

IMPACT OF INFORMATION TECHNOLOGY (IT) ON CONSUMER PURCHASE BEHAVIOR

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ABSTRACT

Business process is under the IT revolution which is transforming the way we do the business. Basic business operations like decision making, customer service, marketing strategies, human resource management are being reformed with the use of IT. It also plays a vital role in the lives of people. Every field of human activity, may it be his daily life, official life, everything is now influenced under the cover of IT. It is used for storing, protecting, processing, securing, transmitting, receiving, and retrieving information. Keeping in mind the various benefits of IT, in the present paper an attempt has been made to study the impact of IT on consumer purchase behavior. The findings highlight that IT has a great influence on consumer purchase behavior. It is argued that the outcome of the study will certainly be helpful for the marketers to define their marketing strategies accordingly.

Keywords: Information technology, IT impact, consumer purchase behaviour, multi utility of IT, online shopping.

INTRODUCTION

The concept of internet marketing and e- consumer behavior has been deeply examined over the years. User-friendly technology like the Internet has altered the mode people communicate, work and execute commercial activities. Internet technology, mainly the World Wide Web (www) as an electronic medium of exchange provides new opportunities to industries to take up the Internet as their substitute marketing tools. As a result of change in the environment, a 'new' consumer and a 'new' marketplace is upcoming (Assael, 2004). Companies are dealing with a consumer that has variously been described as 'knowledgeable' (Lawson, 2000), 'active' (Hawkins et al., 2004), and 'post-modern' (Assael, 2004). This new consumer would seem to occupy an interactive marketplace characterized by high levels of heterogeneity, and be IT-enabled (Baker, 2003). New technologies are continuously rising, changing the relationship an organization establishes with its customers (Lindroos and Pinkhasov, 2003).

Information technology is quickly altering the way people do business all over the world. In the business-to-consumer segment, sales through the web have been increasing radically over the last few years. Customers, not only from developed countries but also from developing countries are adopting new shopping channel. IT has significant roles to play not only in businesses but also in daily activities of individuals. Internet based services keeps on growing in 'business-to-consumer' and 'business-to-business' environment. Every year the number of organizations that use internet for marketing purposes increases. In the same way, number of consumers who use the internet not only for gathering information but also for purchasing goods is also increasing. Consumer looks for information in a website or may search for products to buy. According to Andrews et al. (2007) for organizations Internet is contributing to disseminating information, improving consumer value, enhancing consumer satisfaction, reliability and retention as well as consumer perception which in turn leads towards better profitability and increased market share. As of the consumers' viewpoint, Internet-based services can considerably decrease the costs for searching, extend the selection of vendors, deliver lower priced products/services, and increase easiness, allowing more control over products/services offered. This reduction in cost has inspired organizations to enlarge electronic information services and new competitors to enter existing market.

In the era of IT, consumer behavior is the way of interacting with an online market, communicating with the business and approaching towards decisions, which are influenced by the presentation of the marketers. In the words of Dennis et al. (2004) and Harris & Dennis (2008) the study of e-consumer behavior is getting importance because of abundance of online shopping. The convenience of the Internet and lesser costs of making transactions have given rise in customers bargaining power and intense global competition.

Further there is a belief amongst researchers involved with upcoming technologies that in order to augment adoption potential, next generation products and services must display improved attributes such as ubiquity, personalization, mobility, context awareness and security (Mahon et al., 2006 and Doolin et al., 2008). It seems apparent that emerging technologies may display one or more of these attributes thereby providing an interesting focus for consumer behavior research. Therefore, it is essential to analyze the impact of these technologies on consumer behavior, particularly in today's dynamic environment (Schewe and Meredith, 2004). IT affects everything like producing products, transportation, raw materials, consumer prices, time and workers. It will make the product reach to the consumer, in good quality, and desired quantity fast and at a low cost. Technology has extended producing opportunities and media offering as well as providing an entirely new way to look at existing marketing. This has resulted in changes in how marketers show information to clients as well as how and when customers receive the information to capitalize on this ever-changing environment marketing.

LITERATURE REVIEW:

Presently, the new consumer is characterized mainly by cynical attitude manifested for traditional advertising (which tell him to buy something, but not to explain why) and Internet addiction, the media that enjoyed a growing confidence on the part of consumers and from which it gets information that IT directs the buying decision (Onete et al., 2010). The emotional responses to a website, the enjoyment of the shopping experience and the usefulness of the web site are the factors which may influence the intentions of customers to visit the website again Koufaris (2002). According to the study conducted by Euro RSCG Worldwide (2009), consumers have increasingly higher self-confidence in online content generated by their peers and therefore use the most of online tools to join with others and to document in order to make the best purchase.

