

# Chapter 7

## Enhancing Students' Loyalty to the Information Systems Major

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### ABSTRACT

*Many colleges and universities face the problem of recruiting and retaining students in information systems-related majors. The authors' study proposes a model to identify the primary factors leading to the retention of existing Computer Information Systems (CIS) majors. They identify four factors leading to student intention to remain a CIS major or to refer others to become a CIS major: (1) expectations, (2) perceived service quality, (3) satisfaction, and (4) regret. They discover that certain factors play a significant role in influencing a student's intention to remain a CIS major and/or to encourage others to major in CIS. By determining which factors impact students' intentions to remain a CIS major and to encourage others to major in CIS, we can focus our resources on these areas instead of spending time and money on those services which are not influential.*

### INTRODUCTION

Cultivating major loyalty is a more cost-effective solution than an expensive marketing effort to boost enrollment. Many business schools in the U.S. have been struggling with the decrease of enrollment in information systems majors due to the offshoring trend and economic downturns. About 76% of the surveyed universities in one

study reported a decrease in the number of students enrolled in computer science, computer information systems, and management information systems majors (Pollacia & Lomerson, 2006). Computer science enrollments in the U.S. plummeted by more than 50% from 2000 to 2005 (Scarlatos & Lowest, 2007; Brookshire, 2006). A macro-level analysis shows that growth in IT careers will continue at a rate of higher than 30%

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through 2012 (Horrigan, 2004). Eight out of the eleven fastest-growing occupations through 2012 will require that a prospective employee hold a bachelor's degree in a computer-related field (Pollacia & Lomerson, 2006). The disparity between the demand and supply of IT professionals creates a timely, interesting and relevant topic for research on how to retain CIS majors by creating a positive major experience. Their satisfactory experience with the CIS major and the success of their career placement will inspire prospective students to pursue a CIS major, according to Social Cognitive Career Theory (Lent, Brown, & Hackett, 1994) and Major Choice Goals Model (Akbulut & Looney, 2007). The purpose of this study is to offer a fresh perspective on increasing CIS majors via examining primary factors leading to the retention of existing CIS majors.

## **LITERATURE REVIEW**

A customer-oriented approach to students can increase their satisfaction with college life (DeShields Jr., Kara, & Kaynak, 2005). Students are internal customers, laborers, users, and products of the learning process (Sirvanci, 1996). Students need to pursue their own learning interests and enjoy the learning process. Aside from personal motivations of pursuing a discipline, a student's experience with academic, professional and extracurricular services provided by a major has a strong influence on increasing student satisfaction, thereby decreasing attrition rates. These experiences are particularly important for computer-related majors. The pattern of high attrition in computer-related majors has become a norm; drop rates of these majors are as high as 30% to 40% (Beaubouef & Mason, 2005).

Our study integrates research from several areas to examine the primary factors leading to students' satisfaction with the CIS major. A clear understanding of these factors can help us better understand how to alter today's trend of a con-

tinuous decrease in computer-related majors. The ability of doing so can create a win-win situation for several stakeholders, including IS students, employers, instructors, and academic institutions who have a growing need for IS talents. We identify four factors leading to student intention to remain a CIS major or to refer others to become a CIS major: (1) expectations, (2) perceived service quality, (3) satisfaction, and (4) regret. The following section will examine the causal relationships between these theoretical constructs and learn which relationships are useful at increasing student's loyalty to CIS major.

## **Expected Service Offerings of IS Major**

It is commonly accepted that expectations are a key determinant for consumer satisfaction in the marketing field. Customers have different expectations, which can result in varying satisfactory experiences. Lack of clarity about different types of expectations when investigating customer satisfaction can easily jump to conclusions without understanding the real consumer behavior. One study classifies consumer expectations into three types: (1) predictive expectations, (2) normative expectations, and (3) comparative expectations (Prakash & Lounsbury, 1984). This study adopts the predictive expectation and comparative expectations to help understand how to increase a student's satisfaction with CIS major, thereby leading to major retention and referring intention.

Students of all majors expect quality delivery of academic, professional and extracurricular services from their departments. An effective IS department not only needs to provide common student services similar to other departments, but also needs to offer unique services to IS majors. Student services in demand by all business majors include student clubs, internship opportunities, curriculum design, teaching effectiveness, and job placement services. Unique services attracting CIS majors include (1) offering new technology

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