

# Consumer Behavior on Online Shopping in India

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## Abstract:

**O**nl ine shopping in India has been shown to be a good potential market, buying online gives customers the opportunity to find a great variety of products, customers can review a wide selection of products and find special offers with the best deals online. However, the tangible and intangible problems of online shopping still exist and the online store retailers lack the customer knowledge in some extent. Therefore, the intention of this paper is to explore customer behavior when purchasing online through investigating the factors that can affect online consumer's attitudes, intention and actual consumers' behavior. The study investigates the main web - experience factors that customer takes into consideration when purchasing online, yet, the most important online elements are categorized in two main groups: customer - oriented factors and technology - oriented factors. This paper uses quantitate research in term of survey to analyze the consumer's attitudes towards the web experience elements, moreover it finds out the relationship between the web factors and the customer's attitudes, intentions and actual buying behavior. The results had led to the understanding of the most important web experience elements that influence the purchase decision of the consumers and the final findings show that web elements web content and trust are considered to be the most influential for the consumer's online behavior towards online shopping of sports apparel, this study contributes to the retailers by understanding customer attitudes and the web factors that influence the purchase intention and contributes with valuable information on the sales of sports apparel online retail.

**Key Words:** e-commerce, web experience factors, online consumer behavior, online shopping

## I. INTRODUCTION

Today Internet is considered as an essential parameter of economic and social life as well as one of the main constructs of the future commercial landscape as internet mediates E-commerce and increasingly regarded as a mainstream commercial activity (Drew, 2003) and as a valuable marketing. From business perspective, Internet was visualized as unique linkage between consumers and supplier using proprietary technology and for the consumer, Internet can be a valuable communication medium to facilitate controlled search for up-to-date information and assistance with comparison shopping and decision making. (Hoffman, 1996). Young people become more interested in online shopping and they spend more time and money on online shopping, they select and use the media to best fulfill their individual needs (Arnett, 1995). With the increasing use of the internet as shopping medium, young consumers, particularly college students aged 20-29, are becoming the internet's "hottest" market and a prime source of current and future growth in online sales. As online competition increases, it becomes vital for e-store to attract and fully satisfy consumers to ensure their success. With more choice than ever before, power has moved from suppliers to consumers (Pitt, 2002) giving consumers the ability to easily switch the retailers if they are not satisfied with their online experience. Research has found that almost half of consumers who abandoned transactions did so because of poor website performance (Madu, 2002) which not only results in loss of sales, but negative experiences can also effect consumers' ongoing brand perceptions (Constantines E., 2004)

Web sites founded on solid fundamentals and extensive customer research can make the difference between success and failure. A clear, easy-to-use and customer-centered web site can help garner better reviews and ratings, reduce the number of mistakes made by customers, trim the time it takes to find needed information, and increase overall customer satisfaction. Furthermore, customers who really like a web site's content and quality of service are more likely to tell their family, friends, and coworkers, thereby increasing the number of potential customers. A great example of this result is Google, which has become the dominant search site with little or no advertising, because it simply works better than most other search sites.

The sport apparel and sports goods are occupying an important part of customers' online life, buying sports apparel online takes a very high percentage in the online shopping ratings, on one side, purchasing sports apparel online gives customers an opportunity to review and compare a wide variety of goods selecting between various online vendors and thus find the best deals online and on the other side, customers can buy items from branded online vendors which doesn't have brick and mortal stores and in this sense save time and differentiate themselves. Hence, buying apparel items online is always a beneficial deal than visiting retail stores in terms of more various options and time efficiency. In conclusion, the customers' demand to be different in their sports apparel style is increasing day by day, thus online shopping offers an effective and convenient channel to reach the customers and satisfy their needs.

## II. RESEARCH OBJECTIVE

The research problem of this paper is to identify which are the specific factors that affect customers' behavior to buy sports apparel online and also to answer to what extent the relationship between the customers' attitudes and online buying intention impacts on their actual behavior. So based on the above research problem the research objective is formulated as follows: *Get insight into the main web - experience factors that customer takes into consideration when purchasing sport apparel online.* In order to understand the main web experience factors influencing the online consumers behavior is constructed a research model, based on Theory of Planned Behavior (TPB) developed by (Aizen, 1991) which was applied in the context of online shopping of sport apparel. To cover the research objective, the following research specific objectives have been developed:

1. Categorize the main web experience factors that affect online customer's behavior;
2. Evaluate the relationship between attitudes and intentions in order to understand consumer actual behavior towards online shopping of sport apparel;
3. Understand to what extent web experience factors influence consumers' attitudes towards online shopping and purchase intent;
4. Understand to what extent web experience factors and attitudes are related;
5. Understand to what extent web experience factors and intentions to purchase are related;
6. How does customers' attitude towards online shopping of sport apparel influence their intention to start/continue to buy sport apparel online?
7. Evaluate the customer's attitudes towards online shopping of sport apparel;
8. Understand the consumers' intentions to purchase online sports apparel and their behavior by analyzing them from two perspectives - of experienced and of inexperienced shopper.

## III. HYPOTHESIS OF THE STUDY

H1: There is positive relationship between attitudes towards online shopping and intentions to purchase. It is supposed that positive and good attitudes of online shopping are leading to higher intention to buy sports apparel online.