Bhatnagar & Ghose (2004) found that time spent by consumers in surfing on the net was 9.17 minutes on automotive sites, 9.26 minutes on telecom/ Internet sites, 10.44 minutes on travel sites and 25.08 minutes on financial sites times. The more time spent by consumers in searching for information via Internet and more frequently they do so, more the information gathered online influences the purchase decision. Gender, education,

age and Internet experience influence the time consumers spend in searching for information (Ratchford et al., 2003 and Bhatnagar & Ghose, 2004), while search patterns may be different in retail services because of product classification (Bhatnagar & Ghose, 2004).

In the light of the consumers' age Wood (2002) observed that as compared to older consumers, younger adults, especially those under age 25, are more attracted in adopting new technologies, like the Internet, to find out about new products, search for product information, and compare and assessing alternatives. Reason behind this is that older consumers may perceive the benefits of Internet shopping to be less than the cost of investing in the skill needed to do it effectively, and therefore avoid shopping on the Internet (Ratchford et al., 2001). By taking gender into consideration Burke (2002) and Li et al. (1999) revealed that men express more interest in using different types of technology in the shopping process. They are more optimistic about using the Internet as a shopping medium, while female shoppers prefer using catalogs to shop at home. However, among the female consumers who prefer to shop on the Internet, shop more frequently online than their male counterparts.

According to Burke (2002) and Li et al. (1999) education level also influences e- shopping i.e. higher educated consumers are more comfortable using non-store channels, like the Internet for shopping mainly because of the fact that education is often positively correlated with an individual's level of Internet literacy. Lohse et al. (2000) explored that consumers with higher household incomes intend to shop more online as compared to lower income consumers. It is because of higher household incomes are often positively correlated with possession of computers, Internet access and higher education levels of consumers. Further Wolfinbarger & Gilly (2003) revealed that convenience and accessibility are positively associated with online shopping, because they can shop on the Internet in the ease of their home environment. It saves time and effort, and they are able to shop any time of the day or night particularly for consumers that, owing to their extended working hours, only have a small amount of free time, online shopping is an excellent opportunity. Avery (1996) is also of the same view that consumers, who are not able to shop in traditional stores because of some immobilizing factors, have the option to shop on the Internet to fulfill their shopping goals. Furthermore, for consumers who have to go large distances to stores which give them with the articles needed, shopping on the Internet is a viable alternative to overcome this geographical distance.

In the online shopping context, consumers evaluate their Internet shopping experiences in terms of perceptions regarding product information, form of payment, delivery terms, service offered, risk involved, privacy, security, personalization, visual appeal, navigation, entertainment and enjoyment (Mathwick et al., 2001; Burke, 2002; and Parasuraman & Zinkhan, 2002), security and privacy (Lee & Turban, 2001). A high level of security and privacy in the online shopping experience has a positive effect on consumer trust, owing to the lowered risk involved with exchanging information.

While highlighting the benefits of online shopping Chen & Leteney (2000); Ha'ubl & Trifts (2000); and Grewal et al. (2004) revealed that internet shopping fulfills several consumer needs more effectively and efficiently than conventional shopping likewise, with online shopping, consumers can look through the entire product-assortment with nominal effort, inconvenience and time investment. Consumers can efficiently get significant knowledge about firms, products and brands, and thereby enhance their competency in making sound decisions while shopping. Consumers can easily compare product features, availability, and prices more efficiently and effectively than with brick-and-mortar shopping. Online shopping also offers a high level of convenience for those whose time costs are perceived to be too high to invest in conventional shopping (Grewal et al., 2002).

In pre trial of products where no physical assistance is needed, internet is highly used. In case of standardized and familiar goods, or certain sensitivity products that require a level of privacy and anonymity, consumers' intention to shop on the Internet is high (Grewal et al., 2002). In personal-care products like perfume and lotion, or products that require personal knowledge or experience like computers and cars, are less likely to be considered while shopping online (Elliot & Fowell, 2000).

Alpar and Kim's (1991) revealed the cost reducing effects of IT. A 10% increase in IT capital is associated with 1.9% decreases in total costs. Harris and Katz (1991) and Bender (1986) found a positive relationship between IT expense ratios and various performance ratios (Insurance Industry). IT has also improved the productivity and efficiency (Banking Industry) as higher performance level has been achieved without corresponding increase in the number of employees (Gotlieb et al., 1993). But contrary to the above findings Dos et al. (1993) reported an insignificant correlation between IT spending and profitability measures implying thereby that IT spending is unproductive.

