Press Releases. 2006-04-06. Retrieved 2010-01-27.

⇒ Garg, a. & arya, s. (2015): the opportunity analysis of carbon credit trading for developing world- a case study, international journal of marketing, financial services & management research, issn 2277-3622, vol.4 (2), february, pp. 29-38.

⇒ January, 2015 | Business Dimensions | www.business-dimensions.org

⇒ Lumen shawn lobo & dr. Raghavendra (2016): carbon credit trading: expectations and current scenario, international journal of engineering research and modern education (ijerme) issn (online): 2455 - 4200 (www.rdmodernresearch.com) volume i, issue i, 2016, pp 196-200.

⇒ National Research Council (2010), "Advancing The Science Of Climate Change", Washington D.C., The National Academic Press, pp. 1-22.

⇒ The EU emission trading system : an introduction, climate policy info hub, scientific knowledge for decision-makers (http: // climatepolicyinfohub.eu/eu-emissions-trading-system-introduction)

⇒ http://www.ecosystemmarketplace.com/marketwatch/carbon/?gclid=CMPx7Oee3c8 CFc4QaAod8BEAFw

⇒ https://en.wikipedia.org/wiki/Emissions_trading

❧❧❧

<div style="text-align:center">

20

</div>

Leveraging E-Commerce in Supply Chain Management

Abha Mathur[*]
Saurabh Mathur[**]

Introduction

E-commerce has often been misunderstood as mean trading and selling-buying using internet as a platform. However, this is far from the reality. In fact, E-commerce includes a wide range of activities right from procurement of raw material to selling and customer feedback system. Hence, it includes many activities critical to the working of business using computer networks as the background structure. One of the areas where E-commerce has been able to provide high impact is the Supply chain management for a company.

SCM includes coordinating, scheduling and controlling of procurement of the raw material, managing inventories and selling and delivery of goods and services to the customers. In a sense Supply chain management takes care of all activities and resources required for creation and delivery of products and services to the customers making it one of the most important area in any business. Thus improving supply chain efficiency simply translates into better customer service and higher profits for the business. By providing right resources at the right time, SCM helps in reducing unnecessary inventory and at the same time also ensures there is no waiting time in any activity. This also helps in improving the cash cycle for the business which

---

[*]   Head, Department of Chemistry, Government Girls College, Dausa, Rajasthan, India.

[**]   Student, PGDBM, XLRI Jamshedpur, Jharkhand, India.

[~]   *The chapter is based on the paper presented in "***International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context****" Organized by* **Inspira Research Association (IRA),** *Jaipur* **& LBS PG College,** *Jaipur, Rajasthan, India.* **02-03 February, 2018.**

provides them a great operational advantage over the competitors. Hence any MIS cost incurred on improving the present supply chain practices is easily recovered by the benefits of SCM.

As the technology is taking over the conventional business models ata pretty fast pace, employing E-commerce is not a differentiating factor anymore, but a necessity for the companies in this competitive market. Modern logistics and supply chain management provides a great way to reduce the distribution costs across various industries and improve the efficiency of the movement of materials. Also, with the introduction of E-commerce, the reach for the consumers has increased tremendously allowing great flexibility for the firms to scale their business. This paper is focused on examples of successful implementation of such practices in selected companies worldwide. On a broad level, the practices can be classified as:

- **Information Management Related Activities:** Companies widely use E-commerce to communicate the information related to the product in a timely and efficient manner to the customers. This can be one of the most distinguishing factors for the business.

- **Distribution:** Companies rely on E-Commerce to reduce the number of layers between the company and the customers. This allows the company to reduce the selling costs and hence increases efficiency. Also by providing the optimized distribution path through the use of analytics reduces the distribution costs. This can be used to reduce operational lead time and costs which ultimately leads to higher profitability for the business.

- **Inventory Management:** E-commerce highly simplifies the inventory reporting allowing the stores to keep more products and avoid shortages or excess product inventory. It also ensures higher efficiency through "just in" inventory mechanism. This results in lesser holding costs which again reduces the operational costs for the company. It also takes care of perishable inventory and the costs associated with replacing them.

One of the biggest examples for the successful implementation of E-Commerce in SCM is Amazon which is an E-commerce and Cloud Computing Company. As one of the biggest internet retailer, it has its business comprising of books, DVD, CD, Video games, furniture, food, personal care, pantry, electronics etc. It saves a lot of cost by integrating the inventories in distribution centres and the warehouses of the partners through the network. This allows the Amazon to keep lower level of inventories. Amazon then sets up some injection points for inter-city transportation. After integrating the orders in Distribution Centers and then orders are supplied from the distribution centers to injection points to reduce costs.

Another example for achieving high efficiency through technology is IKEA which is a furniture company from Sweden famous for its flat design and low prices. Every

year, new designs are sent to its suppliers all across the world with the special feature of their ability to be packed in flat and standard packaging. This standard packaging allows for the distribution centres to achieve high levels of automation. 80% of the packages according to the volume are supported by automatic storage and retrieval facilities which include automatic storage and retrieval system, high bay pellet racks, conventional pellet racks and warehouse management systems. This allows faster trans-shipment as the time for extraction now only takes 10 seconds to 2 minutes.

