A study of the impact of the individualist versus collectivist dimension on ecommerce website design in the Indian context

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ABSTRACT

Though the cultural conglomeration of India makes it difficult to study consumption patterns as a whole, yet with the help of past research as a stepping stone the present paper attempts to arrive at a referential if not a conclusive understanding of the purchase behaviour trends of this nation. The research in the context of national cultures as suggested by Greet Hofstede's[1] (1984) model of cultural dimensions indicate that the Indian national culture scores a low 48 on the individualism versus collectivism index, thus indicating that the society places much emphasis on group activities as compared to individual preferences. However this factor has not yet been emphasized much in the user experience design of the major e-commerce platforms functioning within the country at present. "Local adaptation should be based on a complete understanding of a customer group's culture". [2].While the offline purchase behaviour of the Indian consumers has been traditionally based on a system of trust and referrals from friends and acquaintances, there is however little scope to emulate such behaviour in an online environment as yet. For the creation of a strong and sustainable consumer relationship trust is undeniably one of the most essential factors. This paper tries to evaluate how purchase decisions and early adopter characteristics in India can be affected by the low individualist index and the traditional model of buying through trusted referrals and suggestions.

Categories and Subject Descriptors

H.1.2 [**Information Systems**] User/Machine Systems - *Human Factors.*

General Terms

Design, Experimentation, Human Factors, Theory, Verification.

Keywords

1. INTRODUCTION

With the internet fast becoming the locus of consumerism it has been observed by marketing experts that a parallel can be drawn between real life and online consumer behaviour while there also remains an observed set of dissimilarities between the two [3]. It may not be an understatement to say that there is an imminent need of identifying these patterns of similarity and dissimilarity in order to increase business online and also to create better experiences. Although it is often observed by web analysts and experts that the worldwide web is by nature "global"[4], it still remains an undeniable fact that the users of the worldwide web remain influenced by cultural affects.

While a major share of the ecommerce websites with an annual growth rate of 20 % originally venture out of the United states, the market with the maximum growth pace remains in Asia (Global Market report).Therefore it becomes essential that the dimensions of local culture be put to due consideration while making e-commerce design decisions. While it is the goal of the smart marketer to identify the needs of the consumer it is also to be considered that such needs arise only as a consequence of cultural implications and societal expectations of the consumers [5]."It is important for marketers to pay close attention to the values of a particular culture, as cultural values determine the modes of conduct and end states of existence for individuals"[6]

2. BACKGROUND

The current paper is based on the past research in the field of peer influence on buying decisions and the evolution and descent of group buying as a web marketing mechanism throughout the initial years of the e-commerce era.

2.1 The group business model

Research conducted by several experts from different disciplines during the late nineties had predicted that the group buying model would be the ideal model for the upcoming century. However this phenomenon could not live up to its expectations and observed an early downfall [7].

The basic advantages of the group buying business model are as follows:

1) Customers interact over similar products and therefore promote a faster building of trust.
2) Customers cooperate over buying decisions leading to wholesome interactive shopping experiences.
3) It promotes the spreading of the electronic word of mouth.
4) Sellers are able to give more discounts due to larger number of orders placed.

2.2 Information cues.

By nature the internet is loaded with disparate and intangible information which makes it particularly difficult for users when it comes to making purchase decisions. Past literature suggests that under such situations users become more dependent on the nearest available information cues than they would have been in a real world situation.

Such cues include:

i) Electronic editorial recommendations[8]
ii) Perceived cost of information[9]
iii) Recommendations from fellow users[10]

Several marketing researches also reveal that communication has a strong positive influence on purchase decisions particularly amongst the younger set of users [11]. With focus on this particular type of information cues we tried to assess the Indian user population on their motivation for online consumption.

3. OBJECTIVE

With the boom of ecommerce in the Indian subcontinent it has become essential to look into the local culture so as to correctly identify the future trends. However keeping in mind the earlier failure of the group buying business model in the global arena one needs to tread cautiously.

The objective of the current paper is to investigate the viability of reintroduction of the group buying business model in the Indian ecommerce horizon owing to the inherently collectivist nature of the Indian society.

4. METHODOLOGY

A sample of 40 students both male and female of the age-group 22-27(both inclusive), from all over the country were presented with three different ecommerce website layouts which had very similar design and layouts varying only in terms of the kind of feedback available. These students were then asked to purchase an unknown "Product X" from one of these three websites based on the available information.

The first website[1] (Website 1) had only editorial reviews of the product, the second website (website 2) had user reviews and the last website (Website 3) had the option of obtaining live feedback from friends and family. Users were then asked to review all three websites and then decide on any one website to buy the Product X from. The users were also requested to record the kind of

recommendations they would follow in case of a set of 5 different hedonic and utilitarian shopping goals.

