

# DETERMINING B2C WEB SITE FUNCTIONS

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## ABSTRACT

*The web site is a central component of B2C Electronic Commerce. However, there are few guidelines on how to design and develop an effective web site. Most discussions address technical issues of building WebPages. The requirement stage of website design is poorly understood. This chapter discusses requirements for website functions from the point of view of both the firm and the customer. Firm's business strategies and customer decision support needs are mapped into web site functionalities. Two existing websites of firms in the building industry are analyzed for illustrative purposes.*

## INTRODUCTION:

E-Commerce has become one of the major factors essential to the future survival and success in the market place. A survey, sponsored by AOL found that making purchases was the fastest growing on-line activity and more than half the respondents had engaged in the activity. Electronic commerce is at an early stage of development with few established rules on how to organize and implement e-Commerce. The source of e-Commerce knowledge is generally unreliable and often comes from venture capitalists, investment bankers, and technically oriented entrepreneurs who do not have a good track record of building B2C organizations that endure the test of time. The majority of B2C business models are innovative and unproven. Many underlying assumptions for B2C business models such as "more disintermediation is better" are suspect. The website should support the implementation of business strategy and help customers in their decision making process. In the past, discussions of website design have over emphasized the technical aspects, such as web page graphic design, or static or active web pages using HTML, ASP, or JavaScript. These discussions do not adequately address how to determine web site functions that drive website design. This chapter will examine website functions from both the organization's and the customers' viewpoints. It will also present two cases to illustrate how web sites should achieve the dual objectives of carrying out organizational strategies and supporting customers in making decisions.

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## WEBSITE FUNCTIONS, FROM ELECTRONIC COMMERCE PERSPECTIVES

The website functions for the trading view would support electronic buying and selling of products and services. For the information exchange view, it would support multi-channel communication to forge closer ties with customers, suppliers and other business partners. For the effects view, it would streamline business transactions and improve customer service, reduce costs, and increase dollar sales per customer. The web site will also facilitate other activities such as pre-sale and post-sale efforts, and inter-corporation collaboration. Finally, from the value chain view, the website functions would support activities that reduce cost and add value on the value chain, thereby contributing to competitive advantages.

The central component of the electronic business processes is the website where the interactions take place. Website functionalities operationalize these interactions. However, identification of specific website functionalities requires examination of business strategies as well as customer decision support requirements.

### WEB SITE FUNCTIONS FROM FIRM'S VIEW:

A reasonable way for determining the website functions is to examine the strategies employed to strengthen a firm's competitive position. For example, if the firm is pursuing a strategy of customer relationship marketing (CRM), then the site must have the corresponding functionality to support this strategy. If the firm is pursuing a strategy of mass customization, then it must have functionalities to collect data for mass customization. CRM is a business strategy and directs the business to think from the point of view of the customers to figure out how to add more value to its services. It refers to applications that manage all aspects of customer encounters. CRM cuts across many corporate functions including sales, administration, marketing, fulfillment, distribution and post-sale service. The three main areas of focus are on sales, customer and marketing automation (Robinson, 2000).

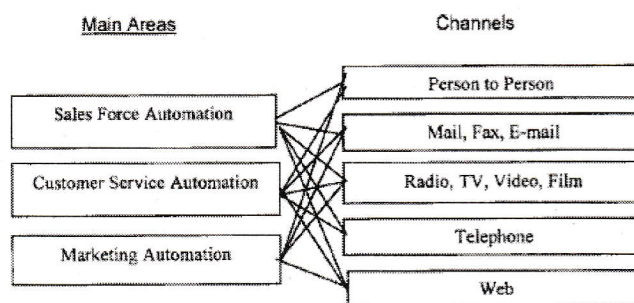


Fig-1 : Main Area and Channels for CRM



The website, therefore, should include the following four functions:

1. Sales Force Automation: Web Based Selling - This function assists the online buyer make satisfying purchase decisions. The design of this function emphasizes the web page as purchase decision support systems with special attention to decisional guidance.
2. Customer Service Automation: Web Based Self-Service - This function provides services to on-line users. The emphasis is on providing personalized services.
3. Marketing: Data Collection and Analysis - This function concentrates on direct or indirect collection of customer information. This data and the data collected through other channels provide the basis for making marketing and other strategic decisions.
4. Support to Other Channels - The web channel is not the only business communication channel and other channels are used as well to exchange information. This function is frequently ignored.

