

Degrees of Delight: A Model of Consumer Value Generated by E-Commerce

Laura Lally, Hofstra University, Hempstead, NY 11549; E-mail: acslhl@hofstra.edu

ABSTRACT

This study proposes a model of Web applications to guide designers of the next generation of Web based businesses. This study will draw upon the Theory of Consumer Involvement, exploring the implications of consumer involvement in designing appropriate applications. The theory will be extended to create a four part Consumer Value Model—based on four different kinds of value a site can deliver. Implications for Web site development and design, Critical Success Factors for sites delivering each form of consumer value, and the appropriate business model for making each type of site profitable will result.

Keywords: Consumer Involvement theory, Critical Success Factors, Consumer Value Model, E-Commerce, High Engagement, High Product Involvement, High Purchase Involvement, Low Engagement, Web site design.

THE NECESSITY OF PROVIDING CONSUMER VALUE

After an exciting and tumultuous first decade, E-Commerce has experienced a wide range of successes and failures. Designers of next generation Web based businesses need to know which applications will provide value to customers and profits to the businesses that create them.

This paper proposes a new perspective, the Consumer Value Model (CVM), that distinguishes the *types of value to the consumer* provided by an E-Commerce application, and argues that it is only by providing one of these types of value to customers that an E-Commerce site can *generate business value* to the creators of the Web based business.

This study will draw upon the Theory of Consumer Involvement from the field of Consumer Behavior in Marketing and develop a Consumer Value Model (CVM) based upon the type of underlying involvement with the product or service offered by the Web site. This approach is in contrast to earlier studies that focused on the consumers' involvement with Web use in and of itself. The result of the analysis will be a four-part model of consumer value that will have implications for the Critical Success Factors of Web site development and design, and the appropriate business model for making the site profitable.

This paper will argue that a *consumer value* oriented approach to technological development will provide valuable insights. Allen (2003) argues that the search for applications that provide value to users can be more important than technological innovations.

Furthermore, a given user may interact with a computer in a number of different roles and contexts, giving web designers alternative means of providing value to the same consumer. Users may learn the details of a player trade on their favorite sports team, seek important information for buying a home, conduct routine transactions like bill paying, or pass time playing a game, through the same computer. Roussos, Peterson, and Patel (2003) argue that each user assumes a number of identities when interacting with a computer and that each identity must be managed.

THEORETICAL PERSPECTIVE: INVOLVEMENT THEORY

This study will draw on *Involvement Theory* from Consumer Behavior research to inform the analysis. A consumer's involvement with a product can be defined in terms of, 'the degree of personal relevance that the product holds for the consumer. Under this definition, high involvement purchases are those that are very important to the consumer and thus provoke extensive information processing' (Schiffman & Kanuk, 1999, p. 186). Consumer behavior further distinguishes

between *product involvement*, which occurs when the consumer finds the product inherently meaningful and enjoyable, and *purchase involvement*, which occurs when a consumer takes an interest in the details of a product because he or she is making an expensive or risky purchase. *Low involvement* products tend to be commodities which consumers find neither fascinating nor risky. Although a number of studies (Venkatesh, 1999, Agarwal & Karahanna, 2000, Novak & Hoffman, 2000) addressed user's involvement with computer use and Internet surfing per se, Lally (2003, 2004) first addressed the idea of studying users' involvement with the underlying product or service as a determinant of Web site success. Lally (2003, 2004) argued that the typical Internet user doesn't surf the Internet because they find computers or the Internet inherently fascinating but because the Internet: 1) allows them to interact with something they do find fascinating, 2) helps them gather information for important purchases or other major decisions, or 3) allows them to conduct routine transactions in a convenient and efficient manner. Her results indicated that users seeking serious information versus entertainment require fewer of the immersive features provided by multimedia, but require more timely, accurate content.

