



## **Chapter 12**

# **Navigation in E-Business Web Sites**

Roland Hübscher  
Auburn University

Tony Pittarese  
Pensacola Christian College

Patricia Lanford  
Auburn University

## **ABSTRACT**

Two of the most important keys to successful Web sites, including e-business sites, are content and usability (Nielsen, 1999). Yet, many of these sites still suffer from flawed content organization and navigation support. In this chapter, we discuss existing problems and point out a series of important user and task characteristics that need to be considered when designing an online store. We focus on usability issues of content organization and navigation which are inherently intertwined. We will also discuss the checkout process, an important element of many e-business, whose design requires not only the usual usability guidelines but also trust issues.

## **INTRODUCTION**

Many e-business site interfaces have serious design flaws apparent to even the casual user. For a person trained in human factors and usability, navigating through a site and the checkout process is often a torture—or a scary, yet exciting fact-finding and data-collection trip through a dangerous jungle. This criticism is also supported by the fact that a massive 65% of shoppers abandon a site before actually purchasing anything (Weiss, 2000). This criticism doesn't just apply to the "mom-and-pop" Web stores, but also to many of the big players. Shopping online can be as confusing as shopping for the first time in a large department store in a foreign country. This problem is compounded by the fact that customer service availability is often extremely limited. Although a lost shopper might attract the attention and assistance of a clerk in a store, almost no parallel exists in an online environment. Many e-business sites are not nearly as usable as they should be.

We will address this usability issue by examining the role of store content organization, site visitor characteristics, and related navigational support. Obviously, navigation and content organization must be dependent on the visitors' characteristics and their goals. The main purpose of the organization and navigation support of a Web site is to allow a user to easily navigate to the needed product and efficiently complete the transaction.

Too often, the organization of the products in an online store or the manner in which the exchange is completed reflects some kind of scheme internal to the business. For instance, in some cases, products are organized according to their product stock numbers. Quite often, the technical implementation, e.g., the database design or method of processing transactions, dictates the organization of the Web site and the checkout process. Such business and implementation-imposed schemes largely ignore the users' needs and are therefore to be avoided.

While there are many similarities between general e-business sites and those selling products, visitors to the latter sites have additional concerns. Since they are being asked to spend money and give personal information, they must have confidence that the business will not purposely or accidentally misuse this information. Consumers must trust the company, otherwise they may not complete the purchase. Trust is often a by-product of the usability and professionalism of the site.

Evaluating site usability only makes sense when considered from the perspective of what kinds of customers are going to do what kinds of tasks. E-commerce sites are interested in users finding items they wish to buy and then actually buying them. It is important that users find what they want and then also be given opportunity to expand their purchase. This can be done by presenting other items that may also be to their liking and are related to the original purchase.

Ultimately, success can be measured by whether or not the user does indeed purchase the items placed in his/her shopping cart. Too often, potential buyers leave the store and abandon a full shopping cart. Our own early pilot studies have shown that, in many cases, usability and trust issues of the site are responsible for this behavior.

In the rest of this chapter, we will analyze a few different store models and what kind of organization and navigation they support. We will make recommendations on what user characteristics need to be considered to design the appropriate organization and navigation. Then we will discuss usability and trust issues considering the checkout process design of an e-business site.

## CONTENT ORGANIZATION

Content in e-commerce sites needs to be organized in such a way that the customer can easily find desired products, and the products themselves are merchandised to impact the customer's purchase decision (Goldberg, 2000). Brick-and-mortar stores arrange and present products to maximize sales given space and other, often physical, constraints (Underhill, 1999). Online stores need to take advantage of the fact that they do not suffer from these same constraints. However, as discussed below, they suffer from their own kinds of problems.

We will begin by discussing some online store models based on their brick-and-mortar equivalent. We do this to both learn from brick-and-mortar stores and to understand their limitations. We will then consider implications of this analysis on navigation and checkout designs.

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/navigation-business-web-sites/5199](http://www.igi-global.com/chapter/navigation-business-web-sites/5199)

## Related Content

---

### System Development Methodologies for Web-Enabled E-Business: A Customization Framework

Linda V. Knight, Theresa A. Steinbach and Vince Kellen (2003). *Architectural Issues of Web-Enabled Electronic Business* (pp. 213-226).

[www.irma-international.org/chapter/system-development-methodologies-web-enabled/5201](http://www.irma-international.org/chapter/system-development-methodologies-web-enabled/5201)

### Using Social Media for Service Innovations: Challenges and Pitfalls

Ada Scupola and Hanne Westh Nicolajsen (2013). *International Journal of E-Business Research* (pp. 27-37).

[www.irma-international.org/article/using-social-media-for-service-innovations/79264](http://www.irma-international.org/article/using-social-media-for-service-innovations/79264)

### A Tale of E-Business Models: From the Music to the Television Industry

Savvas Papagiannidis (2009). *Emergent Strategies for E-Business Processes, Services and Implications: Advancing Corporate Frameworks* (pp. 104-121).

[www.irma-international.org/chapter/tale-business-models/10053](http://www.irma-international.org/chapter/tale-business-models/10053)

### Coordinating Multi-Channel Pricing of Seasonal Goods

Preetam Basu (2012). *International Journal of E-Business Research* (pp. 34-56).

[www.irma-international.org/article/coordinating-multi-channel-pricing-seasonal/74742](http://www.irma-international.org/article/coordinating-multi-channel-pricing-seasonal/74742)

### Social Aspects of Open Source Software: Motivation, Organization, and Economics

S. Lakka (2007). *Social Implications and Challenges of E-Business* (pp. 173-186).

[www.irma-international.org/chapter/social-aspects-open-source-software/29138](http://www.irma-international.org/chapter/social-aspects-open-source-software/29138)