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# A Conceptual Framework in B2C e-commerce: Customer Expectations and Satisfaction Relation With Online Purchasing Behavior

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## 1. Introduction

The Internet has become an essential business platform for trading and selling products. Online customer expectations grow every day, so companies are forced to adopt a more planned approach towards e-commerce. Marketers have to know what their customers expect and how best to deliver satisfaction so they can predict online purchasing behavior [1, 2].

Customers' expectations of online services have influence in the formation of satisfaction through the expectation–confirmation theory. Expectations are perceptions of future service performance and Key areas where customers have high expectations of online marketers are the following: customer service, security and privacy, website design and reliability [1]. After customers use a service, satisfaction in that area can be measured based upon their expectations [3, 4, and 5].

In the context of B2C e-commerce, Web sites services can be classified into three phases of marketing: pre, online, and after sales [6]. The pre-sales phase includes a company's efforts to attract customers by advertising and introducing their products. In the second phase purchase occurs that contains online order and payment. The after sales phase consist of customer service, delivery, and support that generate customer satisfaction by meeting their expectations [7].

The contents of this article are as follows: First, in the background part, the relationship between online customer expectation and satisfaction is explained based on two theories. Following those concepts the dimensions of customer expectations are given in detail. After that, we develop the hypotheses for the conceptual framework that is proposed to show the effect of expectation and satisfaction and other key factors on online purchasing behavior. Then, we present the methodology used in this research. The study ends with discussing the results that prove our hypotheses and suggestions for e-marketers to understand customers better and enhance their relationship with them to become more successful when developing a Web site for B2C e-commerce [8]. Also, limitations and directions for future research are given.

## 2. Background

To form a research framework for the study of online purchasing behavior we used previous research that provide us a rich foundation. As suggested by Douglas et al. (1994), strong conceptual frameworks can be developed by integrating Implications from different research traditions and disciplines [9]. In the current study, we review the prior literature of online purchasing behavior and make a new framework to better relate factors that have major influence in this context.

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Expectation-confirmation theory is the widely used and accepted theory in investigating expectations and satisfaction, which was proposed by Oliver (1977, 1980) [5, 10]. It has been applied in many fields, including marketing and consumer behavior (e.g., Kopalle & Lehmann, 2001; Szymanski & Henard, 2001) [11, 12]. This theory proves that satisfaction is a function of prior expectations and conformation; and satisfaction is a key determinant of repurchase intentions [5, 13, and 14]. The expectation-confirmation theory shows that if the perceived performance meets one's expectation, confirmation is formed and consumers are satisfied.

Another important theory that emphasizes satisfaction and involves expectations is Motivator-Hygiene Theory (also known as Two-Factor Theory). It was proposed by Herzberg, Mausner and Snyderman in their book of *The Motivation to Work* (1959). Based on this theory expectations determine customer satisfaction. Customer expectations are a set of pre-exposure beliefs about the product [15].

Key areas where customers have high expectations of online marketers are customer service, Web site design, Security and privacy, fulfilment and reliability. Major elements of a B2C web site contain ease of navigation, appropriate information, price savings, service excellence, time savings, and levels of interaction. Positive response to such factors can lead to higher satisfaction. Also, Customers now expect that if they are prepared to provide detailed personal and financial information it will be stored securely [1, 7, 16, 17, and 18].

Understanding purchasing behavior is an essential but very difficult task. As we mentioned in introduction, the purchasing process has three phases that starts before the actual purchase and continue after. Marketers have to focus on the entire process rather than on the purchase decision only [19]. Online shopping is growing every day around the world, so most of the recent research is focused on the identification and analysis of factors that one way or another can influence or even shape the online consumer's behavior [20, 21, and 22]. In this research we tried to investigate the relationship between customer expectations and satisfaction and also customer satisfaction relation with online purchase intention and totally with online purchasing behavior.

### 3. Conceptual framework and hypotheses

This research presents a conceptual framework shown in figure 1 that illustrates the factors related to online customer expectations and shows how online customer expectations, satisfaction and other key concepts affect online purchasing behavior.