HIGH PRODUCT INVOLVEMENT: PROVIDE HEDONIC VALUE

Goods for which consumers develop high degrees of product involvement include high end stereo equipment, automobiles, music, art, and movies. Celebrities and sports teams can also generate high levels of involvement among their fans. Customers become educated about the product and enjoy discussing it with others. They find visiting retail outlets for these products inherently enjoyable, even if they are not planning an immediate purchase. This intrinsic pleasure in shopping is called *hedonic value*. Customers willingly devote time and attention to learning about the details of the product and develop sophisticated levels of knowledge. When they do make purchases, customers are willing to pay a premium for products whose characteristics suit their personalities and satisfy their tastes.

High product involvement goods are typically sold in retail outlets where they are displayed in an attractive and involving manner to increase hedonic value. Sales representatives need to be well informed about product features. Educating potential customers and interacting with already knowledgeable customers is part of their job. Because these products tend to have a strong visceral component, customers are often given the opportunity to interact physically with the product before making a purchase.

In E-Commerce, Web sites targeting consumers with high product involvement must confront the limitations of the on-line shopping experience. Consumers cannot physically experience the products as completely as when they are in a retail outlet. As bandwidth limitations become less of a constraining factor, however, Web designers can use multimedia to compensate for the lack of physical presence. Lui, Arnett, and Litechy (2000) suggest that Web designers should aim to create hedonic value for users by making sites playful and engaging. High quality graphics, sound, and animations can provide virtual experiences that consumers find inherently enjoyable. On-line experts can provide advice about products. User groups can provide the enjoyable experience of discussing the products with others. High end auction houses have found, for example, that customers will purchase very expensive works of art over the Web if they can view details of the artwork through high quality graphics, and interact with art experts to become more informed about their potential purchase.

Because High Product Involvement addresses an enduring personal interest on the part of consumers, a *subscription revenue model* is most likely to be successful.

Users are likely to return to sites over and over again, just as they look forward to new issues of magazines on their favorite subjects. Therefore, content must be continually refreshed to provide new experiences with the desired product.

HIGH PURCHASE INVOLVEMENT: INFORM RATHER THAN ENTERTAIN

Unlike consumers with high product involvement, consumers with high purchase involvement do not find their product inherently enjoyable. Instead they invest time and attention because the product is important, expensive and/or risky. High purchase involvement goods include information about buying a home, medical information when they or a loved one need medical help, and financial investments.

When shopping for high purchase involvement goods, consumers want access to essential facts to help them make important or risky decisions. They willingly engage in extensive information processing to help them make the right decision. For managers of Web sites for these products, involvement theory suggests that the emphasis be put on informing, rather than entertaining the consumer.

For consumers making one time important purchases such as buying a home, a fee for content business model would most likely be the most successful. Unlike the case with High Product Involvement, High Purchase Involvement does not represent an enduring interest in a product, so users would be less likely to want to subscribe on a long term basis.

LOW INVOLVEMENT PRODUCTS: MAKE IT QUICK AND SIMPLE

Low involvement products, in contrast, do not personally engage the user. Cash from automatic teller machines, soda from vending machines, and office supplies are examples of products that customers seek out of necessity, not because they find the shopping experience inherently enjoyable. Customers prefer 'limited information processing when the purchase is of low personal relevance' (Schiffman & Kanuk, 1999, p. 186). Involvement theory suggests that an efficient purchasing process is the quality most valued for these products. Kaufmann and Lally (1994) found, for example, that for automatic teller machines, easy access dominated design features in attracting customers.

A fee for transaction business model would be most appropriate. Users with heavy demands on their time and attention are frequently willing to pay a premium to minimize the time and effort required of them to conduct routine tasks. Usability testing upfront is critical, but once the site is well designed frequent changes and updates are likely to confuse, rather than provide value, to the customer.

Table 1 summarizes the design consequences and business models suggested by the theory of consumer involvement for E-Commerce applications.

The three categories can be characterized as:

- High Product Involvement: High Intrinsic Interest, High Importance.
- High Purchase Involvement: Low Intrinsic Interest, High Importance.
- Low Involvement: Low Intrinsic Interest, Low Importance.

