

The New Strategy for a Small M.B.A. Program

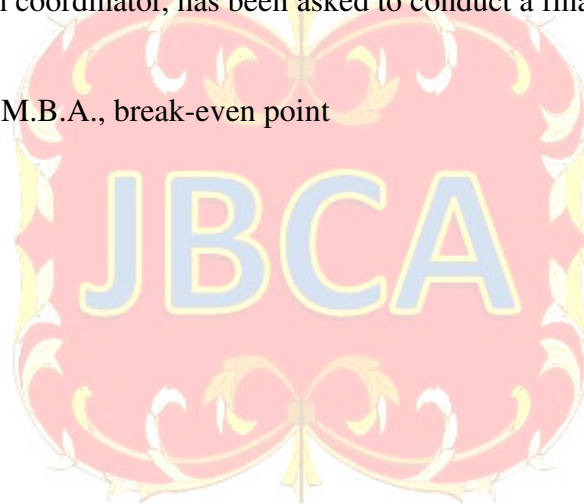
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ABSTRACT

Western Connecticut State University is a small regional school located in Connecticut. Like many universities in the Northeast, the school has been experiencing a decline in enrollment for several years. As a part of a strategic plan to boost enrollment, the school has initiated an effort to attract more international students. One agency in India has proposed to send local students to the M.B.A. program, with the school paying \$3,500 for each student. Dr. Youngbin Kim, the M.B.A. program coordinator, has been asked to conduct a financial analysis of this proposal.

Keywords: cost analysis, M.B.A., break-even point



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INTRODUCTION

Dr. Youngbin Kim worked as an accounting professor at Western Connecticut State University (WCSU) for several years before becoming the director of the M.B.A. program at the school. WCSU is a small state university located in the western part of Connecticut, with an enrollment of approximately 4,000 students. As a regional university, the school primarily served local students from Connecticut. The M.B.A. program was designed for part-time students who were employed at various local companies. Typically, the program accepted about 20 students each year, and the average student graduated after three years.

In 2015, Western Connecticut State University (WCSU) had a total enrollment of 5000 students. However, by 2020, the number had declined to 4000 due to the decreasing young population in Connecticut. In order to maintain its financial stability, WCSU introduced several new initiatives to boost future revenues. One of these initiatives was to attract more international students to the university. To achieve this, WCSU has decided to charge in-state tuition fees for international students, regardless of their nationality. This is in contrast to most other state schools in the Northeast, which charge international students out-of-state tuition fees.

Every department in a small regional school suddenly created new programs for international students. The business decided to offer the existing M.B.A. program without creating a new curriculum. Dr. Kim, who was a program director, was tasked with attracting more students from abroad. He believed that there was enough demand for his program in Asia, even though his school was not well-known there. However, foreign students could benefit greatly from paying in-state tuition.

At first, he attempted to create partnerships with universities in various countries such as China, India, and Korea. However, it would take many years, perhaps even decades, to attract a sufficient number of students. The dean of the business school desired more immediate outcomes. Fortunately, one of his friends introduced him to a local agency in India called Agency ABC. This agency offers advisory services to Indian students who wish to study abroad, particularly in the United States. Due to a lack of sufficient marketing budget, hiring a local agency was the only viable option. However, the school was expected to pay \$3500 to the agency for every student it sent to the program. The provost was hesitant to sign the contract with the agency, unless the deal could generate enough operational income in the future. Dr. Kim was tasked with conducting a financial analysis of this proposal.

ADDITIONAL INFORMATION

Revenue: an M.B.A. student needed to take 30 credits for graduation. An international student was expected to register for 12 credits in the spring and fall semesters, and 6 credits in a summer semester. A student would pay 7159 dollars as a flat tuition fee in the spring and fall semesters but would pay 753 dollars per credit in the summer semester. An international student would pay for a dorm and meals as well. However, Dr. Kim was asked to investigate the proposal's financial impact on the business school. So, he did not include financial information from dorms and meals.

Expense: the school needed to pay a one-time commission of 3500 dollars for every incoming student. The average salary expense for a professor was 6389 dollars in the spring and fall semesters and 2381 dollars in the summer semester for each credit but the school needed to pay

an additional fringe expense as well. The fringe expense was 80% of the salary expense in the spring and fall semesters but 30% in the summer semester. The maximum class size was 30. Therefore, if more than 30 students joined the program in 2021, the school would need to offer more than one session each year.