There are various different technologies available which can be employed by companies to increase their effectiveness in the distribution. Guo Mei which is a large household appliance retailer in China uses various advanced techniques such as AS/RS system, AGV(Automated Guided Vehicle), RFID (Radio Frequency Identification), information management system like WMS, ERP and so on. All this along with outsourcing of logistics helps the company run its 25 main distribution centers, & large central Distribution centres and 40 regional distribution centers.

It is clearly evident that logistics forms the most important part in reducing costs and saving time through E-Commerce. Companies need to focus on improving last mile logistics for the same. Similarly, there are now many information management systems available such as ERP System which helps in coordination between various departments of the firm. It helps in integration of information system of the whole business. New and different modules can then be added to this system according to the specific requirements of the business. The main advantages of the ERP system include its flexibility, accuracy, convenience and its interactive nature. Logistics requires data share in real time along with integration of parcel, capital and information flow, remote control and various management strategies which can be implemented through proper use of ERP systems.

However, there are a few difficulties in implementing the SCM in E-Commerce in India which needs to be taken care of before implementation:

- **Globalization**

There is always a constant price pressure on the companies in the present competitive market. To ensure leadership, companies try to cut costs wherever possible and operational costs are the most prominent one. One way of reducing this is the manufacturing costs by relocating the manufacturing units in the countries with easier access to raw materials or cheap labour. Another reason for going to different countries is the tax exemption. However, due to this relocation, there is another complication that arises due to increased lead times because of the extended delivery time due to these global locations.

- **Improper Information Flow**

To ensure a smooth business strategy, there needs to be a constant communication between the business entity, its suppliers and its customers. Due to

lack of infrastructure in the country, it is difficult to maintain this communication leading to improper implementation of SCM.

- **Lack of Online Payment Infrastructure**

One of the most important aspect of implementation of E-Commerce in SCM is its ability to handle online payments. However, this payment structure is still not that much developed in the country with most of the residents in the country still opting to use cash due to less popularity and lesser options of payment gateways. Apart from lack of such gateways, there is also a very high failure rate in these systems which lead to businesses losing out on customers who don't try the transaction again if it fails.

- **Low Internet Penetration**

This is perhaps the biggest problem with implementation of such measures. A large section of the country has no access to internet whatsoever. Even in areas with access to internet, there are issues with regard to the quality of connectivity. Apart from this, there is not much awareness regarding the use of internet for carrying out business activities in a large proportion of the population. All these factors couple together to make it impossible to connect all the suppliers and the customers through a common unified SCM system.

These factors are still prevalent in the country. However, a lot of work is being done to improve these as more and more companies are understanding the need for the same. There will be a time soon when these problems will be a problem of past and every company along with the suppliers and customers can extract maximum benefit of the SCM. The benefits of incorporating E-commerce and SCM can thus be classified as:

- **Improved Supply Chain Network**

As it has been mentioned various times, this is the biggest advantage a company gets in term of improving the efficiency of supply chain as they are able to better monitor or visualise the different aspects of supply chain. These aspects can be related to the suppliers or the production centres or the distribution networks. This allows the company to identify the areas of improvement easily.

- **Enhanced Customer Relations Management**

As e-commerce takes care of delivery of product and establishes a communication channel between company and its customers through use of internet and websites, it allows the company to quickly respond to the queries or complaints raised by the customers. As the use of analytics is increasing to derive the customers expected behaviour, implementation of e commerce helps in easier collection of large amount of data for the above purpose. This helps the company to improve its product and services and also can cater to the expectations or requirements of the customers easily.

- **Global Trade**

    As SCM helps in reducing the effort during procurement of raw material and delivery of goods, proper implementation of SCM allows the company to get raw material from any place in the world and similarly supply the finished goods to anywhere in the world. This allows the companies to increase their worldwide footprint and actually make this "whole planet one big market".

- **Virtual Business**

    As the trend of online purchases increases, there is more and more demand for the businesses to put their products and services on virtual platforms provided by internet and this can be successful only through the proper implementation of SCM for the communication between the customer and company.

- **Minimized Delays**

    One of the biggest demand by customers is the timely delivery of the products to them. However, there can be delays in the same due to late shipments of raw materials from suppliers or delay in production line or a delay due to the logistic aspect of business. All these can be easily coordinated through the use of SCM. The software will ensure no such delay happens ensuring a positive relationship between customer and company.

- **Reduction in Cost**

    As most of the operational costs are directly or indirectly affected by the SCM, its implementation can have great impact in providing a cost leadership to a company.

- **Customer Satisfaction**

    All the business strategies rely on customer satisfaction. This allows more publicity of the business and also increases chances of repurchase. As implementation of SCM allows better communication channel for the customers, their connection and participation in the process increases which leads to higher brand loyalty.

