

# **Journal of Operations Management and Information Technology**

**Volume No. 12**

**Issue No. 1**

**January - April 2024**



**ENRICHED PUBLICATIONS PVT. LTD**

**S-9, IIInd FLOOR, MLU POCKET,  
MANISH ABHINAV PLAZA-II, ABOVE FEDERAL BANK,  
PLOT NO-5, SECTOR-5, DWARKA, NEW DELHI, INDIA-110075,  
PHONE: - + (91)-(11)-47026006**

# **Journal of Operations Management and Information Technology**

**ISSN No - 2348-6635**

## **Aims and Scope**

The aim of the journal of Operation Management and Information Technology is to provide academically robust papers, research, critical reviews and opinions on the organizational, social and management issues associated with significant information-based technologies. It is designed to be read by academics, scholars, advanced students, reflective practitioners, and those seeking an update on current experience and future prospects in relation to contemporary information and communications technology themes.

# **Journal of Operations Management and Information Technology**

**Managing Editor  
Mr. Amit Prasad**

**Editor in Chief**

**Dr. Paresh Vallabhdas Virparia**  
Professor & Director  
Department of Computer Science  
Sardar Patel University  
Vallabh Vidyanagar - 388120  
Gujarat, india  
pvvirparia@yahoo.com

**Dr. Ruchi Mittal**  
Associate Professor and  
Head of MCA Department  
Maharaja Agrasen Institute of  
Management & Technology,  
Jagadhri (Haryana) as  
raymittal@gmail.com

**Satyendra Kumar Singh**  
Asst. Prof. & HOD  
International Institute for Special  
Education, Lucknow  
mail2satyen@gmail.com

# Journal of Operations Management and Information Technology

(Volume No.-12, Issue No. 1, January - April 2024)

## Contents

Sr. No.	Title / Authors Name	Pg. No.
1	A Strategic Review of E-Retailing in India Dr. Mukul Jain	01 - 09
2	Big Data: An Overview – <i>Pooja Singh</i>	10 - 17
3	E-Commerce Digital Age Of India: Advertising In It – <i>Ather Jamshed Nasir</i>	18 - 26
4	E –Kranti : A Step Ahead – <i>Richa Martolia and Anubhav Tewari</i>	27 - 37
5	e-Retail (Online Shopping) in India: A New Revolution in the Society – <i>Shahla Tabassum</i>	38 - 47

# A Strategic Review of E-Retailing in India

**Dr. Mukul Jain**

Visiting Professor & Management Trainer,  
P-3B-44, Princeton Estate, DLF Phase-5, Gurgaon (Haryana), India  
[mukuljain11@gmail.com](mailto:mukuljain11@gmail.com)

## **ABSTRACT**

*E-commerce companies and experts believe that several factors will drive e-retailing growth in India. According to a recent report from Internet and Mobile Association of India (IAMAI), total Indian market for e-commerce is around Rs 50,000 crore, of which 80% or Rs 40,000 crore is captured by travel e-commerce (on-line train, bus and airline tickets) while non-travel or retail e-com is only 20% or Rs 10,000 crore.*

*Experts hope that by the year 2025, the total e-commerce market will reach at least Rs 4,00,000 crore and the share of retail will be half at Rs 2,00,000 crore. With the phenomenal spread of mobile telephony and the advent of 3G in the country, buyers from small towns and cities are also buying online in large numbers. It is a fact that internet has reduced the discrimination factor between the small and the big cities enabling buyers from small towns to have access to the same branded goods, and quality products which earlier was a privilege of large city buyers. Most of the e-retail businesses are not making profits, as of now. For the e-commerce business to survive and make a turnaround, it is important to keep the fixed cost as low as possible. All e-commerce players know that the ultimate proof of the right strategy is that they must start making money after the first seven or eight years. In this context, many point to the fact that the global e-retailing giant Amazon.com took 8 years to breakeven. E-commerce is a long-haul and volume-driven business. But operating in a fiercely competitive environment on wafer-thin margins will certainly not be a cakewalk for many. For the venture capitalists too, the business sense works like--if even two out of ten companies do survive, they will make their money. This research paper aims to study as to what are the ways to make optimal decisions as an entrepreneur in e-Retailing business and how to integrate traditional retails practices with Internet technology in the Indian context.*

**Keywords: E-Retailing, E-Commerce, Online-Store, optimal-decisions, IT, Strategy, CRM**

## **1. INTRODUCTION**

Internet Retailing or e-retailing is a form of retailing using a variety of different technologies or media. It may be broadly be a combination of two elements combining new technologies with elements of traditional stores and direct mail models using new technologies to replace elements of store or direct mail retail.

There are mainly four types of e-commerce models

**1. Business to Consumer (B2C); 2. Business to Business (B2B); 3. Consumer to Consumer (C2C); 4. M-Commerce**

The critical success factors for the success of e-retail business include:

- ❖ Use of customer databases; Easy ordering; Quick Delivery

Operational elements that the E-retail model shares with both the retail store and direct mail models include:

- ❖ Billing of customers; Relationships with suppliers

There are, therefore, many elements that E-retail and more traditional retail models have in common. Indeed many of the most successful E-retailers have been those that have been able to successfully transfer critical elements from traditional retailing to the Internet, such as customer service and product displays.

### **Some of the challenges of E-Retailing**

- ❖ Controlling customer data; Integrating on and off-line orders; Delivering the goods cost-effectively; Handling returns

Further, the following aspects are also challenges to e-retail business:

- ❖ Affiliate Marketing, Content Management; Customer Service; Delivery Services; E-Commerce; Systems; Email Marketing; Fulfilment Services; Order Management; Payments Processing; Performance Monitoring; Returns Processing; Search Engine Marketing; Site Search Solutions; Supply Chain Solutions; Web Analytics; Web Design / Hosting.

### **E-Retailing Essentials**

To start an e-Retailing business, an organization or an individual should have the following characteristics:

## **1. A Unique Idea / Product to sell**

## **2. A Perfect Business Plan**

The e-Retailing business idea, Product or services, people involved, their expertise, a Project report with all standard projected statements, Competitor analysis, Capital investment, Loans, Business location, Government regulations & policies, Technology plans, and IT infrastructure required should be strategized.

## **3. Technology Plans**

Organization may start off in a small way and then based on the response they can get more funding and grow in a big way.

- ❖ They need to finalize an attractive easy to remember domain name e.g. www.dell.com.
- ❖ They need to finalize a hosting server to book web space from their various plans e.g. www.Hostmonster.com to start with and later go for their own scalable IT infrastructure setup based on the response and growth.
- ❖ Need to Acquire IT team for developing e-Commerce website or to out source the work. One can think of using Open source like OS Commerce, a popular e-Commerce application and Open source CRM application for customer relationship.
- ❖ If one is going to develop from the scratch based on its own technology, the website development process will be followed.
- ❖ Compare and finalize Payment gateway based on their initial setup fee / transaction fee. The popular payment gateway service providers are CC Avenue, ICICI, Bill desk, Pay pal and few more players.
- ❖ Once the website is launched, related internet marketing, popularly called as SEO (Search Engine Optimization) work to be started to increase the popularity and visitors of the site.
- ❖ Plan and organize supply chain management to deliver product or service to the online users who place orders.
- ❖ Post sales support plans.

## **4. E-Retailers Back Office Management**

There will be a huge team working on the back end systems of the web site which is called as control panel / system administration in which a group of people will be updating the product categories,

products, prices, specifications and many other information before it is getting listed in the website. Other than this to attract more users, the Marketing team will often send mailers / newsletters by giving more offers.

## **5. Payment Gateway**

After the e-Retailers web site is ready with products listed and when the online users orders the product online, the retailers should link the Bank account with 3rd party payment gateway, to which the payment will be credited.

## **6. Integration of Customer Relationship Management (CRM) and Supply Chain Management (SCM)**

### **Illustration of the buying process:**

1. Online visitor of the site will pick up the items to be purchased.
2. Confirming / finalizing the item list selected and checkout.
3. Enter the credit / debit card / Pay Pal information to make the payment.
4. User payment information is getting checked with banker via payment gateway and once it is authenticated.
5. The payment will be credited to retailer account and an Order confirmation is shown to the visitor along with order details and shipping information. The visitor will also be notified on the purchase made via email. The visitor will be able to track their order status and an SMS / email update will be frequently sent to visitor on the product or service delivery.

### **E-Retailing Website Design and Launching Process**

Once the Retailers business model and web site design layout is finalized, the software consulting and development team will start developing the site. They will create all product categories, price, specifications and other details; put it in a test site for unit and integration testing. Once the testing is over, it is being handed over to retailer for their acceptance testing. Once the retailer is satisfied with the performance of the web site; upon getting acceptance; the web site is moved to production server. Now the Retailer will initiate the website promotional activity in order to get more visitors and generate revenues.



## **2. SECTION**

### **Government Regulations In Retail**

For the growth of e-commerce, Indian government is taking necessary steps through effective Telecom policies, introduced Information Technology IT Act to create necessary legal and administrative framework. To build the confidence among common public to increase online business, The CCA (Controller of Certifying Authority) has created PKI (Public Key Infrastructure) i.e. for electronic authentication via digital signatures. This will avoid cyber space crimes and do not let anybody unpunished.

Electronic commerce security planning and management calls for identification of the users, better risk assessment and evaluation, application of specific security identification, better and appropriate network security policies, information resources protection, better security management policies, re-transformation and re-skilling human resources in terms of identifying roles and responsibilities and improving physical and environmental security.

### **Internet Marketing For E-Retailing Search Engine Optimization (Seo)**

Around the world all organizations have their websites; few of them generate more visibility and revenue. For a web store / e-Retailing site, one needs to study the business and marketing goals, and then pick / find the best keywords matching the products and services listed in their website. Based on the Keyword analysis, one needs to build quality unique content for the store which will make the store to gain good ranking among the search engines. While publishing the content blended with product-listing, one needs to ensure that competitor web store strategies are analyzed and considered.

Then one should plan for the sitemap, which ensures that when visitors are browsing the site, they should feel easy to navigate to all pages of the site without any difficulties. The site navigation should be developed as a RSS feed which is search engine friendly i.e. the site map will be read by the search engine crawler and get indexed, which results in good search results.

After building the sitemap, one starts building the static and dynamic web pages with unique content. Each page should be optimized so that search engine ranks the page. On completing this process, one needs to submit the site's URL / sitemap feed to all popular search engines viz., Google, Yahoo, MSN etc.

After submitting the site, one needs to have plans to index the site in popular directories and classified sites. Then start indexing in social book-marking sites. There are few sites which offers code snippet e.g.

www.addthis.com by which one display links which will make the visitors to index a specific page to all popular social book marking sites, then email this page to friend, link to face book and twitter etc. To ensure maximum success, one need to review the above processes often and keep on working to get search engine optimization, in order to bring in more traffic to the website. By implementing free Google Analytics in the site, one can generate excellent SEO report as and when required and be updated with the effort versus results.

### 3. SECTION

#### E-Retailing web site Project Planning Input

Online Text and voice chat, recorded telephone conversations, Mails, scanned images and supporting docs by the Client, Discussions Notes, Model sites/applications etc.,