RESEARCH PROBLEM:

Information is the fuel that operates new consumers. Due to development of information technology and the Internet, information is now cheaper and more easily reached than ever to consumers. The enduring need of the

new consumer to be informed is justified by the fact that information opens various ways to opt, permits him to make more alert judgments about future purchases, thus providing greater control over expenditure. In recent decades, new information and communication technologies in the world have gone through remarkable changes, which gradually changed reality into a virtual world. High-speed growth of equipment and technologies, economic globalization and a lot of other external conditions stimulate the changes in consumer behavior. Now customer verify labels and study the content of products, compare prices, review brands promises, weighing options, puts pertinent questions and knows his legal rights with the help of technology. Due to this fact marketing professionals incessantly amend their strategy and tactics to proficiently match their consumers' evolving behavior and habits.

Consumers evaluate their Internet shopping experiences in terms of perceptions regarding product information, form of payment, delivery terms, service offered, risk involved, privacy, security, personalization, visual appeal, navigation, entertainment and enjoyment (Mathwick et al., 2001; Burke, 2002; and Parasuraman & Zinkhan, 2002). According to Grewal et al. (2002) in pre trial of products where no physical assistance is needed, internet is highly used. Even in case of standardized and familiar goods, or certain sensitivity products that require a level of privacy and anonymity, consumers' intention to shop on the Internet is high.

Some reports indicate that consumers vary in their levels of Internet adoption mainly due to perceived risk associated with online transactions. Lack of trust in the online payment system has been emerged as a major factor in hindering consumers to shop online as per Global e-commerce report (2002). Further, according to Pardas (2002), the consumers who shopped online were primarily those who have conducted online transactions before and consumers who are technology literate. However, first time buyers would prefer to 'feel and test' the physical products prior to making purchases.

Therefore, keeping in mind the frequent use of IT by consumers and in the light of contradictions in earlier researches it is very important to understand the influence of IT on consumer purchase behavior, so that marketers can respond accordingly.

OBJECTIVE:

- To study the impact of IT on consumer purchase behavior.
- To compare the impact of IT on consumer purchase behavior demographically.

METHODOLOGY:

In the present study, a sample of 200 respondents form Kurukshetra (100) and Ambala (100) has been taken into consideration, using convenience sampling method. The sample consists of both male and female, respondents of different age group, engaged in different occupation, etc. (Table I). The data has been collected through survey-questionnaire. The final questionnaire consists of 22 items (Table 2). Respondents were asked to record their responses on these 22 items on 5 points interval-scale i.e. Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree. The data, thus generated has been analyzed with the help of Descriptive statistics ANOVA and Factor Analysis.

Table 1: Sample profile

Demographic variables		Frequency	Percentage
Age	Below 25	90	45%
	Between 25-35	62	31%
	Above 35	48	24%
Gender	Male	87	43.5%
	Female	113	56.5%
Education	Up to graduation	63	31.5%
	Post graduation	86	43%
	Professional	51	25.5%
Occupation	Working	106	53%
	Student	94	47%
Residential status	Rural	104	52%
	Urban	96	48%

Table 2: Items of questionnaire

1.	Increase efficiency
2.	Reduce cost
3.	Customer satisfaction
4.	Customer relationship
5.	To get feed back
6.	Create awareness among customers
7.	To customize products
8.	Enhance confidence among consumers
9.	Help to maintain records of bills, purchase, etc
10.	Facilitate consumer in decision making
11.	Information about the product on the internet is sufficient
12.	Easy to make comparison among products
13.	Encourage the consumers to purchase new products
14.	Discounts are offered to attract consumers
15.	Comparatively prices are less
16.	Save cost of transportation to go to market
17.	Order to purchase can be booked easily
18.	Purchased product are delivered well in time to consumers
19.	Reduce the length of distribution channel
20.	Making payment easy
21.	Good planning
22.	Technology savvy customers

RESULTS

Table 3: KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy.		.592
Bartlett's Test of Sphericity	Approx. Chi-Square	595.020
	Df	231
	Sig.	.000

Inspection of the Table-3 reveals that the Kaiser-Meyer-Olkin (KMO), measure of sampling adequacy for the sample is .592 which is greater than 0.5, suggesting thereby that the data is adequate for Factor Analysis. The Bartlett's Test of Sphericity has also been conducted with the aim to test the null hypothesis (H₀) that the population correlation matrix of the variables is an identity matrix. The chi-square statistic is 595.020 and p-value is 0.000 which indicates that there is a correlation of variables to each other. Hence, we reject the null hypothesis and conclude that variables are correlated to each other. Thus, it can be inferred that the Factor Analysis as a Model of data analysis can be accepted.