    To get the above benefits, it is necessary to continuously evolve the existing E-Commerce techniques along with the evolving technologies. Future technologies will revolve around Internet of things which include physical things having sensors embedded in them and being able to communicate with each other within an intelligent environment, Big Data Analytics which is a necessity due to the large amount of data being created and recorded by different companies and can be used in future to come up with decisions which will allow the companies to deal with the situations in a more effective and efficient manner. To compliment all this, cloud computing will be in great use in order to ensure reliable implementation through internet based computing where data, resources and information is shared with the users on demand through a network access to a shared pool of the same.

All this will allow not only the big enterprises to use E-commerce, but also the small and medium firms to leverage the benefits of the E-Commerce to increase their business. Implementation of e-commerce in supply chain management isn't just an individualistic thing in a business, but it's much more complicated as it is woven along with the strands of business strategy, management style, IT practices and many such things. Early adoption of technology in the business models and utilizing the E-commerce in Supply chain at system level, operation level and decision making level can greatly enhance the effectiveness of the supply chain management and can catapult many firms in future on the path of success.

References

⇒ Larmore, Carrieanne. "Role of E-Commerce in Supply Chain Management." Bizfluent, https://bizfluent.com/facts-6913688-role-e-commerce-supply-chain-management.html. 26 September 2017.

⇒ Nimna.V.P, "Role of Supply Chain Management in E-Commerce", International Journal of Advanced Research and Development(Volume2, Issue10) Page 60-64

⇒ S Ziao, S Zhang, "The Role of Supply-Chain Management in E-commerce"

⇒ Ying Yu, Xin Wang, Ray Y. Zhong, G.Q. Huang, (2017) "E-commerce logistics in supply chain management: Implementations and future perspective in furniture industry",Industrial Management & Data Systems, Vol. 117 Issue: 10, pp.2263-2286

❧❧❧

21

E-Commerce in India: Problems and Prospects

Dr. Mrinali Kankar[*]
Dr. Vishal Gauttam[**]

Introduction

Today, online business has developed into a gigantic industry. E-commerce is everything that includes an online dealing. This can chain from onine ordering, through online delivery of paid content, to financial transactions such as movement of money between bank accounts. People today can leisurely buy or sell literally anywhere and anytime within minutes, may be their workplace or their homes. In India, the online market space is proliferating with reference to travel, movies, hotel reservations and books to the likes of matrimonial services, electronic gadgets, fashion accessories and even groceries. In its most clear vision e-commerce is the buying and selling of goods and services and administrations by organizations and shoppers over the Internet. Online deals are increasing fast as buyers make use of low costs offer by the wholesalers who are retailing their products. This pattern is put to protect as sites address purchaser security and security affects. This sector can be categorized into four main types, based on the different sides involved in the transactions – Business-to-business (B2B), business-to-customer (B2C), customer-to-business (C2B) and customer-to-customer (C2C). Since a decade ago, the eminence of e-commerce is hugely increased because of fleet-footed and powerful technique for trading items and enterprises both territorially and all around. Presently a-days it has revolved into the virtual principle road of the world. Earlier food and grocery were

---

[*]   Assistant Professor, Department of ABST, KanoriaPG Mahila Mahavidyalaya, Jaipur, Rajasthan, India.

[**]   Lecturer, Department of ABST, S. S. Jain Subodh College, Jaipur, Rajasthan, India.

~   *The chapter is based on the paper presented in "***International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context***" *Organized by* **Inspira Research Association (IRA),** *Jaipur* **& LBS PG College,** *Jaipur, Rajasthan, India.* **02-03 February, 2018.**

never thought of as items for online trading. However, with the transformation of dynamic routine, and consumers culling for flexibility and facility, there are now incalculable small and large online business concerns selling provisions and food items. Indian e-commerce industry is in a state to encourage itself as a feasible business opportunity not only for entrenched names but also even for start-ups.

Objectives of Study

The clear objectives of this paper:

- To clarify the perception of E-commerce or online business.
- To study the difference between Traditional Commerce and E-Commerce.
- To study the advantages and challenges of online business. 4) To study the prospects of E-commerce in India.

Methodology of Study

This study is applied review with exploratory cum clear nature. It depends on the investigation of different diaries, web and books.

India's Prospects in E-Commerce

E-commerce has such aptitude because it can bring three changes more thorough than accessible and smart prices. The **first** is rapid fiscal or evolution. China is its one example. Alipay, an tributary of Alibaba, overcomes mistrust between buyers and sellers by holding on to customers' money until they have safely received their goods. Alipay has more than 400m accounts that let buyers buy items, discharge bills and transfers money which is now run by an affiliate called Ant Financial. For lending business the theory was the cascade of information that Alibaba concentrated on traders and buyers. In India also something is happening identical. Paytm, is also propped by Ant Financial and provides digital wallets to people and has 120m accounts which are nearly 6 times of credit cards accounts. Not even this, these E-commerce companies help small enterprises to obtain loans which they would have struggled to raise. Last month, one of such company Amazon India raised such programme for his sellers. Snap deal declared his partnership to organize and distribute loans from the State Bank of India.