#### Process

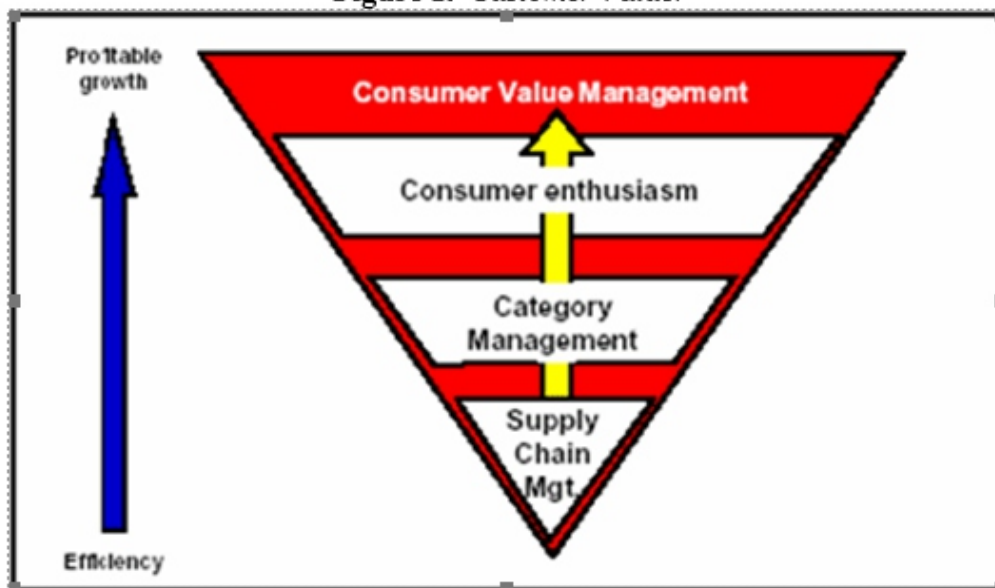
Business Need & User Need Analysis

#### Output

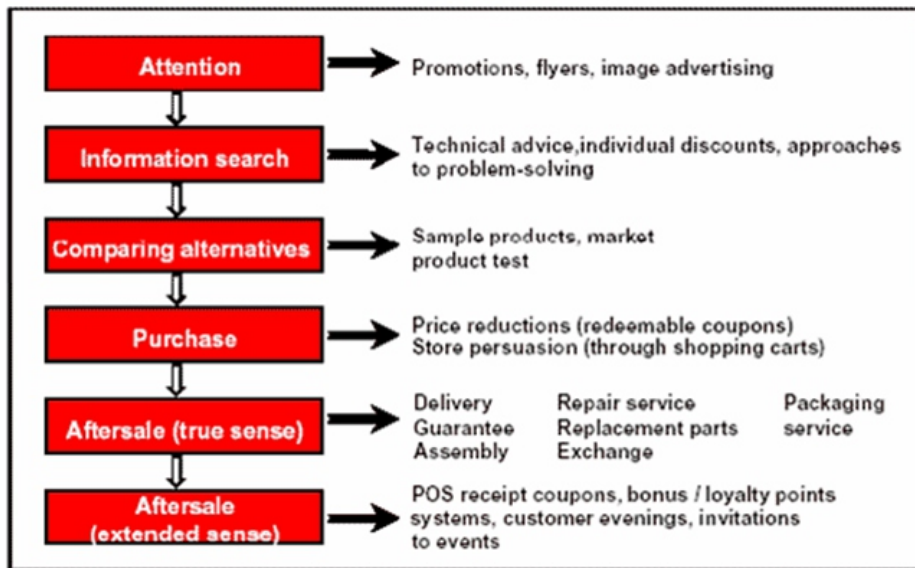
1. Work plan; 2. Cost involved; 3. Team requirements; 4. Domain Name finalization; 5. Web space provisioning or Own Hardware-software requirements; 6. Payment gateway for ecommerce; 7. Any other third party tools; 8. Supporting documents 9. Approval; 10. Web Site / Page Design; 11. Web development; 12. Pilot & Testing; 13. Promotional plans; 14. Site Launch; 15. Maintenance and Support.

IMAGE or DIAGRAM

Figure 1. *Customer Value.*



**Figure 2.**  
**Methods of Influencing the Individual Buying Phases**

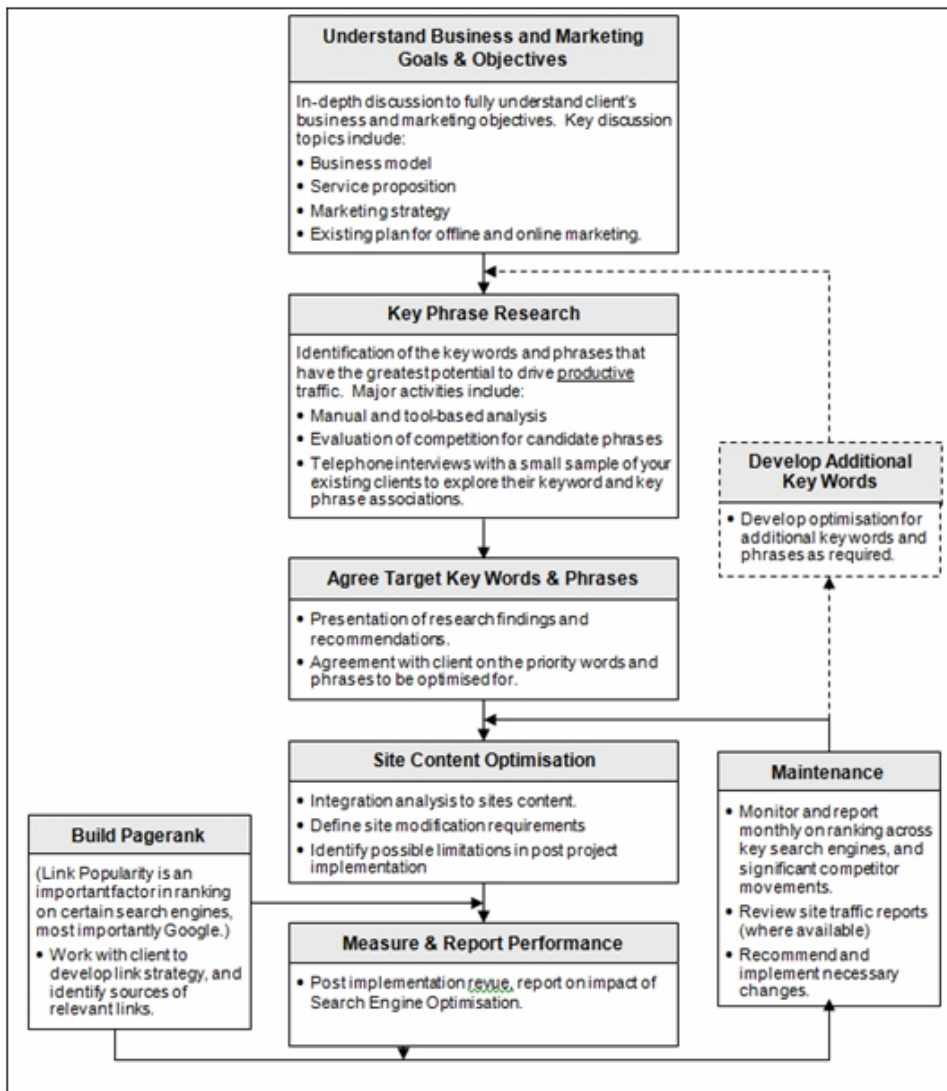


**Figure 3.** (Search Engine Optimization)



**Figure 4.** (E-retailing Strategy)

**Figure 5.** (Flowchart of E-retailing Business IT Model)



#### 4. CONCLUSIONS

E-retailing is to evaluate business plan, check out revenue models, help identify potential alliances and integrate supply chain processes with e-commerce initiatives. The most important concentration is focused on back-end systems. Customers keep coming back only if earlier shopping experiences have been pleasant and successful. One should focus on building strong bonds between every link in the supply chain (order processing, order status tracking, payment status, inventory level reporting, and procurement) and build B2C systems. The government has to take effective steps to resolve all barriers or disadvantages for e-commerce growth and create opportunities for private-public participation in infrastructure development. In this intricate business world, e-retailing will become tremendous business strategic concept, and it may be very helpful and most profitable method of business process in coming years.

## 5. REFERENCES

- [1] Website: <http://www.fibre2fashion.com/industry-article/29/2804/introduction-to-electronic-retailing1.asp>; last accessed on 14-1-2013
- [2] Website: <http://franchiseindia.com/e-retail/>; last accessed on 14-1-2013
- [3] Report: Bajaj, K.K., "Country Report on E-Commerce" (India, Ministry of Communications and Information Technology, Department of Information Technology, Office of the Controller of Certifying Authorities)
- [4] Journal: Virpi Kristiina Tuunainen & Matti Rossi "E-Business In Apparel Retailing Industry" – Critical Issues by, Helsinki School of Economics
- [5] Journal: Steve Burt, Leigh Sparks "E-commerce and the retail process": a review by, Institute for Retail Studies, University of Stirling, Stirling FK9 4LA, UK
- [6] Website: <http://www.eretailing.com>; last accessed on 14-1-2013
- [7] Website: <http://www.deccanherald.com/economy&business>; last accessed on 14-1-2013
- [8] Journal: Kathryn M. Kimery Third-Party Assurances: "Mapping the Road to Trust in E-Retailing", Central Missouri State University
- [9] Book: Herb Sorrensen (2009); "E-Book- Inside the Mind of the Shopper", Garrick Lee
- [10] Website: <http://financialexpress.com/click-n-buy-eretailing>; last accessed on 14-1-2013
- [11] Website: [http://www.us.goodman.com/TI\\_Goodman\\_Whitepaper\\_May2012](http://www.us.goodman.com/TI_Goodman_Whitepaper_May2012); last accessed on 14-1-2013
- [12] Website: <http://ezinearticles.com/?How-Can-a-Virtual-Assistant-Help-Your-E-Retail-Business?&id=4818077>; last accessed on 14-1-2013
- [13] Research Paper: Noam Tractinsky, Ben-Gurion "A Study on Web-Store Aesthetics in E-Retailing: A Conceptual Framework and Some Theoretical Implications", by University of the Negev, Israel & Oded Lowengart, Ben-Gurion University of the Negev, Israel
- [14] Website: [www.wbcsoftwarelab.com](http://www.wbcsoftwarelab.com) – SEO services related information; last accessed on 11-1-2013
- [15] Research Paper: V. Srikanth & Dr. R. Dhanapal (2011), A Business Review of E-Retailing in India.
- [16] Research Paper: K. Umanath & J. Udhayakumar (2010), E-Retailing: A new strategic foundation and Business tool for textile and garment industry
- [17] Book: Piush Kumar Sinha & Dwarka Prasad Uniyal (2007), Managing Retailing, Oxford University Press, Delhi

# Big Data: An Overview

**Pooja Singh**

Department of computer science  
Alfalah University, Dhauj Faridabad  
Email: singh.pooja2608@gmail.com

## **ABSTRACT**

*Information exists in many forms and it can be converted and stored in analog and digital way. Today big data is buzz word that pertain to problem as well as solution involving technology for storing and managing the very large data-set of different type in age of internet, intra net and satellite communication. Most of development in field to big data is coming from side of computer and related technology (software & solution) giants like IBM, Microsoft, SAP & Sybase, Teradata, MongoDB, Solr etc. Emergence of cloud computing, No SEQUEL technologies, new software tools and database systems for large and unstructured datasets, data Lake etc have come up with solution but still technology up-gradation required for future advent of huge and bulky data in almost all field of humanity and science & technology is under the way of emergence.*

***Key words: Data , Big data SEQUEL, No SEQUEL, data lake, capacity, cyber and internet***

## **1. INTRODUCTION**

Information is everywhere doing everything in our lives and helping world to evolve in better way. Information in form of analog and digital Data is the input as well as the output to most of systems pertaining to communication and computation technology. Data base is increasing, data sets are burgeoning, and becoming bigger and bigger in very fast way. As things changes and technology upgraded, more and more data get added day by day in every field of humanity, economics & commerce, life and science & technology. New researches in different fields generate new technology and larger automation of even smallest of things related to our daily activities. The appeal of big data is rising because unprecedented amount of information moves through organization systems.

Developed economies are increasingly using data intensive technologies. Between 1991 and 2004, more than 100 million people across the world entered the socio-economic level of middle class, which means more and more people will join hand with technology by compulsion of economy and commerce or by



their own wish to perform better at various levels. Technology saves money and at same time it eases the life of individuals. World's massive capacity to exchange information through telecommunication networks has jumped from 465 petabytes in 1992 to 100 Exabyte in 2010. Big data is the term used to refer very large and complex datasets impractical to get managed by older technologies. Big data includes reference to technologies and initiatives that handle or operate on or compute data that is too diverse, fast changing or massive for conventional technologies, skills and infrastructure to address efficiently. Data has become bulky in volume and variety and move with ever increasing fast velocity. Big data include huge datasets which can't be capture, curate, manage and processed within tolerable elapsed time by commonly used software tools and technology.

## **2. ANALYSIS AND MODERN TRENDS**

Big data analytics for manufacturing applications are generally based on following points, namely:

- (1) Smart connection – measuring or tapping data y sensors or controller or enterprise manufacturing systems such as ERP, MES, SCM & CMM. A seamless and tether-free technique is required to manage data acquisition procedure and transferring data to central server is required where different protocols like MTConnect etc. are effectively used.
- (2) Conversion (data to information) – several tools and methodologies are used at this level.
- (3) Cyber level is central information hub. Specific analytics are used to extract information and these analytic provide machines with self comparison ability with respect to the whole fleet.
- (4) Cognition – full knowledge of monitored system is produced by implementing CPS at this level. Exact info-graphics are properly used at this level to transfer completely the acquired knowledge to users.
- (5) Configuration – it is the feedback from cyber space to physical space and this level act as supervisory control to make machines self-configure and self-adaptive. Hence the level acts as RCS (resilience control system) and it apply the decisions which are corrective and preventive in nature. Such decisions are made at cognition level to the monitored system.

The trends of modern technology with respect to big data include:

1. Beginning and development of cloud computing
2. New software tools and database systems for large but unstructured datasets
3. Refining analytical tools to process vast quantities of data in near-real time
4. Monetization of big data sources.
5. Concerns around privacy of data and intellectual property
6. Rise of global smart cities.

Big data analytics require connection (sensors and networks), cloud (computing and data on demand), cyber (model & memory), content or context (meaning and correlation), community (sharing and collaboration) and customization (personalization and value).

Big data requires exceptional technologies efficiently process large quantities of data within tolerable elapsed times. New technologies suitable for handling big data include A/B testing, crowd sourcing, data fusion, and integration, genetic algorithms, machine learning, natural language processing, signals processing, simulation, time series analysis and visualization. Tensor based computation efficiently handle multidimensional big data, such as multilinear subspace learning, represented as tensors. Some Massive parallel processing (MPP) databases have ability to store and manage big data, cloud based infrastructure and use of internet are technologies being applied to big data.