H2: There is relationship between attitudes towards online shopping and technology oriented factors, supposing that favorable perception about the technology-oriented factors is leading to good attitudes towards online shopping.

H2a: There is relationship between attitudes towards online shopping and usability

H2b: There is relationship between attitudes towards online shopping and interactivity

H2c: There is relationship between attitudes towards online shopping and web design

H3: There is relationship between attitudes towards online shopping and consumer-oriented factors, supposing that favorable perception about the consumer-oriented factors is leading to good attitudes towards online shopping.

H3a: There is relationship between attitudes towards online shopping and shopping experience

H3b: There is relationship between attitudes towards online shopping and trust

H3c: There is relationship between attitudes towards online shopping and product perceptions

H4: There is relationship between intentions to purchase and technology-oriented factors, supposing that favorable perception about the technology-oriented factors is leading to profound intentions to purchase online.

H4a: There is relationship between intentions to purchase and usability

H4b: There is relationship between intentions to purchase and interactivity

H4c: There is relationship between intentions to purchase and web design

H5: There is relationship between intentions to purchase and consumer-oriented factors, supposing that favorable perception about the consumer-oriented factors is leading to profound intentions to purchase online.

H5a: There is relationship between intentions to purchase and shopping experience

H5b: There is relationship between intentions to purchase and trust

H5c: There is relationship between intentions to purchase and product perceptions

H6: Intentions to spend more time in the online store has impact on intentions to purchase online. It is supposed that if consumers spend more time in the online store their intentions to purchase will be higher.

H7: Buying frequently products online has impact on intentions to purchase online, supposing that higher frequency of buying products online lead to intentions to purchase online.

H8: Intentions to recommend the online store has impact on intentions to purchase online, supposing that when an online store is recommended, the consumers' intentions to purchase online increase.

H9: Online consumer behavior is related to intentions to purchase online sports apparel, it is supposed that the buying intention to purchase sport apparel online will affect the consumer final buying decision and actual buying behavior.

## IV. METHODOLOGY

In this paper quantitative approach was used while mapping out the customer online shopping of sport apparel to get insight into the main web-experience factors that customer takes into consideration when purchasing sport apparel online and to understand which web site elements drive users' attitudes and intentions towards buying from the web site sports apparel store. A structured – survey was designed and distributed online among 150 young university people selected at age of maximum 30 years old. In this study nonprobability sampling is used. to reach the data necessary to accomplish the purpose of this paper both primary and secondary data is use, primary data is collected through online survey, distributed on the web using Facebook as main channel to send the survey and collect the responses and the analysis of the final results of the investigations were used mainly the primary data sources from the employed online survey.

V. LIMITATIONS OF THE STUDY

This paper faces several limitations that could affect its scientific contribution, firstly, the theoretical sources from scientific articles mainly focused on the general online shopping consumer behavior without a specific field and the study was concentrated on online shopping behavior, but narrowed down to a specific field of buying sport apparel online. Thus, limited sources were used to support the research, meanwhile, through reviewing a large amount of previous relevant researches, it was figured out the similarity and difference of the sources, and collected the valuable ones to serve the present research. Secondly, the existence of time constraints had influenced the collection and the sample size and it was aimed to collect data, the results are resumed for this random sampling which does not give the possibility to generalize what is the consumer actual behavior towards online sports apparel shopping at large.

VI. ANALYSIS

Table 1 Results from Factor Analysis and Reliability Analysis

Variables	KMO	Bartlett's Test	Chronbach's Alpha	%Expl. Variance	Nº Component
Usability	0.861	0.000	0.932	83 %	1/Usability
Interactivity	0.789	0.000	0.865	71.27 %	1/Interactivity
Trust	0.734	0.000	0.853	77.72 %	1/Trust
Web Design	0.719	0.000	0.805	75.22 %	2/Web-Atmospherics and Web Content
Product Perception	0.825	0.000	0.909	78.72 %	1/Product Perception
Attitude*	0.845	0.000	0.915	74.78 %	1/Attitude

Note: \* item *indifferent* was eliminated

Table 1 shows that 3 of the variables are having excellent Cronbach's alpha levels –usability - 0.932; product perception – 0.909 and attitude towards online shopping – 0.915. There is no existence of bad consistency of the variables, the rest of the variables represent good levels of intern consistency. In terms of KMO test and the quality of the factor analysis good results were received, having obtained good levels for usability, product perception and attitude and reasonable levels for interactivity, trust and web design variable. Therefore, Bartlett's tests confirm this statement, representing 0.000 levels for each variable. Moreover, it can be concluded that five of the variables are unidimensional or they are composed by one component after the extraction process. The method applied is Varimax rotation and Principal Component Analysis. Only one of the variables *web design* is not unidimensional which encompasses two components (see table 2).