FINANCIAL ANALYSIS

In 2020, there were 20 new students who joined the school. Dr. Kim assumed that there would be the same number of new local students in 2021. However, Agency ABC informed him that he could expect somewhere between 5 and 30 Indian students in 2021. The classroom could accommodate up to 30 students. If the number of students exceeded 30, the school would need to offer 2 sessions per year instead of just 1.

Question 1: Dr. Kim made 6 possible scenarios (5, 10, 15, 20, 25, 30 students from India). Calculate the change in the operational income under each scenario using the following table.

Number of Students	Change in Revenues	Change in Expenses	Change in Operational Income
5			
10			
15			
20			
25			
30			

Question 2: Dr. Kim conducted an analysis and found that it would be reasonable to accept 10 additional students in each class as there were 10 empty seats available. However, he was unsure if accepting more than 10 students would always be beneficial. It could be financially harmful to offer an additional session for a few students. Dr. Kim decided to accept more than 10 students and offer 2 sessions only if it generated more income than the 10-student scenario. So, how many students does Agency ABC need to send to WCSU to offer 2 sessions of each class?

Question 3: Dr. Kim discovered that the University ABC in South Korea was seeking a U.S. university to collaborate on a joint M.B.A. program. The program required students to spend one year in South Korea and another year in the U.S. During the U.S. stay, students would take 12 credits in both the spring and fall semesters. WCSU was not required to pay any commissions for this joint program, however, University ABC requested WCSU to offer specialized classes exclusively for Koreans. The provost of WCSU agreed to provide eight additional sessions only if the program would generate a positive operational income. Can you determine the minimum number of students required each year?

DIGITAL MARKETING ANALYSIS

To attract more students interested in studying at WCSU, the local agency in India, Agency ABC, ran digital marketing campaigns for three months. This campaign had the objective of generating leads by asking prospective students to fill out a contact form. After the contact form was submitted, the agency would contact the interested student. This campaign ran over four different digital platforms that aligned with the target. The results of these efforts are shown below.

Digital media	Total Expenditure (US\$)	Impressions	Clicks	Forms submitted
Instagram	1,500	25,786	4,300	398
Facebook	3,000	45,931	8,255	505
LinkedIn	2,200	22,664	3,664	985
Reddit	1,000	25,920	3,500	295
TOTAL	7,700	120,301	19,719	2,183

Question 4: Agency ABC was looking to evaluate the effectiveness of this campaign using different key metrics such as Cost Per Thousand Impressions (CPM), Cost per Click (CPC), click-through rate (CTR), Conversion Rate, and Cost per Conversion. Calculate these metrics using the following table.

Digital media	CPM	CPC	CTR	Conversion rate	Cost per Conversion
Instagram					
Facebook					
LinkedIn					
Reddit					
TOTAL					

Question 5: Agency ABC wanted to evaluate the campaign and to find out which digital platform performed the best and which one performed the worst. Decide based on the metrics calculated before and justify your answers.

INSTRUCTOR'S MANUAL

The following are possible solutions for each question.

Question 1:

Change in Revenues = Number of Students * (7159*2+753*6)

Change in Expenses = Number of Students * 3500

But if 15 students came there would be 35 students in total. Because the maximum class size is 30. Under this scenario, the school would need to offer 10 additional sessions each year.

Change in Expenses = Number of Students * 3500 + 6389*180%*24 + 2381*130%*6

Change in Operational Income = Change in Revenues - Change in Expenses

Number of Students	Change in Revenues	Change in Expenses	Change in Operational Income
5	\$ 94,180	\$ 17,500	\$ 76,680
10	\$ 188,360	\$ 35,000	\$ 153,360
15	\$ 282,540	\$ 347,077	\$ -64,537
20	\$ 376,720	\$ 364,577	\$ 12,143
25	\$ 470,900	\$ 382,077	\$ 88,823
30	\$ 565,080	\$ 399,577	\$ 165,503



Question 2:

If the agency ABC wanted to send more than 10 students, it should send at least 30 students.

