Investigation of Barriers and Requirements Affecting E-Shopping Behavior of Customers in the Book Market

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ABSTRACT
The article tries to address perceived presuppositions of trust and risk as well as their role on the internet shopping of books from the "iketab" internet bookstore. The investigation is considered as an applied research in terms of its purpose and a descriptive-correlated one with respect to its nature. We used sample at random comprising 104 "iketab" customers who have at least experienced an online shopping. To test the research hypotheses and obtain the results, we used Pearson Correlation Coefficient model and coefficient of determination. The results of the research indicate that perceived risk has negative relationship with online shopping behavior of customers. Also, the perceived advantage and trust of consumers have positive relationship with online shopping behavior. The perceived trust of customers has negative relationship with the perceived risk of the customer. In addition, presuppositions based on emotional state have positive relationship with the trust of customers but negative relationship with the perceived risk. Finally, presuppositions based on experience (prior familiarity with the website of seller) and the willingness of the consumer to trust has positive relationship with the purchasing behavior of customers.

Keywords
Online shopping, Electronic seller, E-Trust

1. INTRODUCTION
Several reasons have caused the development in using the internet during the recent years such as growing the source of information, becoming more user-friendly, and being increasingly more available and less costly. The internet, as a shopping platform, has specific advantages and disadvantages. Compared to other shopping methods at home (such as catalogues), the internet provides possibilities for searching and evaluating the products of several suppliers having less difficulty, paying more easily (without necessarily having to dial numbers or to order via fax or mail) and receiving digital products such as music more rapidly. On the other hand, compared to in-store shopping methods, the internet has some drawbacks such as limited choice of products, lack of salesmen recommendations, customer's products intangibility prior to making any purchase, and lack of sociability. Books are one of the products that can be sold on the internet. In this regard, the researchers discuss the factors affecting the purchasing behavior of the customers based on Kim and Park model.

2. IMPORTANCE, NECESSITY AND THE OBJECTIVES OF THE STUDY
E-commerce has lead to considerable advantages for corporate entities. Amongst the benefits that e-commerce can bring about in a business are market development, costs reduction, supply chain improvement, extension of the work hours to 24x365, customization, customer services enhancement, modification, increasing the efficiency, increasing the access to information, summarizing and simplification of the processes, efficiency in procurements, reduction in transport expenses as well as increasing the business flexibility. Therefore, businesses wishing to benefit from the aforementioned advantages need to have the knowledge of the effective factors in their businesses. In this regard, considering the factors and necessities influencing the behavior of customers and also identifying the obstacles in the way of "e-shopping" development seems to be inevitable. Thus, managers and businesses intending to adopt e-commerce in a very successful way should really take into consideration the influential factors on the behavior of online customers. The aims of this research are as follows:

- Considering the effective factors on the e-shopping behavior of the customers in the book market
• Prioritizing the effective factors on the customers'-shopping behavior of the customers in the book market

3. RESEARCH PROBLEM STATEMENT

Factors such as easy communication transactions, rapid access, 24x7 shopping possibility, flexible delivery options, low prices, high efficiency and functionality, low costs, market competitiveness, straight-forward access to the information in each deal, reduced market limits, high number of suppliers and more choice options for customers are among the many reasons facilitating e-business even more than the past. At the international level, e-commerce is fulfilled in a quick fashion. The advantages are so clear that developing countries have been highly motivated to implement it. Each of these countries has chosen specific programs to commence using e-business, institutionalization, expansion and development. Despite the aforementioned advantages, many Iranian companies and customers do not tend to utilize the internet and its peripheral technologies or use only a small portion of its maximum capacity.

Therefore, identification of the factors affecting the behavior of the customers shopping online can initiate elimination of the obstacles in the field of electronic market in Iran. Book market is one of the areas that have the capability to convert to an e-market. Thus, the main problem of this research is to deal with the "consideration of the effective factors on the behavior of customers, the necessities and obstacles within this field, and prioritization of these elements in book market". The discussion can be considered as a breakthrough in businesses, the government, the community and the customers are to explore every avenue towards business digitalization so as to develop a safe and secured e-business leading to benefits that accrue all people from walks of life.

4. THEORY

Having considered its properties and specifications, companies can develop trust, as the belief that allows the consumers to voluntarily become vulnerable against an online seller, in e-business [1].

Beigy and Pierce have identified unknown factors without any valid or meaningful information [2]. When the customer lacks previous background with an online seller, initial confidence becomes crucial. The presence of trust acts as a simplifying factor in order to simplify the subtlety of the customers decision making [2].

