

# E-Commerce: An Investment Portal

Akshay Mapara  
Akash Chheda

Shraddha Wayal  
Karthik Mohandas

Manish Bhelande

**Abstract**—In the new era of technology it is very important to market or publish your product to customers. As a person investing in variety of schemes has to create various logins for different investment schemes. To integrate this various types of available investment schemes into the single system to make it easier for the customer to track his whole investment at any given time.

The Customer can access his investment through his email or mobile id as he will be identified using same. The Customers generally invests in Insurance, Mediclaim, Mutual Funds etc.

It can be done physically which most common method is used till now. But with time moving toward online transactions the customers have started making online investments. For doing these investments we are providing Single place shop for every investment scheme. Along with we are also providing the news alert about new schemes and market trends which will help the customers for investing in good profitable schemes.

**Keywords**—component, formatting, style, styling, insert (key words)

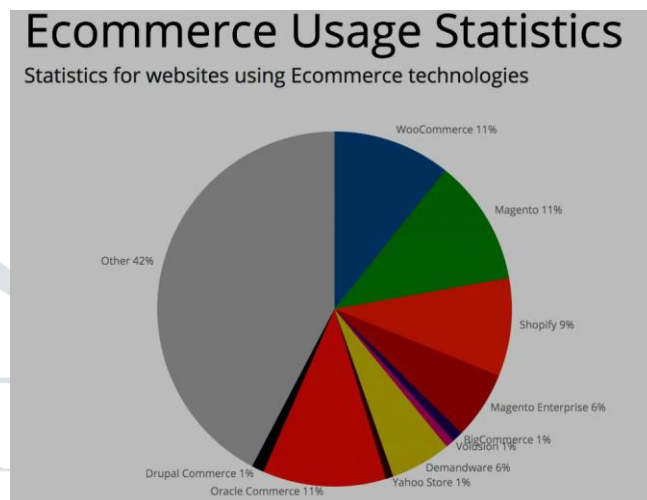
## I. INTRODUCTION

Sometimes when people want to invest their money in different ways, they need to find different websites for this purpose. The Investment portal we are creating will help people to choose from various options like fixed deposit, Mutual funds and also different types of insurances without looking anywhere else for the same and they can track their investment at single place. As people have to create various login for investing at different places rather our website would make it easier the customer to invest in a single portal.

## II. E-COMMERCE

**E-commerce** or electronic **commerce** or EC -- is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These **business** transactions occur either as **business-to-business**, **business-to-consumer**, **consumer-to-consumer** or **consumer-to-business**.

Ecommerce refers to commercial transactions conducted online. This means that whenever you buy and sell something using the Internet, you're involved in ecommerce.



## III. MAGENTO

*Magento is an ecommerce platform built on open source technology which provides online merchants with a flexible shopping cart system, as well as control over the look, content and functionality of their online store. Magento offers powerful marketing, search engine optimization, and catalog-management tools. We believe that Magento is one of the best ecommerce platforms available today, with editions ranging from community open source, to massive, large-scale enterprise SaaS based systems.*

### A. Benefits of Magento

- Easy to install and add additional layouts and plugins
- Open source technology that offers flexible, scalable ecommerce solutions
- Effective and cost sensitive program
- Allows for various discounts and promotions during check-out
- Provides more than 50 payment gateways

## IV. LITERATURE REVIEW

Generally interpersonal trust is focused if we talk about traditional commerce such as a customer's trust in a salesperson. Plank is recognized that consumer trust could have multiple referents like product, salesperson and company and accordingly defined trust as a global belief on the part of the buyer that the salesperson, product, and company will fulfill their obligations as understood by the buyer. Similarly, in the e-commerce context like researchers have tended to define and describe trust as the willingness of an individual to be vulnerable, a person's expectation, a subjective belief,

reliance on parties other than oneself or a subjective probability. There are **four categories of antecedents that influence consumer trust and consumers' perceived risk towards electronic commerce entities** which are: 1. *Experience-based*: e.g., e-commerce experience, familiarity, Internet experience, etc. 2. *Cognition (observation)-based*: e.g., system reliability, privacy protection, quality of information, security protection, brand image, etc. 3. *Personality-oriented*: e.g., disposition to shopping habits, trust, etc. 4. *Affect-based*: e.g., presence of third-party seals, reputation referral, recommendation, buyers' word-of-mouth, feedback, review comments, etc. Ecommerce web site owners on one side are thinking of how to attract more customers and how to make the visitors feel secured when working on the site, while on the other side how the end users should rate a ecommerce website and what they should do to protect themselves as one among the online community. Each phase of E-commerce transaction has security measures.

