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WHY BUSINESS STUDENTS SELECT MIS AS THEIR MAJOR – AN EMPIRICAL EXAMINATION

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ABSTRACT

Enrollment growth has been a concern for many Management Information Systems (MIS) programs in recent years even though the job market remains strong. This paper investigates the factors that impact business students when they select their major and students' perceptions of the MIS program. Students enrolled in business programs within a medium-size public university in the southeastern US participated in the study. Consistent with previous studies, this research finds that career-related and personal interest factors have the biggest impact on students' choice of major. The implications of the study and strategies for promoting the MIS major are discussed.

Keywords

Enrollment, MIS program, selection of majors, student perception of MIS program.

INTRODUCTION

In today's competitive, enrollment driven higher education environment, universities are placing increasing emphasis on the successful recruitment and retention of students. It becomes increasingly important to understand the factors that cause students to select one major over another. This is particularly true in the Management Information Systems (MIS) field, which saw a 75% decline in enrollments in less than a decade. This trend is peculiar in light of the fact that employment opportunities for MIS graduates are growing, and salaries in the field are high, relative to other options (Frankel, 2008). This leads to the inevitable question: why aren't more students selecting MIS as a major, in light of the obvious benefits of doing so?

RELATED STUDIES

The answer to the above question requires us to first examine the prior studies that have attempted to identify the causes of students' major selection choices. Several previous studies have examined the factors that influence business students' selection of college major, either in the broad context or in relation to a specific major. The first we examine, a classic 1987 study by Galotti and Kozberg, found that in general, students' choices of major were determined primarily by five factors: difficulty and appeal of the major, applicability to future career goals, reputation of the program, past experiences with the field, and the courses required for completing the major. This indicates that these students made relatively informed decisions about their major selection. It's also notable that this same study found that influence or advice of other people had very little impact on the decision.

Some more recent studies focused with greater specificity on business students and even single majors in business. Walstrom et al. (2008) found that MIS students make relatively informed decisions on major, influenced primarily by information on the web. Simons et al. (2003) found that among accounting students, major selection was largely based on student expectations about future job opportunities, earning potential and actual job content. However, they also noted that many studies of accounting students indicated that their college professors played a large role in their decision to select accounting as a major. Similarly, a study by Francisco et al (2003) found that non-accounting business students chose not to major in accounting because they viewed it as boring and repetitive and they thought accountants were poorly paid. However, they also found that those same students lacked accurate information regarding what accountants actually do. The students who did major in accounting had significantly higher levels of information about the careers in that field. The reality is that accountants are highly paid and receive lucrative perks and bonuses as well (Byrnes, 2005, MacDonald, 2005).

RESEARCH DESIGN

This paper investigated important factors impacting business students' choice of major and students' perceptions of MIS programs. A survey-based methodology was used in the study. A questionnaire was constructed and administered to business

students enrolled in the business school at a medium-sized public university in the southeastern USA. The questionnaire was designed to gather four types of data: 1) demographic information about respondents, 2) importance of the factors respondents considered when they chose their majors, 3) respondents' perception of the MIS program, and 4) the information resources from which the respondents learned about MIS programs. Survey questions in segment 2 were a revision of the scale used by Walstom et al., (2008) and questions in segment 3 and 4 were a revision of the scale used by Hogan and Li (2010).

In the survey, participants were asked to rate the importance of factors impacting their choice of majors and specify their perceptions of MIS programs using a 5-point Likert-type scale. Pedhazur and Pedhazur-Schmelkin (1991) stated that a five, six, or seven point Likert scale is appropriate for survey research.

The participants were drawn from three sections of a skill-based MIS software application course and two sections of principles of MIS course. All five sections are required courses taken by all business students in either their sophomore or junior year and the latter two course sections are the introductory course in the MIS program. The survey was anonymous and participation in the survey was voluntary.

In this paper, descriptive means and frequency counts were used as the primary statistical methods.

FINDINGS

Demographic Information of the Participants

A total of 160 responses were collected from the participating classes. 33.54% of respondents were sophomores and 42.86% were juniors. 39.38% of the participants were male students and 60.62% were female. This is consistent with the population breakdown by gender of the undergraduate business program. The majority of the respondents were traditional students (about 72% are younger than 25 years) however, there were a significant number of non-traditional students in our sample. Over 75% of participants held either a full time or part time job at the time of the survey. The majority of the respondents had already chosen their major. The distribution of the majors is listed in table 1.

Major	Percentage
Management	24.69%
Accounting	17.9%
Finance	16.05%
Marketing	15.43%
MIS	4.93%
General Business	15.4%
Not yet decided	3.09%
Others	2.47%

Table 1. Distribution of Majors

We divided respondents into two groups: MIS students and non-MIS students. Interestingly, MIS students (50% are older than 25) in general are a little older than non-MIS students (27.26% are older than 25). There are more male students in the MIS group (62.5%) than the non-MIS group (38.16%). Attracting younger students and female students to the MIS program appears to be a potential area for growth.

What is Important to Business Students When They Choose Their Major?

In the questionnaire, we listed eight important factors which may impact respondents' choice of major. The factors can be grouped into three categories: career related factors, personal interest factors, and social and referent factors. The respondents were asked to rate the importance of each factor on a five point scale ranging from "1- least important" to "5 – most important." The means of the responses are reported in table 2.

Career related factors such as salary and job security and personal interest in the subject matter ranked highest when respondents select their majors. The image of the profession and reputation of the degree program also have positive impacts on respondents' choice of major, while the influence of friends and family members has little impact. Interestingly, respondents did not weight the easiness of the subject matter as important, especially the MIS students. The findings are consistent with results reported by Walstom et al., 2008.