4.1.1 Hypothesis testing

H_o= Among the young Indian consumer population, there is no statistically significant preference for ecommerce websites which provide live shopping recommendations from friends as an added feature over those ecommerce websites which only provide editorial reviews and reviews from users.

H_1 = There is a statistically significant preference amongst the young Indian online consumer to prefer websites with live friend recommendations as an added feature over websites which only provide user and editorial reviews.

The data on the preference pattern of users after reviewing the websites with and without live recommendation from friends, may be arranged as follows:

Table 1. Observed preference distribution

	Websites with live recommendations	*Websites without live recommendations*
Expected value e_i	16	16
Observed value o_i	28	8

The problem with three choices of variables has a d value of (3-1=) 2.

Therefore as per $X^2 = \sum (o_i - e_i)^2 - e_i$

the value of X^2 becomes 9 with the corresponding p > 0.025 indicating a significant difference. Hence the null hypothesis may be safely rejected.

The results from the Chi-squared test indicate that there is a potential for introduction of 'live friends recommendations' as an additional feature in the future design of ecommerce websites in order to obtain competitive edge over the currently functioning ecommerce websites. This kind of a website strategy is a vast ocean yet to be explored in the Indian context.

However it is still difficult to predict whether such preference exhibited under the experimental conditions are simply due to an interest aroused by an additional feature or a long lasting feature that could become a basic necessity for future ecommerce design.

To explore further the users were asked about their preference of recommendation for several utilitarian as well as hedonic shopping objectives and the results yielded an interesting set of data.

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[1] Refer Appendix-I for sample web pages from the experimental setup.

Table 2. Preferences based on shopping objectives

| Shopping Goal	Preferred recommendation type			
	User reviews	Live recommendation from friends	Mix of both	None
Electronics	5	5	23	3
Apparel	2	12	6	16
Wellness products	7	4	18	7
Books	5	6	12	13
Services / repairs	7	8	19	2
Insurance Policies	3	7	21	5
Furniture	2	3	15	16

4.2 Observation

In the sample survey the products had been grouped as Electronics, Apparel, Wellness Products, Books, Services and Repairs, Insurance Policies and, Furniture. The survey results show that for six out of seven of these groups people have rated live recommendation over user reviews. However, the option of a mix of live recommendation and user reviews, have been marked twice over either in all of the cases. While the disparity between the markings of user reviews and live recommendation is not much in the case of the other six product categories, apparel shows a steep preference for live recommendation over user reviews.
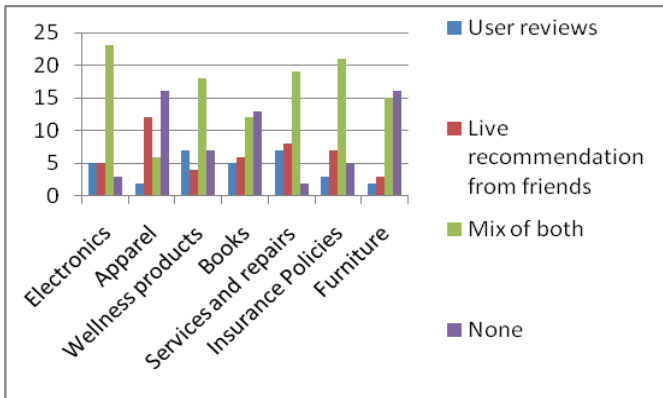
Figure 1. Preferences based on shopping objectives

Another mentionable observation is that for any kind of product the live recommendation function is a more appealing concept for women. While both the sexes show an 18% acceptance of the live recommendation function, women show a 52% over 37% in men, preference for a mix of user reviews and live recommendation.

It is also worth observing that men (33%) prefer to shop without any kind of recommendation or review much more than women (18%).
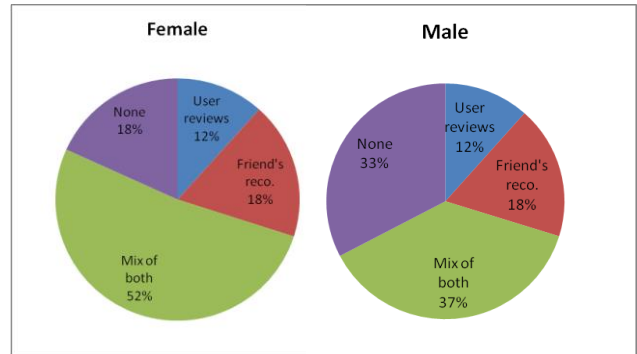
Figure 2. Distribution of choices based on gender.