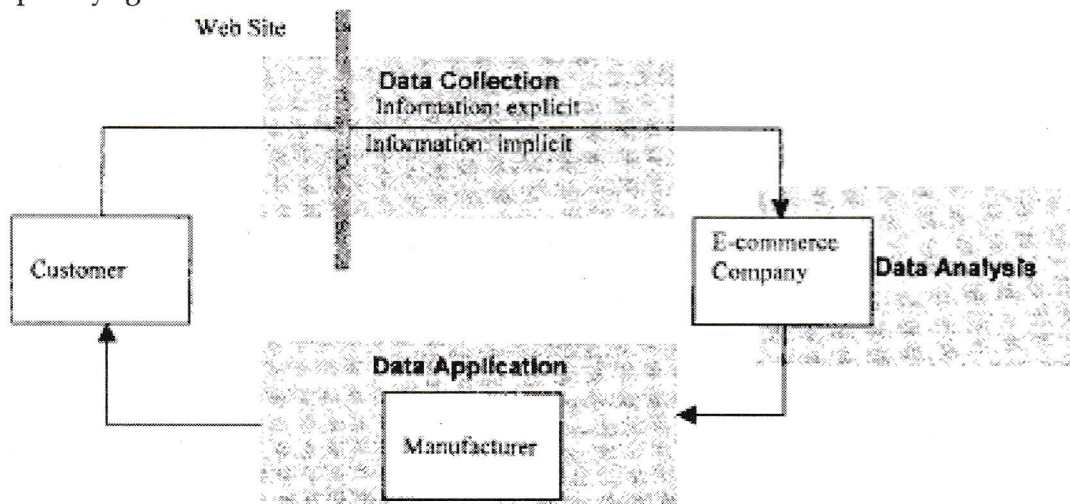


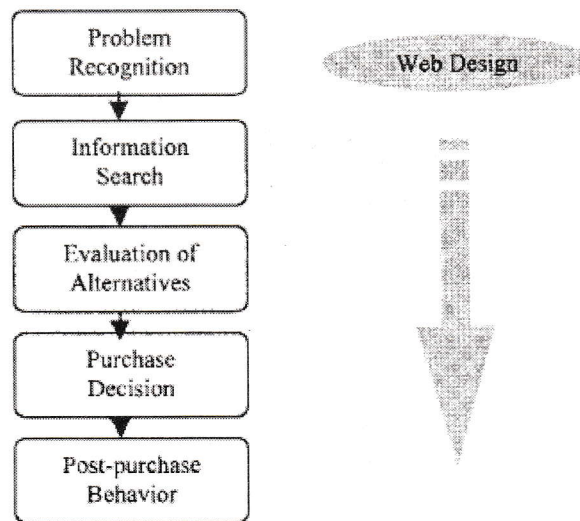
Fig.-2 : Web Site as Point of Order Penetration

#### WEBSITE FUNCTIONS FROM CUSTOMER'S VIEW:

Functionalities of an efficient and effective website that may provide relevant information at all phases of consumer decision-making include:

- Problem recognition: The web selling design of Amazon.com is a good example. When a user searches for a book, he/she gets access to the links similar customers used for other books. Users are considered similar if they searched for the same book. Customers are provided with these links because he or she may potentially needs those books.

- **Information Search:** To help the users make informed decisions, the web site may provide more information on the different features of a series of products and the appropriate situations in which to use or apply those various products. During this phase of decision making, more information is helpful.
- **Evaluation of Alternatives:** During this phase of the decision making process, the website may provide decisional guidance on forming the criteria for making a choice.
- **Purchase decision:** Here the problem is how to help the consumer process a large amount of information that can potentially overwhelm the consumer.
- **Post purchase behavior:** From a customer's point of view, the website should inform the decision making process.