McNite and his colleagues suggest that customers evaluate the situation carefully while performing online transactions due to a sense of risk or distrust in the online environment. Fear and distrust of losing personal information is one of the most vital topics for e-customers. Also, safeguarding the privacy, trust, and honesty are the factors that define the amount of customers’ willingness to undergo online transactions [2].

Whenever the probability of the expected event is less than 100%, it is a risky situation. Risk indicates an amount of uncertainty about the consequences of a behavior.

In order to guess the risk of an act, customers often use their common sense that might have been affected by previous experience, level of involvement or shopping costs. Risk has a balancing effect on customers; since most of them usually try to avoid mistakes while they are making decisions during shopping. Therefore, they can benefit from the advantages of e-shopping. In addition, sellers might suggest test products to reduce the risks [3].

An online environment, compared to a physical environment, is more subject to risk and less trust. Evaluating the products is difficult, i.e. there is no obvious evidence about the quality of the product or service. Furthermore, face to face interaction with the salesmen is impossible and therefore, the shopping becomes sensitive to security issues and privacy. Thus, the amount of online asymmetric information is more than that of a physical shop that leads to a higher perceived risk by customers (the less informed group). Knowing more about the risk perceived by customers can help in designing appropriate strategies to achieve the satisfaction of customers and trusting the websites [4].

Previous researches have shown that customers can perceive the risk in many situations. Online shopping faces higher level of risk compared to shopping in real shops. Online transactions lack control from the customer side, anonymous sellers, and therefore the risk of fraud. 

Personal data such as home address, phone numbers and bank account details are among the information that is to be provided while shopping online. Providing such data and the fact that the seller has access to them is a source of anxiety or a perceived risk for some customers. The concerns of customers may also include: doubting about the honesty of the offer, the claims, and the specifications of the products. Lack or insufficiency of guarantees can help categorize online transactions as risky [3]. Risk plays an important role in the behavior of customers and act as a contributory factor in describing and searching the behavior of customers and their decision making patterns. Experimental studies have shown that the perceived risk can reduce the tendency of customers to shop online leading to confidence trick. The perceived risk is the belief of the customers on the uncertain negative consequences of online shopping [5].

The perceived risk is, in other words, the uncertainty in the shopping environment in which customers evaluate the consequences of shopping or the outstanding results rooted from making a wrong or right decision [6]. There are two theories about risk. The first is based upon the uncertainty in the result of the decisions. The other focuses on the costs or effects of such results. Customers show different attitudes and behaviors; that's why, the levels of confidence depend on their perception of risk. Tan states that brands and trademarks or acquaintances can make differences in the customers risk perceptions [4].

The concern of providing security might be considered as the most important issue in implementing e-business. A highlight of the most prominent security threats is given below [7]:

• Innate internet threats: The internet has connected millions of computers, users, companies and governmental organizations all over the world. This inherited multiplicity of the internet has caused uncontrollable security issues.

• Weak technology: The hardware constituting the internet has undergone many security flaws.

• Weak policy making: Due to the high pace of internet development and expansion, there has been no unique or international consensus to provide internet security policies.
• Illegal attackers or hackers: Hackers are users who illegally access files and personal and organizational information resources.
• Legal aspect: Many internet crimes occur as a result of not inappropriate and inefficient laws.

5. CONCEPT MODEL

The concept model of the research is based on the model presented by Kim and his colleagues. This model evaluates the role of trust and perceived risk in the customer intention for online shopping. The main argument in this framework is that the customer's intention of online shopping can be changed depending on perceived benefits, perceived risk and confidence in the internet seller. The probability of online shopping increases if the perceived risk is low, while the benefits are considerable and the level of trust is also high (Figure 1).

The intention of online shopping is defined as the situation in which customers become interested to participate in online transactions [6].

The perceived risk is defined as the customer's belief about the negative consequences of potential uncertainty of online shopping [8].

Perceived benefits are the customers' opinions about the extent to which they can benefit from online shopping. Since the customers' perceive benefits on a webpage, the probability of online shopping increases [8].

Online trust reduces the behavioral uncertainty and risks related to fraud attempts of online sellers, i.e. the trust reduces the risk [9].