Table 2 Web Design Dimensional

Item	Component	
	1	2
1	.657	
2	.806	
3	.904	
4	.769	
5		<b>.838</b>
6		<b>.880</b>
<b>Extraction of % Variance</b>	<b>67.27</b>	<b>79.07</b>
<b>Alpha Chronbach</b>	<b>0.830</b>	<b>0.726</b>

Note: Extraction Method: Principal Component Analysis, Rotation Method: Varimax and Kaiser Normalization, Rotation converged in 3 iterations

The table 2 shows that they were extracted two components composing the web design scale. It is labeled them as: web atmospherics (encompasses items 1,2,3,4), web Content (encompasses items 5,6). Cronbach's alpha for the first component web atmospherics is 0.830 which is good level and for the second component web content is lower with 0.726 which presents reasonable level of reliability. The loadings obtained are showing very good levels for each variable, which means that they have high explanatory power. In contrast the only variable with low level of the *loadings* is the web design which encompasses 2 components as discussed before. After conducting new extractions of the sums of squared loadings by component separately it is observed that the total variance explained of web atmospherics and web content is 72, 55 %. As result from the explanatory factor analysis, it was removed only one item – *indifferent* from the scale elaborated for attitudes towards online shopping of sport apparel, because it was verified that this item had insignificance and the scale has equally better results without this item. Web design was factored into two main components “web atmospherics “and “web content”. When spared they represent higher levels of the consistency test and total explained variance levels. The rest of the variables and the scale items used are maintained, due to the very satisfactory results from the tests of consistency.

Table 3 Mean variable values

Variables	Mean	S.D
usability – Usability	4.2616	.88360
interactivity – Interactivity	3.9709	.86127
Web design– Web Design	.85384	4.1221
Shopexp –Shopping experience	3.5233	1.02586
trust – Trust	4.3992	.83677
prodperception – Product perception	4.2824	.82627
attitude – Attitude toward online shopping	3.1931	.86881
continueex – Intention to purchase	2.9540	1.19015
startinex – Start purchasing sport apparel online (intention to purchase)	1.1478	.85063
Freq – Frequency of using Internet	1.0261	.27975
buyprod – Buying products over Internet	3.000	2.06899
boughtexinex – Bought sport apparel online (experience / nonexperience shoppers)	1.6435	.48107
intrecommnd – Intention to recommend the online store	3.5529	1.18025

The table 3 represents the average values of the variables, the possible answers from the direct questions were codified with finite cardinal numbers (1 to 6). Likert scale was ordinated as 1-very unimportant to 5-very important. Thus, it was concluded that, in average, the surveyed people considered web technology – oriented factors - usability, interactivity and web design as important for online sports apparel site with means values: (4.26; 3.97; 4.12) and the customer web oriented – factors - shopping experience, trust and product perception were also considered, in average, as important and relevant for online sports apparel site (3.52; 4.39; 4.28).

Table 4 T-test For Independent Groups

Variable	Sig. (2-tailed)					Exp/ Unexp shoppers
	Gender	Age	Education	Work	Income	
Usability	.831	.720	.531	<b>.024</b>	.703	.750
Interactivity	.562	.614	.206	<b>.045</b>	.446	.584
Trust	.408	.337	.558	.243	.173	.380
Product Perception	.745	.967	.318	.069	.086	.604
Web Atmospherics	.823	.595	.229	.694	.879	.825
Web Content	.688	.975	.538	.226	.885	.681
Shopping Experience	<b>.008</b>	.528	.237	.368	.844	<b>.018</b>
Attitude	.566	.476	.191	.362	.420	.086

It can be observed from table 4 that the probability for the independent group “gender” is  $.008 < .05$  which means that the difference between males and females for the factor *shopping experience* is statistically significant, or that gender influences this Web Experience element. For the groups “work” on the variable *usability* it is verified that the differences into the groups are also statistically significant, with probability levels  $.024$  in other words the controllable variable working status is influencing the Web Experience element *usability*. Lastly, the difference into the groups of work with probability  $.045$  for the variable *interactivity* is verified to be also statistically significant. Moreover, it was tested the difference into the independent groups – experienced and non-experienced shoppers. The output shows that the difference into this group is statistically significant with probability level  $.018$  for the variable *shopping experience*, measured by the variable satisfaction, meaning that the level of shopping experience influences to a great extent the type of shopper, which is evident.

Table 5 Group differences between variables

			Mean	SD
Usability	WORK	Students	3.91	1.075
		Employees	4.41	.7727
	INCOME	Less than 1000 euros	4.20	.99527
		More than 1000 euros	4.28	.83539
Interactivity	WORK	Students	3.69	.96900
		Employees	4.08	.81367
Online Experience	GENDER	Female	3.28	1.17260
		Male	3.83	.68773
	Previous Online Experience	Non experience shopper	3.28	1.02552
		Experience shopper	3.80	.96609

From table 5 it is concluded that groups of males obtained better results for their online shopping experience – mean 3.83 versus female mean 3.28, or shopping experience is important, in average, employees who received higher means for the factor usability 4.41 versus mean for students 3.91, so usability factor is important, in average, more for the employees than for the students. Also, employees considered web factor interactivity to be more important, in average, than student did, the first received higher mean results than students: 4.08 versus mean for students 3.69. Lastly it is observed than from our sampling, people with higher income considered web experience factor usability more influential when buying sports apparel online that the people with lower income (This was verified through the comparison of the means 4.28 versus 4.20).

### 6.1 Models for Attitudes towards online shopping

The models for attitudes towards online shopping require testing of multiple linear regressions. For each model was used *Stepwise* method, so as to maximizing the number of the explanatory variables. The results from the models are presented in the following: *Attitudes towards online shopping influencing Intentions to purchase online*-The first model considering the hypothesis proposed will test to what extent the attitudes towards online shopping influence intentions to purchase online. Therefore, it was used bivariate linear regression, because in this model only two variables are tested.

