E-Commerce Progress in India and Consumer Perception Towards Online Shopping

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ABSTRACT This report was commissioned to examine a startup Software company and its growth in the field of E Commerce service using SaaS. There is study done on consumer's perception towards online shopping to find factors that needs to be concentrated while building website. The research draws attention of on Industrial analysis of IT Sector. Tools like Porters five force analysis on Indian IT Sector studied. A present study on Political, Economical, Social, Technological, Environmental factors of IT industry is done. E commerce has started in early 2000 to 2005 in India had a drastic blow due to lack of trust and lack of echnological advancements. Later from year 2009 the due exponential growth in mobile and internet service providers flourishing the demand for e commerce again boosted. 7P's of Marketing mix on online marketing to understand. A behavioral study on online shopping has lead to following factors as Internet and TV Ads, Convenience, Brand Image, Price and Promotion, Safe transactions. On these factors a linear regression is done to determine the satisfaction of consumers. It is observed that Convenience and Safe transactions will play a major role for any E commerce site for consumer to transact. The limitation of research is age group considered between 20 and 30. The sample size is 210, which is convenient sample through online. The Recommendations as follows first Company has to increase its portfolio in terms of new technology like cloud computing. Second A large scope of business development in E commerce is catered if Convenience and safe transactional process is assured by SSL certification to sites. Third A proper sales training program in online marketing should be given for increase in sales to Business and Company. Four Revisit of marketing mix for company has to be done. Place and Promotion has to be given immediate priority.

INTRODUCTION

Indian IT Firm has delivery centers across the world. Industry well diversified across verticals like BSFI, Telecom, retail to show Global footprint. India IT and ITes Market size is USD 76 billion and expected to reach USD 225 billion by 2020FY. There is strong growth in export demand from new verticals. Growing economy has to propel rise in local demand.

As a proportion of India's GDP, the contribution of IT sector has risen from 1.2 per cent in FY98 to 6.4 per cent in 2011. The IT sector of India is segmented having IT software 71.70% market share followed by IT hardware 21.67%,BPO ITES 5.11% and IT education 1.52% respectively.

In India, the IT Software segment has seen significant growth and has put India on the global map. It contributes for almost 75% of the total revenues of the IT sector. Though Hardware enjoys second place in terms of market share in India, it is quite low as compared to global benchmark. The BPO segment has grown well and is expected to make a footprint in the IT Sector. Add little more in the introduction.

Literature Review:
1. Growth Drivers for IT Sector
1.1 Easy availability of Talent pool and cost advantage –
The sector is human power and knowledge-oriented and this cost accounts for more than 40% of overall cost. Indians are considered to have better mathematical skills required for writing software. The easy availability of this talent pool makes it a long-term advantage. **Widespread knowledge of English** makes this pool employable, as compared to other countries like China, Japan etc. Also, it is **5 to 8 times cheaper to employ an Indian technologist** than one from developed countries and thus the business has been flowing to India over the years.

1.2 Process and Quality –
Nearly all the **Indian software companies take CMM (Capability Maturity Model) certification, which is the benchmark of quality management**. Out of approximately 250 companies reaching supreme level i.e. level 5 of CMM, 60 are from India. This gives the impression of the company being dependable and hence, helps them tap the market easily.

1.3. Supportive government policies
– In early 1970's when Americans began looking offshore for software development, the government policies of India were not much supportive. However, post liberalisation the government recognised the potential and took supportive stance towards IT by reducing import tariff on Hardware and Software, developing Software Technology Parks and introducing legislative actions to protect intellectual property (e.g. Information technology act 2000). Indian government policies are framed in a way that ensures maximum benefit out of IT outsourcing to India.

1.4 Unique geographic location –
The major consumer of IT products so far has been the US. The time difference between India and US is 12 hours and it offers "economy of 24 hours a day" by communication equipment.