#### Online customer expectations

Excellent customer service and high customer satisfaction must start with understanding customer expectations. Marketers need to know who customers are and what they want. By observing factors that customers have high expectations of online marketers, four key areas were identified. They are customer service, Web site design, Security and privacy, fulfilment and reliability [1, 7, 16, 17, 18, 24, and 25]. These factors credibility will be shown at discussion of results. These are four hypotheses about key factors in online customer expectations.

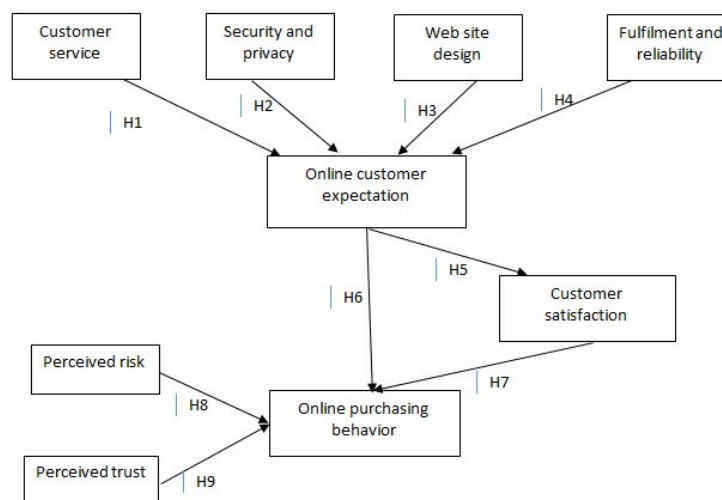
H1: customer service has a positive relationship with expectations in an online service.

H2: Security and privacy is positively related to expectations in an online service.

H3: website design has a positive relationship with expectations in an online service.

H4: fulfilment and reliability has a positive relationship with expectations in an online service.

Figure 1 a conceptual framework that shows Factors affecting the online consumer's expectation, satisfaction and online purchasing behavior



### Online buying behavior

By integrating the Expectation-confirmation Theory and the Motivator-Hygiene Theory that we explained in background, we propose the relationship between customer expectations and their satisfaction.

Expectation–confirmation theory shows the relation between expectations, confirmation, performance, satisfaction, and intentions [1, 5, and 23]. We consider the specific relationship between expectations, satisfaction and intention to find how expectations effect on satisfaction and also bring higher intention in buying behavior. We assume that the influence of expectations on satisfaction will be positive.

H5: Online customer expectations have a total positive effect on satisfaction.

H6: Online customer expectations have a total positive influence on online purchasing behavior.

Purchase intentions in online purchasing behavior are widely influenced by customer satisfaction. After purchase, if the customers are satisfied, they will have more tendency to buy again in the future. So we assume that customer satisfaction has a significant effect on online purchasing behavior.

H7: customer satisfaction has a significant positive affect on online purchasing behavior.

Also there are other key concepts that widely affect online purchasing behavior. These are perceived risk and trust. Risk and trust are multi-dimensional constructs and have been found to improve online sales effectiveness if perceived risk is reduced and trust established.

H8: perceived trust has a positive influence on online buying behavior.

H9: perceived risk has a negative influence on online buying behavior.

### 4. Methodology

This study use the results of the review of more than 35 academic papers selected from a large amount of articles on customer behavior and online purchasing intention in B2C e-commerce. The criterion for the paper selection was the focus on studying the effects of controllable (by the online marketer) factors on the online buying decision-making process. The papers selected for the review were published in credible academic journals and conferences. The controllable elements identified in the literature as influencing the online buying behavior. The selection of papers and review was done, in order to ensure the conformity of the selection criteria; a minimum of one literature reference was necessary for including a given component in the classification.

### 5. Discussion of results

Electronic commerce is quickly changing the way people do business all over the world. In the business-to-consumer area, online purchase via internet is increasing every day. Customers, not only those from well-developed countries but also those from developing countries, are getting used to the new shopping channel. Recognizing the customer expectation and factors that affect satisfaction and intention that totally form purchasing behavior, are important for researchers and marketers. Our analysis has showed some results that researchers can use to success more in this area.