DARPA's topological data analysis program seeks the fundamental structure of massive data sets. DARPA launched company AYASDI in 2008 in public domain.

### **3. SHARED STORAGE ARCHITECTURE**

Shared storage architectures like storage area network (SAN) and network-attached storage (NAS) are typically slow, complex and expensive in big data domain. Big data analytic systems have to perform faster, should have simpler commodity infrastructure and low cost. Hence shared storage system and architectures, since 2011, are not in use in today's world of big data. Real or near-real time information delivery is one of defining characteristics of big data analytics.

Relational database management system (RDBMS) is a database management system based on relational mode, invented by E. F. Codd (IBM). RDBMS are general choice for storage of information and new databases used for financial records, manufacturing and logistical information, personnel data and other application since 1980s. In 2011, among five leading commercial relational database vendors, Oracle topped in revenue (49%), IBM (20%), Microsoft (17%), SAP & Sybase (4.6%) and Tera data (3.7%). Big data is difficult to work with using most RDBMS and desktop statistics and visualization packages because it requires 'massively parallel software running to hundreds or thousands of servers'.

Traditional database technologies are built around many tables of information like spreadsheets with rows and columns and way of asking questions of these tables in a structured way, which was originally named SEQUEL or shortened to SQL. The technology was pioneered in 1970s by Oracle and it became number one of database technology ever since.



Data like storing the relationships in social network (face book), or index of documents stored on the web (Google) or collections of digital media could not be stored in conventional ways used for storing data of company accounts, marketing and sales figures overtime such as Excel. There is always demand, ever growing faster, for store and analyze very large bodies of information specially unstructured data (data not suited to store in tables). Hence a group of technology collectively known as NoSQL technologies have become popular of which many leading technologies is not developed by single company but instead are open-source developed by an open network of companies and independent developers and contributors in same way as Wikipedia or Linux is developed.

Some most prominent types of NoSQL data technologies that are still under way of development include:

1. Storing huge data sets of document in suitable way
2. Emergence and development of wide column store in order to access structured and semi structured data rapidly.
3. Rapid access to unstructured data by key value store
4. Advance search engine suitable for full text indexing fo documents
5. More effective graph database for storing graph type data like social networks.

#### **4. EFFORTS IN BIG DATA NETWORKING**

MongoDB (from 'Humongous') is an open-source document database, and leading NoSQL database. It is leading technology in 'document store'. It uses JSON- Style documents with dynamic schemas providing power and simplicity.

Apache Cassandra is database technology which is mostly preferred for its scalability and high availability without compromising performance. Linear scalability and proven fault-tolerance on commodity hardware or clod infrastructure make it perfectly suitable platform for mission-critical data. It supports best in class- replicating across multiple datacenters, giving lower latency for users. Data model built by casseandra provides facility of column indexes with performance of log-structured updates, strong support for denormalization and materialized views and strong built-in-caching.

Solr is highly reliable, scalable and fault tolerant, open source enterprise search platform built on 'Apache Lucene tm'. It provides distributed indexing, replication and load-balanced querying, automated failover and recovery. It powers the search and navigation features of many of the world's largest internet sites.

Redis is an open source, BSD licensed, advanced key value cache and store (for rapid access to unstructured data). It is often referred to as a data structure server since keys can contain *strings, hashes, lists, sets, sorted sets, bitmaps & hyperloglogs*.

Neo4j is the world's leading graph database with largest ecosystem of partners and tens of thousands of successful deployments. EBay uses routing with Neo4j to tackle ecommerce delivery service. Walmart uses it to give customers best web experience through relevant and personal recommendations.

Cloud analytics is term for a set of technological and analytical tools and techniques specifically designed to help clients extract information from massive data. It is designed to make official statistical data readily categorized and available via user's web browser. New era in computing technologies include high processing speeds to cloud computing. These have made possible for organizations and companies to be capable of storing and analyzing huge data collected. The most important field to offer challenge include 'dynamic nature of data', 'security of data', and 'development and application of optimal analytic techniques to analyze and use information in best possible way.

Cloud analytics is a data driven frontier and it leverages the use of cloud and related computing, communications and data management and visualization technologies to perform sophisticated multivariate analysis on massive centralized, distributed or federated data sets to better understand and help solve problems. Booz Allen is one of global leader and innovator in bringing cloud analytics to commercial clients.

## **5. PROGRESS OF BIGDATA**

Rise of cloud computing and cloud data stores have been a precursor and facilitator to the emergence of big data. Choosing a cloud computing as optimal choice is important question to be addressed. Cloud computing employs virtualization of computing resources to run numerous standardized virtual servers on the same physical machine. Economies of scale are achieved by cloud providers and this is represented in low prices and permission of billing on small time intervals basis (e.g. Hourly basis).

In year 2000, C++ based distributed file sharing framework was developed by Seisint Inc. in order to address data storage and querying involving structured, semi-structured or unstructured data distributed across multiple servers. LexisNexis acquired Seisint Inc. in 2004 and Choice Point Inc. in 2008 for its high speed parallel processing platform. HPCC systems were result of merging of the two platforms and was open sourced under Apache v2.0 license. Currently HPCC and '*Quantcast file system*' are only

available platforms capable of analyzing multiple Exabyte of data in public domain.

*MapReduce*, type of Distributed analytic frameworks, is a programming model and associated implementation for processing and generating large data sets. In 2004, MapReduce was introduced by Google to the world. Users specify a map function that processes a key or value pair to generate a set of intermediate key or value pairs and a reduce function that merges all intermediate values associated with the same intermediate key. Typical mapReduce computation processes run on large cluster of commodity machines such as many terabytes of data on thousands of machines. SQL, MapReduce, in-memory, stream processing, graph analytics and other types of workloads are able to run on Hadoop with adequate performance and more & more businesses will use Hadoop as an enterprise data hub. With map reduce, queries are split and distributed across parallel nodes and processed in parallel. An implementation of MapReduce framework was adopted by an Apache open source project named 'HADOOP'.

HADOOP is a framework and file system which includes set of tools for processing very large data sets. It is not included in 'database technology', but can support many of database technologies. Originally it was invented and design for working on clusters of physical machines. Hadoop changes the economics and dynamics of large scale computing. It is an open source software project that enables the distributed processing of large data sets across clusters of commodity servers and is designed to upgrade to thousands of machine from previous single server with very high degree fo fault tolerance. It is the ability of software to detect and handle failures at the application layer that has ended much relying upon hardware.

The first generation of Hadoop was running MapReduce applications. YARN (yet another resource negotiator) gives ability to other application frameworks to run on Hadoop. It assigns CPU, memory and storage to applications running on a Hadoop cluster.

HDFS (distributed file system) spans all the nodes in a Hadoop cluster for data storage. One big file system is prepared by linking together the all file systems on various local nodes.

Hadoop gives computing solution that is cost effective, fault tolerant, scalable, and flexible. Fault tolerant characteristic is due to the fact that the system redirects work, when a node is lost, to another location of data and continues processing.

## 6. SUMMARY

Big data projects focus on adopting Hadoop for data processing. MapReduce has become standard for large scale data processing. Tools like Hive and Pig have evolved on top of Hadoop which make it feasible to process huge data sets easily. Hive is data ware house system for Hadoop that facilitates easy data summarization, adhoc queries and analysis of large datasets stored in Hadoop compatible files systems. Hive provides a mechanism to query the data using SQL like language (HQL). Hive enables developers not familiar with MapReduce to write data queries that are translated into MapReduce jobs in hadoop. Hive has no support for update or delete. It donot support for inserting single rows. It allows limited number fo built in functions and above all not all standard SQL is supported. Pig platform includes an execution environment and scrimptions language (Pig Latin) to analyze Hadoop datasets. It is an abstraction over the complexity of MapReduce programming. Its compiler translates Pig Latin into sequences of MapReduce programs. Pig is recommended for people familiar with scripting languages like Python.

There is increasing number of technologies being in use for cloud –data processing. For example, some cloud based data warehouse and technologies include, Big Query data analytics service (Google), Bluemix cloud platform (IBM), Redshift hosted BI data warehouse (Amazon), Kinesis data processing service (Amazon). Hybrid of cloud and on- premises is future of big data.

Big data technology offers opportunity to build capabilities to reduce costs and evolving better insight. Traditional approaches to sharing and transferring data have all used some type of extract, transform and load (ETL) capability that extracts information from one format (database, silo, file etc.) and transforms it into another data format. Data gets loaded into the target system for use in a set predetermined analysis. Drawback of the process is that it is resource intensive and requires investments in high cost tools to access the data. There result Very large number of data warehouses and each has its own ETL process. Creation of customized point to point solutions is done by using data warehouses calls. PtP solutions can certainly meet short-term goal, but most of time it does not come to expectations or often fail to scale up to meet longer-term organizational goals.

Today anyone can use APIs (application Programming Interfaces) provided mostly free by Big Data holders like Google and Twitter to do research in social and behavioral sciences. For e.g. Tobias Preis et al used Google Trends data to demonstrate that internet users from developed countries with highest GDP are more likely to search for information about future than information about the past.

## REFERENCES:

1. [Borthakur07] Borthakur, Dhruba, "The hadoop distributed file system: Architecture and design", Apache Hadoop Documentation, 2007, [https://hadoop.apache.org/docs/r0.18.0/hdfs\\_design.pdf](https://hadoop.apache.org/docs/r0.18.0/hdfs_design.pdf)
2. [Bala13] Bala, Nayar Kiran, "Reliability of Cloud Computing Environment during Disasters", *Indian Research in Progress*, 2013, <http://shodh.inflibnet.ac.in:8080/jspui/handle/123456789/1625>
3. [Garlasu13] Garlasu, Dan, et al, "A big data implementation based on Grid computing", *Roedunet International Conference (RoEduNet)*, IEEE, 2013 11th, [http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=6511732](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=6511732)
4. Dan Sommer, Rita L. Sallam, James Richardson, "Emerging technology analysis: Visualization-based data discovery tools," June 17, 2011
5. <http://www.computerweekly.com/opinion/How-to-manage-big-data-and-reap-the-benefits>.
6. <http://www.boozaallen.com/consulting/technology/cloud-computing/cloud-analytics>
7. <http://www.qubole.com/big-data-cloud-database-computing/>
8. [Chang08] Chang, Fay, et al. "Bigtable: A distributed storage system for structured data", *ACM Transactions on Computer Systems (TOCS)*, 2008, <http://static.googleusercontent.com/media/research.google.com/en/us/archive/bigtable-osdi06.pdf>
9. [Zikopoulos12] Zikopoulos, P. C., et al., "Understanding big data.", New York et al: McGraw-Hill, 2012, ISBN: 978-0-07-179053-6.
10. Intel IT Center, "Intel's IT Manager survey on how organizations are using big data," August 2012.
11. IBM Institute for Business Value, in collaboration with SAID Business School at the University of Oxford. "Analytics: The real-world use of big data." 2012.

# E-Commerce Digital Age Of India: Advertising In It

**Ather Jamshed Nasir**

Research Scholar, School Of Business Management, Noida International University,  
Gautam Budh Nagar, U.P.  
Email:atherkhan27@yahoo.com

## **ABSTRACT**

*What once apparently used to be the only mode to communicate around a decade back- paper-based communication is now replaced by chats, e-mails and messaging apps. India's e-commerce market from a customer base of mere eight million in 2012, it has climbed to 35 million in 2014, to have a whopping 100-million customer base for e-commerce now would be valued at \$15 billion by 2016, according to a report released by Google. It represents less than 4 percent of the total retail market. B2C e-commerce leads the market in India, while B2B is limited to organizations that drive online channels to integrate with their partners and distributors. For instance, the highest growth rate was seen in the apparel segment — almost 64 per cent over last year, followed by baby care products at 53 per cent, beauty and personal care products at 52 per cent and home furnishings at 49 per cent. The reason to inspect the product increases when the product in question is food and groceries. But gradually Indian consumers are shedding their obsession to physically inspect products and they are doubting online stores lesser than before. In order to take advantage of this demand, it is essential to develop a network of branches and delivery points that will be able to service high-growth cities. The sheer volume of CoD orders will require fundamentally different cash handling capabilities, Offline retailers moving to online channels will require significant fulfillment capabilities, A shift of focus to surface movement will create a need to develop strong multi-modal mix, Emergence of new categories will increase complexity, requiring accurate weight reconciliation systems*

**Key words:***E-Commerce, Digital, Online Channel, Cash on Demand(CoD), Gross Merchandise Value(GMV)*

## **INTRODUCTION**

With the increasing accessibility of internet, the communication method of Indians also fundamentally changed. What once apparently used to be the only mode to communicate around a decade back- paper-based communication, is now replaced by chats, e-mails and messaging apps. India's e-commerce market from a customer base of mere eight million in 2012, it has climbed to 35 million in 2014, to have a whopping 100-million customer base, with women being the major contributors a phenomenal growth of over 12 times in just four years, and the current valuation of the market, which stands at about \$3

billion for e-commerce now would be valued at \$15 billion by 2016, according to a report released by Google.