2. Benefit to INDIAN economy from IT Sector
2.1 Exports –
The IT industry accounts for a major share in the exports from India. This is expected to grow further in coming years. The information technology industry is one of the major sources of foreign currency or India.

Employment –
The biggest benefit of the IT industry is the huge employment it generates. For a developing country like India, with a huge population, the high rate of employment in

the IT sector is a big advantage. The IT industry is expected to generate employment of 2.2 million by the end of 2008 which is expected to increase significantly in coming years.

1.6.3 FDI (Foreign Direct Investment) –
High inflow of FDI in the IT sector is expected to continue in coming years. The inflow of huge volumes of FDI in the IT industry of India has not only boosted the industry but the entire Indian economy in recent years.

Understanding Importance of E commerce in INDIA

3.1 Definition of E Commerce:
It is about doing business electronically and encompasses many diverse activities both in the B2B market and in the B2C market. The following shows the market share is Rs 31598 crore

E-commerce Market Share, 2010

Travel industry being dominant player in E commerce website, next expected dominant player will be Digital Download.

3.2 Activities involved in E commerce:
These are the most common activities involved in e commerce

- electronic trading of goods and services
- online delivery of digital content
- electronic share trading
- commercial auctions
- collaborative design and engineering
- online sourcing
- public procurement
- direct consumer marketing
- after sales service.

From an online shopping survey conducted by E Bay the following picture depicts Top 10 in year 2010-11.

3.3 Major factors that influence E commerce Business in India

The above diagram shows the factors that influence E Commerce in India. Let us see each factor growth impact on E Commerce

3.3.1 Internet Connectivity:
Increase internet usage due to better connectivity in India is sign for growth in online shopping. As the number of users spending their time on internet increases, it leads to indirect behaviour on users to shop online due to attractive E commerce sites luring the Indian consumers.

Internet Usage in India from last 5 years which is directly related due to better connectivity

Mobile internet connection like 3G will turn to be major source for internet usage for consumers in INDIA. From McKency reports 3G connection to reach 22% of population in INDIA by 2015. Number of mobiles with 3G connections is going to reach 450 million and the price of the mobiles goes down from Rs 3000 to 2000 by the end of 2012.

Indians spending time on internet will go up by 27% which boosts online advertising and E-commerce. Average time spent online person per day till 2012 is 0.61 hours.

Out of the time spend online , the study on number of unique users trasancting online is observed to be 6-7 million and for non travel websites with E commerce turned out to be 2-3 million in 2010. It is expected to reach around 38 million unique transacting users by 2015.

3.3.2 Sales Tax for internet retailers
•Online retailer having physical presence in a particular state, such as a store, business office, or warehouse, it should collect sales tax from customers in that particular region. If at business not having any physical presence in a region, does not required to collect sales tax.

•The Information Technology Act, 2000, a legal framework for transactions carried out electronically, was enacted to facilitate e-Commerce, e-Governance and to deal with computer related offences.

•The principal Act was amended through the Information Technology (Amendment) Act, 2008 to include provisions for new forms of cyber crimes like cyber terrorism, identity theft, child pornography, breach of confidentiality and leakage of data by intermediary and e-commerce frauds.

•The following Rules pertaining to sections 52, 54, 69, 69A and 69B respectively of the Information Technology (Amendment) Act, 2008 are notified.

In India none of companies have integrated across various functions like Rail, Road, Coast to Coast , Container , MTO (Multi Mode Transport Operator),Container Freight station (CFD), In Land Container Depot (ICD). There is significant growth and reliability has increased due to high competition for local players on global entrants into the market.

Growth Drivers for E commerce in INDIA
FDI Investments into Retail sector like Bharati Wall Mart, which boosted market size to grow from 425 USD billion to 564 USD billion by 2014.The CAGR rate is approximately 6.4% in Indian retail industry.