PASSIONS VERSUS PASTIMES: EXTENDING THE MODEL

An examination of the growing proliferation of casual entertainment E-Commerce applications, such as computer gaming and downloading TV shows for iPods, indicates that there exists a fourth category of applications. *These applications provide high intrinsic interest to the consumer, but are not of enduring personal*

Table 2.

| | Critical Success Factors | Business Model |
|----------------------------------|--|---|
| High Product Involvement | Media rich immersive interfaces—high quality information conveyed through a range of media—fascinate user continually over long periods of time. | Subscription |
| High Purchase Involvement | Timely, accurate information, facts conveyed clearly—inform users for important decisions. | One time fee for individuals. Subscriptions for business. |
| High Engagement | Media rich interfaces to hold users attention over immediate time period. | Fee for Connect Time |
| Low Engagement | Quick Efficient transactions simple interfaces—minimize users transaction costs. | Fee for Time Used. |

importance. Consumer based applications aimed at killing time in a pleasant and engaging matter attract a significant number of consumers. This analysis proposes to extend the theory of consumer involvement to include applications that provide this form of value and substitute the terms High Engagement and Low Engagement for the Low Involvement category suggested by involvement theory:

- High Engagement: High Personal Interest, Low Importance.
- Low Engagement: Low Personal Interest, Low Importance.

These sites should charge for the service they provide consumers with a pleasant means of passing the time, either through connect time or usage. As new, more exciting forms of High Engagement applications become available, customers are likely to switch to them, hence the need for constant innovation. Because the degree of personal relevancy of a particular product is low, customer loyalty is likely to be fleeting.

Table 2 extends the categories suggested by the theory of consumer involvement to include High Engagement sites.

CONCLUSION

This paper has presented a model of consumer value, for understanding the motivations behind consumer adoption of E-Commerce applications, what features are most appropriate and what business models apply. Empirical studies will follow to address the applications of the model to next generation Web Applications.

REFERENCES

References upon request.

Table 1.

| | Critical Success Factors | Business Model |
|----------------------------------|---------------------------------|---|
| High Product Involvement | Media rich immersive interfaces | Subscription |
| High Purchase Involvement | Timely, accurate information | One time fee for individuals. Subscriptions for business. |
| Low Involvement | Quick efficient transactions | Fee for Transaction |

0 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/proceeding-paper/degrees-delight-model-consumer-value/33234

Related Content

On IT and SwE Research Methodologies and Paradigms: A Systemic Landscape Review

Manuel Mora, Annette Lerine Steenkamp, Ovsei Gelman and Mahesh S. Raisinghani (2012). *Research Methodologies, Innovations and Philosophies in Software Systems Engineering and Information Systems* (pp. 149-164).

www.irma-international.org/chapter/swe-research-methodologies-paradigms/63262

The Effects of Sampling Methods on Machine Learning Models for Predicting Long-term Length of Stay: A Case Study of Rhode Island Hospitals

Son Nguyen, Alicia T. Lamere, Alan Olinsky and John Quinn (2019). *International Journal of Rough Sets and Data Analysis* (pp. 32-48).

www.irma-international.org/article/the-effects-of-sampling-methods-on-machine-learning-models-for-predicting-long-term-length-of-stay/251900

Logistics Distribution Route Optimization With Time Windows Based on Multi-Agent Deep Reinforcement Learning

Fahong Yu, Meijia Chen, Xiaoyun Xia, Dongping Zhu, Qiang Peng and Kuibiao Deng (2024). *International Journal of Information Technologies and Systems Approach* (pp. 1-23).

www.irma-international.org/article/logistics-distribution-route-optimization-with-time-windows-based-on-multi-agent-deep-reinforcement-learning/342084

Informing the Design of Future Literacy Technologies with Theories of Cognitive Science

Michael C. Mensink, Mark Rose Lewis and Jeremy Wang (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 2516-2524).

www.irma-international.org/chapter/informing-the-design-of-future-literacy-technologies-with-theories-of-cognitive-science/112668

A Fuzzy Multicriteria Decision-Making Approach to Crime Linkage

Soumendra Goala and Palash Dutta (2018). *International Journal of Information Technologies and Systems Approach* (pp. 31-50).

www.irma-international.org/article/a-fuzzy-multicriteria-decision-making-approach-to-crime-linkage/204602