Table 6 Linear Regression Attitudes/Intention to purchase

Model 1	Unstandardized Coefficients		Standardized Coefficients			
	Beta	Std. Error	Beta	T	sig	VIF
Constant	1.420	.456		3.114	.003	
Attitude	.486	.138	.360	3.535	.001	1.000
<b>Dependent Variable: intention to purchase</b>						
<b>Adjusted R<sup>2</sup>: 0.119 df =105 F = 12.493</b>						

The model Table 6 was tested at level of its statistical significance, by examining the F statistic with critical value 3.92 which is lower than the value of F = 12.493, implying the rejection of null hypothesis. The *p* - value has to assume values less than 5%, i.e. the hypothesis that the predictor variable *attitude* is not explanatory is zero. *p* - Value is 0.001, assisting by the standardized coefficient Beta ( $\beta = 0.360$ ) which is positive, meaning that the positive attitudes lead to higher intention to purchase. Adjusted R<sup>2</sup> is 11.9%, standing for the variation of the independent variable *attitude*, explains 11.9% of the variation of the dependent variable *intentions to purchase*. It shows that the model has good, but not very satisfactory explanatory capacity. The value of VIF is 1,000, which value according to Marocos, 2007 means that the model is perfect, or there is no multicollinearity between the variables.

Table 7 Pearson Correlation Attitudes/Intention to purchase

		Attitude	Int Purchase
Attitude	Pearson Correlation	1	.360**
	Sig. (2-tailed)		.001
**. Correlation is significant at the 0.01 level (2-tailed).			

In order to reinforce and confirm the results obtained from Linear Regression Model 1, it was tested Pearson Correlation Analysis, the output shown in table 7 means than at significance level of 1% the relationship between the variables is a positive and on medium level, and *p* - value is less than 0.001, in other words there is evidence for associations between the two variables. The proposed hypothesis was H1 is validated, but partially confirmed because of the lower value of R<sup>2</sup> = 11.9%.

### 6.2 Technology - Oriented Factors influencing Attitudes

The second model tests the extent to which the technology - oriented factors influence the consumers` attitudes towards online shopping. Linear Regression was used to understand if the dependent variable *attitude* is influenced by the independent variables: usability, interactivity and web design. Stepwise method was applied for excluding variables which don`t present statistical significance for the model.

Table 8 Linear Regression Technology-Oriented Factors /Attitudes

	Standardized Coefficients		
	Beta	T	sig
Constant		3.114	.080
Usability	.069	.634	.528
Interactivity	-.117	1.080	.283
Webatm	.136	1.440	.154
Webcontent	.603	3.535	.000
<b>Dependent Variable: Attitude</b>			
<b>Adjusted R<sup>2</sup>: 0.356 df =105 F = 47.394, VIF = 1.000</b>			

The table 8, which was personally elaborated, using Linear Regression and analyzing the results from Anova Model, adjusted R<sup>2</sup> and F statistics values, shows that for this model only 1 variable from technology-oriented factors (web content) is passing the t - test of significance (.000) and it is the one that possesses explanatory power over attitudes towards online shopping. The standardized coefficient Beta is  $\beta = 0.603$ , meaning that the factor “web content” has positive impact on attitudes towards online shopping. Critical value 95% level of significance is 2.45, which is lower than  $F = 47.394$ . The *p-value* is .000, implying the rejection of the null hypothesis. The adjusted R<sup>2</sup> is 35.6 %, meaning that the variation of the most influential independent variable *web content*, explains 35.6 % of the variation of the dependent variable *attitude*. Thus, it is concluded that the model is significant, the variables usability and web atmospherics have positive  $\beta$  coefficients, in difference to the variable interactivity that has  $\beta = - 0.117$ , but any of this variables show significance for this model. Owing to the results obtained for the indicator VIF = 1,000, it is estimated that there is no multicollinearity between the variables. The relationship between attitude towards online shopping and the web elements usability, web atmospherics and web content is positive and on medium level, with significance at .000, .001 and .000 level. The Web experience element interactivity has *p-value* > 0.01, there is evidence of lack of association between the variables interactivity and attitudes towards online shopping, in spite of the positive (.277) relation. However, any of the last mentioned variables show enough explanatory capacity that is significant for the dependent variable *attitude*.

Table 9 Pearson Correlation Technology-Oriented Factors/Attitudes

		Attitude	usability	interactivity	webatmosp	webcontent
Attitude	Pearson Correlation	1	.396**	.277**	.346**	.601**
	Sig. (2-tailed)		.000	.010	.001	.000
**. Correlation is significant at the 0.01 level (2-tailed).						