Viruses are a nuisance threat in the e-commerce world. They only disrupt e-commerce operations and should be classified as a Denial of Service (DoS) tool. Password protection, encrypted client-server communication, public private key encryption schemes are all negated by the simple fact that the Trojan horse program allows the hacker to see all cleartext before it gets encrypted. Due to the increase in warnings by the media from security and privacy breaches like identity theft and financial fraud, and the elevated awareness of online customers about the threats of performing transactions online, e-commerce has not been able to achieve its full potential. Many customers refuse to perform online transactions and relate that to the lack of trust or fear for their personal information. Clearly, the online transaction requires consumers to disclose a large amount of sensitive personal information to the vendor, placing themselves at significant risk. Understanding (indeed, even precisely defining) consumer trust is essential for the continuing development of e-commerce.

E-commerce Transaction Phases			
Information Phase	Negotiation Phase	Payment Phase	Delivery Phase
Security Measures			
Confidentiality	Secure Contract	Encryption	Secure Delivery
Access Control	Identification		Integrity
Integrity Checks	Digital Signatures		Integrity Checks

Fig 1 Security measures in different phases of Ecommerce Transaction [18]

### A. E-COMMERCE IN INDIA

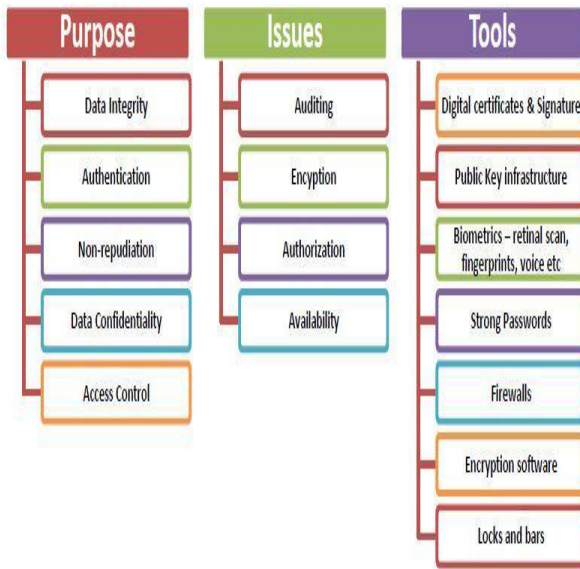
India has an internet user base of about 354 million as of June of 2015. Despite being the second largest user base in world, only behind China (650 million, 48% of population), the penetration of e-commerce is low compared to markets like the United States (266 M, 84%), or France (54 M, 81%), but is growing at an unprecedented rate, adding around 6 million new entrants every month. The industry consensus is that growth is at an inflection point. In India, cash on delivery is the most preferred payment method, accumulating 75% of the e-retail activities. Demand for international consumer

products (including long-tail items) is growing much faster than in-country supply from authorized distributors and e-commerce offerings. Largest e-commerce companies in India are Flipkart, Snapdeal, Amazon India, Paytm. India's e-commerce market was worth about \$3.9 billion in 2009, it went up to \$12.6 billion in 2013. In 2013, the e-retail segment was worth US\$2.3 billion. About 70% of India's e-commerce market is travel related. According to Google India, there were 35 million online shoppers in India in 2014 Q1 and is expected to cross 100 million mark by end of year 2016. CAGR vis-à-vis a global growth rate of 8–10%. Electronics and Apparel are the biggest categories in terms of sales. By 2020, India is expected to generate \$100 billion online retail revenue out of which \$35 billion will be through fashion e-commerce. Online apparel sales are set to grow four times in coming years.

