Chapter 9

Drop-Out Risk Measurement of E-Banking Customers

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ABSTRACT

During the last decade, the national financial markets have shown a great transformation that has failed to reduce the high rate of existing banking in spite of the current financial crisis. This high level of competition makes financial institutions concerned about the loyalty of their customers to maintain or increase their market share and profitability. In this chapter, the authors propose a statistical model that measures the risk of customers dropping out of a Spanish financial institution, and this is a widespread method for the financial sector in general. The risk depends on socio-demographic and economic factors, as well as—most importantly—on the levels of satisfaction and trust that the bank produces in customers. Research shows that the proposed model can help institutions to know which customers have a greater risk of dropping out and, therefore, establish some recommendations for their loyalty.

INTRODUCTION

Nowadays, online trading is regarded as the most potential tool for companies, which will mean a revolution in both the buying habits of consumers and the formulas of relationship between consumers and companies (Sharma and Sheth, 2004). Currently, over 90% of total OECD firms have access to the Internet. Although in Spain it is slightly lower (86.6%), the trend in recent years shows signs of an approximation to the average OECD countries (AMETIC, 2010).

Even though it is true that the use of the Internet will be more or less intensive depending on the sector and size of the company, there are certain sectors, such as finance, tourism and the media, where the Internet has a major presence (Badia, 2002) and shows a value creation (Luque
and Castañeda, 2007) as well as the generation of significant investments (AMETIC, 2012). In these sectors, as claimed by Rainer and Turban (2009), the Internet is considered to be a revolutionary tool that contributes to change and ways to do business. In this sense, financial institutions have modified their business models, paying special attention to e-Banking.

Generally speaking, the use of e-Banking is increasing annually, and at the present moment 28.7% of Internet users make financial transactions online (comScore, 2012) with significant growth prospects (see Figure 1).

In regards to Spain, both the number of Internet users and the use of most online services, including e-Banking, have increased as shown in Table 1.

Payment is one of the most important elements of any business because it makes the sale complete. In the case of e-commerce, payment is still an essential element requiring a payment system akin to the medium used. Consequently, e-Banking is presented as the main payment tool in financial transactions online (Molavi et al., 2011). Thus, e-Banking will be automatically offering modern and traditional bank services and products to customers directly and with the help of electronic connection channels (Alagheband 2006).

Meeting the needs of customers along with fulfilling their differentiation and loyalty are the three most important business objectives for financial institutions, thus promoting the loyalty of customers who make payments through online banking. Due to the privileged position they have enjoyed, financial institutions have not traditionally been characterized by using tools that favored customer loyalty, whereas in recent years, there are multiple actions that are performed in order to make the relationships with their customers profitable, rather than adding new customers, as this is much more expensive than keeping an existing one (Bhattacherjee, 2001).

In recent years, the current situation in the financial sector has been characterized by (Momparler, 2008): 1) Increased competition, 2) development of technological innovations, 3) Greater accessibility to services, 4) social interaction of financial customers, 5) Requirement of a lower cost per bank transaction, 6) Counting on customers with higher financial knowledge and 7) Ease of access to new technologies. This complicated situation has forced financial institutions to enhance and personalize their service level as well as to involve the entire organization in the search for greater linkage and customer profitability using tools such as Customer Relationship Management (CRM).

Can statistics help financial institutions and banks in customer faithfulness and loyalty according to their needs? In order to answer this question, this manuscript aims to test the importance that customer loyalty implies for financial institutions and whether that loyalty can bring them a higher profit (Reichheld, 1996), for which empirical research was conducted using a survey of 946 clients of a Spanish financial institution, following the scheme presented in Figure 2. The research results suggest that statistical models provide a great service to detect those customers with high risk of dropping out, though, after viewing a large number of descriptors, a different model can be obtained for each entity within a financial system using, for this, the same methodology.

In this sense, the objective of this work is to determine a method that can assess the existing probability for an e-banking customer not to be faithful to the bank, therefore measuring the risk of loss of an e-banking customer.

For this, we divided the work as follows: in section 2 we define the concept of faithfulness after an extensive review of literature dealing with marketing and consumer behavior. In this regard, we establish the relationships between loyalty and satisfaction and confidence, respectively. In section 3 we present the theoretical relationship of the subject to explain following the concepts defined in previous sections. For this, after posing the objectives and appropriate hypotheses,