Research and consulting firm Spire had predicted that within next 4-5 years, ecommerce industry is going to consolidate, with only 2-3 players surviving at the end. According to eTailing India research, Indian Ecommerce Market will reach \$90 Billion by 2019.

It represents less than 4 percent of the total retail market. B2C e-commerce leads the market in India, while B2B is limited to organizations that drive online channels to integrate with their partners and distributors.

Following browsing trends, which have broadly shifted from the desktop to mobile devices in India, online shopping is also expected to follow suit, as one out of three customers currently makes transactions through mobiles in Tier-1 and Tier-2 cities. The number in Tier-3 cities is even higher, with every second person shopping online through their mobile. In 2014, 50 per cent of shopping queries were made through mobile devices, compared to 24 per cent in 2012.

Identifying the gender contribution to the shopping debate, the report states that women would be the most significant contributors to this growth comprising almost 40 per cent of the projected customer base. Although men account for the majority of the customer base as of now, in Tier-1 cities, women spend almost double the amount men spend on online retail. In terms of frequency as well, women outnumber men, shopping more number of times.

Nitin Bawankule, industry director for e-commerce, Google India, said the current gap was due to product categorisation where electronics and mobiles make up for almost 75 per cent of the traded products, mostly dominated by men. Women still maintain their hold in the “soft segments” such as apparels, skin care products, jewellery, home furnishings, small appliances, and accessories.

For instance, the highest growth rate was seen in the apparel segment — almost 64 per cent over last year, followed by baby care products at 53 per cent, beauty and personal care products at 52 per cent and home furnishings at 49 per cent. Compared to this, the currently dominant segments of electronics has seen the least growth of just about 35 per cent over last year.

One of the biggest speed breakers that is deterring e-commerce firms from scaling is the Indian consumers' desire to physically inspect a product before purchasing it. And certainly an online store

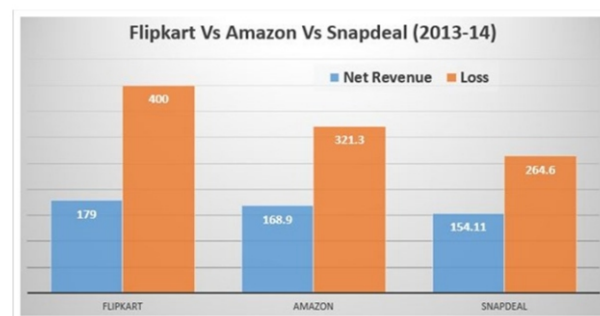


cannot render this facility to them. However, the reason to inspect the product increases when the product in question is food and groceries. But gradually Indian consumers are shedding their obsession to physically inspect products and they are doubting online stores lesser than before. So now even grocery business has gone online. The two bigger players in this domain are Bigbasket and Localbanya (and there are many others operating in various cities). However storing a perishable item is difficult and expensive than storing a non-perishable item, e.g. a mobile phone. Thus, being an online grocer becomes quite capital intensive, and hence you do not see any player who have expanded to an entire state, let alone entire country. However, Pragya Singh from Technopak has commented, “Urban India's increasing shortage of time is fuelling the growth of online grocery” and in 2015 we are expecting atleast 20 metropolises to be fully covered by e-grocers. 7 out of 10 Consumers will shop from Mobile!

Mobile devices already account for approximately 50% of traffic for all marketplaces. Even on our ecommerce platform, we have experienced surge in their mobile traffic from mobile devices. The increasing affordability of smartphones and accessibility of internet among Indian middle class has boosted m-commerce. Less than a year ago mobile traffic accounted for less than 10% of the entire traffic to Flipkart but now the same figure is close to 50%. In the year 2015 we expect m-commerce to increase further and I believe the total mobile traffic would be account for about 70-75% of the entire e-commerce traffic.

India Post may be the most sought after Delivery man. Almost 12 months back India Post jumped into the bandwagon of e-commerce and did transaction of more than 280 million. According to figures shared by India Post, delivery and logistics makes up 12% of the e-commerce market and in 2015 India Post may just have one of the largest shares.

While it is evident the volume of online retail is going to drastically increase over the period of time, majority of these sales are going to come from already established marketplaces like Flipkart, Snapdeal and Amazon.



*Note: All figures are in INR Crore*



GMV or Gross Merchandize Value represents the price of products sold and net revenues is just a fraction of that! Flipkart leads the race with net revenue of 179 crore followed by Amazon at 168.9 crore and Snapdeal at 154.11 crore. However, when it comes to losses, Flipkart leads by a much bigger margin and their loss for 2013-14 stands at Rs. 400 Crore. Comparatively, Amazon losses are pegged at Rs. 321.3 crore and Snapdeal had least losses of 3 with 264.6 crore.

## AFFILIATE PROGRAMS

Affiliate programs are big sales generating channel for E-Commerce sites across the world. These Affiliate programs by E-commerce sites have also led to hundreds and thousands of affiliate commission based businesses. For example, If I am an affiliate partner of Flipkart and for any sales that happen through me, I will be paid a certain fixed percentage (or fixed amount) of the sale value. Unlike other forms of advertising, Affiliate programs work very well for e-commerce sites, because they know the exact Return of Investment from it.

Affiliate Commissions offered by Indian E-Commerce Sites

ECOMMERCE SITE	BOOKS	MOBILES/ ELECTRONICS	HOME & KITCHEN	DIGITAL/ SOFTWARE/ EBOOKS	LIFESTYLE	OTHER
FLIPCART	10%	5%	10%			
AMAZON	10%	5%	N.A.	10%	N.A.	
SNAPDEAL	8% on selected items only					
MYNTRA	INR Rs.200-Rs.225 per sale					

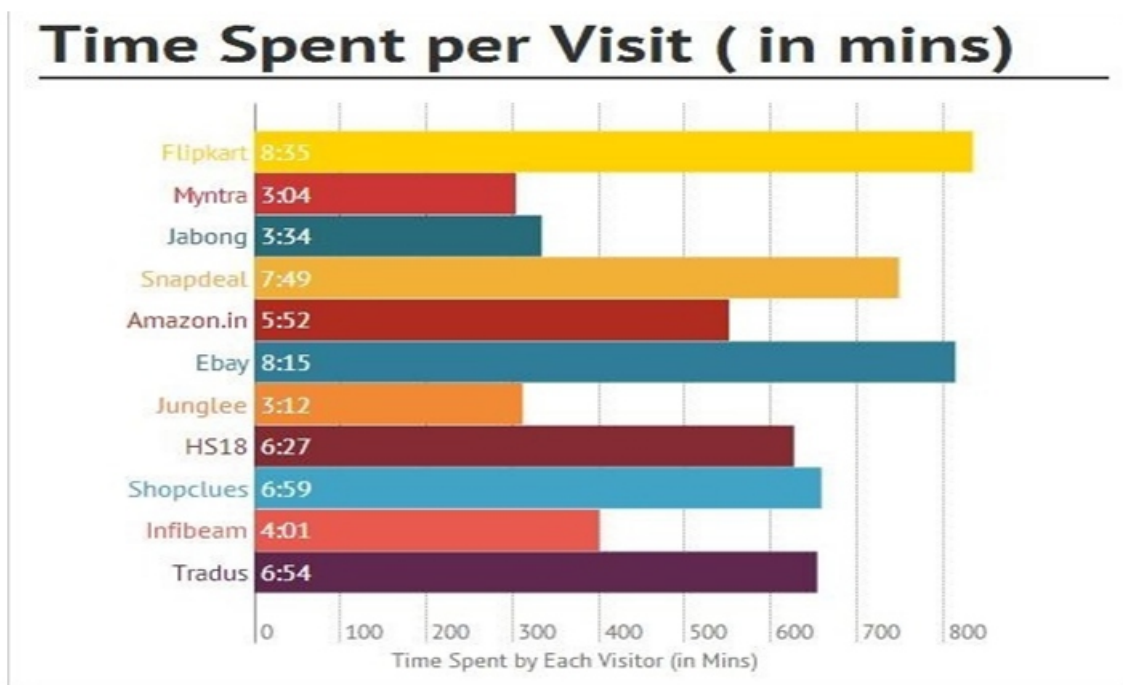
Flipkart's affiliate commissions were recently increased due to Amazon's entry into India. Though, Flipkart has said that these affiliate commissions are for limited time period (till July 30th, 2013), but they continued with that structure beyond that limit. Given that others ecommerce platforms are offering similar affiliate commissions, it will be difficult for Flipkart to move back to their old structure, which had much lesser commissions.

Though Myntra offers fixed amount per sale (Rs. 200 to Rs. 225), I think their structure is equally

lucrative to affiliate marketers. If a buyer makes a purchase of Rs. 2000 or less, their commission actually works out to be much more than others. The above comparison chart only compares affiliate program commissions of some of the top e-commerce sites in India and by no means is a complete list. Nearly all Indian ecommerce sites have their affiliate programs, and it would be advisable to check them individually.

## TRAFFIC TO ECOMMERCE SITES

There is a lot of interest amongst people, in order to find out the current pecking order of ecommerce players in terms of traffic and sources from which they generate their traffic. Lets look at it in more detail:



When it came to user engagement, Flipkart again reigned supreme with each visitor spending an average of 8:35 minutes per visit. Ebay also had very high levels of engagement with 8:15 mins followed by Snapdeal (7:49 mins).

Myntra had surprisingly low (infact lowest of all) visitor time spent at 3:04 minutes. Junglee and Jabong were other two sites who had low visitor time spent.

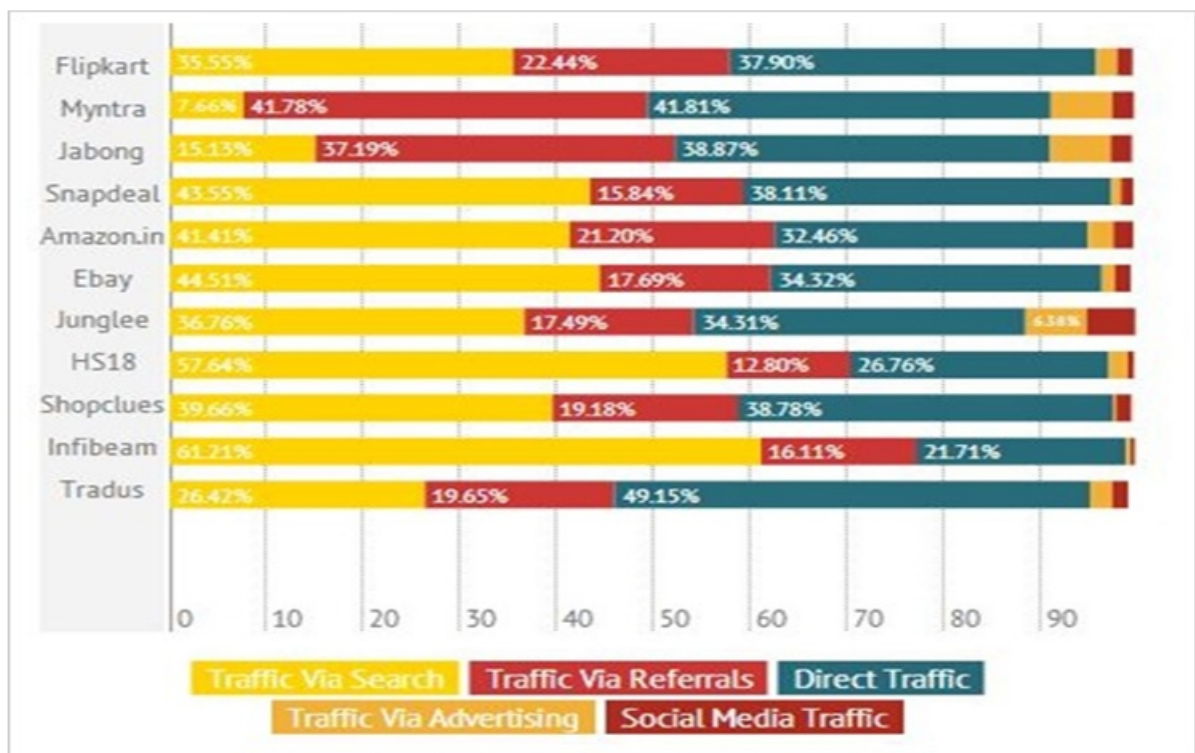
## SOURCE OF TRAFFIC

Look at the source of traffic offers some interesting insights into how these ecommerce sites generate traffic and from where! For example, if a site has lower search traffic, but higher direct traffic, it means they have created a brand, which people remember and directly visit the sites URL for any needs. On the other hand if the search traffic is high, it means people are either unaware of them or don't prefer to go their directly.

Let us look at how various sites generate their traffic!

Myntra, Tradus, Flipkart and Jabong were 4 sites that had lower search traffic and high direct traffic, which meant that they had better brand recall than others (there can be other reasons as well) and more people visited these sites directly. On the other hand, HomeShop18 and Infibeam had nearly 6 out of 10 visitors coming from search engines.

When it came to referral traffic (through affiliate partners, coupon sites, etc) Myntra rules with 42% of their traffic coming from referrals. Snapdeal, HS18 and Junglee had lower referral traffic.



Contrary to popular belief most sites had very less paid traffic (from advertising). Junglee, Jabong & Myntra got around 6% of traffic from display advertising. All others had between 0-2 percent.