Factors	Detailed Descriptions	Non-MIS Students	MIS Students	Overall
Career related factors	Starting salary and long time salary prospects	4.46	4.13	4.45
	Job Security of the Related Occupations	4.25	4.38	4.25
	Occupational Growth of Forecast	4.20	4.29	4.20
Personal interest factors	Personal interest in the subject matter	4.40	4.88	4.42
	Easiness of the Subject Matter - Easy for me	3.16	2.50	3.13
Social & referent factor	Prestige/Image of the Profession	4.02	3.25	3.98
	Reputation of the Degree Program	3.90	3.75	3.89
	Influence of Friends and Family Members	3.08	3.38	3.09

Table 2. Important Factors Regarding Student Career Choice

Where Do Students Learn about Their Majors?

The respondents rated the importance of information sources to their career choice on a five point scale ranging from “1- least important” to “5 – most important.” The mean values are shown in table 3. Surprisingly, there is no prominent information source that stands out. The top three sources, major-related course, Internet, and friends and family, were just rated slightly higher than neutral. It seems clear that the traditional sources of information do not feature prominently in the major choice decision of these students. This finding was particularly pronounced among MIS majors who rated none of the traditional sources above the neutral point of 3.0. This leads to the next inevitable question for future study, which is; where are students obtaining the information about their major that they use to select their program of study?

Important Information Sources to Career Choices	Non-MIS Students	MIS Students	Overall
Information from Major-related Courses	3.35	2.75	3.32
Information from Internet/Web	3.25	2.88	3.24
Information from friends and family members	3.24	2.88	3.22
Job Listings (online/classified Ads)	3.09	2.63	3.07
Discussion with Fellow students	2.76	1.75	2.71
Career Counselors or Academic Advisor	2.59	1.63	2.55
Presentations by Alumni/Guest Speakers	2.33	1.75	2.30

Table 3. Important Information Sources to Career Choice

What Do Students Think of the MIS Program?

From the above section, we learned that career-related factors and personal interest factors were most important to students' major choice. We felt that it would be useful to identify students' perceptions of our MIS program based on those important factors. Respondents were asked to indicate their opinions on several statements about MIS major on a five point scale ranging from “1- least important” to “5 – most important.” The mean values are listed in table 4. In general, students had positive perceptions about the MIS program and they didn't think MIS was an easy subject. However, easiness of subject wasn't an important factor for student's career choice. The respondents who chose the MIS major clearly held strong beliefs about MIS in terms of job and career prospects and their own personal interest in the subject matter. The results seem to indicate that there is a good student base to which to promote the MIS program as a major or minor. They already hold positive attitudes about the subject matter and post-graduation job opportunities. Since these are among the strongest factors that students identified as impacting their major choice decision, these students should be attracted to the program if recruited effectively.

Respondents' Perception of MIS Program	Non-MIS Students	MIS Student	Overall
MIS graduates have good and well-paid jobs	4.18	4.25	4.19
MIS Jobs are stable and fast growing	4.08	4.63	4.11
MIS major/jobs sounded interesting and cool	3.72	4.38	3.75
MIS seems easy to study and to graduate with	3.17	2.63	3.14
I'm not a MIS student, but MIS courses can make me more competitive in my current job/the job market	4.48	NA	NA

Table 4. Respondents' Perception of MIS Program

DISCUSSION AND CONCLUSION

In this paper, we investigated the factors important to business students' career choice and student's perceptions of an MIS program using a survey-based method. The survey results showed career-related and personal interest factors have the biggest impact on students' choice of major. Our study replicates the findings of Walstrom et al (2008) generalizing their findings to a different academic setting, located in the Southeastern US rather than the Midwest. Our study shows that the results of Walstrom et al (2008) are robust and generalize beyond the specific university used in their study.

Additionally, while the relative ordering of the sources of information used by students mirrored Walstrom et al's study, we discovered that none of the traditional information sources cited in previous studies were identified as important or very important in students' major choice. The highest ranked sources received ratings barely above three on a one to five scale. What this suggests is one of two possibilities. The first is that we currently are not measuring the information sources most important to students in their major choice. The other alternative is that students make their major choices in an intuitive manner, not relying heavily on outside information. Since the second alternative is inconsistent with much of the established research that shows that students make their major choices in a relatively rational manner, the first alternative seems the most likely. This suggests that students are still making relatively informed decisions, using information sources other than those currently being measured.

Another positive outcome of this study is that, in general, business students seem to hold a positive perception of MIS programs, both in terms of having interesting content subject matter and post-graduation career opportunities. This suggests that these students may be amenable to recruitment into an MIS program, if the proper approach is taken. These findings are important given the current state of declining MIS enrollments and burgeoning MIS career opportunities. This is not a case of attempting to convince students that they should major in something that they dislike, for some intangible greater good. Students already believe that MIS as a major is interesting and will result in a high paying, rewarding career. The challenge is to find the key to nudging them into a major they already find interesting and rewarding.

The implications of this study suggest further research along two directions. 1) Identifying the important information sources currently used by students in making their major choices. It is clear from our study that students are placing a low reliance on traditional sources of major and career information. This leads us to ask the question of where exactly students get information about their major. An open-ended or interview-based research methodology would be appropriate to investigate this. 2). Finding effective methods for promoting the MIS major to students. The ultimate goal of understanding the important factors of major and career choice is finding good strategies to effectively promote the MIS program. Since career and personal interest are important to students' major choice and students are often less informed about MIS than other majors, conducting informational seminars for students to inform them of the career opportunities associated with the MIS major, as well as highlighting the opportunities and salary potential in the field.

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