4.3 Inference

For ecommerce websites focussing on apparel, the live recommendation model can be introduced immediately and without the user reviews section, as the data shows a clear propensity for customers to go for live recommendation over user reviews. For every other group of product since the option of a mix has been marked much higher than either and user reviews and live recommendation show a close marking respectively, hence it is clear that in these cases the live recommendation function cannot be introduced as a singular function but must be introduced as a parallel function to user reviews.

It can also be arrived at that the live recommendation function is more marketable to women than men as women show a 52% preference over 37% in men, for a mix of user reviews and live recommendation. Also, as men (33%) prefer to shop without any kind of recommendation or review much more than women (18%), which means that women depend more on reviews and recommendations hence in any case the live recommendation function is more acceptable and marketable to the female segment. The best case scenario to introduce which would be an e-commerce website focussing solely on apparels or apparels and accessories, as that product category has shown the highest marking for live recommendation.

The research however, taking into account, that the survey has been conducted targeting a very specific market, has shown results which go on to substantiate the hypothesis made at the beginning of this research.

5. Conclusion and Future Work

While the findings of this research indicate that there is scope for the development of collectivist group shopping ecommerce sites in India, there is a need to conduct further empirical research to correctly identify the shopping motivations based on shopping goals, since the current data obtained is only indicative due to limitations of the experimental setup. It would also be interesting to study how this kind of group shopping experience may be created within the framework of pre-existing ecommerce websites. The findings from this research opens up new scope for designers to create better ways of interaction and socialization over ecommerce sites thus paving the way for a whole new genre of social-commerce websites.

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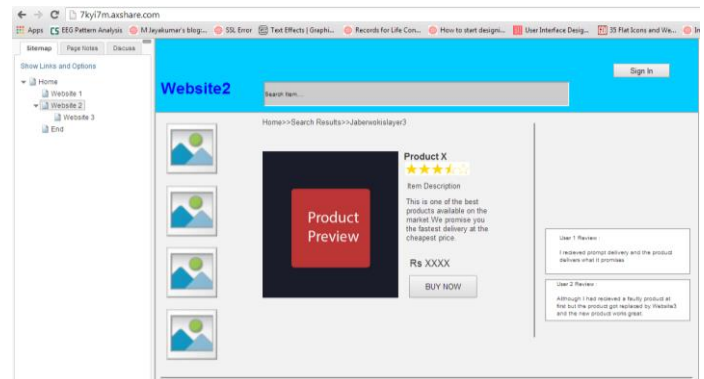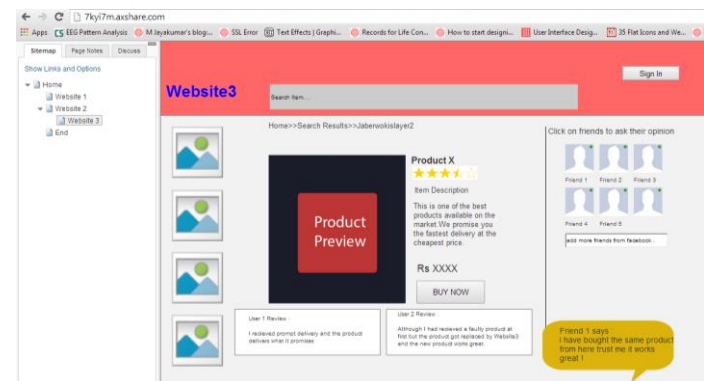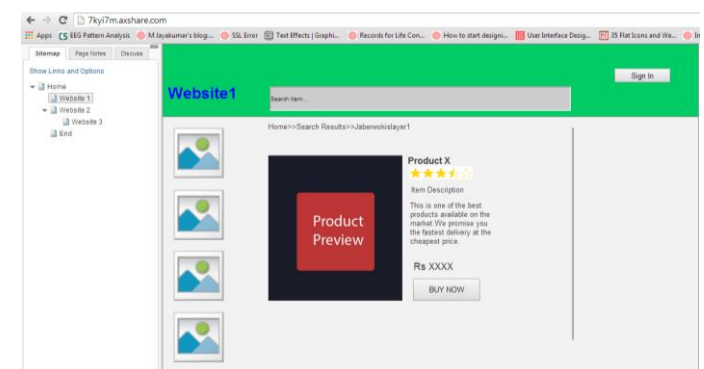
7. APPENDIX

Figure 3. Sample page of Website 1

Figure 4. Sample page of Website 2

Figure 5. Sample page of Website