# Stickiness and Web-Based Customer Loyalty

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# INTRODUCTION

Between 1997-2003, Internet hosts grew from 16 million to over 233 million worldwide (www.isc.org, 2004). Of all Internet hosts, the number of commercial domain names (.com) is about 20.9%, which increased from 3.9 million in January 1997 to 48.6 million in January 2004.

Despite continued market growth, a number of Web sites have been unprofitable. From 2000 to 2003, at least 962 Internet companies ran out of money, shut down their operation and sold their businesses, with 63 5 of these enterprises operating in the business-to-consumer (B2C) sector (www.webmergers.com, 2004). Some notable failures were eToys.com, boo.com, bluefly.com, buy.com and valueamerica.com. An examination of the companies' IPO filings suggests that the collapses were caused by cut-price strategies, over-investment, incorrect expectations, and non-profitability. The surviving dot com companies in the new economy also have experienced financial difficulties. Amazon, a member of the Internet hall of fame, is still unable to generate a profit (www.webmergers.com (2004) REPORT). Surviving in the digital market has become a critical challenge for Web managers.

To face the business challenge, Web managers and marketers demand information about Web site design and investment effectiveness (Ghosh, 1998). Further, as the rate and diversity of product/service innovation declines and competition intensifies, Web managers must increase their efforts to improve their product/service and stabilize market shares. In this context, Donath (1999) and Hoffman (2000) noted the lack of, and the need for, research on Internet-related investment decisions. Web managers and marketers would benefit from reliable and consistent measuring tools for their investment decisions, and such tools are the focus of this article.

### BACKGROUND

Since online consumers can switch to other Web sites or competitive URLs in seconds with minimal financial costs, most Web sites invest heavily in programs to attract and retain customers. The Web site's ability to capture consumers' attention is known widely as "stickiness".

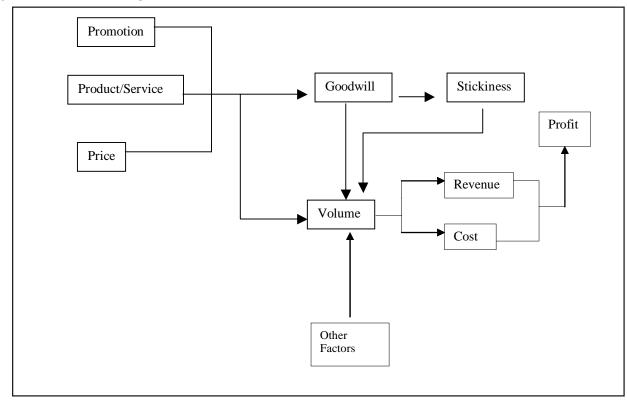
From one perspective (Rubric, 1999, p. 5), "The sticky factor refers to the ability of a web site to capture and keep a visitor's attention for a period of time." Likewise, stickiness can be described as the ability of the site in attracting longer and more frequent repeat visits or the ability of the site to retain customers (Anders, 1999; Davenport, 2000; Hanson, 2000; Murphy, 1999; O'Brien, 1999; Pappas, 1999). The various perspectives suggest that stickiness is similar to, if not the same concept as, customer loyalty.

On the other hand, Demers and Lev (2000) distinguished stickiness from customer loyalty. In their research, stickiness is represented by the average time spent at the site per visit, and customer loyalty refers to the frequency of visits. In fact, both the time duration and frequency of visits are mutually inclusive. The extension of the duration of relationships with customers is driven by retention (Reichheld, 1996). Loyal customers would visit the Web site frequently and remain with the site for a longer time period. In the process, these customers are generating not only traffic but revenue as well. Therefore, the goal of any Web site stickiness program must be to make customers loyal.

Customer loyalty has been a core element of marketing since the early eighties (Morgan & Hunt, 1994). The idea is to develop and maintain long-term relationships with customers by creating superior customer value and satisfaction. Enhanced customer satisfaction results in customer loyalty and increased profit (Anderson, Fornell & Lehmann, 1994; Reichheld & Sasser, 1990). Loyal customers, who return again and again over a period of time, also are valuable assets of the Web site. The ability to create customer loyalty has been a major driver of success in ecommerce (Reichheld & Schefter, 2000; Reichheld et al., 2000) since enhanced customer loyalty results in increased long-term profitability.

From marketing theory, then, stickiness can be viewed as the ability of a Web site to create both customer attraction and customer retention for the purpose of maximizing revenue and profit. Customer attraction is the ability to attract customers at the Web site, whereas customer retention is the ability to retain customer loyalty.

Figure 1. Stickiness conceptual model



### MAIN THRUST

E-commerce customer loyalty, or stickiness, results from goodwill created by the organization's marketing efforts (Reichheld, 1996; Reichheld & Sasser, 1990), or

Stickiness = $f(Goodwill)$	(1)
and Goodwill = $f(Marketing Mix)$	(2)

By encouraging current and return visits, stickiness will influence the organizations' volume. Marketing theory also suggests that the mix of price (including switching costs to consumers), product/service (including site characteristics), and promotion (including banner and other Web site ads), as well as other factors (including consumer characteristics), will influence this volume (Page et al., 1996; Storbacka et al., 1994). Hence,

Volume = f(Stickiness, Promotion, Product, Price, Other Factors) (3)

Such volume will determine revenue, cost, and thereby profit for the Web site.

According to standard accounting practice and economic theory, profit is defined as the excess of revenue over cost, or

$$Profit = Revenue - Cost$$
(4)

while revenue will equal volume multiplied by price, or

$$Revenue = Volume \times Price$$
(5)

According to standard accounting and economic theory, an organization's costs will have fixed and variable components, or

$$Total Cost = Fixed Cost + Variable Cost$$
(6)

and variable cost will equal volume multiplied by unit cost, or

Variable Cost = Volume 
$$\times$$
 Unit Cost (7)  
with volume as defined in equation (3).

These marketing-economic-accounting-theory-based relationships are illustrated in Figure 1. This figure and equations (1) - (7) provide a conceptual model that specifies the manner in which the stickiness investment can contribute to an e-business organization's effectiveness

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