# Association for Information Systems AIS Electronic Library (AISeL)

SAIS 2005 Proceedings

Southern (SAIS)

3-1-2005

# Analysis of Business Students' Internet Purchases: Fall 2003

Gordon Couturier gcouturier@ut.edu

Follow this and additional works at: http://aisel.aisnet.org/sais2005

#### **Recommended** Citation

Couturier, Gordon, "Analysis of Business Students' Internet Purchases: Fall 2003 " (2005). SAIS 2005 Proceedings. 25. http://aisel.aisnet.org/sais2005/25

This material is brought to you by the Southern (SAIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in SAIS 2005 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

# ANALYSIS OF BUSINESS STUDENTS' INTERNET PURCHASES – FALL 2003

Gordon W. Couturier The University of Tampa gcouturier@ut.edu

#### Abstract

This study was made to compare the buying habits of students at The University of Tampa and Institute Tecnologico y de Estudios Superiores de Monterrey, ITSM. The original intent was to contrast the buying characteristics between US and Mexican students. However, due to the few Mexican students that participated, a good comparison could not be made. As a result, this analysis explores the buying habits of both US and Mexican students over a 3-4 week period (October and November, 2003).

Keywords: E-commerce, Buying Habits

#### Introduction

This study was made to compare the buying habits of undergraduate business students at The University of Tampa and undergraduate and graduate business students at the Institute Tecnologico y de Estudios Superiores de Monterrey, ITSM, in Mexico. The Tampa students were members of several sections of an Information Technology Course, a core requirement of all business students. This instrument was also used to determine whether purchases were made online or internet influenced in a store [Kim, 2003], the ages of the students participating, the student families' gross income level, when items were purchased [Hall, 2000] and the types of products purchased.

#### Acknowledgement

The author would like to acknowledge the assistance of Dr. Carlos R. Martínez from the Institute Tecnologico y de Estudios Superiores de Monterrey for his assistance in developing the survey form and for encouraging his students to participate.

### **Initial Hypothesizes**

Initially, it was expected that this research would validate the following:

**H1.** The younger the student, the more they would buy on the internet. **Reasoning:** Younger students have been brought up using computers and the internet and they would be more comfortable with using them to make purchases.

**H2.** More men than women would purchase items on the internet. **Reasoning:** Men have been more involved with electronics and the internet than women in the past and therefore would be more comfortable making purchases on the internet [Johnson, 1998][Dholakia, et al, 2003][Hall, 2000].

**H3.** The higher the gross family income, the more the student would purchase on the internet. **Reasoning:** students from high gross income families would have more disposable money to spend on the internet.

**H4.** Computer related majors (IS, CS) majors would purchase more on the internet than other students. **Reasoning:** Computer related majors would have a higher comfort level with computers and internet buying than non-computer majors. H5: Most purchases on the internet will be planned versus impulse purchases. Reasoning: Students will be more likely to make a purchase when they are looking for something specifically rather than when they are surfing the internet.H6: The major stimulus for purchases will be friends. Reasoning: Friends and peers have a strong influence on students. Students will be swayed more by friends than ads.

H7: Most student purchases are made from 6pm to 6am. **Reasoning:** Evening, night and very early morning are times when students would be more likely on the internet (after classes and social functions).

**H8:** The majority of the purchases were made on the internet rather than internet influenced store purchases. **Reasoning:** Students are comfortable in purchasing online.

## Methodology

To obtain the data for this study, a business student was asked to register themselves on a website and to provide demographic data consisting of:

- 1. ID and password
- 2. University attended
- 3. Academic class
- 4. Nationality
- 5. Native language
- 6. Sex
- 7. Age range
- 8. Major or concentration
- 9. Gross family income

They were then asked to keep a log of his/her Internet purchases for two weeks. For every purchase, the student was requested to record:

- 1. Date and time of purchase
- 2. Category of purchase [Nickerson, et al, 2003][Hall, 2000][Dartnell Corporation, 2000]
- 3. What prompted purchase
- 4. Amount of purchase
- 5. Language used to make purchase
- 6. Planned or impulse purchase
- 7. URL of the homepage where purchase made
- 8. Purchase made on internet or internet influenced
- 9. Security of ordering website

# Results

Ninety students participated in this study. Forty seven (47) males and forty three (43) females registered for the survey.

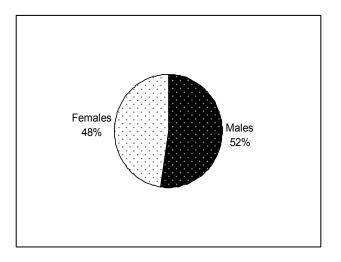


Figure 1. Number of registered males and females.