Table 4: Eigen values with cumulative percentage of variance

Components	Eigen Value	% of variance	Cumulative % of variance
1	2.25	10.23	10.23
2	1.81	8.22	18.45
3	1.51	6.86	25.31
4	1.51	6.86	32.17
5	1.50	6.81	38.98
6	1.41	6.39	45.37
7	1.31	5.93	51.30
8	1.29	5.84	57.14
9	1.19	5.42	62.57

Table 5: Rotated component matrix

Variables	1	2	3	4	5	6	7	8	9	h ²
Increase efficiency	0.09	0.02	-0.09	-0.06	0.09	0.80	0.10	0.08	-0.03	0.69
Reduce cost	0.08	-0.01	0.77	-0.02	0.27	-0.14	0.23	-0.09	-0.13	0.77
Customer satisfaction	0.02	0.76	-0.17	-0.05	0.02	0.01	0.08	0.05	-0.10	0.63
Customer relationship	-0.02	0.73	0.30	-0.01	0.06	-0.03	-0.07	0.14	-0.08	0.66
To get feed back	-0.33	0.54	0.11	0.05	0.05	0.20	0.04	-0.22	0.10	0.52
Create awareness among customers	-0.11	0.17	0.61	0.21	-0.16	0.12	-0.17	0.23	0.22	0.63
To customize products	-0.05	0.06	0.30	0.24	-0.35	0.39	-0.14	-0.17	-0.38	0.62
Enhance confidence among consumers	0.08	0.33	-0.24	0.58	-0.17	-0.18	0.29	-0.16	0.16	0.71
Help to maintain records of bills, purchase, etc.	0.17	0.09	0.04	-0.05	-0.03	0.08	-0.07	0.79	0.13	0.70
Facilitate consumer in decision making	-0.05	-0.15	0.11	0.75	0.05	-0.06	0.09	-0.18	0.00	0.64
Information about the product on the internet is sufficient	0.49	0.20	0.24	-0.14	-0.06	-0.05	0.24	0.21	0.10	0.47
Easy to make comparison among products	-0.38	0.26	0.12	0.13	0.32	0.40	-0.16	0.10	0.10	0.55
Encourage the consumers to purchase new products	0.17	0.01	0.10	0.61	0.15	0.19	-0.09	0.31	-0.10	0.58
Discounts are offered to attract consumers	0.72	-0.22	0.02	-0.02	-0.08	0.03	-0.01	0.09	0.10	0.59
Comparatively prices are less	-0.27	0.07	0.03	0.11	0.52	0.27	0.32	-0.14	0.05	0.56
Save cost of transportation to go to market	-0.07	0.04	0.06	0.03	0.84	0.00	0.02	-0.03	-0.08	0.73
Order to purchase can be booked easily	0.61	0.14	0.01	0.10	0.05	-0.18	-0.45	0.00	0.03	0.63
Purchased product are delivered well in time to consumers	0.11	0.06	0.08	0.13	0.13	0.04	0.76	-0.02	0.05	0.63
Reduce the length of distribution channel	0.00	-0.12	0.03	-0.01	-0.09	-0.02	0.07	0.08	0.75	0.60
Making payment easy	0.67	-0.06	-0.18	0.21	-0.07	0.18	0.11	0.02	-0.16	0.60
Good planning	0.21	0.18	0.07	0.09	0.22	0.17	-0.30	-0.49	0.47	0.72
Technology savvy customers	0.44	-0.03	0.34	0.01	-0.18	0.35	0.11	-0.10	0.22	0.54

Here Principal Component Method of Factor Analysis has been applied. Factor extraction was stopped when Eigen values came to 1.00, thereby extracting 9 factors. The factor loading of 0.30 or more is significant and retained for further analysis. These factors account for 62.556 of total variance (Table 4) and the communalities (h²) range from 0.472 to 0.772 (Table 5). Each of the factors extracted so far represents the impact of IT on consumer purchase behavior (Table 6). Following is the detailed explanation of all these factors:

Table 6: Details of the extracted factors

Variables	Factor loadings	Factor	1
Multi Utility of IT			
1. Discounts are offered to attract customers	0.72		
2. Making payment easy		0.67	
3. Order to purchase can be booked easily		0.61	
4. Information about the product on internet is sufficient		0.49	
5. Technology savvy customers		0.44	
Factor 2 Customer satisfaction			
1. Customer satisfaction		0.76	
2. Customer relationship		0.73	
3. To get feedback		0.54	
Factor 3 Save cost			
1. Reduce cost	0.77		
2. Create awareness about latest products		0.61	
Factor 4 Effective buying decisions			
1. Facilitate customers in decision making		0.75	
2. Encourage customers to purchase new products		0.61	
3. Enhance confidence among customers		0.58	
Factor 5 Reasonable price			