Four prerequisite groups affect the confidence of customers and their perception of risk in e-business or e-shopping, which are as follows:
• Requirements based on knowledge such as privacy preservation, security, system safety, information quality, etc. which correlate to the knowledge of seller's characteristics and includes the following items:
  • Information quality: Information directly affects the customer's perception and evaluation of the efficiency of a webpage and reduces the perceived risk. The criteria to evaluate the information quality include completeness, multiplicity, transparency, truth, punctuality and credibility of the information [10].
  • Perceived preservation of the privacy: Violating the privacy is defined as the probability of personal information abuse by online sellers. Customers usually dislike giving their information to third parties [11].
• Perceived preservation of security: Worrying about the security is defined as a threat that creates a situation in which the probability of information abuse increases [11].
• Requirements based on emotions such as the seller's reputation, presence of a third party guarantor, recommendations, word of mouth, etc. This field includes indirect interactions with the sellers, such as recommendations. These requirements include:
  • Presence of a third party guarantor: This item refers to guarantee of the seller provided by a third party agent such as a bank, a syndicate of consumers, or a large firm [8].
  • Reputation of the seller: Reputation means the process in which one party (the customer) assigns characteristics to the other party (the seller) based on the second hand information collected about them [8].
The results of the analysis show that from the total 105 consideration in this research, the length of acquaintance with the internet are taken into personal respondents' characteristics such as age, gender, educational qualifications or variables.

Requirements based on experience pending the observations of consumers from the sellers' specifications and characteristics. It includes the personal experiences of consumers and, in general, online shopping. An important factor in this field is acquaintance with the seller. It refers to the level of familiarity of the consumer with the seller including: knowing the seller, knowing the relevant procedures such as information and product searching and placing orders using the seller's webpage.

Requirements based on character: This includes the tendency of the consumer to trust the seller. These fields pending the attitude and shopping behavior of the customers and are characteristically constant. They include the tendency of customers towards trust. It shows the tendency of the individual to trust or to doubt in others. If customers have high tendency to trust others, it positively affect their trust in sellers.

6. RESEARCH METHOD

The current research can be classified as applied one in terms of the purpose it pursues. It can also be categorized as descriptive regarding its data acquisition method. The descriptive method can be considered as a survey, which is concerned with the properties and characteristics of the samples in a given population and deal with studying the current condition of the population with respect to a few qualifications or variables.

6.1. Statistical Population and the Sampling Method

The statistical population in this research consists of all “icketab” customers who have experienced buying online books from Jan to Feb, 2011. Not having access to the list and individual members of the population, the chosen method for sampling is considered as non-random sampling method, i.e. electronic questionnaires have been sent to email addresses of the customers.

6.2. Reliability and Validity of the Questionnaire

The researchers designed and collected the questions of the questionnaire using scientific texts and documentation on the topic of acceptance of information technologies. We also evaluated the construct and content validities in order to verify the validity of the main variables of this research. Cronbach's alpha was our choice for the reliability test of the questionnaires that is usually used in multi-scale questions. The average value of Cronbach's alpha equals 0.82 (a relatively good value) that indicates the proved reliability for the respective questionnaire.

6.3. The Findings, Data Analysis and Assumptions Examination

Personal respondents' characteristics such as age, gender, marital status, education, online shopping experience and the length of acquaintance with the internet are taken into consideration in this research. The results of the analysis show that from the total 105 respondents, the majority are men with the frequency of 65.4% and female respondents are 34.6%. Among the studied respondents, 56.4% are single and 43.6%. Most of the respondents (nearly 70%) are younger than 40 and the smallest group of them belong to the age group above 50 (5.1%). 3.8% of the respondents study in high school and college, 19.2% are undergraduate, 54.85% are masters and 22.1% possess Ph.D. degree. The majority of the samples have been familiar with the internet for over 5 years (90.3%); 1.9% less than 1 year, 2.9% between 1 to 3 years, and 4.9% between 3 to 5 years. The majority of the respondents have more than 3 online shopping experiences (86.8%), 7.6% from 1 to 3 and 5.7% has only 1 online shopping experience.

6.4. Research Assumptions Examination

Since the acquired data are interval, the researchers used the Pearson correlation coefficient to study the correlation of the variables in the research. The relationships between variables at two levels of 1% and 5% are also discussed. The results obtained from the correlation coefficient of each presumption are shown (Table.1)

6.5. Prioritizing the Effective Factors on the Online Shopping Behavior of the Customers in the Book Market

In order to prioritize the factors affecting the customers online shopping behavior, we studied the ranking (T) of different effective factors summarized in Table 2. According to the obtained results (Table 2), the trust of customer has ranked high in terms of effective factors on customers' behavior during online shopping. All in all, we can conclude that according to the results drawn from the dependant T test, factors such as tendency of the customer to trust, prerequisites based upon experience, perceived risk and prerequisites based on knowledge do not show a significant effect on the online shopping behavior of the customers in the book market.

7. SUGGESTIONS AND PROPOSITIONS

According to the obtained results and based on the related literature, the following suggestions can be made for online book markets. Those active in the online book shops should provide supportive information for the customers i.e., whether personal data utilized in future enhances the trust in online platforms or not. Preventing the leakage of personal information of customers is an effective factor for perceiving the preservation of privacy.