India's *retail market* is estimated at \$470 billion in 2011 and is expected to grow to \$675 Bn by 2016 and \$850 Bn by 2020, – estimated CAGR of 10%. According to Forrester [1], the e-commerce market in India is set to grow the fastest within the Asia-Pacific Region at a CAGR of over 57% between 2012 and 2016. As per "India Goes Digital", a report by Avendus Capital, a leading Indian Investment Bank specializing in digital media and technology sector, the Indian e-commerce market is estimated at Rs 28,500 Crore (\$6.3 billion) for the year 2011 of which online travel constitutes a sizable portion (87%) of this market today. Overall e-commerce market is expected to reach Rs 1, 07,800 crores (US\$24 billion) by the year 2017 with both online travel and e-tailing contributing equally. Another big segment in e-commerce is mobile/DTH recharge with nearly 1 million transactions daily by operator websites. New sector in e-commerce is online medicine. Company like Reckwing-India, Buyonkart, and Healthkart already selling complementary and alternative medicine where as NetMed has started selling prescription medicine online after raising fund from GIC and Steadview capital citing. There are no dedicated online pharmacy laws in India and it is permissible to sell prescription medicine online with a legitimate license.

### B. E-COMMERCE SECURITY

# E-Commerce Security



## A. Major types of E-Commerce Threats-

E-commerce security is the protection of e-commerce assets from unauthorized access, use, alteration, or destruction. Consumers fear the loss of their financial data, and e-commerce sites fear the financial losses associated with any resulting bad publicity and break-ins. There are a number of critical social and organizational issues with security. The first is the development of adequate organizational processes for risk management, development of security policies, separation of duties, security assurance and access control. The second is that the weak link in security is often employees or users, rather than the technology [34] and the third is software engineering management, or managing how security technology is deployed. A persistent problem is users' differing and incorrect models of security and their seeming unwillingness or inability to adhere to critical security policies and guidelines. For example, users may store passwords in unencrypted files on vulnerable machines or employees may divulge their passwords to third parties.

## C. MAJOR CHALLENGES OF ECOMMERCE

1) **Poor Knowledge and Awareness:** When it comes to ratio of internet consumers, scenario is not so admirable one. Majority of Indian rural population are unaware of internet and it uses. Surprisingly, most of internet savvies or urban population are also suffering from poor knowledge on online business and its functionalities. Very few are aware of the online corruption and fraud and thus darkness still exists. A reliable survey reveals that 50% of Indian online users are unaware of the solution of online security.

2) **Online Transaction:** Most of Indian customers do not possess plastic money, credit card, debit card and net banking system, which is one of the prime reasons to curtail the growth of ecommerce. Nevertheless, in recent years, some of the nationalized banks have started to issue debit cards to all its account holders. This is undoubtedly a positive sign for Indian online entrepreneurs.

**Cash on Delivery:** Cash on Delivery (COD) has evolved out of less penetration of credit card in India. Most of Indian E-commerce companies are offering COD as one of mode of payment for the buyers. 30%-50% of buyers are also taking advantage of this mode of payment while making purchase of any product and service over internet. COD has been introduced to counter the payment security issues of online transaction, but this mode has been proving to be loss and expensive to the companies. It is seen that majority of the customers denied to make the payment at the time of delivery of the product. Hence, companies tend to lose the sale along with product transit fees. In order to curb the problem of COD, online companies should take some judicial steps; otherwise basic logic behind the ecommerce business will be at risk.

**Online Security:** In case of startup and small business, Business owners are ignoring the importance of authentic software due to budget constraints. They are even failing to take the initial steps to secure and protect their online business through installation of authentic protection services like antivirus and firewall protection, which indeed a crucial step for successful online business players. In India, maximum number of business entrepreneurs used unauthorized software in their server, which usually does not come with upgraded

1) **online security.** Such pirated software leaves room for virus, malwares and Trojan attacks and it is highly risky task to make online transactions in the systems, which may disclose or leak sensitive details of credit cards and online banking of the users. These kinds of droopiness should be banned in Indian ecommerce sectors. Affiliation to SSL certificate should be imposed as a mandatory action for every owner.

**Logistics and Shipment Services:** In India, logistics and courier services required lots of improvement. While, perfect and strong logistics service is one of the key reasons behind the success of any online company, India is lagging far behind in this sector as most of the town and small villages are still not covered under serviceable area of many of the courier and logistic companies. Ecommerce is hampered in a big way owing to the limited services offered by the courier service companies.

**Tax Structure:** Tax rate system of Indian market is another factor for lesser growth rate of e-commerce in India in comparison to other developed countries like USA and UK. In those countries, tax rate is uniform for all sectors whereas tax structure of India varies from sector to sector. This factor creates accounting problems for the Indian online business companies.