	1. Save cost of transportation to go to market	0.84	
	2. Comparatively prices are less		0.52
Factor 6	Ease of use		
	1. Increase efficiency	0.80	
	2. Easy to make comparison among products	0.40	
	3. To customize product		0.39
Factor 7	Timely delivery		
	1. Purchased products are delivered well in time to consumer	0.76	
Factor 8	Maintaining records		
	1. Help to maintain records of bills, purchase, etc.		0.79
Factor 9	No intermediaries		
	1. Reduce the length of distribution channel	0.75	
	2. Good planning		0.47

FACTOR 1 MULTI UTILITY OF IT:

Multi utility of IT plays a vital role in consumer purchase behavior. Results of this factor states that consumers perceive that IT have multiple uses as reflected by the nature of variables loaded on this factor. Consumers think that sufficient information about the product is available on internet. It is easy to make payment online as various options are offer to consumers. To make the online purchase attractive various discounts are given by the organizations from time to time. Moreover the orders made by consumers to purchase can be booked easily. Online shopping has made the consumer techno savvy. Thus, consumers are of the view that to purchase by using IT has multi utility.

FACTOR 2 CUSTOMER SATISFACTION:

All the variables loaded on this factor have positive loadings and indicates that most firms are using information technology to satisfy the customers as customer satisfaction is the ultimate motto. Basic structure of this factor suggests that customers are getting satisfaction over the purchase made by them using IT. By doing so they are in direct touch with the companies thereby having direct relationship. It also enables the customers to contact such companies any time and get information about pre purchase, products and post purchase so that they can purchase the product of their choice without cognitive dissonance. Thus, it can also be postulated that firms use IT as medium to maintain the relationship with customers, to satisfy their customers and get periodically feedback about its products/services.

FACTOR 3 SAVE COST:

Nowadays consumers are of the opinion that information technology help in reducing cost and create awareness about latest products. They perceive that in comparison to traditional shopping online shopping is more beneficial in terms of cost associated with purchasing. Further they get more information and awareness regarding new products easily without any cost of searching elsewhere. Keeping in mind the nature of variables loaded on this factor it is named as save cost.

FACTOR 4 EFFECTIVE BUYING DECISIONS:

The another important factor in the favour of using IT is effective buying decisions in terms of enhancing the confidence among customers, facilitating customers in their decision making, encouraging customer to purchase new products, etc. Thus, consumers purchase through online mode because of such encouragements, which is good for the companies as well.

FACTOR 5 REASONABLE PRICE:

Consumer attitudes towards purchasing through online mode are further fueled by reasonable price as they can save cost of transportation to go to market. Consumers can make a comparison of prices of various products offered by companies and can decide to purchase the products having reasonable price. Even it is found that prices are comparatively less than traditional shopping. Thus, it can be inferred that reasonable price is one of the impact of IT due to which customer purchase products/ services frequently.

FACTOR 6 EASE OF USE:

Factor-6 highlights that use of IT to purchase through online mode make the consumers efficient as they can save too much time. It is also easy for them to get the product of their choice by making comparison among various products. Therefore, it can be said that IT has increased the efficiency of the consumers by saving time and cost that can be used elsewhere.

FACTOR 7 TIMELY DELIVERY:

Another booster in the support of using IT in purchasing products/ services online is delivery of products well in time to customers. Online companies have strong supply chain enables them to make the product available to consumers well in time. Thus, it can be concluded that customers are highly influenced by IT as they get timely delivery of products/services.

FACTOR 8 MAINTAINING RECORDS:

The variable loaded on this factor have very high positive loading and indicates that for consumers who go for shopping online, it is easy for them to maintain the records of bills and purchases, etc. Consumers give order of purchase online, get bills and all other related information online, thus maintaining records become routine. Moreover, there is no risk of losing the bills as it is not in physical form and data can be handled and stored easily for further use.

FACTOR 9 NO INTERMEDIARIES:

As consumers are in direct touch with online companies therefore, products are directly delivered to consumer. Such direct contact between companies and consumers reduces the length of distribution channel leaving no or least scope for intermediaries. As a result it may save the time and cost for the consumers as well as companies. It also helps the consumers to make effective planning i.e. what to order and when to order so that they can get delivery of products at required time and place.

COMPARATIVE ANALYSIS:

To test whether the impact of IT on consumer purchase behaviour differ demographically, two tailed t-test was applied for gender (male, female), occupation (working, students) and residential status (urban, rural) whereas ANOVA was applied on age (below 25, 25-35, above 35) and education (upto graduation, post graduation, professional). For this purpose, average scores of variables comprising a particular factor was added up and divided by number of variables, to determine the mean score for all the factors, extracted after applying Factor Analysis and then t-test and ANOVA was applied to see differences among factors (impact of IT on consumer behaviour) demographically.