Second, E-commerce companies could help rejuvenate India's ropy common people and huge geography. About half of customers of Flipkart's and Snapdeal's are outside India's biggest cities. Amazon claims that it helps more than 6000 Indian businesses to sell outside India. China is continuing developing in the area of e-commerce. Alibaba is coupling secluded or isolated rural areas to the web based economy. There are now 780 "Taobao Villages", provincial areas in which minimum 10% of families are buying or selling online. In India, the third big impact of E-Commerce is on retailing itself. Only one-tenth of total retail sales are from shopping malls and chain stores. The total sales of top three online trading sites i.e. Flipkart, Snapdeal and Amazon exceed sales of 10 largest offline retailers. Two-thirds of

Indians are less than 35 years in the age. Now-a days, Shopping is probably very distinct from the shopping which was done by the parents of these young people who are fully equipped with smart phones, gadgets, tablets and laptops.

Malls and chains will not dissipate, but they may never be as prevalent as they are in the West. In turn they will encourage the increase of other digital companies. The technological scene of India is in very booming stage. One of the Flipkart investor, Tiger Global also supports an Indian online-classified business and a messenger app that helps users avoid data costs. Softbank sponsors a mobile-advertising stage which favors Snap deal. There are some important elements which will undoubtedly advance contribute to the development of e-commerce industry in India i.e. generating of legal requirement for online transactions, quick service, the product quality and dedicated 24/7 customer care centre should be there. E-commerce also provides various types of opportunities for retailers, wholesalers/distributors, producers and people

- **Services for Manufacturers/Producers**

Producers can avail more and more benefit of online trade by connecting themselves with on-line, by presenting better description and information about their items and products and services to the other links in the business chain and by having brand identity. Producers can sell their goods directly to the consumers and retailers. Providers have accessible capacity for transmission and they can no longer rely on the customer to be forced to communicate with them by sending leaflets or through advertisements.

- **Services for wholesalers**

Wholesalers can avail benefit of e-commerce who are efficient of establishing contractors with renowned manufacturers and linking their business with the on-line. E-commerce reduces the cost of generating, processing, distributing, storing and regaining information by digitizing the process.

- **Services for Consumers**

Consumers can purchase or sell just only with a click of mouse button without moving out of their homes or office, online services such as banking. Ticketing including airlines, bus, railways, hotel booking etc have been formidable advantages for the consumers. E-commerce permits consumers to communicate in electronic communities and to exchange ideas and compare experiences.

Investments /Developments

Some of the major developments in the Indian e-commerce sector are as follows:
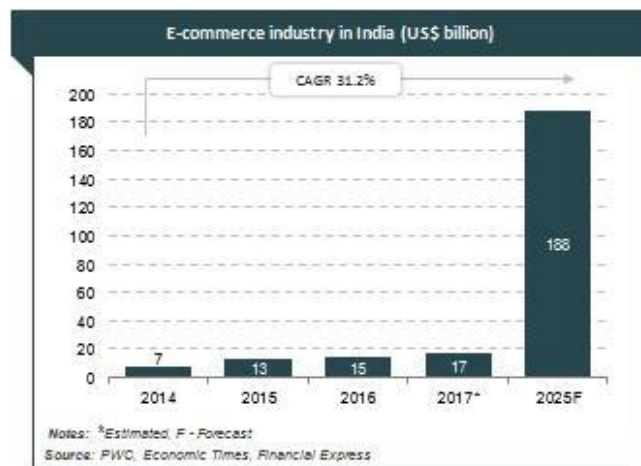
- In the calendar year 2017, Rs. 6200 Crore were invested in e-commerce business by Amazon India.

- Blackbuck, an online freight aggregator which is regulated by Zinka Logistics Solutions Pvt Ltd, has raised Rs 50 crore (US$ 7.68 million) in venture debt from InnoVen Capital.
- Bank Bazaar, a financial marketplace start-up in India, raised US$ 30 million in a financing accomplished by Experian Plc, a credit rating agency based in UK, taking the company's total financing to US$ 110 million.
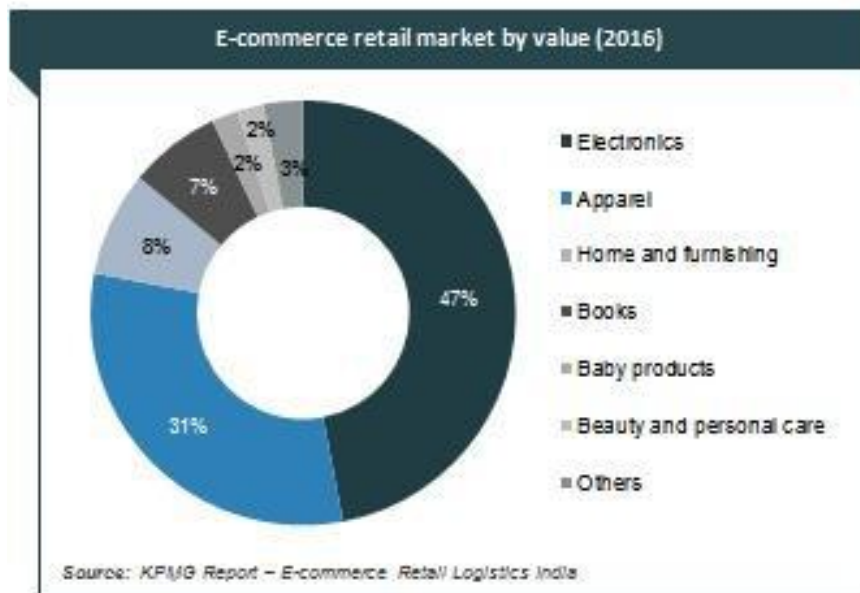
Growth of E-Commerce in India