Number of Students	Change in Revenues	Change in Expenses	Change in Operational Income
10	\$ 188,360	\$ 35,000	\$ 153,360
11	\$ 207,196	\$ 333,077	\$ -125,881
12	\$ 226,032	\$ 336,577	\$ -110,545
13	\$ 244,868	\$ 340,077	\$ -95,209
14	\$ 263,704	\$ 343,577	\$ -79,873
15	\$ 282,540	\$ 347,077	\$ -64,537
16	\$ 301,376	\$ 350,577	\$ -49,201
17	\$ 320,212	\$ 354,077	\$ -33,865
18	\$ 339,048	\$ 357,577	\$ -18,529
19	\$ 357,884	\$ 361,077	\$ -3,193
20	\$ 376,720	\$ 364,577	\$ 12,143
21	\$ 395,556	\$ 368,077	\$ 27,479
22	\$ 414,392	\$ 371,577	\$ 42,815
23	\$ 433,228	\$ 375,077	\$ 58,151
24	\$ 452,064	\$ 378,577	\$ 73,487
25	\$ 470,900	\$ 382,077	\$ 88,823
26	\$ 489,736	\$ 385,577	\$ 104,159
27	\$ 508,572	\$ 389,077	\$ 119,495
28	\$ 527,408	\$ 392,577	\$ 134,831
29	\$ 546,244	\$ 396,077	\$ 150,167
30	\$ 565,080	\$ 399,577	\$ 165,503

Question 3: In order to produce a positive operation income, the joint program needs to accept at least 20 students each year.

Change in Revenues = Number of Students * 7159*2

Change in Expenses = 6389*180%*24

Number of Students	Change in Revenues	Change in Expenses	Change in Operational Income
1	\$ 14,318	\$ 276,005	\$ -261,687
2	\$ 28,636	\$ 276,005	\$ -247,369
3	\$ 42,954	\$ 276,005	\$ -233,051
4	\$ 57,272	\$ 276,005	\$ -218,733
5	\$ 71,590	\$ 276,005	\$ -204,415
6	\$ 85,908	\$ 276,005	\$ -190,097
7	\$ 100,226	\$ 276,005	\$ -175,779
8	\$ 114,544	\$ 276,005	\$ -161,461
9	\$ 128,862	\$ 276,005	\$ -147,143
10	\$ 143,180	\$ 276,005	\$ -132,825
11	\$ 157,498	\$ 276,005	\$ -118,507
12	\$ 171,816	\$ 276,005	\$ -104,189
13	\$ 186,134	\$ 276,005	\$ -89,871
14	\$ 200,452	\$ 276,005	\$ -75,553
15	\$ 214,770	\$ 276,005	\$ -61,235
16	\$ 229,088	\$ 276,005	\$ -46,917
17	\$ 243,406	\$ 276,005	\$ -32,599
18	\$ 257,724	\$ 276,005	\$ -18,281
19	\$ 272,042	\$ 276,005	\$ -3,963
20	\$ 286,360	\$ 276,005	\$ 10,355

Question 4:

Digital media	CPM	CPC	CTR	Conversion Rate	Cost per Conversion
Instagram	0.06	0.35	0.17	0.09	3.77
Facebook	0.07	0.36	0.18	0.06	5.94
LinkedIn	0.10	0.60	0.16	0.27	2.23
Reddit	0.04	0.29	0.14	0.08	3.39

Question 5:

Based on the calculated metrics above, we can conclude that:

- Instagram has a low CPM and CPC. It has the second highest CTR, so prospects seem to be willing to click on the advertisement once they see it in this media. Cost per Conversion seems to be decent considering the CPC for the other media.
- Facebook has the second-highest CPM and CPC, and the highest CTR. However, its Conversion rate is very low, and its Cost per Conversion is quite expensive in comparison to the CPC for the other media. *Considering this, we can conclude that this is the worst-performing media.*
- LinkedIn has the highest CPM and CPC, and a lower CTR than the one for Facebook and Instagram. However, and this is the key, the Conversion Rate is higher than others, meaning more prospects who click on the advertisement result in forms completed (which is the goal of the campaign). Now, is it worth paying this relatively high CPC for this media? Yes, because the Cost per Conversion is the lowest. *So, this is the best-performing media.*
- Reddit has one of the lowest CPM, CPC, and CTR. Its Conversion rate is one of the lowest, and its Cost per Conversion is the second lowest. This suggests that Reddit is not great at converting prospects, however, the cost per form completed is relatively cheap.