**Fig-3 : Using Decisional Guidance to guide the Design of Web Selling and Ordering**

#### **ANALYSIS OF EXAMPLE WEB SITES:**

Based on the previous discussion, we analyze the web site designs of Homes.com and Homebuilders.com from two viewpoints. First, how is the website designed to help the company achieve its business strategies? Second, how is the website designed to assist a consumer to make a home buying decision? Homes.com is an end to end online source for home buying, selling and renting and a valuable tool for real-estate professionals. HomeBuilder.com provides builder information on new homes, subdivisions and developments. It has developed a customized, nationwide listing of builders' models, newly built homes and housing plans. Users may search for new



homes, builders, custom builders and real estate agents.

### **Support for the Five Phase Purchasing Decision-Making Process:**

#### *Problem Recognition Stage- Deciding to Buy a Home*

Homes.com provides no support. Homebuilders.com provides a buyer guide index covering most topics ranging from the advantages of home buying to the moving process. These topics inform a potential homebuyer in fulfilling their needs. Improvements may include additional information such as advantages of buying vs. renting, to inform problem recognition phase. Also chat rooms may be useful to potential home buyers to learn and define objectives before embarking on a search for a specific home.

### **Decision Support - Users, Context and Tasks**

#### *User Specific Support*

Homes.com collects personal information such as name and e-mail address and provide the user with personal archive to store his/her queries. Homebuilders.com does not collect user personal information. Both sites could collect more user information through explicit specific user queries as well as click streams. The data can be mined to infer user objectives and preferences to help make purchase decisions.

### **Customer Relationship Management**

#### *Sales Force Automation - Web Based Selling*

Homes.com does not support this activity. However, Homebuilders.com provides links to other web sites such as stacks and stacks.com and Mercata.com where customers can shop for appliances, lawn and garden etc.

Customer service automation - web based self-service Both sites provide automated customer service in conducting searches and making various financial calculations. However, these services are not tailored to specific users who may be novice or experts in performing the automated tasks.

### **Mass Customisation**

Mass customization is applicable to most products and services. It is natural for clothing because everybody has a different body shape and different tastes. Clothes manufacturers need electronic order-acquisition systems that capture customization is applicable to homes. Homebuilders normally provide several home models and

allow buyers to select alternative shapes for the windows, colors for the interior walls, and type of carpets. Normally, homebuilders assign agents to capture such information. However, the person-to-person discussion is expensive and time and location specific. The web site is a good channel to communicate without time or location constraints. For example, the HomeBuilder.com may want to provide samples for all the alternatives of home models, shapes of the window, colors of the wall, types of carpet on line. Customers may participate in home customization by entering information or make changes to the information on electronic order-acquisition forms.

## CONCLUSIONS

Currently the prevailing practice in web site design is to what new technology to employ. This skips a very critical step, which is to link website design to business strategy and customer decision support requirements. In this chapter, the support for customer relationship management and mass customization strategies and decision support for purchase decision making process were mapped to website functions. A three step website design process is shown in Figure 4.

The analysis of the website of two building industry companies shows that websites functions are inadequate in supporting business strategy and customer decision support requirements. General recommendations for determining the objectives of B2C web sites functions may include:

- Operationalize Business Strategy
- Establish long lasting, high value, individualized relationship with the customer based on serving customer needs and earning customer trust.

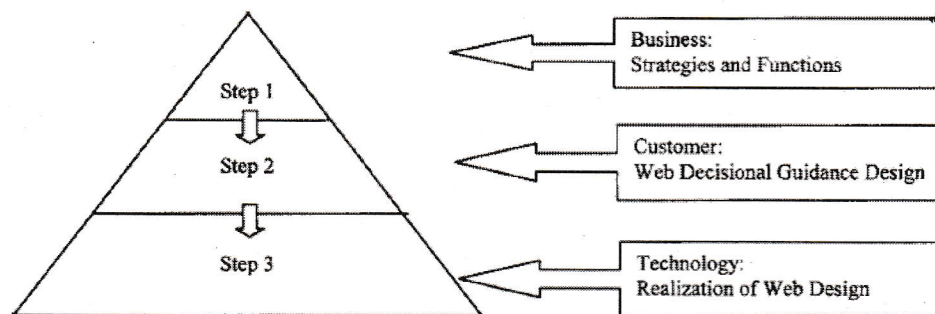


Fig-4 : B2C Web Interface Design Framework

Establish two-way communications with the customer where both sides provide and seek information and learn from each other.



- Facilitate formation of small communities of customers and exchange information among them to learn from each other.

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