The way of business regulated and done in the India is completely changed by e-commerce. The Indian e-commerce market shall grow to US$ 200 billion by 2026 from US$ 38.5 billion as of 2017. By 2018, the value of e-commerce market is anticipated to pass over US$ 50 billion. The increase in internet and seepage of smart phone, provoked the growth of the industry. The regular digital revolution n the country is expected to increase India's total online user base to 829 million by 2021 (59 per cent of total population), from 373 million (28 per cent of population) in 2016, while by 2021, total number of networked devices in the country are anticipated to increase up to 2 billion from 1.4 billion in 2016. By 2018, total online investing, including of domestic and international browsing and purchasing, is expected to increase by 31 per cent year-on-year to Rs 8.76 trillion (US$ 135.8 billion). In 2017, for international shopping, the Indians preferred the top 3 countries i.e. USA (14%), UK (6%) and China (5%).

In 2017, the Indian buyer and seller online market increased by 44 per cent year-on-year to touch US$ 65 billion, up from US$ 45 billion in 2016. Online travel agents account for the largest market share (70 per cent) in the internet consumer market, while the remaining 30 per cent is occupied by horizontal e tailing, fashion, furniture, grocery, hotel, food tech, cab aggregators, education technology, and alternative lending among others.

Source**:** https://www.ibef.org/industry/ecommerce.aspx

Source: https://www.ibef.org/industry/ecommerce.aspx

In India, the e-commerce industry is expected to double to reach US$ 250 billion by 2020, growing to 7.5 per cent of Gross Domestic Product (GDP). The number of mobile web consumers increasing to about 650 million and that of high-speed online users touching 550 million. The total automobile sales in India, which is about 70 per cent worth US$ 40 billion, are expected to be digitally influenced by 2020 as against US$ 18 billion in 2016.

Since 2014, the Government of India has announced different initiatives for e.g. Digital India, Make in India, Start-up India, Skill India and Innovation Fund etc. In India, the appropriate and emphatic application of such programs will surely support the growth of e-commerce growth. Some of the important steps taken by the Government to encourage the online sector in India are as follows:

- "Inter-operability" between Prepaid Payment Instruments (PPIs) such as digital wallets, prepaid cash coupons and prepaid telephone top-up cards was permitted by Reserve Bank of India (RBI).

- Finance Minister MrArun Jaitley has recommended different plans and areas to fasten India's transition to a cashless economy, including a ban on cash transactions over Rs 300,000 (US$ 4,655.1), tax inducement for formation of a cashless framework, encouraging more operations of non-cash methods of transactions, and making Aadhaar-based transactions more common.

- An e-commerce portal and m-commerce portal named as "TRIFED" and "TRIBES INDIA" respectively to enable 55000 tribal artisans to get connect to international market are also introduced by the Government of India.

GST Implementation

An inflexible taxation structure, which GST (Goods and Services Tax) purports to achieve will definitely support in the success of online business in India with the idea of One Tax, One Nation. Online trade is carried out pan-India, and an equal tax structure makes calculations easier and uniform. The prices will maintain uniform across the Indian Territory by the same tax for same product.

Road Ahead

In the Asian region, Electronic Commerce is anticipated to explode in the forthcoming years. In the Asia Pacific region, The number of digital buyers is predicted to cross the one billion mark for the very first time in 2018. India, is the fast-growing emerging Asian market in the regional growth which, shows assured positive calculations in the online industry. In India, by contributing with the means of financing, technology and training, the online industry been directly striking the micro, small & medium enterprises (MSME) and has a favorable cascading effect on other industries as well. By 2020 in India, the total size of online industry (only B2C e-tail) is supposed to reach US$ 250 billion.

The growth of the online sector will definitely support by the Technology enabled innovations like online transactions, hyper-local logistics, analytics driven customer engagement and online advertisements.

By 2020, it is anticipated that cashless transactions will incorporate 55% of online sales with the increase in the number of electronic payment gateways and digital wallets. The growth in e-commerce sector will also boost employment, increase revenues from export, increase tax collection by ex-chequers, and provide better products and services to customers in the long-term. Present entrance of e-commerce industry in India stands only 28 percent, with lots of area for improvement - India's retail e-commerce CAGR is predicted to stretch 23% from 2016 to 2021.

In India, by 2020 arround 329.1 million people are predicted to purchase online goods and services. It means that about 70.7% of internet users in India will buy online products by then. Male are the major digital shoppers in India. This growth in number of online buyers has a impression on revenue as well. In 2021, Retail e-commerce sales in India are proposed to grow marvelously, with expectation to jump from around 16 billion U.S. dollars in 2016 to just over 45 billion U.S. dollars.

