**TEACHING NOTE**

**AMERICAN TEXTBOOKS: BUYING STRATEGIES AND INNOVATIVE BUSINESS MODELS**

**Critical Incident Overview**

This critical incident introduced a true story about Lucy, an international student who was frustrated with the culturally different, very expensive academic environment in the United States. Lucy had not previously shopped for college textbooks. In her native country, China, universities provided textbooks to students at a nominal price. But in the United States, she observed textbook prices were extremely high. Just to give a comparison, textbook prices in the U.S. were almost twice that of the average monthly living expenses for an international student whereas in her native country it was one-fifth of their monthly expenses. She realized government influence in China, a country that greatly values higher education, helped to keep costs down. Despite learning in her business classes that competition results in lower prices, Lucy could not understand why American textbooks prices were so high. In addition there was wide price variation among various booksellers. There were competitive differences amongst booksellers such as the convenience of returns, the option to view a textbook before purchasing, the availability of online shopping, good customer service, and cost saving opportunities through auctions.

Lucy collected price data for 30 textbooks from the University bookstore, Barnes and Noble, Amazon and eBay. The comparative data did not lead her to an effective solution for her situation nor did it include the intangible benefits offered. Starting with her research to reduce costs that did not result in a clear solution, Lucy ended up searching for an alternative business model that would not only provide a lower cost solution for students, but also other intangible benefits.

**Research Methods**

This critical incident was written based on a former student’s actual experience. The names of the individual and university location have been disguised to preserve anonymity. Price data given in the case is publicly available information.

**Learning Objectives**

After analyzing this case students should be able to:

1. Contrast various business strategies and consumer buying patterns;
2. Perform data analysis for price comparisons and decision making; and
3. Generate new business ideas and models, particularly with respect to selling textbooks

Note: The learning objectives may vary based on the course in which this Critical Incident is used. These are examples of some learning objectives with possible questions and answers listed below. In the answer provided to question 2, multiple data approaches are suggested which range from simple analysis based on ranking to more complex analysis involving ANOVA. For more information on ANOVA technique some of textbooks chapter are suggested at the end of this teaching note.

**Applications**

This case will be useful in undergraduate or graduate strategic management, international business, marketing, new business ventures/entrepreneurship, and cross-cultural management classes, too. Students should be able to perform basic marketing, data, and general business analyses. (Knowledge of ANOVA will be helpful but is not required.) Students should also have an understanding about various business/marketing strategies, and should be able to creatively develop new business ideas.

**Questions**

1. Compare the textbook selling business model in the U.S. versus China, Lucy’s native country.
2. Based on the data provided, how would you compare the pricing of textbooks by the four different booksellers discussed in case?
3. Identify other costs in addition to textbook prices, and various intangible benefits that should be considered when deciding where to buy textbooks.
4. Generate at least one business idea/model that could provide lower cost textbooks to students as well as other intangible benefits.

**Questions and Answers**

1. **Compare textbook selling business model in the U.S. versus China, Lucy’s native country.**

Lucy’s native country, China, was very different from the United States in terms of the academic environment, and the decision making process in colleges and universities.. Decisions on curriculum, content and selection of textbooks were made at the university level in compliance with China’s governmental policies. The university received selected textbooks from suppliers at negotiated prices that were then sold to the students. Students, therefore, never shopped for academic books outside of the university because the university bookstore was the only bookseller for the purchase of textbooks. This was virtually a monopoly situation with respect to selling books to college students. A very high was emphasis placed on higher education in China, and the government exerted its influence to keep education-related expenses low.

In contrast, individual American instructors made decisions regarding curriculum, content and textbooks. Accordingly, the University bookstore was obligated to carry all required course textbooks regardless of price. Students could also purchase textbooks from other sellers’ stores or online. Wide variation in textbook prices existed, thereby making it more important to shop for good prices before making a purchase. However, contrary to what Lucy learned in her business classes, competition in the textbook market had not brought down prices. Textbook costs for a semester were almost twice the average monthly expenses of an international student. In China, the cost of textbooks for a semester was only one-fifth of their average monthly living expenses.

1. **Based on the data provided, how would you compare pricing of textbooks in the four different options discussed in case?**

There are multiple approaches to answer this question ranging from a simple ranking of stores based on price to more sophisticated statistical analysis using the ANOVA technique. If students have not previously learned ANOVA, then instructors should encourage students to come up with different ways to analyze the situation. This may include comparing mean prices at different stores or comparing the differences in the prices of books across stores.