The age distribution in purchases made (H1) was heavily weighted toward the young as shown below. Since most undergraduate students who have declared business as a major are juniors and seniors, the large number in the 21-25 age range is not surprising.

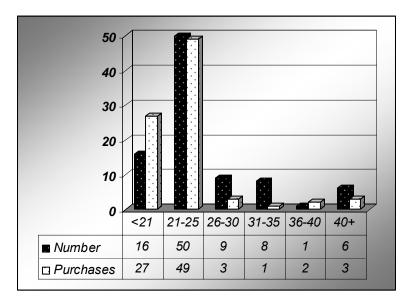


Figure 2. Age distribution of purchases.

The number of purchases identified by sex (H2) was forty three (43) by females, forty one (41) by males and one (1) left blank. Some people made multiple purchases while others didn't make any purchases.

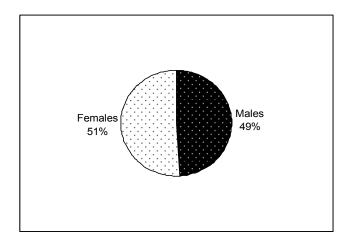


Figure 3. Purchases made by males and females.

The income level of persons versus their number of purchases (H3) is shown below. Notice that although the income level was fairly evenly distributed, more than twice as many purchases were made in the over \$100,000 level.

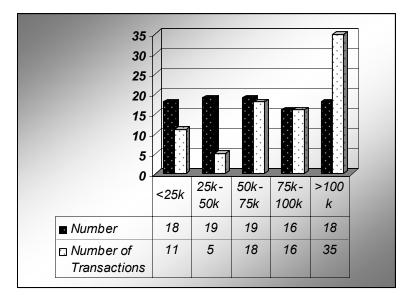


Figure 4. Number of transactions distributed by income level comparison.

The distribution of eighty five (85) purchases was quite diverse. Almost a third of the purchases were other than specified choices.

Category	Number
Books	9
Clothes	19
Electronics	8

Table 1. Distribution of purchases registered during survey.	Table 1.	Distribution	of purchases	registered	during survey.
--	----------	--------------	--------------	------------	----------------

Music	8
Travel	15
Other	26

The distribution of transactions by business major (H4) showed an unanticipated distribution with Finance majors making more than twice as many purchases as any other major. Since most of the students were from a required core course (Information Technology) of all business students, the number of students in each major should be evenly distributed.

Table 2. Number of transactions by reported major.

Major	Number of Transactions
Accounting	8
CIS/CS/ITM	7
Finance	35
International Business	12
Management	15
Marketing	8

Twenty eight (28 or 33%) of the purchases were made upon impulse whereas fifty seven (57 or 67%) were planned purchases (H5).

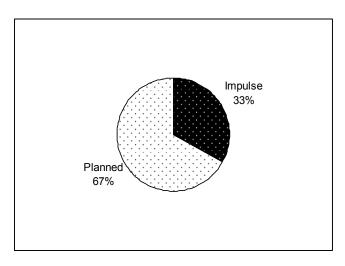


Figure 5. Impulse versus planned purchases.

The stimuli for purchasing items (H6) were varied and unexpected as shown below. Although friends were the most specific factor, other factors seemed to play a greater role.

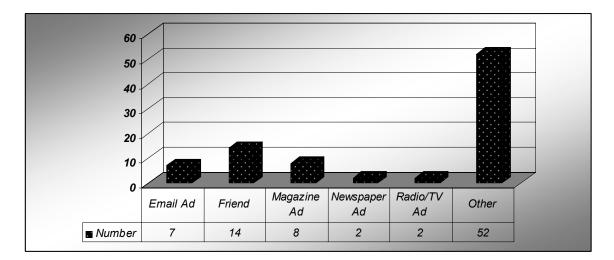
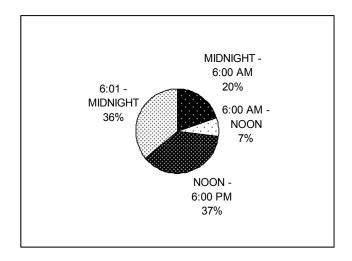
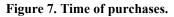


Figure 6. Influence factors on purchases.

The times at which the purchases (H7) were made were as follows:





Notice that the number of purchases between noon and 6 P.M is essentially the same as from 6:01 P.M. to Midnight. It was not too surprising that the lowest number of purchases was made between 6:00 A.M. and noon when most students sleep in late.

Fifteen (15) of the purchase were influenced by the internet but were made in a store. Seventy (70) purchases were made on the internet (H8).

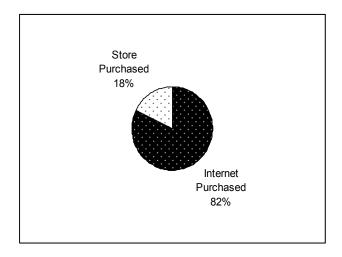


Figure 8. Where purchases were made.