The proposed hypotheses H2 affirming that the attitudes towards online are related to technology-oriented factors is partially confirmed, due to the fact that one of the elements was estimated to be very significant – web content (H2e), which hypothesis is equally confirmed. Thus, the well perceived web element web content is leading to good attitudes towards online shopping. Relatively to H2a and H2b - they were rejected, because the variables usability and interactivity don't show significance for the model. Even more, interactivity presents negative  $\beta$  coefficient, which can be analyzed that negative interactivity (bad service quality, negative recommendations about the online store or brand) influences negatively customers` attitudes. About H2c – there is relationship between attitudes towards online shopping and web design, the last variable was divided into two components – web atmospherics and web content. Therefore, two new hypotheses derived from the regression analysis which were not previously included in the designed research hypotheses: *H2d*: There is relationship between customer`s attitudes and web atmospherics *H2e*: There is relationship between customer`s attitudes and web content Concluding from Linear regression model 2, H2d was rejected, because of the low explanatory capacity of web atmospherics for the variation of the dependent variable attitude. However, H2e is confirmed, as the strongest hypothesis for this model. The results show that web content is the most influential factor for attitudes towards online shopping, though, H2c is partially confirmed.

### 6.3 Consumer - Oriented Factors influencing Attitudes

The third model tests to what extent the consumer - oriented factors influence the consumers` attitudes towards online shopping. Linear Regression was used to analyze if the dependent variable *attitude* is influenced by the variables: shopping experience, trust and product perception. Stepwise method was applied.

Table 10 Linear Regression Consumer-Oriented Factors /Attitudes

	<i>Standardized Coefficients</i>		
	Beta	T	sig
Constant		1.460	.147
shopexp	.167	1.756	.083
trust	.565	6.270	.000
prodpercep	.181	1.195	.253
<b>Dependent Variable: Attitude</b>			
<b>Adjusted R<sup>2</sup>: 0.311 df =103 F = 39.315 VIF = 1.000</b>			

Table 10 shows that from three web experience elements composing the customer - oriented factors (online experience, trust and product perception) only trust is representing significance for the model (.000). The rest of the variables are not fitting at the *p-value* < 5% level (.083 and .253), consequently they were excluded from the model as they didn't show enough explanatory capacity for the variation of the dependent variable attitudes, by examining the F statistic with critical value 2.68 which is lower than the value of  $F = 39.315$ , implying the rejection of null hypothesis. Adjusted R<sup>2</sup> is 31.1%, meaning that the variation of the independent variable *trust*, explains 31.1% of the variation of the dependent variable *attitude*. Thus, it is concluded that the model is significant. Owing to the results obtained for the indicator VIF = 1,000, it is estimated that there is no multicollinearity between the variables it is concluded that the relationship between attitude towards online shopping and the factors shopping experience, trust and product perception is positive and on medium level . The relationships are significant at .000, .000 and .001 level, hence, there is evidence of

association between the variables, however, as it was referred before, the variables shopping experience and product perception don't show enough explanatory capacity for the model.

Table 11 Pearson Correlation Customer-Oriented Factors/Attitudes

		Attitude	shopexp	trust	prodpercep
Attitude	Pearson Correlation	1	.347**	.565**	.519**
	Sig. (2-tailed)		.001	.000	.000
**. Correlation is significant at the 0.01 level (2-tailed).					

The proposed hypotheses H3 - attitudes towards online is related to customer-oriented factors is partially confirmed, hypotheses H3a and H3c are rejected, since the variables shopping experience and product perception online don't pass the t-tests of significance. And H3b is confirmed, due to the fact that the web element trust shown to be the most important for shaping attitudes towards online shopping, thus, trust as favorable perceived web experience element is leading to good attitudes towards online shopping. The T-test for Group Statistics results have previous online experience with mean value 3.5250, in contrast to non-experienced having mean value 3.1702, therefore, more experienced the shoppers are, more positive is to be their attitudes towards the shopping of online sports apparel. Confirming the H1 that attitudes influence intentions to purchase it can be concluded that more experience yields for higher intention to purchase, contrary, for the non-experienced shoppers even we confirmed to have positive attitudes towards online shopping of sports apparel, it can affirm that this will lead to higher intentions to purchase sports apparel online.

#### 6.4 Models for Intentions towards online shopping

**Technology - Oriented Factors influencing Intentions to purchase**-The following model tests the extent to which the technology - oriented factors influence the consumers' intentions to purchase sports apparel online. Linear Regression was used to examine if the dependent variable *intention* is influenced by the variables: usability, interactivity and web design. *Stepwise* method was applied for excluding variables which don't present statistical significance for the model. As it was verified after the factor analysis, the variable web design showed to be constructed by two components - web atmospherics and web content, so the regression was elaborated for the both of the components.

Table 12 Linear Regression Technology – Oriented Factors/Intentions to purchase

	<i>Standardized Coefficients</i>		
	Beta	T	sig
Constant		1.758	.082
Usability	.102	.797	.428
Interactivity	.026	.201	.841
Webatm	-.181	-.1635	.106
Webcontent	.342	3.320	.001
<b>Dependent Variable: Attitude</b>			
<b>Adjusted R<sup>2</sup>: 0.107 df=105 F = 11.022, VIF = 1.000</b>			