Table 7: Compare factors' mean – t-test (on the basis of gender)

Factors	Gender	Mean	S.D.	t	Sig. (2-tailed)
Multi utility of IT	Male	4.31	0.47	0.421	0.674
	Female	4.28	0.49		
Customer satisfaction	Male	3.51	0.59	-1.112	0.268
	Female	3.61	0.68		
Save cost	Male	4.11	0.58	0.94	0.348
	Female	4.03	0.58		
Effective buying decisions	Male	3.92	0.55	0.582	0.561
	Female	3.87	0.54		
Reasonable price	Male	3.17	1.05	-1.302	0.194
	Female	3.35	0.88		
Ease of use	Male	3.78	0.54	-0.94	0.348
	Female	3.85	0.49		
Timely delivery	Male	4.07	0.76	0.145	0.885
	Female	4.05	0.78		
Maintaining records	Male	4.29	0.82	-0.372	0.71
	Female	4.33	0.70		
No intermediaries	Male	4.03	0.38	-0.588	0.557
	Female	4.07	0.38		

Table 7 revealed that t- values of all the dimensions of impact of IT on consumer behaviour is non significant when gender is taken as a base of difference among consumers. It indicates that there is no significant difference between male and female while using IT for purchase. Therefore, irrespective of gender IT influences the purchase behaviour of all the consumers in the same way.

Table 8: Compare factors' mean – ANOVA (on the basis of age)

Factors	Age	Mean	S.D.	F	Sig.
Multi utility of IT	Below 25	4.11	0.49	13.405	.000
	Between 25-35	4.41	0.46		
	Above 35	4.49	0.36		
Customer satisfaction	Below 25	3.79	0.66	13.107	.000
	Between 25-35	3.46	0.63		
	Above 35	3.26	0.46		
Save cost	Below 25	4.09	0.60	.526	.592
	Between 25-35	4.09	0.55		
	Above 35	3.99	0.61		
Effective buying decisions	Below 25	3.86	0.60	.199	.820
	Between 25-35	3.91	0.48		
	Above 35	3.91	0.55		
Reasonable price	Below 25	3.46	0.96	3.442	.034
	Between 25-35	3.17	1.03		
	Above 35	3.04	0.83		
Ease of use	Below 25	3.94	0.46	5.597	.004
	Between 25-35	3.77	0.56		
	Above 35	3.65	0.50		
Timely delivery	Below 25	3.93	0.78	2.298	.103
	Between 25-35	4.15	0.83		
	Above 35	4.19	0.64		
Maintaining records	Below 25	4.23	0.72	.965	.383
	Between 25-35	4.40	0.78		
	Above 35	4.33	0.78		
No intermediaries	Below 25	4.07	0.39	.417	.660
	Between 25-35	4.06	0.36		
	Above 35	4.01	0.39		

It is amply clear from the summary of ANOVA (Table 8) that F-ratios of multi utility of IT, customer satisfaction, reasonable price and ease of use are significant indicating thereby that on these factors consumer purchase behaviour vary when age was taken into consideration. Mean values indicate that consumers of below 25 age group are highly influenced by IT on satisfaction, reasonable price and ease of use as compared to any other age group. Consumers of age groups of above 35 years are highly influenced by IT mainly because of multi utility of IT, followed by age group of 25-35 & below 25. On rest of factors i.e. save cost, effective buying decisions, timely delivery, maintaining records & no intermediaries, there is no significant difference among consumers of various age groups. Thus, irrespective of different age group, on these factors consumers are equally influenced by IT while purchasing products/services of their choice

Table 9: Compare factors' mean – ANOVA (on the basis of education)

Factors	Education	Mean	S.D.	F	Sig.
Multi utility of IT	Up to graduation	4.17	0.53	3.116	.047
	Post graduation	4.33	0.50		
	Professional	4.38	0.36		
Customer satisfaction	Up to graduation	3.49	0.61	3.481	.033
	Post graduation	3.70	0.66		
	Professional	3.43	0.62		
Save cost	Up to graduation	4.01	0.64	1.122	.328
	Post graduation	4.05	0.52		
	Professional	4.17	0.61		

Effective buying decisions	Up to graduation	3.84	0.58	.531	.589
	Post graduation	3.89	0.56		
	Professional	3.95	0.50		
Reasonable price	Up to graduation	3.33	1.02	.622	.538
	Post graduation	3.18	0.95		
	Professional	3.34	0.92		
Ease of use	Up to graduation	3.83	0.46	.195	.823
	Post graduation	3.83	0.49		
	Professional	3.78	0.62		
Timely delivery	Up to graduation	4.08	0.81	.033	.967
	Post graduation	4.05	0.73		
	Professional	4.06	0.79		
Maintaining records	Up to graduation	4.29	0.77	.099	.905
	Post graduation	4.34	0.73		
	Professional	4.29	0.78		
No intermediaries	Up to graduation	3.98	0.39	1.503	.225
	Post graduation	4.08	0.39		
	Professional	4.09	0.34		