Flipkart, Snapdeal, Amazon- the biggies of the e-commerce space, their strategies are intensifying to appeal the masses. With the internet users in India growing by the minute, it's not really such a bad idea to invest in India. India is the hotspot for e-commerce right now in the Asia Pacific.

India is now the US of the Asia Pacific Region. As much as we already know about the e-commerce wars, the competition to get the consumer's attention for just 10 minutes, is a race all the e-tailors are competing in right now. The money being drawn in is also huge with Flipkart raising \$1 billion, Amazon with \$2 billion and Snapdeal following the lead with \$650M. Gartner, a foremost American consulting firm also mentioned in the report that this bullish trend shows no signs of slowing down. Talking about the penetration into Mobile internet consumption, many e-commerce giants have paid more attention in "mobilizing" their web pages for hassle-free user view. "Mobile commerce will help organization skip

the desktop wave with increasing penetration of affordable smart devices with connectivity and a rapidly growing ecosystem to engage customers on mobile. Thirty percent of traffic for eCommerce sites come from mobile and tablets.

From food to furniture, mobiles to kitchen ware, appliances to clothes, the sky is the limit for selling on these B2C e-stores. With easy access, low prices, effective supply chain, numerous vendors, various payment options, the modern e-shopper is spoiled for choice.

The year 2014 has been a great year for Indian ecommerce. From Flipkart's \$11 Billion valuation to Snapdeal's recent \$627 million investment, from Myntra's acquisition to Amazon's \$2 Billion investment in India, Indian e-commerce market has seen exponential growth in all corners of the sector.

The Indian eCommerce industry, one of the fastest growing markets, currently pegged at Rs. 68,000 Crore (\$11 Billion) is expected to cross Rs. 1, 25,500 Crore (\$20 Billion) in 2015. The biggest contributor to this growth can be attributed to mobile. With over 50% of the sales coming from mobile and set to grow even more, Indian mobile commerce is poised to reach unprecedented heights.

As per a statement released by them, “Much like Apple changed the music industry, e-commerce will not only impact retail, but also the advertising industry.”

And the most interesting aspect in the incredible growth story is that, mobile will hold the key to this growth.

According to Mint report, both these Indian ECommerce giants are building large advertisement sales teams and beefing up the technology to serve advertisements based on the intelligence they have collected in regards to shopping habits of Indians.

Here is what Flipkart and Snapdeal plan to do – They will be serving ads on their portal to the visitors either from the sellers on their own marketplace or brands that sell products. So, for example, if a seller wants to show a listing of their product on preferential basis, they will need to buy ads from Flipkart and Snapdeal.

While one can argue, especially in case of Flipkart (because they have WS retail as their major seller), this makes sense because ad sales are sure to shore up their profits. Both Flipkart and Snapdeal have thousands of sellers on their platforms, and these sellers will always want their listing to show up prominently, which in turn will drive up their sales.

Even from a brand perspective, it seems to be a pretty good offering. Let us take an example – If someone is searching for a Motorola phone, other brands can poach the interested visitors by showing of their product advertisements.

Even sellers and brands will love doing ads because they can laser target the users. For example, A Samsung can show their advertisement on a Gionee phone listing. There is a high possibility that visitor will click on it and give a thought to a Samsung product.

The fact is that there is a fierce battle going at the top between big players and billions are being poured to out-compete the rival. Earlier it was only Flipkart and Snapdeal, then Amazon entered, and now Alibaba has also decided to join the race by declaring to step up its investment. All these developments have made e-commerce a capital intensive business. It has become game of the survival of the fittest and richest.

Small scale retailers are going to hard time to keep up with the pace.

## **SPEED BREAKERS IN E-COMMERCE**

While logistics is the biggest challenge in e-tailing, it is also the key differentiator between “e-tailers.” This industry is in the midst of emerging macro trends, and adapting logistics to accommodate these trends will determine any future success.

Here are key issues to consider when determining a suitable strategy:

The rising relevance of Tier 2 and Tier 3 cities necessitates a wider network presence of logistics for e-commerce to be successful in these cities.

Tier 2 and 3 cities are expected to contribute to more than 350 million e-tailing shipments in 2018, exceeding the demand from traditional retailers. In order to take advantage of this demand, it is essential to develop a network of branches and delivery points that will be able to service high-growth cities. The sheer volume of CoD orders will require fundamentally different cash handling capabilities, Offline retailers moving to online channels will require significant fulfillment capabilities, A shift of focus to surface movement will create a need to develop strong multi-modal mix, Emergence of new categories will increase complexity, requiring accurate weight reconciliation systems.

## **REFORMS NEEDED IN E-COMMERCE**

With the growing resentment in online consumers, largely after the Flipkart's Big Billion Dollar day disaster, even Indian government has taken note of the matter and has assured online shoppers of the quick reform. Commerce and industry minister Nirmala Seetharaman has been heard many times speaking about the government stand to take some credible action. Infact, consumer associations have even approached the cabinet to bring online shoppers under the purview of consumer law.

The fact is that brick and mortar store owners are experiencing decline in their business due to e-commerce and they are certainly going to mount pressure on government. Currently, government's stand on e-commerce is not concrete and some rules are absolutely mockable. 2015 is sure to see regularization of this industry by government!

### ***REFERENCES:***

- *Pragya Singh, Technopak*
- *Nitin Bawankuli, Industry Director for E-Commerce, Google India*
- *Commerce and Industry Minister Nirmala Seetharaman*
- *Googles Reports*
- *Gartner Consulting Firm Report*
- *Spire Research and Consulting Firm Report*
- *E-tailing India Research Report*

## E –Kranti : A Step Ahead

1. **Richa Martolia,Assistant Professor,Bora**  
Institute Of Management Sciences, Lucknow
2. **Anubhav Tewari,Assistant Professor,**  
Bora Institute Of Management Sciences, Lucknow

### **ABSTRACT**

*E-Kranti is an important pillar of the Digital India programme. The Vision of e-Kranti is "Transforming e-Governance for Transforming Governance". The Mission of e-Kranti is to ensure a Government wide transformation by delivering all Government services electronically to citizens through integrated and interoperable systems via multiple modes, while ensuring efficiency, transparency and reliability of such services at affordable costs.*

*The programme management structure approved for Digital India programme would be used for monitoring the implementation of e-Kranti and also for providing a forum to ascertain views of all stakeholders, overseeing implementation, resolving inter-Ministerial issues and ensuring speedy sanction of projects. Key components of the management structure would consist of the Cabinet Committee on Economic Affairs (CCEA) for according approval to projects according to the financial provisions, a Monitoring Committee on Digital India headed by the Prime Minister, Digital India Advisory Group chaired by the Minister of Communications and IT, an Apex Committee chaired by the Cabinet Secretary and the Expenditure Finance Committee (EFC) / Committee on Non Plan Expenditure (CNE). **The thrust areas of the e-Kranti - electronic delivery of services under the Digital India programme are:-***

***Technology for Education (e-Education), Health (e-Healthcare), Farmers, Financial Inclusion, Planning, Justice, Security, Planning and Cyber Security.***

***Keywords:**E-Kranti, digital India, e-governance , e-education, e-healthcare.*

### **INTRODUCTION**

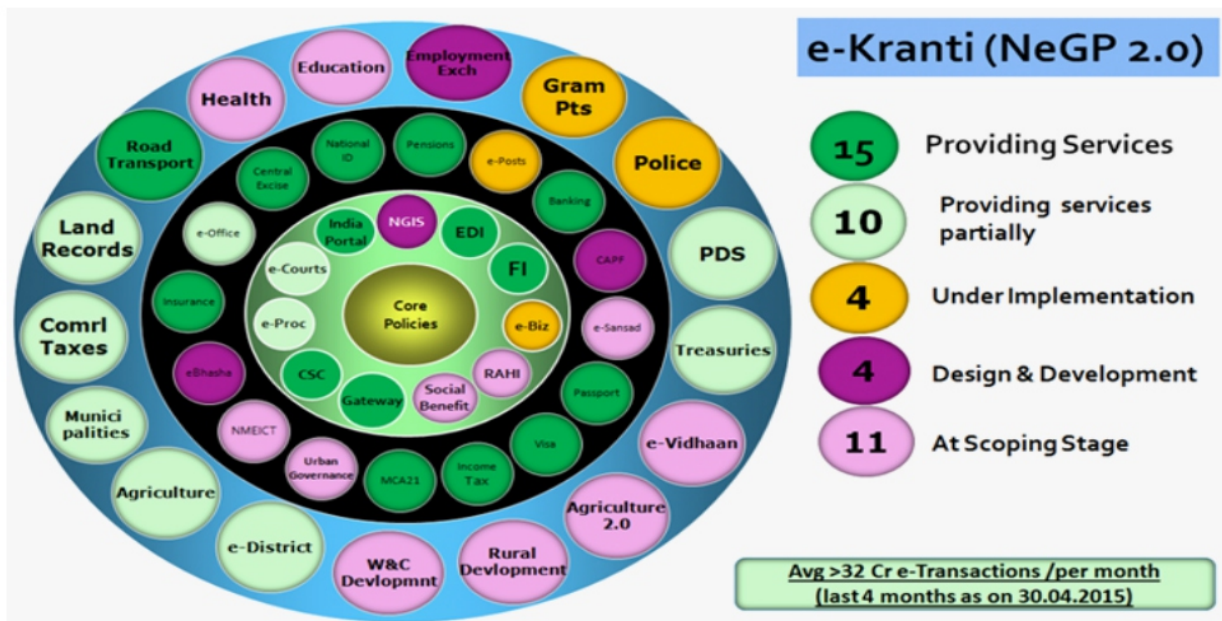
Government of India accords highest priority to the Digital India programme that is an umbrella programme for transforming India into a digitally empowered society and knowledge economy. The pillars 4 and 5 of the Digital India programme, namely '**e-Governance: Reforming Government through Technology**' and '**e-Kranti - Electronic Delivery of Services**' respectively are directly linked to the e-Kranti: National e-Governance Plan (NeGP) 2.0. The implementation of e-Kranti is vital for Digital India and for the delivery of e-governance, easy governance and good governance in the country.



The Union Cabinet in its meeting held on 25.03.2015 has approved the Approach and Key Components of e-Kranti that include, inter alia, the vision, mission, key principles of e-Kranti, Approach and Methodology, Programme Management Structure and Implementation Strategy including 44 Mission Mode Projects and Core ICT Infrastructure. The vision of e-Kranti is “Transforming e-Governance for Transforming Governance” and its mission is “To ensure a Government-wide transformation by delivering Government services electronically to the citizens through integrated and interoperable systems via multiple modes, while ensuring efficiency, transparency and reliability of such services at affordable costs.”

All new and on-going e Governance projects as well as the existing projects, which are being revamped, should now follow the key principles of e-Kranti namely 'Transformation and not Translation', 'Integrated Services and not Individual Services', 'Government Process Reengineering (GPR) to be mandatory in every MMP', 'ICT Infrastructure on Demand', 'Cloud by Default', 'Mobile First', 'Fast Tracking Approvals', 'Mandating Standards and Protocols', 'Language Localization', 'National GIS (Geo-Spatial Information System)', 'Security and Electronic Data Preservation'.

There are 44 Mission Mode Projects under e-Kranti, which are at various stages of implementation.



E-Transaction counts have been taken from the E-Taal (Electronic Transaction Aggregation & Analysis Layer) portal. E-Taal is a portal for dissemination of statistics related to electronic transactions under national and state level e-governance projects including MMPs. It receives transaction statistics from web based applications periodically on near real time basis. E-Taal presents quick analysis of transaction counts in tabular and graphical form.



### **Technology for Education – e-Education**

All Schools will be connected with broadband. Free wi-fi will be provided in all secondary and higher secondary schools (coverage would be around 250,000 schools). A programme on digital literacy would be taken up at the national level. Massive Online Open Courses (MOOCs) shall be developed and leveraged for e-Education.

### **Technology for Health – e-Healthcare**

e- Healthcare would cover online medical consultation, online medical records, online medicine supply, pan-India exchange for patient information, etc. Pilots shall be undertaken in 2015 and full coverage would be provided in 3 years.

### **Technology for Farmers**

This would facilitate farmers to get real time price information, online ordering of inputs and online cash, loan, and relief payment with mobile banking.

### **Technology for Security**

Mobile based emergency services and disaster related services would be provided to citizens on real time basis so as to take precautionary measures well in time and minimize loss of lives and properties.

### **Technology for Justice**

Interoperable Criminal Justice System shall be strengthened by leveraging several related applications, i.e. e-Courts, e-Police, e-Jails and e-Prosecution.

### **Technology for Financial Inclusion**

Financial inclusion shall be strengthened using mobile banking, Micro-ATM program and CSCs/ Post Offices.

### **Technology for Cyber Security**

National Cyber Security Co-ordination Centre would be set up to ensure safe and secure cyber-space within the country.



**Cyber crime?  
Now there's a way to beat it**

To secure the Indian cyber space as well as to deal with cyber crime, DIT has taken comprehensive approach. That includes initiatives at multiple levels – from R&D for developing effective technology for cyber security to judicial measures.