After the regression only one web experience element from technology-oriented factors (web content) passed the t - test of significance with 0.001 level of significance and it is the one that possesses explanatory power over attitudes towards online shopping, meaning that the hypothesis that the predictor variable "*web content*" is not explanatory is zero. The variables "usability" and "interactivity" have positive  $\beta$  coefficients, in difference to "webatm" which has negative  $\beta = -0.181$ , but any of this variables show significance for this model, the model was tested at level of its statistical significance, by examining the F statistic with critical value 2.45 which is lower than the value of  $F = 11.022$ , implying the rejection of null hypothesis. The standardized coefficient Beta is  $\beta = 0.342$ , meaning that "webcontent" factor has positive impact on intentions and adjusted R<sup>2</sup> of the total model is 10.7%, meaning that the variation of the regression variable "*webcontent*", explains 10.7% of the variation of the dependent variable "*intentions to purchase*". It shows that the model has good, but not very satisfactory explanatory capacity. From the results obtained for the indicator VIF = 1,000, it is estimated that there is no multicollinearity between the variables. To test the extent to which the variables are related Pearson Correlation is used it is observed that variables usability and interactivity have positive and on medium level of correlation with intentions to purchase. The correlation is significant at 0.05 levels, the web content has positive and medium strong relation with  $p < 0.01$ , here the correlation is significant at 0.01 levels, lastly, the variable web atmospherics shows *p-value*  $0.835 > 0.05$ , and shows negative relationship with intentions to purchase it is concluded that the last variable doesn't have any associations with intentions to purchase

Table 13 Pearson Correlation Technology-Oriented Factors/Intentions to purchase

		Attitude	usability	interactivity	webatmosp	webcontent
intpurchase	Pearson Correlation	1	.263*	.217*	-.023	.336**
	Sig. (2-tailed)		.014	.045	.832	.002
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

The proposed hypotheses H4 affirming that intentions to purchase are related to technology-oriented factors is partially confirmed, because three of the technology-oriented factors (usability, interactivity and webatm) shown do not have enough explanatory capacity for the dependent variable “intentions to purchase”, relatively to H4a and H4b - they are rejected, because in Linear Regression they were excluded from the overall model, considered non-significant, about the H4c – there is relationship between intentions to purchase and web design, the last was divided into its two components – web atmospherics and web content, therefore, two new hypotheses derived from the regression analysis, which were not included previously in the design of the research hypotheses: H4d: There is relationship between customer`s intentions to purchase and web atmospherics and H4e: There is relationship between customer`s intentions and web content. Concluding from Linear regression, H4d was rejected, because of the insignificance of web atmospherics and its low explanatory power over the “intentions to purchase”. It is observed that “webatm” coefficient  $\beta$  is negative due to the bad web atmospherics of an online store are influencing negatively intentions to purchase and the results show, the web content is the most influential element for intentions to purchase online sports apparel, consequently H4e is confirmed, or favorable perception about the web experience element web content is leading to profound intentions to purchase online, though, it can be concluded that H4c is partially confirmed.

Table 14 Linear Regression Consumer – Oriented Factors/ Intentions to purchase

	Standardized Coefficients		
	Beta	T	sig
Constant		3.618	.001
shopexp	.351	3.435	.001
trust	.104	.955	.342
prodpercep	.139	1.298	.198
<b>Dependent Variable: intentions to purchase</b>			
<b>Adjusted R<sup>2</sup>: 0.113 df =103 F = 11.797 VIF = 1.000</b>			

Table 14 shows that from three variables composing the customer - oriented factors (shopping experience, trust and product perception) only “shopexp” is representing significance for the model (.001), meaning that the hypothesis that the predictor variable “shopexp” is not explanatory is zero. The rest of the variables don`t show enough explanatory capacity for the model having significance levels - .342 and .198 greater than 0.05, by examining the F statistic critical value 2.68 which is lower than the value of F = 11.797, implying the rejection of null hypothesis, adjusted R2 is 11.3%, meaning that the variation of the independent variable *shopping experience*, explains 11.3% of the variation of the dependent variable *intention to purchase.*, thus, it is concluded that the model is significant, but doesn`t possess big explanatory power.

Table 15 Pearson Correlation Consumer-Oriented Factors/Intentions to purchase

		intpurchase	shopexp	trust	prodpercep
intpurchase	Pearson Correlation	1	.351**	.216*	.285*
	Sig. (2-tailed)		.001	.045	.030
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

The results obtained for the indicator VIF = 1,000, show that there is no multicollinearity between the variables, from the interpretation of table 15 it is concluded that the relationship between intentions to purchase and the web experience factors shopping experience, trust and product perception is positive and on medium level. The correlation between intention to purchase with trust and product perception is significant at 0.05 level, where the *p - values* are .045 and .030. “Shopexp” has relatively strong relation with “intpurch” with  $p(0.001) < 0.01$ , so, each variable is associated with customers` intentions to purchase online sport apparel, but it is referred in the regression analysis, the variables “trust” and “prodperception” don`t show enough explanatory capacity for the model. The proposed hypotheses were: H5 is partially confirmed and H5a is validated and confirmed too, showing positive  $\beta$  coefficient of “shopexp” = 0.351 and relatively strong relationship with intentions to purchase, so, the well perceived web experience element shopping experience lead to higher intentions to purchase online, in relation to H5b and H5c, they are rejected, because in the model of linear regression they were excluded from the overall model, considered non-significant and not enough explanatory for the variation of the dependent variable – intentions to purchase.