The above table 9 depicts that F-ratios of multi utility of IT ($F=3.116$, $df=1/198$, $p. <05$) and customers satisfaction ($F=3.481$, $df=1/198$, $p. <05$) are significant when education is taken as a base of difference among consumers. It highlights that on these two factors consumer purchase behaviour is different. Professional are using IT mainly because of multi utility of IT, as reflected by high mean score (4.38). Consumers of post graduate background were found more satisfied than upto graduate & professional educational background, their mean score being 3.70, 3.49, and 3.43 respectively. On rest of the factors, education does not create any difference among the consumers as ANOVA yields non significant F ratios. Therefore, irrespective of different educational background, on rest of the factors there is no change in consumer behaviour in using IT while purchasing products/ services.

Table 10: Compare Factor's mean – t-test (on the basis of occupation)

Factors	Occupation	Mean	S.D.	t	Sig. (2-tailed)
Multi utility of IT	Working	4.43	0.43	4.312	0
	Student	4.14	0.50		
Customer satisfaction	Working	3.42	0.63	-3.402	0.001
	Student	3.72	0.62		
Save cost	Working	4.04	0.57	-0.701	0.484
	Student	4.10	0.60		
Effective buying decisions	Working	3.91	0.50	0.515	0.607
	Student	3.87	0.60		
Reasonable price	Working	3.26	0.96	-0.126	0.9
	Student	3.28	0.97		
Ease of use	Working	3.76	0.53	-1.636	0.103
	Student	3.88	0.49		
Timely delivery	Working	4.17	0.74	2.168	0.031
	Student	3.94	0.79		
Maintaining records	Working	4.35	0.78	0.778	0.437
	Student	4.27	0.72		
No intermediaries	Working	4.07	0.37	0.721	0.472
	Student	4.03	0.39		

The mean value of all the factors extracted after using Factor Analysis was compared on the basis of occupation i.e. students and working class. It is found that multi utility of IT, customer satisfaction and timely delivery are having significant t- ratios, implying that on these factors consumer purchase behaviour differ. Working class is found highly influenced than students on multi utility of IT and timely delivery of products whereas students are found highly satisfied while purchasing products/ services by using IT. On rest of the factors different occupations do not have any significant influence, therefore consumer purchase behaviour will remain same.

Table 11: Compare factors' mean – t-test (on the basis of residential status)

Factors	Residential status	Mean	S.D.	t	Sig. (2-tailed)
Multi utility of IT	Rural	4.31	0.45	.563	.574
	Urban	4.27	0.51		
Customer satisfaction	Rural	3.47	0.58	-2.075	.039
	Urban	3.66	0.69		
Save cost	Rural	4.01	0.58	-1.262	.208
	Urban	4.12	0.59		
Effective buying decisions	Rural	3.91	0.58	.602	.548
	Urban	3.87	0.51		
Reasonable price	Rural	3.22	0.93	-.668	.505
	Urban	3.31	1.00		
Ease of use	Rural	3.82	0.44	.151	.880
	Urban	3.81	0.58		
Timely delivery	Rural	4.18	0.76	2.391	.018
	Urban	3.93	0.75		
Maintaining records	Rural	4.35	0.75	.764	.446
	Urban	4.27	.76		
No intermediaries	Rural	4.05	.37	.034	.973
	Urban	4.05	.39		

On the basis of above table 11 it can be inferred that urban consumers are more satisfied ($t=2.075$, $p<.05$) than rural consumers whereas rural consumers are of firm believe that products are delivered well in time by using IT ($t=2.391$, $p<.05$). Non significant t-values of remaining factors indicate that residential statuses of consumer i.e. urban or rural do not have any significant impact on consumers. Therefore, on rest of the factors, irrespective of residential status, IT has same influence on consumer purchase behaviour.

DISCUSSION:

A perusal of the results in the present investigation makes it amply clear that IT has great impact on consumer purchase behavior. Firstly consumers perceive that purchasing with the help of IT have multi purposes. They are of the view that use of IT makes the payment easy, information is ample and purchased order can be booked easily, etc. The present findings get sufficient support from the findings of Chen & Leteney (2000); Ha'ubl & Trifts (2000) and Grewal et al. (2004) who states that internet shopping fulfills several consumer needs more effectively and efficiently than conventional shopping likewise, consumers can efficiently get significant knowledge about firms, products and brands, and thereby enhance their competency in making sound decisions while shopping.