**Research & Development:** R&D initiative is aimed at research into more effective technologies and tools. The thrust areas are Cryptography and Cryptanalysis; Network and Systems Security; Security Architectures; Vulnerability and Assurance; Monitoring, Surveillance and Forensics.

**Indian Computer Emergency Response Team (CERT-In):** It is a national nodal agency that creates awareness on security issues through dissemination of information and provides Incident Prevention and Response services and Security Quality Management Services.

**Cyber Appellate Tribunal (CAT):** A judiciary body set up under Section 40 of the IT Act to bring the offences under the judicial proceedings and severely deal with cyber offences.

## **E Courts Mission Mode Project**

The e Courts Mission Mode Project is a national e Governance project for ICT enablement of district/subordinate courts of the country. The objective of the project is to provide designated services to litigants, lawyers and the judiciary through ICT enablement of courts.

The Phase I covered the basic infrastructure for ICT enablement which consisted of various modules, primarily - such as computer hardware, Local Area Network (LAN), internet connectivity and installation of standard application software at each court complex and up gradation of ICT Infrastructure of Supreme Court and all High Courts / Benches. It also included provision of laptops, laser printers, broadband connectivity at home offices of judicial officers and imparting ICT training to them. Power back up was also provided at these court complexes for the ICT Infrastructure through Diesel Generator Sets (DG Sets) and Uninterrupted Power Supply (UPS).

Status of implementation as on 30th September, 2015, for main components of the project is given as under:

<b>S.No.</b>	<b>Module</b>	<b>Status as on 30.09.2015</b>	<b>% Completion</b>
1	Sites readiness	14249	100.00
2	Hardware installation	13436	94.29
3	LAN installation	13683	96.02
4	Software deployment	13672	95.95

In addition to above,

- (i) ICT infrastructure of the Supreme Court and High Court have been upgraded.
- (ii) Laptops have been provided to 14,309 judicial officers.
- (iii) A Case Information System (CIS) software has been developed and made available for deployment at all computerized courts.
- (iv) Entry of case data has been initiated, and data in respect of over 4.5 crore pending and decided cases in more than 13,000 courts is available online.
- (v) Judicial Service Centre (JSC) have established at all computerized courts.
- (vi) Over 14,000 Judicial Officers have been trained in the use of UBUNTU-Linux OS and over 4000 court staff have been trained in CIS software.
- (vii) Process Re-engineering has been initiated in all High Courts to study and suggest simplification in existing rules, processes, procedures and forms.
- (viii) Video Conferencing between 500 courts and corresponding jails: Pilot launched in five districts have been completed and roll out in remaining locations across the country is under process.
- (ix) Service Delivery and National Judicial Data Grid:**

The national e-Courts portal has become operational. The portal provides online services to litigants such as details of case registration, cause list, case status, daily orders, and final judgments. Currently, litigants can access case status information in respect of over 5.5 crore pending and decided cases and more than 1.79 crore orders/judgments pertaining to district and subordinate Courts.

The portal has been linked to the eTaal, which is a web portal for dissemination of e-Transaction statistics of Central and State level e-Governance Projects including Mission Mode Projects, and the portal has recorded 25.49 crore transactions so far, which is among top five if not the highest among all other eGovernance Projects.

### **Phase II of e Courts Integrated Mission Mode Project**

Envisaging further ICT enhancement through universal computerization of all the courts, use of cloud computing, digitization of case records of last 20 years and enhanced availability of e-services to lawyers and litigants through e-filing, e-payment gateways and mobile applications etc., the Phase II of the project has also been approved within the cost of Rs.1670 Crores in the duration of four years. The project would function in line with the Digital India program of the Government of India.

The Phase II of the project would focus not only on the computerization of courts across the country but also help in the automation of workflow management which would enable the courts to exercise greater control over the management of cases. The services envisaged to be taken up during Phase II, which would be at the disposal of the citizens, include installation of touch screen based Kiosks with printers in each Court Complex, fetching information through Mobile, facilitating improved performance of courts through change management and process re-engineering, installation of Video Conferencing facility at all Court Complexes and corresponding jails, use of e-filing, e-Payment and mobile applications and also for the composite set of services to be provided through the Judicial Service Centres. Further, the judiciary can also benefit from the project by provisioning of Hand held process service devices for process servers to ensure transparent and time bound delivery of court notices and summons, Digital Signature Certificates (DSCs) to Court officials to enable them to issue certified e-documents to lawyers and litigants, and provisioning of laptops and printers to Judicial Officers. The court management system would also be created under the project through digitization, document management, Judicial Knowledge Management and Learning Tools Management. Also the use of solar energy has also been proposed at some court complexes enabling the courts to help the environment actively.

In line with the Digital India Programme of the Government of India which emphasizes on Citizen

centric services, the project would also focus on Digital Infrastructure as a Core Utility to Every Citizen providing Governance and Services on Demand subsequently digitally empowering the Citizens.

## **E-KRANTI MISSION & VISION**

**e-Kranti Project** is launch with the vision to help each and every member of the credit society to have latest technology and with the strong mission to provide continuous quality service & up gradation to the latest cutting edge technology needs of the members of the societies, so they are at par with others in SOCIETY, registered under The Gujarat State Co-op. Societies Federation Ltd.

## **OBJECTIVES OF E-KRANTI**

- To redefine NeGP with the transformational and outcome oriented e governance initiatives
- To enhance the portfolio of citizen centric services
- To ensure optimum usage of core Information & Communication Technology (ICT)
- To promote rapid replication and integration of eGov applications
- To leverage emerging technologies
- To make use of more agile implementation models.
- Transformation and not translation
- Integrated Services and not individual services
- Government Process Reengineering (GPR) to be mandatory in every Mission Mode Projects (MMP's)
- ICT Infrastructure on Demand
- Cloud by default
- Mobile first
- Fast Tracking Approvals
- Mandating Standards and Protocols
- Language Localization
- National GIS (Geo-Spatial Information System)
- Security and Data Preservation

## **TARGET AUDIENCE AT E-KRANTI**

The project helps in making the IT & telecom product available to Students, Farmers, and Villagers who are members of the respective Credit Societies. They can apply for interest free loan to their respective

credit society for purchasing computer, Laptops, All in One, Tablet, UPS etc. on 12 months installment base.

**Prospective consumer at Federation: the member of the Credit societies/Employee's cooperative Credit Societies approx.50 lacs.**

**Expected Approx registration in e Kranti project 1 Lac numbers and 5000 requisition on hand.**

## **VALUE PROPOSITION OF E-KRANTI**

- On demand provisioning of the next generation core and common ICT infrastructure under DeitY such as :
  - National Information Infrastructure (NII) comprising of:
    - Next generation hi-speed network connectivity NKN, SWAN, NOFN & reaching upto village panchayat level
    - GI Cloud (Meghraj), NDC, SDC for cloud services, backend storage of data & application hosting
    - e-Sangam {National Service Delivery Gateway (NSDG) / State Service Delivery Gateway (SSDG)} acting as a middleware for integrating various Central / State Departments' applications
    - Mobile platform under the Mobile Seva project for delivery of mobile-based services through various channels such as SMS, USSD, IVRS and mobile apps
- Monitoring & Evaluation of the project under the NeGP 2.0 framework
- Sharing of best practices and standards to facilitate integration of services and enhance interoperability of services for seamless, single-window delivery of services
- Exploring and facilitating Departments to provide end-to-end integrated service delivery, which is cross-cutting across Departments

## **PRINCIPLES OF E-KRANTI**

There are ten major principles of e-Kranti which have been defined by DeitY in its draft report NeGP 2.0. These principles will be the fundamentals for the proposed e-service delivery system for the country.

### **1)Transformation**

The projects under e-Kranti should provide transformation in the quality, magnitude and mode of delivery of services and/or a substantial improvement in output & competitiveness.

This transformation can be in several ways, which can range from significant process change, boosting the delivery points or embracing innovative models for delivery of services. MMPs would go through adequate transformation by implementing relevant changes to their earlier versions.

## **2) Integrated Services**

To achieve integrated e-services, there is a need to conceptualize, design and implement a set of standards in these variants which should cut across and also be interwoven. The plan identifies eBiz as one MMP which has proven its mettle in this regard. Where, eBiz is a platform which provides comprehensive Government-to-Business (G2B) services to business entities with transparency, speed, and certainty.

Also, the e-services must be fully integrated in terms of front-end delivery & backend process to civil society and to government. The design should be able to establish a common middleware and amalgamate the back end processes.

## **3) Compulsory Government Process Re-engineering (GPR) in every MMP**

There are a lot of non-value adds (NVAs) because of inadequate attention been given to process reengineering in the course of services offered by the government. Thereby, Government Process Re-engineering (GPR) is one of the most essential requirements identified by the plan. The first step in this direction is the making of GPR mandatory for all the new MMPs, without which a project will not be sanctioned.

In addition, DeitY will commence a time bound project of elementary GPR, which involves identification of Elemental Government Processes (EGPs), reengineering and optimizing each of the EGPs and disseminate them extensively to be used across all e-governance projects homogeneously.

## **4) Infrastructure**

Government department and ministries have put a lot of effort on aspects such as design, procurement and establishment of information infrastructure rather than focusing on ways to achieve transformation in service delivery.

DeitY has established core infrastructure such as state data centers, state wide area networks, common service centers and state service delivery gateways, which have brought public services closer to citizens,

besides supporting Government to Business (G2B) and Government to Government (G2G) services.

### **5) Cloud by Default**

Cloud architecture should be widely adopted at the central & state level and in PPP (Public Private Partnership) projects. New e-gov initiative in government offices should be based on the principle of “Cloud by Default.” Going ahead with this strategy will hasten the execution of the entire project as it will simplify hardware and software requirements. Further, the draft report emphasizes on adopting cloud as the first choice from the inception to implementation of architecture of each e-gov project.

### **6) Mobile First**

The mobile seva project under DeitY has build a centralized cloud based Mobile Service Delivery Gateway (MSDG) for delivering electronic services through numerous mobile channels like mobile apps, SMS (Short Message Service), USSD (Unstructured Supplementary Service Data) and IVRS (Interactive Voice Response System). These service should be used by both central and state government departments and related agencies for their mobile based schemes.

### **7) Authorising Standards and Protocols**

Presently, the e-governance standards notified by DeitY are only recommendatory in nature. In the current draft policy, specific regulations have been recommended under the ambit of proposed EDS Bill to control and mandate e-governance standards. Further, the MDDS (Metadata and Data Standards) committees which will be constituted by proposed National Institute for e-Governance Standards for formulation of domain stipulation would be given highest priority by the nominated ministries.

### **8) Language Localisation**

The e-governance services will be offered in various languages following the internationalization / localisation fundamentals. This will help in designing software applications which can be used in various languages and regions, and plummeting engineering efforts. Further, the adaptation of a product, application or textual data will meet the verbal, cultural and other necessities of a specific area.

### **9) National GIS**

National Geographic Information System (NGIS) is a mission oriented programme for helping an organization unit to systematize and operationalise GIS needs for decision making, development needs of the civil society and security inspection of its products. It is proposed to be a new mission mode project (MMP) under NeGP 2.0 and a part of the overall architecture of e-governance ecosystem.



## **10) Security and Electronic Data Preservation**

The numerous online applications and e-services should stick to approved cyber security measures under the National Cyber Security Policy 2013. Also, the pertinent electronic data and records collected should be preserved for future references and appliance. Moreover, the E-Governance Standard for Preservation Information Documentation (eGOV-PID) of Electronic Records under DeitY would be the guiding principle in this regard.

## **E-KRANTI BENEFITS TO MEMBERS**

- Bring cutting edge Revolution through e-Kranti.
- Transform the Gujarat State's youths , Farmers into a technology savvy generation.
- Offer computers, Laptop, All In One, Tablet, Smartphone at Zero Interest Loan.
- Help develop a completely new sustainable business model which will be helpful to societies.
- Offer a common product under a uniform scheme & strengthen the brand "Bring e- Kranti".
- Help Citizens to avail next generation needs.
- Improve Literacy by availing technology which in turn helps to grow GDP.
- 5200 Co-Operative Credit Societies under one roof Direct reach to Co-operative Credit Society of Gujarat members which are more than 50 Lacs members.
- Members can apply for interest free loan from their respective credit society for purchasing computer, Laptops, All In One, Tablet, Smart Phone, printers, UPS etc. on 12 months installment base.
- Loan is available on easy equated monthly installments through Credit Co operative societies.

## **CONCLUSION**

A strength, weaknesses, opportunities and threats (SWOT) analysis of NeGP reveals several issues related to adopting new technologies, transforming processes and improving implementation that need to be addressed urgently. It derives from the reports of the Expert Groups and the experience of DeitY in working with various Ministries and Departments in implementing the 31 MMPs. It is evident that there is a need to make substantial improvements to the current framework of NeGP to bring about the desired transformation. It is also clear that the weaknesses and threats under the current framework adversely affect implementation of various MMPs, resulting in sub-optimal outcomes. On the other hand, the opportunities present a compelling case for a comprehensive revision of the entire e-Governance framework in the country, to achieve the full potential of e-Governance for improving delivery of Government services to citizens.