Challenges Faced by E-Commerce

E-commerce at the same time, despite of opportunities hype also bears the problems and challenges as well at the same time. Therefore, enumerating the major challenges which e-commerce faced in small enterprises and submitting the remedial measures to meet these challenges.

- **Framework Problems**

Internet is the backbone of e-commerce. Unfortunately, In India, internet penetration is so far very low at 0.5% of the population against 50% in Singapore. Similarly, in India use of personal computer (PC) is as low as 3.5 per thousand of population compared to 6 per thousand in China and 500 per thousand in US. Internet is still accessible through PCs with the help of telephone lines.

E-commerce remains very far from the common man due to penetration of telephone only 2.1 % of population. It is very difficult for e-commerce to touch to 1,000 million-population over 37 million housed in 6, 04,374 odd villages and 5,000 towns and cities. Besides, both in India the cost of PCs and accessing internet access are quite high.

- **Secrecy and Security Problems**

As of to-day, quite vulnerable issues related to e-commerce are privacy and security. So far, there is no protection offered either by Website or outside watchdogs against hazard created by exploiting one's privacy.

- **Payment and Tax Related Problems**

Online traders have to face problems continuously related to payment and tax. The electronic payment is made by the use of credit card or plastic money, which could, however, not become popular so far in India mainly due to two reasons. First, the use of credit card in India is very low.

Second, due to growing threat of fraud played by hackers, the Indian customers are quite doubtful of paying by credit card. Credit Card could not increase in India like elsewhere because of authentication and recognition issues of online signatures.

- **English Language**

Last but not the least, In India, the software is particular in English specific. However, if we want that online trade or e-commerce industry should touch the small enterprises, it is necessary to get it available in the regional languages of the owners of the small enterprises so that they can adopt e-commerce and processes their operations. As soon as it will be done, it will be better for the small enterprises Sooner it is done, better will be it for small enterprises to reconcile with e-commerce.

Conclusion

Nowadays, online business or E-commerce is a developing system in Indian economy in the post monetary changes time. The transformation in the IT area in the later past has been instrumental being developed of online business. E-commerce is the extensive use of computer network with internet. E-commerce offers benefits like cost effectiveness, quick comparison-shopping, better customer service, information saving and knowledge market development. Online business offers many advantages

to the different partners. These advantages are cost viability, fast examination shopping, better client benefit, higher business edges coming about shape economy in business operations, data sparing and learning market improvement and so forth. At present, there are a few hindrances in the advancement of web-based business. Nevertheless, these hindrances to online business should be dealt with at the appointed time and henceforth internet business has brilliant prospects in India. We have to redesign ourselves to welcome web-based business and receive its rewards.

References

⇒   AbhijitMitra,E-Commerce in India-A Review, International Journal of marketing, Financial Services & Management Research, Vol.2, No.2, February (2013).

⇒   Awais and Samin(2012),Advanced SWOT Analysis of E-Commerce, International journal of Computer Sciences Issues, Vol.9, Issue 2.

⇒   Kaur Pradeep, Dr.joshi Mukesh, E-Commerce in India: A Review, IJCST Vol.3 , issue 1, 2012

⇒   Kaur,P.and Joshi, M.M., "E-Commerce in India: A Review", IJCST,Vol.3,Issue 1,Jan-March 2012,pp-802-804

⇒   Kaur,Ranmeet, E-Commerce in India, Asian journal of research in business economics and management, vol.2, issue 6,2012

⇒   Waghmare, G.t.,"E-Commerce, A Business Review and Future Prospects in Indian Business", Indian streams Research Journal, Vol.2, Issue.IV,May-2012,pp1-4 http://www.zippycart.com/ecommerce-news/3163-merchants-take-note-ecommerce-trends-for-2012.ht

⇒   http://www.yourarticlelibrary.com/business/7-challenges-faced-by-e-commerce-in-india-explained/41228

⇒   https://www.ibef.org/industry/ecommerce-presentation

⇒   https://www.techinasia.com/talk/state-india-ecommerce-2017

❧❧❧

<div style="text-align:center; border:2px solid black; display:inline-block;">

22

</div>

Brand Building through Social Media Marketing: The Latest Business Trend

Harshit Sharma[*]

Introduction

In the age of social media marketing, the internet is changing the brand environment or brand-building scenario in India and significantly contributing to the explosive growth of Indian Economy. The internet is renovating the business environment, creating new challenges and opportunities to the corporate. The internet is not only a source of communication, collecting information and entertainment, but also a medium by which online transactions take place. Since the drastic changes in the business environment nowadays, the web or the internet has become a medium of doing business online.

Internet & Social Media

The internet provides the break to the startups to reach a wider audience and create a convincing value proposition while providing new tools for promotion, interaction and relationship building. In addition, the internet is empowering customers with more options and more information to make a buying decision. Gone are the days, when people used to visit the stores for the things they care to buy. Now, they have 4G Internet speed and wide use of social media that not only save their time and money, but also provides the relevant information about the brand and its product. The internet has become a critical distribution channel for the majority of successful

[*]   Research Scholar, Department of Business Administration, University of Rajasthan, Jaipur, Rajasthan, India.