Below is the simple ranking analysis of the provided data. Out of 30 textbook price comparisons, prices for only three textbooks were cheapest at the University bookstore. Seven textbook prices were cheapest at Barnes and Noble; nine book prices were cheapest at Amazon; and the remaining eleven book prices were cheapest at eBay. Table 1 presents these statistics by rank listed across rows with statistics generated for the 1st, 2nd, 3rd and 4th ranks.

**Table 1. Textbook Store Ranking Based on Prices**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rank/Store | University bookstore | Barnes and Noble | Amazon | eBay |
| 1st | 3 (10%) | 7 (23%) | 9 (30%) | 11 (37%) |
| 2nd | 0 (0%) | 11 (37%) | 9 (30%) | 10 (33%) |
| 3rd | 6 (20%) | 9 (30%) | 12 (40%) | 3 (10%) |
| 4th | 21 (70%) | 3 (10%) | 0 (0%) | 6 (20%) |
| Total | 30 | 30 | 30 | 30 |
|  |

Based on the above table, eBay was the most appealing option to purchase textbooks followed by Amazon and Barnes and Noble whereas the University bookstore was the most expensive place to buy textbooks. However, caution must be made results observed in this sample might not be applicable to all textbooks. To derive statistically significant conclusions, an ANOVA test should be performed. This method is used when you are comparing the difference in means of more than two populations. In this case we have four textbook stores representing four populations, and we are analyzing the impact of types of store (independent variable) on textbook prices (dependent variable). There are many subtypes of ANOVA technique. Students may get tempted to use one-way ANOVA. However, performing one-way ANOVA will not capture price differences across stores since price differences between textbooks are much larger than price differences across stores. For example, an Organizational Behavior textbook would cost between $39.99 and $54.95 across stores whereas the price difference between an Organizational Behavior textbook and a Managerial Accounting textbook would be around $230. Since we know that these two textbook prices are going to be different, the Textbook ID variable is introduced as a block variable and a Randomized Block Design (RBD) ANOVA test is performed. We found that bookseller is a significant predictor of prices (*p value < 0.0001*). Results are given in Table 2.

**Table 2. ANOVA Test Results (Independent variable Bookseller)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | 380613.604a | 31 | 12277.858 | 16.142 | 0 |
| Intercept | 1439201.3 | 1 | 1439201.3 | 1892.138 | 0 |
| Textbook ID | 360008.09 | 28 | 12857.432 | 16.904 | 0 |
| Bookseller | 20605.512 | 3 | 6868.504 | 9.03 | 0 |
| Error | 66934.716 | 88 | 760.622 |  |  |
| Total | 1863599 | 120 |  |  |  |
| Corrected Total | 447548.32 | 119 |  |  |  |
|  | | | | | |

Since the result of this ANOVA is significant, further post-hoc test should be conducted to analyze which stores differed in prices. Results are given in Table 3. Results showed that there was no difference among textbook prices of Amazon, Barnes and Noble, and eBay at the 5% significance level. However, prices at the university bookstore were significantly different from Amazon (*p value 0.002*), Barnes and Noble (*p value 0.024*), and eBay (*p value < 0.0001*). The University bookstore prices were higher than all three of the other booksellers studied as reflected by the positive mean difference in Table 3.

**Table 3. Bonferroni Multiple Comparison Test Results for Bookseller**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| (I) Bookseller | (J) Bookseller | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
| Lower Bound | Upper Bound |
| University bookstore | Barnes and noble | 20.9997\* | 7.12096 | 0.024 | 1.7787 | 40.2206 |
| Amazon | 26.8717\* | 7.12096 | 0.002 | 7.6507 | 46.0926 |
| EBay | 35.5417\* | 7.12096 | 0 | 16.3207 | 54.7626 |
| Amazon | Barnes and noble | -5.872 | 7.12096 | 1 | -25.093 | 13.349 |
|  | EBay | 8.67 | 7.12096 | 1 | -10.551 | 27.891 |
| EBay | Barnes and noble | -14.542 | 7.12096 | 0.265 | -33.763 | 4.679 |

1. **Identify other costs in addition to textbook prices, and various intangible benefits that should be considered when deciding where to purchase textbooks.**

There are many factors that should be considered regarding the purchase of textbooks. Instructors should encourage students to go online and research more about buying textbooks at Barnes and Noble, Amazon and eBay. If there is a university bookstore on campus, then students should include their own experiences in developing answers.