## **REFERENCES**

1. Singh, K., *Digital Divide factors in Indian management libraries*, *International journal of Advanced Research in IT and Engineering* , ISSN:2278-6244, vol.1, No-3, sept, IJARIE-35.,2012,([www.graph.co.uk](http://www.graph.co.uk))
2. Stevenson, R.L., *Communication development and the Third World: The global politics of information*. New York: Longman, 1988.p.35.
3. NeGP website . ["Approval Details of NeGP". NeGP Website. Retrieved 17 July 2014.](#)

# **e-Retail (Online Shopping) in India: A New Revolution in the Society**

**Shahla Tabassum**

Redearch Scholar, Jawahar Lal Nehru University, Delhi

Email: [shahlajmi@gmail.com](mailto:shahlajmi@gmail.com)

## **INTRODUCTION**

The society all over the world has seen the various revolutions took place and its impact on the people. Starting from Agricultural Revolution has a first wave and Industrial Revolution second wave and many more. But in the present century, the revolution which brought all the people in this world stunned or in other words which is impacted all the facets of individual life directly or indirectly was called as ICTs (Information and Communication Technologies) revolution. The magnitude of its impact and spread was unimaginable. Even the country like India was not spared by this revolution.

Related to the ICTs was e-Commerce which is seen rapid growth particularly online shopping by the people. In the last two to three years, one important thing which can be noticed in the India is the intense competition in two major sectors, one is Airline companies and the other one was e-Commerce sector (e-retail). No doubt, in both sectors because of competition among the service provider has benefitting the people. But there are some questions which needs to be answered especially related to the burgeoning e-retail sector (online shopping) in the country. Does it benefitting the common man in the society, more importantly those illiterate, marginalized and more importantly digital have not or does it just an urban or semi-urban areas phenomena? This article tries to analyze the rapid growth of e-retail (online shopping) in the country.

## **RAPID GROWTH OF e-RETAIL (ONLINE SHOPPING)**

In India, these days especially at the government level serious discussions are going on regarding how to bring transparency and efficiency in the functioning of government services, which ultimately benefits the common man while accessing the various services not only from the government but also the private sector. This can be possible with the use of ICTs in the various fields of the society. The one form of ICT which has changed the entire world either developed or developing countries is 'Internet'. The internet has brought major transformation direct or indirect in the lives of the people who are using it. Because of

which e-retail (online shopping) is growing very rapidly in India every day. The e-retail (online shopping) companies in India are not old phenomena, but which came into being in the last 7 to 8 years. Starting with Flipkart and Myantra established in the year 2007 followed by Snap Deal (2010) and Jabong (2012) and many more followed. At global level, the two American companies starting with Amazon established in the year 1994 and e-bay in 1995.

The advantages of online shopping over physically visiting the shop for shopping purpose is many, which attracts the online shoppers to do shopping. Starting with searching the various products of his/her choice from fashion and mobile to books and home appliances etc. By sitting at one place either with the help of mobile, computer, laptop, tablet etc, so the physical energy will be saved. The online shoppers can read the product specifications, reviews and more importantly the price of the product which they are getting it for very cheaper rates with huge discount, which we hardly see in the shops. The other advantages are money guarantee back, free delivery service, easy returns and exchange of goods, cash on delivery, comparison of the products and their prices offered by different e-retail companies, 24x7 customer support, tracking order starting from order place-processing-in transit-delivery, along with this courier company name and contact number, flexible payment often in the form of EMI, Even some e-retail company like Amazon are having guaranteeing delivery period from same day delivery; one-day delivery; 2 day delivery and 2-4, 4-7 and 7-10 business day delivery.

At the last, the e-retail companies send a feedback form to the customer to fill it up and submit back to them. The questions usually consist of : 1) How did the seller do? 2) Item arrived within the time period? 3) Item as described by the seller? 4) Prompt and Courteous service? 5) How would you rate the seller: Excellent-5; Good-4; Fair-3; Poor-2; Awful-1. 6) Does the product meet your expectations?

The craze and spread of online shopping among the customers can be noticed from the fact that, these days some mobile companies launch their new mobile online bookings for the Indian market firstly online, where customers can buy. Recently the controversy regarding the book of Pranab Mukherjee, the President of India on “The Dramatic Decade: The Indira Gandhi Years” for which the selling rights were given initially exclusive to the Amazon. It is not that, the huge discounts offered by e-retail companies are attracting the customers. In urban areas, many of the customers are preferred to buy online if product differentiation is minimal (segments such as grocery, books, electronics, appliances) even if prices are more or less the same compare with the shops. Because the e-retailers are making the shopping and buying experience much more convenient to the customers.1

**Table No. 1: e-Retail is Growing up in the India**

Different Categories	2010-11	2013-14E	2016-17P
Organized Retail on overall Retail	7%	8%	9%
e-Retail on overall Retail	0.3%	0.8%	2.0%
e-Retail on organized Retail	4%	10%	23%

Note: E-means estimated and P means projected.

Source from-Crisil Research. Ajay Srinivasan, "Increasingly the elephant in the retail shop", The Hindu, 1st December 2014, Monday

The domestic e-Commerce market in India has increased quite drastically from Rupees 190 billion in the year 2010-11 to almost Rupees 563 billion in the year 2013-14. According to CRISIL Research forecasts the e-Commerce market in India to grow at a three year CAGR of (40-44 %) to reach Rupees 1.6 trillion by 2016-17. Initially, the e-Commerce in the country has grown because of online ticketing which today accounts for (57%) of revenue in the e-Commerce sector and followed by the online market place (23%); online retail (19%) and online deals (1%). But by the year 2016, the online ticketing will reduce its share of revenue to (40%), followed by online marketplace (41%); online retail (17%) and online deals (2%). The above (table no.1) has clearly shows that the e-Retail is growing up, at present it was (10%) of organized retail and by 2016-17 it will increase to (23%), thus (19%) increase if we compare the data from the year 2010-11 to 2016-17.<sup>2</sup>

## **FACTORS RESPONSIBLE FOR GROWTH OF e-RETAIL (ONLINE SHOPPING) IN INDIA**

The following below are given some important reasons for the rapid growth of e-Retail (online shopping) in the country in recent years.

### **Mobile Internet**

The phenomenal increase of mobile users in the country is the big reason along with the mobile internet for the e-Retail (online shopping). According to the report called the 'Mobile Internet in India 2014' prepared by Internet and Mobile Association of India (IAMAI) and IMRB International. Till October 2014, the total internet user base stood at 278 million, which is estimated to grow to 354 million by June 2015. Interestingly, out of 278 million internet users majority of them are using internet through their mobile phone. According to the report mentioned above till December 2014, there were 173 million mobile internet users, which are expected to reach 213 million by June 2015. In rural areas, the mobile internet users are likely to grow to 53 million by June 2015, on the other hand in the urban India, it will

grow to 160 million users.<sup>3</sup> The one reason which is responsible for increase in mobile internet users especially in urban India, apart from feature basic mobile is because of growing smart phone penetration which is very cost-effective with different models and features coming out in the market frequently. Like from the costly Apple I-phone and Samsung galaxy to cheaper one like Xiamoi and Huwai. According to a Strategy Analytics report, global smartphone shipments grew 30 percent to reach 1.028 billion in 2014, up from 990 million the year (2013) before.<sup>4</sup>

**Table No.2 :GLOBAL SMARTPHONES MARKET SHARE**

Companies	4 <sup>th</sup> Quarter 2013	4 <sup>th</sup> Quarter 2014
Samsung	28.8%	20%
Apple	17.4%	91.9%
Lenova*	4.8%	6.6%
Huawei	5.7%	6.3%
Xiaomi	2.0%	4.4%
Others	41.3%	42.9%

Note: \*Figures do not account for Lenovo's recent acquisition of Motorola.

Source from- Product Design and Development. Source from-<http://www.pddnet.com/news/2015/01/smartphone-snapshot-samsung-getting-squeezed>, accessed on 31<sup>st</sup> January 2015.

Thus, because of the rise in the different categories of mobile handset, out of the average monthly mobile bill of Rupees 439 for an individual, the average monthly spend on mobile internet has been Rupees 235 according to the 'Mobile Internet in India 2014' report.<sup>5</sup> This is the reason why many of the e-retail companies have developed a mobile apps application, where a customers can easily do the shopping by downloading shopping applications developed by online companies giants.

**Table no.3: Mobile Internet Users In India**

Year	Rural (in million)	Urban (in million)	Total (in million)
2012 June	4m	44m	48m
2013 June	21m	70m	91m
2013 October	25m	85m	110m
2014 June	36m	101m	137m
2014 October	40m	119m	159m
2014 December	45m	128m	173m
2015 March (Estimate)	49m	143m	192m
2015 June (Estimate)	53m	160m	213m

Source from-IAMAI and IMRB. {Yuthika Bhargava, 'India to have 213m mobile Internet users by June 2015', The Hindu, 14<sup>th</sup> January 2015, Wednesday.}

## **Young Population**

The factor which supporting the mobile penetration and internet was because of young population of the country. According to the United Nations Population Funds (UNFPA) State of the World's Population Report released last year, out of the 1.8 billion young population (between the aged 10-24 year) in the world, the young population in India accounts for 356 million, which is the largest youth population in the world behind is China with 269 million; followed by Indonesia 67 million; the United States 65 million and Pakistan 59 million.<sup>6</sup> Especially, the teenager or young generation are using their mobile for the mix of purpose of calls, e-mails, snapchat, whatsapp, Instagram and Facebook etc. It is not only the youth between the age group (10-24 year) but also above that with their mobile handset, laptop, computer, tablet etc enjoying e-retail (online shopping) at their fingertips.

## **Facebook**

The publicity or marketing techniques of the e-retail (online companies) were totally different from the traditional companies who want to sell their products to the customers, either through advertisements in newspaper or media (audio or video) etc, spending so much money in advertisements for their product. But in the case of e-retail (online companies) the most effective and easy advertisement for selling their products through portal is Facebook and also some extent by sending e-mail to the customers. Who already has login ID and password or in other words who already did shopping with that online company. Especially, as we know Facebook is becoming more and more popular and expanding its base in the country every day. With every section of the society irrespective of the age, class, language, religion etc. Even the semi-literate person can easily operate Facebook, such is the simplicity and attraction of the technology called Facebook. According to the recent data available, the number of Facebook users in the country are 112 million users. Of the 112 million users in India at present, more than 99 million users are using the platform on their mobile phones at least once a month. About 45 million users in India are using their mobile phones every day to connect with their friends on Facebook.

Also according to the market research firm eMarketer, "India -- the world's second largest Facebook audience - will surpass 100 million mobile phone Facebook users for the first time this year (2015) and by 2017, will have more mobile Facebook users than the U.S.A. By 2017, India will have the largest mobilephone userbase at 145.9 million followed by the US at 138.8 million, eMarketer said."<sup>7</sup>

## **ISSUES IN e-RETAIL (ONLINE SHOPPING)**

Although the online shopping is increasing rapidly but there are some important issues associated with it.

### **Digital Divide**

The Digital India Programme has been announced by the NDA government last year (2014) according to which by next three i.e. 2018, all the 2.5 lakh panchayats in the country will be connected with the National Optical Fibre Network with the speed of 100 mbps. By connecting all the panchayats, the people living there can use the services like e-health, e-education, e-banking and e-commerce etc. But, it is not an easy task and still long way to go, however for the time being among the BRICS country India's internet penetration rate was lower, as still for many people accessible to the internet is a dream. The major reason for this is affordability and infrastructure. The infrastructure especially at the rural areas is in bad shape not only in the form of lack of optical fibre or broadband, but also the mobile connectivity. In many areas still, only the public sector telecom company BSNL is providing the services and private telecom companies are not showing much interest. This is the reason why still in India, the internet penetration as been very low (19%) when we compared with other countries, even within the BRICS country also. For instance, Brazil (54%); Russia (60%); China (47%); and South Africa (46%). The country like Vietnam (44%); Nigeria (38%); and Philippines (44%) are higher than India ( see the table no.4).

Although earlier in this paper, we have seen that the average mobile internet monthly bill has increased, still for many people in the country the issue of affordability for accessing internet exist. The prices for broadband access is still higher than country like Bangladesh in the country.<sup>8</sup> Forget about rural areas, even in the urban areas, the issue of infrastructure is not much problem, but the problem of affordability still exist. Related with this is the issue of digital literate or digital literacy, are people are capable enough to handle or operate the ICTs.



**Table no.4 :Internet use-( National Internet Penetration figures January 2015)**

<b>Country</b>	<b>Internet Penetration</b>
India	19%
Canada	93%
UAE	92%
South Korea	90%
Australia	89%
United Kingdom	89%
Germany	89%
U.S.A.	87%
Japan	86%
France	84%
Singapore	81%
Hong Kong	79%
Spain	77%
Malaysia	66%
Russia	60%
Saudi Arabia	58%
Brazil	54%
Egypt	53%
Turkey	49%
Mexico	49%
China	47%
South Africa	46%
Philippines	44%
Vietnam	44%
Nigeria	38%
Thailand	37%
Indonesia	28%
Global Average	42%

Source from- [Simon Kemp](#), "[Digital, Social & Mobile Worldwide in 2015](#)", 21<sup>st</sup> January 2015.