~   *The chapter is based on the paper presented in "***International Conference on Modern Management Strategies, E-commerce and Global Economy-In Indian Context***" Organized by* **Inspira Research Association (IRA),** *Jaipur* **& LBS PG College,** *Jaipur, Rajasthan, India.* **02-03 February, 2018.**

enterprises/companies. One among them is viral marketing (SMM) and spreading brand communication through social networking sites such as Facebook, YouTube, Twitter, Instagram, LinkedIn, Google+, and Pinterest.

Objectives

The objectives of this research paper are as follows:

Ñ To explore the importance of social media marketing in the effective brand building.

Ñ To explore various social media marketing tools and strategies for successful brand building.

Research Methodology

This study is based on secondary data. Indeed, it is a review-based study of various online and offline articles, journals, news, research reports. This study will be helpful to the marketers and Startups to know more in detail about Viral Marketing, Brand Building through Social Media Networks, and various online marketing strategies. It reveals huge market for e-commerce business and online shoppers in the age of social media. This study highlights an exponential growth of Indian e-commerce business and effective brand building with the use of social media marketing.

Latest Social Media Marketing Trends

- Letters to Emails
- Brochures to Website
- News Paper to Online News (Even through personal apps as well)
- Seminars to Webinars
- Books to E-Books (Kindle Books)
- Socializing to "Social Networking" (Such as Facebook, Twitter, Instagram etc.)

Importance or Why Use Social Media?

- Increase exposure of your brand to the target customer.
- Increase traffic to your online web store.
- Provide market insight.
- Develop a loyal customer relationship.
- Lead generation – actually converts into a real customer.
- Improve search ranking of your website.
- Reduce promotional and marketing costs.
- Develop business partnerships.
- Improve sales; indeed promote your brand over the internet.

Brand Building Mechanism

A successful brand building is a very complex process and starts with the development of a strong *value proposition – "a strong offer that a prospective customer would find compelling and interesting."* Once it is done, focus on influencing

the customers to try your brand. A business should make the satisfactory experience to the customer and lead to a willingness to buy again. To persuade trial and repeat purchase requires **triggering mechanisms,** which is created through advertising, promotion, public relations, and direct marketing. The company has to communicate the values of its brand and then strengthen brand associations with the customers.

Social Media Marketing Strategies for Successful Brand Building

Facebook, Pinterest, Instagram, YouTube, and Twitter have become an individual product and corporate branding hub in the world. Every brand that exists on social networking sites has many key features and benefits, such as creating an individual page for the brand, share the content, and adding multimedia etc. The effective brand building strategies are analyzed to find the impact of a brand among the customers. Essentials to building a brand on social media are explained below:

- **Choose Networks that Support Your Brand Image:** There are more than hundreds of social media networks on the internet, but only a few are worth investing your time and energy. Few names below are popular in nowadays:
  - **Facebook** is the best platform for promoting brand awareness. It provides so many options to advertise and analyze your target customer base for your brand. Facebook is a great platform for promoting virtually any brand as it has a very diverse user base.
  - **Instagram** is a great platform for brands that rely deeply on images. It is best suitable for the businesses such as clothing, shoes, wooden art and creative handmade stuff.
  - **YouTube** is a platform for those businesses who needs to demonstrate their product or services such as smartphones, video classes for students, singing talent etc.
  - **Pinterest** is an outstanding social media network to reach ladies; especially for brands selling jewelry, clothing, shoes and innovative things etc.
  - **LinkedIn** is a platform for the professionals to get in touch with the people from different companies, businesses, and professions. It is the best way to promote business through content marketing and get in contact with other corporate influencers.
- **Valuable and shareable content:** A business should focus on creating useful content that viewers really appreciate and do read, share and subscribe. Every single word of content you share must support your brand image. If you are able to use **memes (an image, video, piece of text, etc.)** effectively, it can lead you to a powerful brand building.

- **Leverage Influencers:** Publishing powerful content to your social profiles is very important. You have to work hard on your content to attract the target customers. This strategy takes time, so have patience.

- Tag the influencers you have referenced when sharing content to your social media profiles.

- Email influencers after you have published your content to let them know they have been referenced in your work.

  The key object of all these different actions is to get your influencers to share your content either blogs or articles with their followers via social media networking. It can take much time to build up your brand image in the mind of target customer but if you've patience then keep producing quality content, your efforts will get noticed.

- **Use social campaigns to promote your website content:** paid campaigns would be better options for building your brand on social networks. Many of growing brands use strategies such as contests and social media campaigns to successfully increase visibility and generate leads. To promote user participation in your campaigns offer valuable incentives to the target audience.