Availability was identified as the most important factor. If students were not shopping early enough for textbooks from external booksellers, then the university bookstore was the best option available. Although the university bookstore was the most expensive, it was also the most convenient with almost guaranteed availability. Purchasing textbooks in an external physical store like Barnes and Noble involved the additional cost of transportation and time in travelling and searching for books. Many international students did not have cars, and transportation to external booksellers could be quite challenging. Spending money on taxicabs might not justify the savings one would make by not shopping at university bookstore. In addition, there was a loss of time and money if the textbook was not available in the external store location. The university bookstore had an advantage because students were already on campus for classes. Also, textbooks could be easily located in the store because they are arranged by course number.

Travel related time and cost could be saved if students look up their textbook online on Amazon or eBay. However, there were additional costs and lead times involved. Order processing and shipping has increased lead time from payment to receipt of textbooks. Hence, students needed to order textbooks from Amazon or eBay at least one week or more before classes start. Shipping costs were waived for most textbooks on Amazon but this was not always the case on EBay. Paying more for expedited shipping might not justify savings by not shopping at the university bookstore. The cost to return textbooks should be considered if you are not certain about taking the course and might drop it after the first week. In some cases, for example on eBay, sales were final leaving no choice but to resell the textbook. Purchasing at a university bookstore or a Barnes and Noble store was advantageous if a student was not sure about continuing that course.

Student perceptions were that Amazon, and Barnes and Noble provided good customer service. However, shopping on eBay might not be that reliable. Buyers came in contact with different independent sellers, and some sellers might not be prompt in shipping textbooks. In addition, there could be issues with the quality of the purchased textbook. . This included receiving a book without the CD or an incorrect edition or damaged book. Receiving and returning books involved additional time and costs that might be refunded later but have to be paid first by students.

Thus, in this critical incident we recommend that consumers, especially students, be proactive by comparing prices and weighing other intangible benefits before choosing a bookseller.

1. **Generate at least one business idea that will provide low cost textbooks to students with other intangible benefits.**

The cost of higher education continues to rise dramatically in the United States. Students spend a significant amount of money in purchasing textbooks. The intent of this question is to require students to think critically and strategically as they attempt to identify alternative options to reduce cost they have to make sure that it is convenient too. This option should be justified using the textbook price data provided in the critical incident. Students can make appropriate assumptions for other expenditures from their own life experiences. Depending on the focus of the course, the answer to this question can vary from simple theoretical discussion to an in-depth budgetary analysis.

Here is a simple start up business idea similar to the co-op café model described in the critical incident.

Lucy could form a student organization that would manage a cooperative bookstore on campus. To begin with, only used books would be sold at this bookstore. The co-op bookstore would be a non-profit organization solely owned and managed by student members. Any student could become a member of this group either by paying a nominal fee or it could be completely free. The bookstore did not need to have a continuous physical location, but at times they could use student union rooms for their activities at no cost.

Based on the data provided, a simple analysis can be developed regarding the average cost of new textbooks at four different sellers, the average cost to purchase used books at the bookstore (75% of cost of new textbook prices at the university bookstore) and the average cost if a student sells a used textbook to the university bookstore (50% of the price of a new textbook at university bookstore). The data is listed in Table 4. Our data shows that if students bought a textbook and sold it back to the university bookstore at the end of semester, they lose on average at least $64.74 per book. This loss provided considerable incentive for a co-op bookstore to operate and benefit students. For example, a student could complete a seller’s form on the co-op bookstore webpage to list their book and desired price, and bring the book with the form to the organization’s office. Students interested in buying textbooks could look up the textbook listing online and then purchase it from the office. Alternatively, a co-op bookstore could have daily listings of textbooks available to sell during the first week of the semester in the student union. Lucy could advertise the group during freshman orientation. In addition, auctions managed by student organizers could be held where students could sell their books. A nominal fee of $10 per sale could be charged by the co-op bookstore to facilitate textbook sales. For each sale conducted through the co-op bookstore, the sale price could be stamped so that the price of books will be reduced further and further as books were sold over and again.

**Table 4. Average textbook cost**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **University Bookstore** | **Barnes & Noble** | **Amazon** | **EBay** | **Used books to purchase** | **Used books to sell** |
| $129.48 | $108.48 | $102.61 | $93.94 | $97.11 | $64.74 |

The co-op bookstore could operate with almost no start-up cost and maintenance expenses. Websites could be developed by MIS or computer science students as a part of their courses. Professors and students could help to maintain the website, and volunteers could facilitate events. Business faculties with expertise in Taxation could help this group with Tax returns. Co-op bookstore organizers could give discounts or waive $10 fees to students who volunteer to work during their events. This complete business model would benefit all students, and provide an opportunity for them to learn how to be an entrepreneur, and manage a small business.

**References**

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