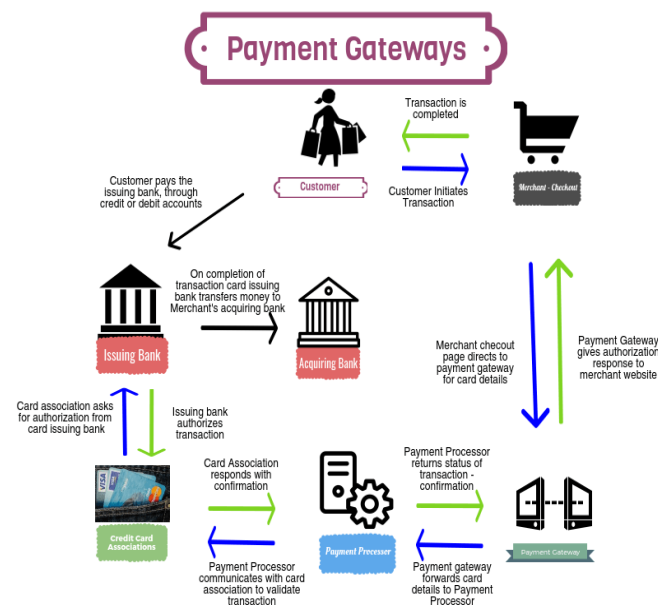
**Fear factor:** Fear of making online payment is a universal psychological factor of Indian customers. With the spread of knowledge on online transactions and its reliability, some percentages of customers have overlooked this fear and they are fearlessly engaging themselves in online shopping. But still, majority of customers are not aware of online



transactions and its security. They often reluctant to disclose their credit card and bank details and preferred to stay away from online world of shopping.

**‘Touch and Feel’ factors:** Indian customers are more comfortable in buying products physically. They tend to choose the product by touching the product directly. Thereby, Indian buyers are more inclined to do ticketing and booking online in Travel sectors, books and electronics. Companies dealing with products like apparel, handicrafts, jewellery have to face challenges to sell their products as the buyers want to see and touch before they buy these stuffs.

#### D. ECOMMERCE PAYMENT GATEWAY FLOW DIAGRAM



#### V. CONCLUSION

Different Investment options provide to invest in their schemes through creating login-ids to the customers. The customer has to maintain his login ids for tracking his various investments. This tracking of investment is difficult so we have proposed a solution. This is the reason we are providing a solution to these customers through a person can invest in various schemes and keep a track of his investment as well we are providing him details about new schemes as well as investment strategies.

Initially the platform will be implemented in form of website and there is possibility of an application development for iOS and Android .The platform which we are using is open source software in order to enable other developers that are interested to work in the same field.

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A proper synchronization between individuals is must for any project to be successfully completed.

#### VII. REFERENCES.

- 1.ADVANTAGES AND CHALLENGES OF E-COMMERCE CUSTOMERS AND BUSINESSES: IN INDIAN PERSPECTIVE 2016
2. Cloud Computing for E-Commerce Nevin Aydin *Artvin Çoruh Üniversitesi, Hopa, Turkey*
3. IMPACTS OF CLOUD COMPUTING ON E-COMMERCE BUSINESSES IN INDIA Satinder1 , Niharika 2015 IJR JOURNAL
4. Rashad Yazdanifard, Noor Al-Huda Edres "Security and Privacy Issues as a Potential Risk for Further Ecommerce Development"International Conference on Information Communication and Management – IPCSIT vol.16 (2011).
5. E-Commerce- Study of Privacy, Trust and Security from Consumer’s Perspective
6. Pradnya B. Rane, Dr. B.B.Meshram. "Transaction Security for Ecommerce Application" IJECSE -ISSN- 2277-1956. 2012.
7. Wang D, (May,2013), “Influences of Clouds Computing on E-Commerce Businesses and Industry”, *Journal of Software Engineering and Applications*, Vol. 6, pp. 313-318
8. S. L. Lai, “The Influences of Cloud Computing to the Traditional Software Project and Our Corresponding Strategies,” *The Proceedings of the 3rd International Conference on Intelligent System Design and Engineering Applications*, Hong Kong, 16-18 January 2013, pp. 1461- 1464.
9. Golden, S. A. R., & Regi, S. B. (2015). *Satisfaction of Customers towards User Friendly Technological Services offered by Public and Private Sector banks at Palayamkottai, Tirunelveli District. International Journal of Research*, 2(3), 775-787.