From RBI bulletin increasing banking facilities and allowing transactions through Debit Cards will impact on E com-

merce business.The Pitch Madison Media Advertising Out-look expects internet revenues to go up to Rs 1,478 crore in 2012, a growth rate of 50 per cent.

Due to increase of broadband penetration in India, there steady growth in online retailing sector. There is steady shift from traditional retail shopping towards online shopping.

Research Methodology:

The research is aimed at studying the buying behaviour of youth consumers in the age group of 20-30 towards online shopping.The final questionnaire evolved after many stages of reformulating and restructuring. A pilot test was conducted with a sample of 30 respondents prior to conducting the actual interviews. This was done to mainly to test the language of the questionnaire and know whether the respondents interpreted the question as intended. Exploratory research: Focus group interview was conducted to determine the variables that affect the dependent variable (customer satisfaction).A questionnaire of 25 questions (18independent + 1 dependent) was designed based on the variables derived from the FGD. One pilot question to arrive at the questions is also included. Unforced Likert scale ranging from 1(Strongly Agree) - 5(Strongly Disagree) is used.

Simple random sampling technique was used and initially survey was conducted on a sample of 31 respondents for the Pre-test of the questionnaire. Further the actual survey was conducted on 210 respondents. Pretest of the questionnaire was conducted on a sample of 30 respondents to determine the consistency and reliability of the questionnaire.

The cronbachs was 0.87 for the 18 independent variables suggesting that the items have relatively high internal consistency and KMO was 0.843 which shows sample adequacy. The correlation matrix showed good correlation between the items and no negative correlation. This indicated that the questionnaire is accurate and no changes were required and hence we continued with the same questionnaire for the actual survey. Survey was conducted on a sample of 170 respondents chosen through simple random sampling. All the responses are coded in an excel sheet using the likert scale codes mentioned in the scale.

DATA ANALYSIS

SPSS 13.0 was used for the interpretation of the data. The following results were derived and interpreted.The alpha coefficient for the 18 items is .870, suggesting that the items have relatively high internal consistency.

KMO and Bartlett's Test:

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.851
Bartlett's Test of Sphericity	Approx. Chi-Square	1345.566
	Df	153
	Sig.	.000
Cronbach's Alpha(18 items)		.870

The KMO measure for the 210 respondents was 0.851 which indicates the adequacy of the sample for the survey. The Bartlett's test of Sphericity is also significant. All the

communality values are above 0.4. All the items are loaded into five factors.

Rotated Component matrix:

Name of the Factors	Name of the particulars	F1	F2	F3	F4	F5
Price & promotion	Price of the product				.763	
	Specific variety of the product				.742	
	Promotional offers				.575	
	Trail of the product				.566	
Convenience	save time		.518			
	Free cost in buying prroducts		.644			
	Limited access to buying products		.785			
	Comparison of various brands		.715			
Safety & security	Online security					.610
	Modes of payment					.764
	Others opinions					.639
Promotion	related to advertisement on television.	.814				
	related to banner adds in a website.	.773				
	related to facebook marketing .	.782				
	related to increase in usage of internet	.527				
Brand Image	Distance from home to store			.649		
	Easy Payment Option			.775		

In the above Rotated Component matrix we have not removed any of the questions. None of the question is influencing other two factors

Regression Analysis:

Since the result of Cronbach's alpha is greater than 0.8 we had to use the factor means instead of factor scores for regression analysis.

All variables entered and removed

Model	Variables Entered	Variables Removed	Method
1	E, A, D, B, C(a)	.	Enter

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.502(a)	.252	.234	.681

Predictors constant, E A D B

ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	31.775	5	6.355	13.705	.000(a)

Residual	94.129	203	.464		
Total 125.904		208			

Predictors Constant EADB
Q19 is dependent.
Coefficients

Model	Un-stand-ardized Coeffi-cients	Standardized Coefficients		T	Sig.
		B	Std. Error	Beta	
1 (Con-stant)	1.121	.207		5.421	.000
A	-.027	.069	-.028	-.391	.696
B	.341	.077	.322	4.422	.000
C	.128	.078	.129	1.648	.101
D	-.015	.083	-.013	-.177	.860
E	.202	.084	.190	2.420	.016

