Critical Factors that Impact the Quality of an Online Shopping Experience

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Abstract

In this study, we identify key critical factors that are instrumental to the success of online retail stores. These factors gage the entire shopping experience starting from the initial point of entry to the final delivery of the product. Our framework can provide online retailers with a tool to identify areas that must be targeted for improvement, in addition to an instrument that can also be used to form a quality web index for benchmarking purposes.

1. Introduction

The recent failure of many dot coms has received considerable attention lately. The e-commerce literature is replete with anecdotal evidence that attempts to explain the reasons behind the demise of many online retailers. Among the reasons cited are poor inventory management, excessive delivery costs, inadequate supply chain management, poor web design, and nonviable e-commerce business models. However, it is interesting to note that with all the publicity concerning dot com failures, e-commerce sales continue to rise. According to a recent report by the Census Bureau of the Department of Commerce, U.S. retail e-commerce sales in the third quarter of 2001 were estimated at $7.5 billion, up 8.3% from the third quarter of 2000 [1].

There are many success stories of companies that have benefited from using the Internet for conducting sales online. Among the cited benefits of online transactions are reseller elimination, product customization, and better customer service and support. However, many firms continue to struggle with the most basic question: what makes a successful online retailer? This paper attempts to shed light on this important issue by identifying key factors that are instrumental to the success of online stores. In specific, these factors are intended to gage the entire shopping experience starting from the initial point of entry to the final delivery of the product. In this study, we group these factors into two categories: web-based factors and non web-based service-oriented factors. The web-based factors are those that shape the online shopping experience by being built into the design of the web site. The non web-based factors are those that are intended to support and supplement the online shopping experience and thus, play a key role in determining the quality of the service itself (e.g., accuracy in billing, on time delivery, etc.).

The next section provides a description of the critical web-based factors. Next, we describe the non web-based service-oriented factors that are intended to support and supplement the online shopping experience. Finally, we conclude with research implications and future research directions.

2. Critical Web-Based Factors

In conducting an online transaction, the first phase that a shopper encounters is the home page of the web site that serves as an initial point of entry, followed by a product catalog, and finally the order form. Once an order form has been completed, web-based customer service and support is a critical function for a successful online shopping experience. As depicted in Figure 1, managing these four phases quite often determines the ultimate survival of the online retailer.
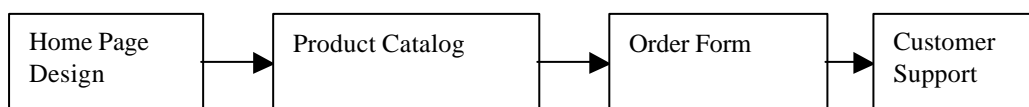

Fig. 1   Stages that Define an Online Shopping Experience

Phase I: Home Page Design

In a recent study, we identified key factors that determine the quality of a home page [2]. These factors include:

- Meta tags
- Selection of home page titles
- Selection of domain names
- Search engine site registration
- Speed of page loading
- Links
- Spelling
- Visibility of contact information
- Timeliness of information
- Presence of privacy policies
- Presence of search engines
- Translation to multiple languages
- Presence of navigation bars or site maps
- Value-added extra content to encourage customers to return to the site (e.g., updated industry news, product reviews, free samples, valuable resources for customers, contests, etc.)

While not intended to be exhaustive, this list captures the key elements that affect initial perceptions of an online user, and consequently determines whether the user will continue to the second stage that we define as a web-based "shopping experience".

Phase II: Product Catalog

Since web users do not have the luxury of touching, feeling, or smelling products, it is imperative that an online catalog provides comprehensive and thorough product descriptions. Critical factors that are pertinent to this shopping experience stage include [3]:

- Presence of a product search engine
- Price listings adjacent to products
- Presence of images to display products
- Comprehensive description of products (e.g., dimension, weight, etc.)
- Clear labeling of out of stock items (i.e., availability)
- Varieties of products offered
- Varieties of brands and models
- Special offers
- Most recent product changes

Phase III: Order Form

Once an online shopper decides on buying a specific product from the online catalog, the next stage involves completing an order form. Quite often this form is integrated with what is typically known as a shopping cart. A shopping cart is basically a scripting program that enables a user to modify the content of the shopping cart and to display the cost of the purchases. Shopping carts can also give customers the opportunity to add or remove items, change sizes and colors, as well as confirm shipping and billing information. Thus, pertinent critical factors in this phase include:

- A breakdown of overall costs (e.g. shipping cost, sales tax, etc.)
- Multiple payment options (e.g., credit card, checks, phone orders)
- Options to add, remove, or change items from shopping cart
- Security of orders (or security of transaction processing)
- Shipping options
- Assistance in completing transaction
- Ease of transaction (e.g., minimum number of steps required, use of pre-registered customer information)

- Helpful instructions
- Assistance in product selection
- Correct price calculation (e.g., sales tax, discounts)

Phase IV: Online Customer Service and Support

This phase is a critical stage that shapes the overall experience of the online shopper. For instance, the computer giant Dell that constantly receives high marks for its customer support allows the buyer to conduct a plethora of activities online such as checking the status of an order, changing an address, returning or reporting missing and damaged items, and accessing a comprehensive database that contains frequently asked questions (FAQ) about products. Therefore, critical web-based customer support options should include:

- Instant automated merchant notification of orders
- Clearly designated return policies and restocking charges
- Issuance of order tracking numbers for products purchased
- Order cancellation options
- Order changing options (flexibility)
- Help or online customer service

3. Non Web-Based Quality Factors

As stated previously, a successful online retailer should not only build quality into the design of the web site itself, but also meet or exceed customer expectations of the overall shopping experience. This will increase the likelihood of repeat customers and simultaneously enhance the credibility of the merchant. Thus, consideration should be given to the following issues:

- Accuracy in billing
- On time Delivery (e.g., expected versus actual delivery date)
- Ability to reach "real" people with further questions
- Honesty in product representation (i.e., product description versus what was received)
- Ease of product return
- Timeliness of credit adjustment

4. Conclusions and Implications

In this study, we break down the online shopping experience into four stages and identify critical quality factors for each stage. The factors identified in this study capture the quality of an online shopping experience from the initial point of entering a web site, up to and including the delivery of the final product to the customer. Thus, these factors provide online retailers with a tool to identify areas that must be targeted for improvement. Moreover, the factors that are identified in this study may be combined to form a quality web index that can be used for benchmarking purposes.

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