The lowest priced purchase was \$2.50 for music. The highest priced purchases were \$1350.00 for electronics, \$1200.00 for insurance and \$1200.00 for electronics.

### Conclusions

Each of the original hypothesizes will now be reexamined:

**H1.** The younger the student, the more they would buy on the internet. **Reasoning:** Younger students have been brought up using computers and internet and they would be more comfortable with using them to make purchases. **Result:** 89% of the transactions were made by students 25 years old or younger. For students less than 21 years old, they averaged 1.69 transactions each. For 21-25 year olds, they averaged .98 transactions each. However, the one student in the 40+ age group made 2 purchases. **This hypothesis is inconclusive.** 

**H2.** More men than women would purchase items on the internet. **Reasoning:** Men have been more involved with electronics and the internet than women in the past and therefore would be more comfortable making purchases on the internet. **Result:** Even through more males registered than females, females actually executed more transactions than males. **This hypothesis was not supported.** 

**H3.** The higher the gross family income, the more the student would purchase on the internet. **Reasoning:** students from high gross income families would have more disposable money to spend on the internet. **Result:** The distribution of registered students by income level was fairly even. However, the distribution of the number of transactions per income level showed that 81% were made by students with a gross family income of \$50k or more and that 41% were made by students with gross income of \$100k or greater. **This hypothesis was supported.** 

H4. Computer related majors (IS, CS) majors would purchase more on the internet than other students. **Reasoning:** Computer related majors would have a higher comfort level with computers and internet buying than non-computer majors. **Result:** 7 out of 85 (8%) transactions were made by IS/CIS/CS students. Finance had more than twice as many transactions as any other major. **This hypothesis is not supported.** 

**H5:** Most purchases on the internet will be planned versus impulse purchases. **Reasoning:** Students will be more likely to make a purchase when they are looking for something specifically rather than when they are surfing the internet. **Result:** 67% of the transactions were planned versus 33% done on impulse. **The hypothesis is supported.** 

**H6:** The major stimulus for purchases will be friends. **Reasoning:** Friends and peers have a strong influence on students. Students will be swayed more by friends than ads. **Result:** While friends were the highest influence named (14/85 or 16%), other unnamed influences were far higher (52/85 or 61%). For named influences, the hypothesis is correct; however, for the majority of all influences, the hypothesis is not supported.

H7: Most student purchases are made from 6pm to 6am. **Reasoning:** Evening, night and very early morning are times when students would be more likely on the internet. **Result:** Essentially, the same number of transactions occurred between noon

and 6 p.m. as occurred between 6 p.m. and midnight. The lowest number of transactions occurred between 6 a.m. and noon. **This hypothesis is not supported.** 

**H8:** The majority of the purchases were made on the internet rather than internet influenced store purchases. **Reasoning:** Students are comfortable in purchasing online. **Result:** 82% of transactions were made online. **This hypothesis is supported.** 

#### **Summary**

This was a self reporting survey of business undergraduate and graduate students at The University of Tampa and the Institute Tecnologico y de Estudios Superiores de Monterrey in Mexico performed over a 3-4 week period. Some interesting conclusions were observed:

1. The largest number of purchases was clothes, followed by travel. The students were fairly evenly divided between men and women and family income levels.

2. Friends were influential in the buying process; however, there were over three times as many influenced by "Other" factors.

3. One third of all purchases were done on impulse, not planned.

4. The internet was used for research of later store purchases in less than 20% of all purchases.

### References

1. Dartnell Corporation, 2000, Targeting the College Students Just Got Easier," Selling, 1069195, (pp 2)

2. Dholakia, Ruby Roy, and Chiang, Kuan-Pin, 2003, "Shoppers in Cyberspace: Are They From Venus or Mars and Does It Matter?" Journal of Consumer Psychology, 13(1&2), (pp 171-176).

3. Hall, Cheryl, 2000, "Are You an Online Window Shopper – Or an Actual Buyer?" Retrieved February 10, 2004 from www.ebates.com/press\_release.jsp?press\_release=press\_releases/press\_012.html.

4. Johnson, Don, 1998, "Who's on the Internet and why," Futurist, August/September Volume 32, Issue 6, (pp11-12).

5. Kim, Tae-Hwan, and Shim, J. P., 2003, "Perception of Internet Shopping: A Study on the Experienced and Inexperienced Internet Shoppers for College Students," AMCIS 2003 (pp 344-352).

6. Nickerson, Robert C., and Turberg, Stephanie, 2003, "An Assessment of European E-Commerce Systems," AMCIS 2003 (pp 353-362).