The significant factors in the regression analysis are "CONVENIENCE" and "SAFE TRANSACTIONS". The highest Beta coefficient for CONVENIENCE .322 which indicates that Qu variable has influence the satisfaction of the on-line consumer buying behaviour. The SAFE TRANSACTION also impact on consumer buying behaviour from below re-sult. Factors like "INTERNET AND TV ADS"," BRAND IM-AGE" and "PRICE AND PROMOTION" has very insignifi-cant impact on consumer behaviour

Data collected from secondary research
Below graphs is self explanatory of consumer preferences. Mainly customers use e-commerce for ticket booking,stock trading,books search, tourism compare to purchase fo electronics, gift, groceries or fast food purchase.

Particu-lars	Customer response on online shopping in per-centage			
Internet Profi-ciency of users	Advanced (56%)	Intermedi-ate (42%)	Beginners (2%)	
Beliefs about online pur-chase	Safe (47%)	Neutral (39%)	Can't be trusted (8%)	Can't say (6%)
% of people having experi-ence with online shop-ping	Yes(94%)	No(6%)		
Satis-faction level from online shop-ping	Delight-ed(67%)	Satis-fied(17%)	Neu-tral(4%)	Dissatis-fied(12%)
Cus-tomer frequen-cy in online shop-ping	Once a month(38%)	Less than a month(33%)	More than 3times a month (22%)	Never(7%)

Average transac-tion amount in online shop-ping	Rs 1000-Rs5000/- (62%)	Less than Rs1000/- (28%)	Rs 5000-Rs 10,000(9%)	More than Rs 10,000(1%)
Devices used for online shop-ping	Lap-top(67%)	Desk-top(10%)	Mobile(4%)	All the above(19%)

From the above analysis of the research project, it can be concluded that Major variable that can influence an on-line Consumer buying behaviour while shopping store is CONVENIENCE. CONVENIENCE this research is defined having saving time, less cost involved buying, better com-parison, easy accessibility from anyplace. But the consum-ers defined here are predominantly people who fall under the age group of 20-30 years of age is a limitation for this research.

Further study is still required as this study is based on the perception of students and employees who are below 30 years. Although this study does not reflect age, tariffs, profession, these need to be verified by conducting the broader study by considering a wider demographics and geographies.

Learning's and Recommendations
As per the market condition & considering future growth prospects shastra has to revamp the pricing strategy. Pres-ently shastra Softech is following a competitive pricing strategy which has been analyzed from competitive analy-sis. Majority of the players are charging similar prices for a normal E commerce website i.e. it starts from Rs 30000 onwards. Since there are large numbers of small players in the market & in order to increase its customer base shastra Softech should go for penetrative pricing strategy to cap-ture the market.

Being a software service company clients are reluctant to pay initial setup fees, so to boost the business confidence shastra Softech should come up with certain policies per-taining to initial payment options i.e. setup fee.

Shastra should maintain database of the list of the pros-pects in segment wise so that business intelligence team can convert prospects into closures by using some tech-niques like sms blasting e mail blasting etc.

Shastra Softech should go for new type of marketing strat-egy to reach the clients. From the competitor analysis it has been observed that competitors are adopting different kinds of strategy for pitching the clients wherein they tar-get a prospective client by analyzing the details online and make a brief report stating the scope of improvement. The report is then mailed to the client making him understand loop holes in his business. Using such strategy there is more possibility of getting closures & converting leads as compared to traditional calling. Blend of both should be used in reaching the business clients.

E mail Blasting: E mail blasting involves sending bulk e mail to targeted clients

Newspaper commercials: Advertisements should be given to promote the services and create brand image for the company.

Ad words: company should make use of google ad words which will increase the brand publicity.