Findings of the present investigation also reveal that firms use IT for providing its services to build and maintain customer relationship. The aim is to satisfy the customers, to get feed back about its services from the customers. The present findings are in conformity with the findings of Andrews et al. (2007) who states that for organizations increased importance of Internet channels can be observed in its contribution to disseminating information, improving consumer value, enhancing consumer satisfaction, reliability and retention. Another important impact of IT is saving cost. Alpar and Kim (1991) also reported a cost reducing effect of IT. Consumers perceive that as compared to conventional shopping online shopping offer less price and creates awareness about latest products with least efforts so that comparison among products become easy.

The influence of IT on consumer purchase decision can also be noticed from the fact that their decision making is becoming effective. The use of IT is enhancing the confidence among customers, facilitating customers in their decision making, encouraging customer to purchase new products. Thus, consumers are eager to purchase more & more through online mode. These findings are in conformity with the findings of Study conducted by Euro RSCG in 2009 Worldwide which indicated that consumers have increasingly higher self-confidence in online content generated by their peers and therefore uses the most of online tools to join with others and to document in order to make the best purchase. In the words of Wood (2002) younger adults are more attracted in adopting new technologies to find out about new products and related information, compare and assessing alternatives to make sound purchase decision. Furthermore, the more time consumers give over to searching for information via Internet and more frequently they do so, the more the information gathered online influences the purchase decision (Bhatnagar & Ghose, 2004).

Findings of the present study also highlight that consumer attitudes towards using IT to purchase products/ services is positive as they think that it saves cost of transportation to go to market and in comparison to traditional shopping there is less price as consumers can go for comparison of prices of various products by sitting at home. These findings get ample support from the findings of Wolfinbarger & Gilly (2003) who postulates that convenience and accessibility are positively associated with online shopping, because they can shop on the Internet in the ease of their home environment, it saves time and effort, and they are able to shop any time of the day or night. Particularly for consumers that, owing to their extended working hours, only have a small amount of free time, online shopping is an excellent opportunity. According to Avery (1996) consumers who have to go large distances to stores, shopping on the Internet is a viable alternative to overcome this geographical distance.

The uses of IT make it easy for consumers to purchase products/services and increase their efficiency. It is easy for them to purchase the products of their choice by making comparison among various products resulting into convenient shopping. The results of this factor supports the findings of Grewal et al. (2004) who investigated that consumers can easily compare product features, availability, and prices more efficiently and effectively than with brick-and-mortar shopping.

Present study make it also amply clear that consumers have a positive image of purchasing by using IT as they assume that purchased order are delivered well in time, it is easy for them to maintain the records of bills and purchases, etc. It has also enables the companies to reduce the length of distribution channel resulting in to direct marketing without no/ least intermediaries. Always consumers are in direct touch with companies, which may help the company to build, maintain and sustain long term relationship with the consumers.

When the mean values of all the factors were compared demographically, it is found that there is no difference among consumers on the basis of gender. But differences were noticed when age, education, occupation and residential status were taken into consideration. Age wise there was a difference among consumers on factors—multi utility of IT, customer satisfaction, reasonable price and ease of use whereas on other factors i.e. save cost, effective buying decisions, timely delivery, maintaining records and no intermediaries, consumer behaviour remains same. Likewise, educational background create differences in consumer behaviour on multi utility of IT and customer satisfaction. Occupation wise consumer differs on multi utility of IT, customer satisfaction and timely delivery whereas residential status differentiates customers on satisfaction and timely delivery. Thus, it can be concluded that age wise, education wise, occupation wise, consumers differ on multi utility of IT and customer satisfaction; occupation and residential status make differences on timely delivery; and age wise consumer differ on reasonable price and ease of use.

CONCLUSION:

The fast expansion of Internet exercise and programmatic enhancement in the circle of IT has modified the way stock are acquired and marketed, resulting in an exponential expansion in the number of online buyers. Because of the numerous benefits of IT use to purchase products/ services, now more and more people prefer online shopping over conventional shopping. Present investigation reveals that consumers have overall positive image towards use of IT while making purchase. Consumers view IT as multi utility, customer satisfaction, save cost, effective buying decision, reasonable price, easy to use, timely delivery, maintaining records and no intermediaries which open the way of direct marketing. Thus, the value of IT as a prospective source of competitive advantage is clearly realized. Therefore, it is the need of hour for marketers to understand what motivate consumers to purchase online and what discourages them from doing so. The answer of this question will certainly help the corporates to expand their business beyond boundaries.

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