Table 16 Linear Regression for Intentions to purchase and its determinants

	Standardized Coefficients		
	Beta	T	sig
Constant		3.618	.001
spendtime	.078	.776	.440
buyprod	.050	.505	.615
intrecommnd	.506	5.379	.000
<b>Dependent Variable: intentions to purchase</b>			
<b>Adjusted R<sup>2</sup>: 0.247 df =103 F = 28.937 VIF = 1.000</b>			



### 6.5 Intentions to spend more time

If intention to spend more time at the online store “spendtime” , frequency of buying general products “buyprod” and intention recommend the online store “intrecommend” impact the “intention to purchase online sports apparel”. Linear Regression Model shows that only “intrecommend” has strong explanatory capacity over the predicted variable intention to purchase (.000), i.e. the hypothesis that the predictor variable “intrecommend” is not explanatory is zero and the other two variables don’t show enough significance (.440 and .615), so there were excluded from the model (see table 16). The model was tested at level of its statistical significance, by examining the F statistic with critical value 2.45 lower than  $F = 28.937$ , implying the rejection of null hypothesis, adjusted R2 is 24.7%, meaning that the variation of the independent variable *intrecommend*, explains 24.7% of the variation of the dependent variable *intentions to purchase*, thus, it is concluded that the model is significant and accordingly to the results, more recommendations the consumers make about the online store, the intentions to purchase are increasing, it is observed that don’t exist problems with the multicollinearity between the variables (VIF=1.000). The proposed hypotheses H6 and H7 are rejected, since “spendtime” and “buyprod” don’t have significance for the model, they don’t show explanatory capacity over the dependent variable “intentions to purchase”. Thus, spend time in the online store and buying products online frequently were not well perceived by the respondents because of that they don’t provoke higher intentions to purchase sports apparel online. Only H8 is confirmed, owing to the fact that the beta coefficient of “intrecommend” is  $(\beta) = 0.506$  showing good explanatory power over intentions to purchase online. **Online Shopping Intentions and Actual Consumer Behavior-** on the model of TPB suggests that attitudes towards online shopping bring about intentions; and intentions towards online shopping results in actual consumer behavior.

Table 17 Linear Regression Actual Consumer Behavior / Intentions to purchase

	Standardized Coefficients		
	Beta	T	sig
Constant		3.618	.001
Continuepurch	.351	3.435	.001
Start	.050	.505	.615
intrecommend	.506	5.379	.000
<b>Dependent Variable: intentions to purchase</b>			
<b>Adjusted R<sup>2</sup>: 0.247 df =103 F = 28.937 VIF = 1.000</b>			

The consumers’ actual behavior, expressed through specific actions of buying, was measured in the research through questions about previous behaviors towards online shopping, these were basically questions 8, 9 and 11, multiple linear regressions were used to maximize the understanding of the implicit relationship between the variable “boughtprod” measuring actual behavior and each of the shown intentions towards online shopping – continue purchase, start purchasing and intention to recommend the online store. The model was tested at level of its statistical significance, by examining the F statistic with critical value 2.45 which is lower than the value of  $F = 11.797$ , implying the rejection of null hypothesis. Two of the independent variables “continuepurch” and “intrecommend” passed the t – test of significance with 0.001 and 0.000 level of significance, or the hypothesis that the independent variables “continuepurch” and “intrecommend” are not explanatory is zero. Their Beta coefficients are positive (.351 and .506), from where it is estimated that higher intentions cause positive actual online behavior, adjusted R2 is 12.3%, meaning that the variation of the independent variables “*continuepurch*” and “*intrecommend*”, explains 12.3% of the variation of the dependent variable “*boughtprod*”. It shows that the model has good, but not very satisfactory explanatory capacity, the value of VIF = 1.000 prove that there is not multicollinearity between the variables and the proposed hypothesis

H9 is partially confirmed, since one of the constructs of the intentions to purchase (“start”) shows small explanatory capacity for the overall behavioral model and it can be concluded that the higher buying intention to purchase sport apparel online affects positively to consumer’s final buying decision and actual buying behavior.

## VII. CONCLUSIONS

With the blooming of online shopping activities, it is essential to understand the customers` online shopping behavior, improving the important specific factors influencing the online shopping and overcoming the potential drawbacks will help the online retailers become more competitive. Through the test of this paper it was found that in the technology-oriented factors “web content” is the main specific web element that influences customers` attitudes towards online shopping of sports apparel and shape higher intentions to purchase online sports apparel; while in the customer - oriented factors “trust” is the main specific web experience element that influences customers` attitudes towards online shopping of sports apparel and “shopping experience” influences positively the consumers` intentions to purchase online sports apparel. Concerning with the relationship between attitude and buying intention, firstly, the findings showed that for inexperienced shoppers, their attitudes cannot decide their buying intention and to bring out the final actual buying behavior. In contrast, the experienced shoppers` attitudes towards online shopping of sports apparel significantly affect the buying intention and final actual buying behavior, furthermore, a positive attitude lead to a strong willingness to continue to buy sports apparel online. Secondly, the result indicates that the buying intention of experienced shoppers are quite strong, because the willingness of continuing to buying sports apparel online and highly reflect their buying intention, more than half of the respondents said they definitely would like to continue to purchase sports apparel online in the future.