**Table 1. The operational definition and supporting sources for expectations' factors**

Factors	operational definition	Sources
Customer service	Customer support, Responsiveness, Competitive Price, Helpful, Willing service, Return Policy, Immediacy of response.	[1],[7],[16],[17],[18],[25]
Security and privacy	Secure payment facilities, Privacy-secure and private personal information.	[1],[16],[17],[25]

<b>Web site design</b>	Easy navigation, Appropriate levels of information, Effective information search facility, Web Design and interface, Fast Presentation and page download, Straightforward ordering, Appropriate personalization, Appropriate product selection.	[1],[16],[17], [18],[25]
<b>Fulfilment and Reliability</b>	Can be depended on to provide whatever is promised. Reliability of the information content: Diversity, depth and actuality of information contents, Reliability in control and use of technology: Delivery of the right product within promised time frame.	[1],[7],[25]

In table 1 key factors of online customer expectation, their definition and supporting sources are shown. Analysis of the findings of this research shows that online customer expectations are influenced by four hypothesis that were mentioned at conceptual framework. Each factor is defined and proved by at least three sources.

By analysis of our finding about expectation and its effect on satisfaction, we focus on the specific relationship between expectations, satisfaction in expectation–confirmation model to show expectations effect on satisfaction. Some researchers have different idea that expectations have a negative impact on satisfaction, given the basic formulation of the expectation– confirmation model that higher expectations lead to more negative confirmation and lower satisfaction. Others say that expectations have a positive influence on satisfaction through performance because perceptions of performance assimilate toward expectations, and performance itself has a positive influence on satisfaction [2, 26, and 27]. So, customer with higher expectations will have higher satisfaction [28].

Spreng et al. [26] find that the basic relationship among expectations and satisfaction is positive in many marketing studies, suggesting an overall positive influence of expectations on satisfaction. By reviewing prior online service research, we find that online service expectations have a total positive effect on satisfaction [24, 28, and 29]. So, we settled that the influence of expectations on satisfaction will be positive.

The results about online purchasing behaviors' factors are shown in Tables 2.

**Table 2. The definition and supporting sources for purchasing behaviors' factors**

<b>Factors</b>	<b>operational definition</b>	<b>Sources</b>
<b>Satisfaction</b>	General feedback on the web site design, Competitive price of the product, Merchandise availability, Merchandise condition, On-time delivery, Merchandise return policy, Customer support, E-mail confirmation on customer order, Promotion activities.	[25],[30]
<b>Expectation</b>	Customer service, Security and privacy, Timeliness, Availability, Convenience.	[1],[24]

perceived trust	A set of expectations that lead to behavioral Intentions, Willingness to depend on web site.	[11],[17],[31]
perceived risk	Lack of assurance and trust.	[1],[8]

According to researches results is has been given that customer satisfaction has a significant effect on online purchasing behavior, when they decide to purchase a product their prior satisfaction play an important role there [25, 30].

Willingness to purchase is considered to be inversely affected by perceived risk. Stone and Gronhaug (1993) state that 'risk is the subjective expectation of a loss'. On the other side there is trust as it is a potential outcome of risk reduction. If marketers want to succeed, trust needs to be increased and perceived risk decreased [1, 24]. Also, importance of trust in e-commerce is argued and proved in purchase intention [11, 17, and 31]. Consumer's attitude to risks affect the buying intention. In addition, numerous studies indicated that all factors used for lowering risks influence consumers purchasing behavior [1, 8].

### 6. Limitations and future research

However this research prepare a conceptual framework to show the relation between customer expectation, satisfaction and online buying behavior, there are still some limitations and a need for additional research be included and the effects may be retested. Considering the developing online market conditions, it is necessary to focus on new channels to deliver services that affect customer expectations, satisfaction and online buying behavior.

Future research can use our conceptual framework as a basis to their empirical research to prove the factors affecting the online consumer purchasing behavior. One possible future study in this case can be done by finding and testing more relationships between factors.

### 7. Conclusion

The purpose of this study was to show a series of new relationship in B2C context of online purchasing behavior. In summary, this research provides a conceptual framework to better understand customer expectations, and how it leads to satisfaction, and also their influence on online buying behavior. The results of this study provide support for the hypotheses proposed at the beginning, it shows four key factors that form online customer expectation: customer service, Web site design, Security and privacy, fulfilment and reliability. It also shows that online customer expectations have a total positive effect on satisfaction and online purchasing behavior. The other results are satisfaction has influence on online purchasing behavior and perceived trust needs to be increased and perceived risk decreased for higher purchasing intention.

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