Viral Marketing or Buzz Marketing

Viral Marketing is a marketing strategy that persuades websites or individuals to pass on a marketing message (Blog or Article) to other websites, creating the potential for an exponential growth(like a virus)in the message's visibility and effect. Like viruses, such strategies take benefit of rapid multiplication to blast the message to thousands - to millions – to billions. It is often known as **"word-of-mouth", "creating a buzz", "leveraging the media", and "network marketing".** Buzz Marketing is a powerful medium, as it carries the indirect endorsement from a friend to another one. However, viral marketing is an effective tool for spreading a message out fast with the minimum expenses and maximum output. Viral in normal sense means anything that spreads fast across the users online or offline. Additionally, viral marketing is a marketing approach that inspires users to share the message with other users.

It could be a normally forwarded message on your smartphone related to any recently launched product or a news like - India winning the world cup or a funny/motivational video that individuals share with different users over the WhatsApp, e-mail, hike or any social networking site or mobile app.
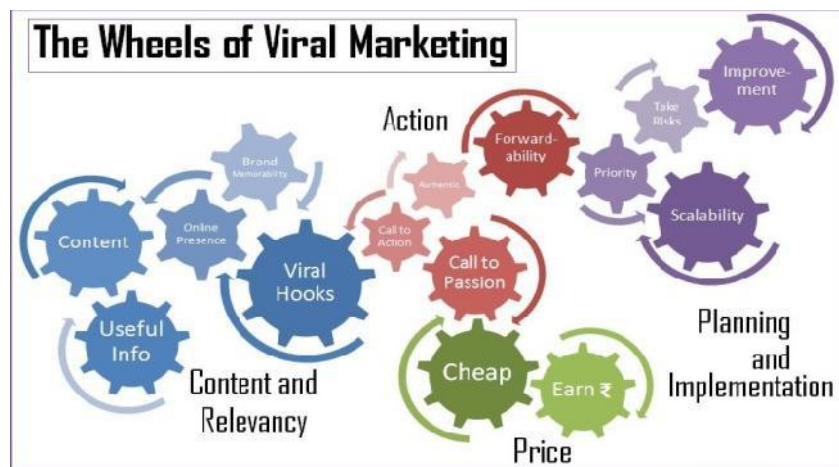
Source: Internet Image.

For an example: Hotmail was a classic example of viral marketing, however, later Gmail took it to a new level when it launched its **free web-based email service.** The word "FREE" is a very attractive and influencing word, which indeed creates the curiosity among the users. People made their free accounts on Gmail and referred their friends and family to join free.

To make viral any marketing strategy, a business must follow various elements of viral marketing tricks. First, make your product or services "free" for all, having an easy accessibility. This could be your marketing stunt from your marketing team to get enough attention from the target group across the globe, although it might not generate any revenue for your company but you will earn customer database. **Recent, live example of viral marketing is - launching of "Reliance Jio" – which provides their users "Free calling", "Free internet 4G data" and "Free SIM".** This was really a great stunt and great live example of viral marketing or buzz marketing. Reliance has changed the scenario of the whole telecom sector and created a fair competition in the whole Telecom Industry.

Another crucial element is the **Transferability** – when a message is simple and easy to understand, and easily transferable via any mode of electronic media such as WhatsApp, email, Hike etc. **Example - Get a professional email for your business @companyname.com with 50GB of storage.** Moreover, the content of a message should be interesting and cleverly placed. Viewers or readers should be able to identify with the message. **If any influential person like acelebrity endorses your message or product on the website or on their social media or networking site, it will viral so fast.**

Conclusion

In the age of the Internet and Social Media revolution, it is must for the companies to make their presence on social networking websites for revenue

generation and brand promotion. Social media sites like Facebook, Twitter, YouTube, and Pinterest have so many features, which helps a business venture to promote their product and service. These social media sites provide a platform for the businesses to develop their brand identity in customer's mind. This research paper would really assist advertisers to identify the effective marketing strategy through social media to communicate their brand to the customers. Moreover, every business can go further for social media marketing and can use the best part of it to expand their businesses online.

References

Journals

⇒ Aaron Agius. (2015, April 23). The 4 Essentials to Building Your Brand on Social Media [Web log message]. Retrieved from https://www.entrepreneur.com/article/244677, last accessed on January 17th, 2018.

⇒ Anna Guerrero. (2014, March 20). Introduction to Brand Building through Social Media [Web log message]. Retrieved from https://designschool.canva.com/blog/introduction-brand-building-social-media/, last accessed on January 17th, 2018.

⇒ Douglas Holt. (2016, March). Branding in the Age of Social Media. Retrieved from http://www.hbr.org/2016/03/branding-in-the-age-of-social-media/, last accessed on January 17th, 2018.

⇒ Neti, S. (2011). Social Media and Its Role in Marketing. International Journal of Enterprise Computing and Business Systems, 1(2). Retrieved from http://www.ijecbs.com/, last accessed on January 17th, 2018.

⇒ Vukasovic, T. (2013). Building Successful Brand by Using Social Networking Media. Journal of Media and Communication Studies, 5(6), 56-63. Retrieved from http://www.academicjournals.org/, last accessed on January 17th, 2018.

⇒ http://www.business.com/social-media-marketing/

⇒ http://www.academicjournals.org/

⇒ http://economictimes.indiatimes.com/definition/viral-marketing

⇒ http://www.practicalecommerce.com/articles/100366-viral-principles

❧❧❧