Source from-<http://wearesocial.net/blog/2015/01/digital-social-mobile-worldwide-2015/>, accessed on 3<sup>rd</sup> February 2015.

### **Shopping Addiction**

The online shopping has become an addiction among the people. Except few, we hardly see people addicted to the shopping in pre-online shopping stage. But with the emergence of internet, the shopping pattern has changed. Now people during their free time either in office or at home or any other places, always search the websites of the e-retail (online companies). Today we can hardly think about living without electronics like mobile, laptop, tablet etc, more importantly the first one (mobile), which become important part of our human life. The main reason for this addiction among the online shoppers is huge discounts offered by the online companies. Also, if we go to the shops (not talking about the showroom or mall or any branded shop etc) we have to bargain and plead so much from the shopkeeper for purchasing any products. Thus it means that, the customer needs to have learn some bargaining

techniques and it is not necessary that all people will have it. Thus, for the customers online shopping is a right platform where they don't need to bargain anything from the sellers.

### **Bumper Sale or Huge Discounts**

Before the emergence of online shopping, many of us as a customer used to shop more during festival time like Diwali, Christmas, Idu'l Fitr etc and we used to get discounts that time only or we can call shopping season used to be there during those time. But, now there is no shopping seasons as such, you can shop any time of the year. As said earlier, not only festival seasons but also bumper sale and discounts during republic day and valentine day etc. the huge discounts which customer get online from minimum 20% - 30% to 70%-90% on the various products. Because of this even the customers who don't want to buy anything get lure or attract towards the products to buy. As customers thing that he/she is getting products in a cheaper price. Especially the products related to the electronics, books and cloths etc. Also the other reason being, great bargaining on the products which the customer get without engaging verbal and pressing hard with the shopkeeper for discount.

### **The Issue of Lack of Uniformity or Discrimination**

The next issue is related to the option of cash on delivery and delivery of products in some parts of country. Here we are not talking about rural areas, where off course there is non-existence of online shopping and online companies also thinks it non-profitable at this moment. For example, in the state of Mizoram if a customer book any product the option of cash on delivery is limited. Then it means those customers who don't have debit card or internet banking can't do the online shopping. Plus, the delivery of products was not done at home or any other place where customer wants to deliver. Rather customer needs to go to the courier company office to collect their product. Thus, there exist a difference in providing the services to the online customers.

### **Cyber Crime**

India has a fast developing economy, is very much susceptible to cyber attacks from both (international and domestic), although the issue of cyber attack is minimal or less in online shopping. However, still any online activity or transactions is susceptible to cyber attacks, especially related to the payment through debit card or master card or net banking. In the last few years, the cyber crime has seen an increase of about (40%) annually. Because of this reason only, the Government of India in the month of December 2014, has set up an expert group consist of five people. So to give suitable recommendations, about how to deal with cyber crime in the country.<sup>9</sup>

### **Tax issue**

For country like India, where e-retail (online shopping) are emerging so fast and widening its arm in the online market. But one issue which haunts the online companies is related to the issue of tax. The present indirect tax system in the country is not appropriate for the emerging e-retail market. For example according to the media reports in the last month (January 2015), the Kerala state government has slapped a fine of up to Rupees 54 crore on number of e-retail players for evasion of sales tax in the year 2012 and 2013-14. Some of the companies which are under the scanner are Flipkart Rupees 47.15 crore; Jabong Rupees 3.89 lakh; Vector E-Commerce Rupees 2.23 crore (which has a stake in Myntra) and Robemall Apparells Rupees 36 lakh which operates garments retailer Zovi.com. This is not the first time that the companies are facing tax issues in the country, but earlier also for instance in the state of Karnataka the tax department had banned Amazons Indian arm from selling electronics and few other select products from its warehouses situated in the state. The state department had cancelled licences of about 100 vendors who sold products through the company's website.<sup>10</sup>

### **The Issue of Quality of Goods**

The other issue related to online shopping are the quality of goods which are sold online, there are many complaints from the customers that in order to clearance the stock and also the product which are secondary in quality are sold out through online. Although this issue is not uniformly apply or found among all the online companies, but still this problem exist and needs to be overcome.

### **Refund Issue**

The issue of refund of customer money was a problem with some online companies. If any customer want to return or cancel their product their money refunded in their account. But with some online companies like Jabong and Snap Deal, the money was not refunded by them to the customer; rather they issue Jabong credits or Snap Deal credits, which can be used in any denomination towards next purchase at their website.

### **CONCLUSION**

In the present time, the entire world is become 'virtual', in the sense that, everything is based on technology. The people are more curious and keen to use this virtual world for their benefits in whatever manner it is possible. The traditional shopping pattern has been seen changing with the introduction of e-retail (online shopping) in the society. In India, at present only the private players are using this platform for their advantage, but in the coming future we will see many public sectors coming into the fold of e-Commerce field. For instance the big public sector like Indian Post also planning to enter in e-Commerce

sector. As we know there are more than 1.50 lakh Indian post office exist in the country and according to the T.S.R Subramaniam Committee set up last year (2014) by the NDA government for giving suggestion how to revamp Indian post. It recommends, Indian post to be divided into five different subsidiary, out of which one will be e-commerce. The committee wants Indian post to be ready to take the use or opportunity provided by e-commerce in the country.

Though there are many advantages of e-retail (online shopping), but still there exist some important issues which needs to addressed, particularly how to save the physical retailers from the phenomenal growth of e-retail. Already in our country, we have heard from many quarters (physical retailers) regarding how, huge discounts offered by the e-retail (online companies) are not creating equal level playing field for them to compete in the market. The government needs to ensure that all the issues associated with the e-retail (online shopping) in the country should be solved as soon as possible. So that all the stakeholders in the society related with the e-retail (online shopping) will be benefitted. Thus, the dramatic growth of e-Commerce market in India in last few years needs to utilized in the right manner.

## **REFERENCES**

- *Ajay Sreevatsan, "India last among BRICS in Web Index", The Hindu, 11<sup>th</sup> December, 2014, Thursday.*
- *Ajay Srinivasan, "Increasingly the elephant in the retail shop", The Hindu, 1<sup>st</sup> December 2014, Monday.*
- *Firstpost, "Tax trouble returns to haunt Flipkart, others as Kerala slaps Rs 54 cr penalty", 24<sup>th</sup> January 2015, Saturday. Source from-<http://www.firstpost.com/business/tax-trouble-returns-to-haunt-flipkart-others-as-kerala-slaps-rs-54-cr-penalty-2062291.html>, accessed on 24<sup>th</sup> January 2014.*
- *Ibid.*
- *op.cit. Yuthika Bhargava.*
- *Rukmini S. 'India brimming with youth', The Hindu, 18<sup>th</sup> November 2014, Tuesday.*
- *"India to have the largest number of Facebook users on mobile by 2017: Report" By PTI, 22 Jan, 2015. Source from <http://economictimes.indiatimes.com/magazines/panache/india-to-have-the-largest-number-of-facebook-users-on-mobile-by-2017-report/articleshow/45978668.cms>, accessed on 3<sup>rd</sup> February 2015.*
- *Silky Malhotra, "Android leads with 81.2 pc global smartphone market share in 2014", Digit. Source from-<http://www.digit.in/mobile-phones/812-pc-smartphones-shipped-were-android-in-2014-report-25144.html>, accessed on 31<sup>st</sup> January 2015.*
- *Vinay Kumar, "Expert group set up to check cyber crime", The Hindu, 26<sup>th</sup> December 2014, Friday.*
- *Yuthika Bhargava, "India to have 213m mobile Internet users by June 2015", The Hindu, 14<sup>th</sup> January 2015, Wednesday.*

# Instructions for Authors

## Essentials for Publishing in this Journal

- 1 Submitted articles should not have been previously published or be currently under consideration for publication elsewhere.
- 2 Conference papers may only be submitted if the paper has been completely re-written (taken to mean more than 50%) and the author has cleared any necessary permission with the copyright owner if it has been previously copyrighted.
- 3 All our articles are refereed through a double-blind process.
- 4 All authors must declare they have read and agreed to the content of the submitted article and must sign a declaration correspond to the originality of the article.

## Submission Process

All articles for this journal must be submitted using our online submissions system. <http://enrichedpub.com/> . Please use the Submit Your Article link in the Author Service area.

---

## Manuscript Guidelines

The instructions to authors about the article preparation for publication in the Manuscripts are submitted online, through the e-Ur (Electronic editing) system, developed by **Enriched Publications Pvt. Ltd.** The article should contain the abstract with keywords, introduction, body, conclusion, references and the summary in English language (without heading and subheading enumeration). The article length should not exceed 16 pages of A4 paper format.

### Title

The title should be informative. It is in both Journal's and author's best interest to use terms suitable. For indexing and word search. If there are no such terms in the title, the author is strongly advised to add a subtitle. The title should be given in English as well. The titles precede the abstract and the summary in an appropriate language.

### Letterhead Title

The letterhead title is given at a top of each page for easier identification of article copies in an Electronic form in particular. It contains the author's surname and first name initial .article title, journal title and collation (year, volume, and issue, first and last page). The journal and article titles can be given in a shortened form.

### Author's Name

Full name(s) of author(s) should be used. It is advisable to give the middle initial. Names are given in their original form.

### Contact Details

The postal address or the e-mail address of the author (usually of the first one if there are more Authors) is given in the footnote at the bottom of the first page.

### Type of Articles

Classification of articles is a duty of the editorial staff and is of special importance. Referees and the members of the editorial staff, or section editors, can propose a category, but the editor-in-chief has the sole responsibility for their classification. Journal articles are classified as follows:

#### Scientific articles:

1. Original scientific paper (giving the previously unpublished results of the author's own research based on management methods).
2. Survey paper (giving an original, detailed and critical view of a research problem or an area to which the author has made a contribution visible through his self-citation);
3. Short or preliminary communication (original management paper of full format but of a smaller extent or of a preliminary character);
4. Scientific critique or forum (discussion on a particular scientific topic, based exclusively on management argumentation) and commentaries. Exceptionally, in particular areas, a scientific paper in the Journal can be in a form of a monograph or a critical edition of scientific data (historical, archival, lexicographic, bibliographic, data survey, etc.) which were unknown or hardly accessible for scientific research.

**Professional articles:**

1. Professional paper (contribution offering experience useful for improvement of professional practice but not necessarily based on scientific methods);
2. Informative contribution (editorial, commentary, etc.);
3. Review (of a book, software, case study, scientific event, etc.)

**Language**

The article should be in English. The grammar and style of the article should be of good quality. The systematized text should be without abbreviations (except standard ones). All measurements must be in SI units. The sequence of formulae is denoted in Arabic numerals in parentheses on the right-hand side.

**Abstract and Summary**

An abstract is a concise informative presentation of the article content for fast and accurate Evaluation of its relevance. It is both in the Editorial Office's and the author's best interest for an abstract to contain terms often used for indexing and article search. The abstract describes the purpose of the study and the methods, outlines the findings and state the conclusions. A 100- to 250-Word abstract should be placed between the title and the keywords with the body text to follow. Besides an abstract are advised to have a summary in English, at the end of the article, after the Reference list. The summary should be structured and long up to 1/10 of the article length (it is more extensive than the abstract).

**Keywords**

Keywords are terms or phrases showing adequately the article content for indexing and search purposes. They should be allocated heaving in mind widely accepted international sources (index, dictionary or thesaurus), such as the Web of Science keyword list for science in general. The higher their usage frequency is the better. Up to 10 keywords immediately follow the abstract and the summary, in respective languages.

**Acknowledgements**

The name and the number of the project or programmed within which the article was realized is given in a separate note at the bottom of the first page together with the name of the institution which financially supported the project or programmed.

**Tables and Illustrations**

All the captions should be in the original language as well as in English, together with the texts in illustrations if possible. Tables are typed in the same style as the text and are denoted by numerals at the top. Photographs and drawings, placed appropriately in the text, should be clear, precise and suitable for reproduction. Drawings should be created in Word or Corel.

**Citation in the Text**

Citation in the text must be uniform. When citing references in the text, use the reference number set in square brackets from the Reference list at the end of the article.

**Footnotes**

Footnotes are given at the bottom of the page with the text they refer to. They can contain less relevant details, additional explanations or used sources (e.g. scientific material, manuals). They cannot replace the cited literature.

The article should be accompanied with a cover letter with the information about the author(s): surname, middle initial, first name, and citizen personal number, rank, title, e-mail address, and affiliation address, home address including municipality, phone number in the office and at home (or a mobile phone number). The cover letter should state the type of the article and tell which illustrations are original and which are not.

**Address of the Editorial Office:**

**Enriched Publications Pvt. Ltd.**  
S-9, IInd FLOOR, MLU POCKET,  
MANISH ABHINAV PLAZA-II, ABOVE FEDERAL BANK,  
PLOT NO-5, SECTOR -5, DWARKA, NEW DELHI, INDIA-110075,  
PHONE: - + (91)-(11)-45525005