Providing useful information in an appropriate time on the webpage can improve the perception of the webpage quality. It increases the confidence of the customer. The relationship between the perceived benefits and the intention of online shopping for customers demonstrate that those active in the online book market can maximize the perceived benefits of the customers and consequently persuade them to shop online. This can be performed by diverse advertising methods such as introducing the online buying systems accentuating the advantages of online shopping. Building trust by providing good images of the shop in the digital environment can reduce the customers' perceived risk. Thus, the sellers are highly recommended to launch proper advertisements to familiarize the potential customers with the
online shopping webpage and to explain the advantages of such a platform over the traditional system. This can augment the confidence and intention of shopping.

8. RESEARCH RESTRICTIONS

Since the research is merely based upon the model introduced by Kim and his colleagues, there is the possibility that some other variables and their relationships have not been taken into account. The results are confined to the time period of data collection and its credibility is limited to a short period accordingly. Time can change these results.

N view of the fact that the research has been conducted in the "iketab" online store, the obtained results might not be overgeneralized to other online book stores.

The restraints of the internet in Iran might have affected the results and the extent to which customers use online shopping services and the research results are indeed affected by this restriction.

REFERENCES


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**Table 1. Research presumptions and their results**

<table>
<thead>
<tr>
<th>Presumptions</th>
<th>Correlation Coefficient</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>The perceived risk is inversely proportional to the intention of online shopping.</td>
<td>0.519</td>
<td>Approved</td>
</tr>
<tr>
<td>The perceived benefits are proportional to the intention of online shopping.</td>
<td>0.665</td>
<td>Approved</td>
</tr>
<tr>
<td>Customers' trust is inversely proportional to the customers' perceived risk.</td>
<td>0.53</td>
<td>Approved</td>
</tr>
<tr>
<td>Customers' trust is proportional to the intention of online shopping.</td>
<td>0.766</td>
<td>Approved</td>
</tr>
<tr>
<td>Prerequisites based on knowledge are proportional to the trust of the consumer.</td>
<td>0.306</td>
<td>Disapproved</td>
</tr>
<tr>
<td>Prerequisites based on knowledge are inversely proportional to the risk perceived by the consumer.</td>
<td>0.152</td>
<td>Disapproved</td>
</tr>
<tr>
<td>Prerequisites based on emotions are proportional to the trust of the consumer.</td>
<td>0.467</td>
<td>Approved</td>
</tr>
<tr>
<td>Prerequisites based on emotions are inversely proportional to the risk perceived by the consumer.</td>
<td>0.337</td>
<td>Approved</td>
</tr>
<tr>
<td>Familiarity of the seller's website to the customer is proportional to the consumer's trust.</td>
<td>0.098</td>
<td>Disapproved</td>
</tr>
<tr>
<td>Familiarity of the seller's website to the customer, is inversely proportional to the perceived risk by the consumer</td>
<td>0.075</td>
<td>Disapproved</td>
</tr>
<tr>
<td>Familiarity of the seller's website to the customer, is proportional to the consumer's shopping intention</td>
<td>0.19</td>
<td>Approved</td>
</tr>
<tr>
<td>The consumer's tendency to confide is proportional to the consumer's confidence.</td>
<td>0.409</td>
<td>Approved</td>
</tr>
</tbody>
</table>

**Table 2. Coefficients of factors effectiveness on online shopping behavior of the customers**

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Factors effective on online shopping</th>
<th>Correlation coefficient</th>
<th>Standardized coefficients (b)</th>
<th>Rating (T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trust of the customer</td>
<td>0.77</td>
<td>0.454</td>
<td>5.68</td>
</tr>
<tr>
<td>2</td>
<td>Perceived Benefits</td>
<td>0.66</td>
<td>0.267</td>
<td>5.3</td>
</tr>
<tr>
<td>3</td>
<td>Prerequisites based on emotion</td>
<td>0.56</td>
<td>0.22</td>
<td>3.3</td>
</tr>
<tr>
<td>4</td>
<td>Tendency of the consumer to trust</td>
<td>0.39</td>
<td>0.105</td>
<td>1.28</td>
</tr>
<tr>
<td>5</td>
<td>Prerequisites based on experience</td>
<td>0.19</td>
<td>0.03</td>
<td>0.51</td>
</tr>
<tr>
<td>6</td>
<td>Perceived Risk</td>
<td>0.52</td>
<td>0.022</td>
<td>0.24</td>
</tr>
<tr>
<td>7</td>
<td>Prerequisites based on knowledge</td>
<td>0.19</td>
<td>0.003</td>
<td>0.04</td>
</tr>
</tbody>
</table>