Apart from these ShastraSoftech has to concentrate more PLACE aspect of marketing mix.

The following limitations were observed during the course of the research.The Sample of respondents chosen is convenient sample. The questionnaire was posted in various social networking sites and blogs. Lack of enthusiasm on the part of the respondents to answer the questionnaire.

Conclusion:
The resources that small software businesses have offer the opportunity to grow and perform well, but they have to be exploited thoroughly in order to achieve good results

According to INDIAN budget 2012 government has not granted exemption for income generated from Special economic zones from minimum alternate tax which could have adverse effect on upcoming SEZ, hence may affect employment opportunities. Introducing of GST in the budget by end of Aug 2012 which will replace existing indirect tax framework will help to reduce complexity in addressing taxation issues faced by the multiple departments of MSME. Budget 2012 taxes are being imposed on Indian companies for its onsite services since it is major export of technical skills will impact over the IT sector. Business costs is affected by taxation policy. A rise in corporate tax has same affect as increase in cost. Other business tax like VAT &environment tax. On the bottomline this tax passes down to the consumers. The standard vat tax rate in India 12.5%. The corporate tax rate after surcharges is 30% for local companies and 40% for foreign companies. The increase in the interest rate by the bank on account of adoption of monetary policy by RBI (increase in CRR & SLR) make new ventures for the software companies a little unattractive as cost of capital increases. The company should do cost benefit analysis to see if the prevailing interest rate will lead to profit for any investment or its better to invest it in bank. Thus ROI plays an important part for software companies and interest rate becomes integral part of it. Companies with huge pile up of cash need to innovate investment areas to benefit ROI.

As seen in the above hierarchical structure, the technical director and business director(operations head) will have two way communication with each other to make things simpler without any mismatch between what have to develop and what they are doing.

These two wings are monitored by human resource wing where the recruitments have to be done as per the requirements for a particular project. Problems with regards to the requirement and available resources are discussed between the top management involved in this stage.

The technical team starts with technical director who is responsible for assignment of the work followed by technical leader who will monitor the work progress. The technical team was divided into two wings internally based on the platform they are going to work are DOTNET and PHP teams which are individually maintained by technical director.

The business director who is going to take care of operations of the whole company is having a dedicated sales team which is going to going to take care of the getting clients which in turn helpful for the development of the company. The sales team is divided into SRS executive, sales executives and business leads. SRS executive is responsible for maintenance of relations with the clients who are generated; his work is sending prospects, generating proposals, generating estimations about the project for clients. The sales executive is going to generate leads from external sources and maintaining sync between the company and client. The business leads executives work is to generate the leads by cold calling and researching about the client.

Future aspects of E commerce
Technopark estimates that by 2020, the e-tail industry will grow to $70 billion and several local factors will push growth.Due to extensive increase in Mobile Device with internet connectivity may give rise to following challenges. Online Retailers Need to Move to Mobile

"We've even seen the time of day orders are being placed shift to where we think it's Mom -- after she's come home from work -- sitting on the couch with an iPad." By Buzzeo.

Mobile Trends and Facts
Most Common shopping activity is COMPARING and RE-SEARCHING products

A Mobile Website is far less expensive than a Mobile E commerce App.

30% of Tablet owners use for Online Shopping and 25% of Smart Phone use for Mobile phone.

Its Great way to get Competitive Advantage as many people are using smart phones and internet enabled devices.

3.8 Future of Online travel industry
We can see from the avendus report there is huge potential for online travel

If we observe diagram below Air Travel , IRTC are being major dominants of Tourism Industry. Where there is large scope of increasing in Hotel & Package and Bus Travel. Recently many ventures Bus industry came into the picture like RedBus.com, travelyaari.com etc.

EXHIBIT-1:-E-COMMERCE STATISTICS IN INDIA

Exhibit-2 Seven P's Of Marketing Mix on Internet Marketing

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