## REFERENCES

### Works Cited

- Aizen. (1991). The theory of planned behaviour . *organizational behaviour and human decision process* , 179-211.
- Arnett, J. (1995). Adolescents uses of media for self socialization . *Journal of Youth and Adolescence* , 519-533.
- Constantines E. (2004). influencing the onliner consumers behaviour: the web experience . *Internet Resaerch*, 111-126.
- Drew, S. (2003). Strategic Users of E-Commerce by SMEs in the east of England . *European Mangement Journal* , 79-88.
- Hoffman, N. &. (1996). Commercial Scenarios for the Web: opportunities and challenges . *Journal of Computer Mediated Communications*, 1-19.
- Madu, C. a. (2002). Dimensions of e-quality . *International journal of quality & reliability Managment* , 46-58.
- Pitt, L. B. (2002). The internet and the birth of real consumer power. *Business Horizons* , 7-14.

### Bibliography

#### Books

- [1] Creswell, J.W. (2007). *From Qualitative inquiry and research design : Choosing among five approaches*. Thousand Oaks, CA: Sage
- [2] Kent, R. (2007). *Marketing Research: Approaches, methods and application in Europe*. Rotolito. Italy.
- [3] Kotler, P. (2003), *Marketing Management*, 11th ed., Prentice-Hall International Editions, Englewood Cliffs, NJ.
- [4] Laudon, K.C. & Traver, C. G. (2008). *E-Commerce: Business, Technology, Society*. 4<sup>th</sup> Edition. Harlow: FT Prentice Hall
- [5] Malhotra, N.K., Rocha, I. Laudisio, M.C., Altheman, E., Borges, F.B. (2005). *Itrodução à pesquisa de marketing*. S.Paulo, Prentice Hall
- [6] Solomon M. R., (2004), *Consumer behaviour: buying, having, and being*, 6th International edition, *Pearson Education International*.
- [7] Saunders, M., Lewis P. and Thornhil A., (2003) *Research Methods for Business students* 4<sup>th</sup> Ed. Harlow: Prentice Hall

#### Articles

- [1] Ahmad, S., (2002). Service failures and customer defection: a closer look at online shopping experiences. 12(1), 19-29
- [2] Allred, C.R., Smith, S.M. & Swinyard , W.R. ( 2006) E-shopping lovers and fearful conservatives: a market segmentation analysis “ *International journal of retail & distribution management* 34(4/5),p. 308-333
- [3] Ballantine, P.W. (2005) “ Effects on interactivity and product information on consumer satisfaction in an online retail setting” *International journal of retail and distribution management*,33(6), p.461-471
- [4] Demangeot, C. & Broderick, A.J. (2007) “ Conceptualising consumer behavior in online shopping environment” *International journal of retail and distribution management*, 35 (11), p. 878-894
- [5] Dennis,C., Fennech, T.& Merrilees, B. (2004) *E-Retailing*. Oxon: Routedledge Fishbein, M. & Ajzen, I. (1975) “ Belief, Attitude, Intention and Behaviour” An introduction to theory and research, MA: Adison Wesley
- [6] Fiore, S.G & Kelly, S. (2007)” Surveying the use of sound in online stores “ *Journal of retail & distribution management* 35(7), p.600-611
- [7] Fransi, A.C. & Viadiu, F.M. (2007) A study of e-retailing management: analyzing the expectations and perceptions of Spanish consumers” *International Journal of consumer studies* 31(6),p. 612-633
- [8] Kim, H.H., & Kim, J. (2008). The effect of offline brand trust and perceived internet confidence on online shopping intention in the integrated multi-channel context. *International Journal of Retail & Distribution Management*, 37 (2), p. 126-141
- [9] Li, D., & Qiu, L. (2008). Applying TAM in B2C E-Commerce Research: An Extended Model. *Tsinghua Science and Technology*, 13(3), 265-272
- [10] Novak, T., Hoffman, D., Yung, Y. (2000). Measuring the customer experience in online environments: A structural modeling approach. *Marketing Science*, 19 (1) p. 22–42
- [11] Smith A. D., (2005), “Exploring online dating and customer relationship management”, *Online Information Review*, Vol.29, No.1, p.18-33
- [12] Smith A. D.,& Rupp, W.T. (2003) “ Strategic Online Consumer Decision making: leveraging the transformational power of the internet” *Online Information Review*, 27 (6), p. 418 - 432
- [13] Thurban, E., King, D. McKey, J. Marshall, P. Lee, J. & Viehlan, D. (2008) *Electronic commerce: a managerial perspective*. New Jersey: Pearson Education
- [14] Vijayasaraty and Jones (2000)” Print and Internet catalog shopping: assessing attitudes and intentions *Interent Research*, 10(3), p. 191-202

**Online Sources**

- [1] Allen, C. (2000) "Effective online merchandising techniques" The ClickZ Network available at [http://www.clickz.com/mkt/precis\\_mkt/article.php/832981](http://www.clickz.com/mkt/precis_mkt/article.php/832981)
- [2] Chaffey, D., (2007) " E-business and E-commerce Management" 3rd Ed., Marketing Insights. Available at [http://www.sadatacademy.edu.eg/Jedah\\_mokrarat/7aseb.../E.../SAMSch10.pdf](http://www.sadatacademy.edu.eg/Jedah_mokrarat/7aseb.../E.../SAMSch10.pdf)
- [3] <http://www.bcs.org/content/conWebDoc/38555>
- [4] <http://www.free-press-release.com> –
- [5] <http://dataplusinsight.com/2011/>