

Using the Boston Consulting Group Portfolio Matrix to Analyze Management of a Business Undergraduate Student Program at a Small Liberal Arts University

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Given the competitive environment for consumer demand, it is important today for organizations to utilize accepted models for effective resource allocation to different strategic business units. This paper extends the concepts of the Boston Consulting Group (BCG) portfolio matrix model to an academic setting. The paper describes and explains the BCG portfolio matrix model, applying the model to several divisions of a small liberal arts university. The paper concludes by discussing the negative impact of not following the standard marketing management and strategic 'rules of thumb' for resource allocation that are suggested by the model found in most traditional marketing management texts.

INTRODUCTION

The subject for this analysis is a small Midwestern university with current enrollment of approximately 3,200 full time undergraduate students. The school also has a traditional program that includes liberal arts, business and the sciences. In spite of institutional growth in the in full time undergraduate market the last several years, the university product mix has drastically changed, to the detriment of the business program. As a result, the business program, a recent one-time "cash cow" is experiencing decreasing enrollments. Explanations for the decrease in the business enrollment for the institution, including questionable management decisions, are postulated based on an analysis of the impact of organizational decisions and their timing given the initial position of the business program as a cash cow. A cash cow needs resources to maintain/strengthen an already existing advantage of large market share. A cash cow deprived of adequate resources will lose its relative market share advantage, and will experience the resultant decrease in cash flow. The authors extend the idea of the strategic business unit and subsequent strategic analysis of the BCG model to an academic institution. The paper defines the strategic business units at the department and program levels, focusing on the health sciences department programs and the business department program.

Conceptual Background

The business portfolio is a useful management tool that has been used to analyze a business unit's environment and to suggest several resource allocation strategies based on the unit's industry growth rate and the organization's relative market share/strength. Using this approach, the authors felt it would be a

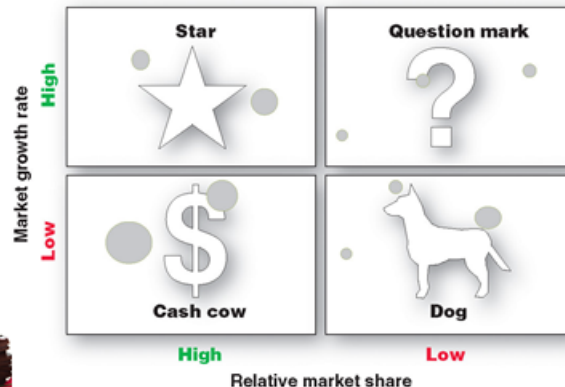
useful model to explain or describe the decreasing enrollment in a traditional university undergraduate business program. The key is that strategies should be made to differ widely from business unit to business unit, as a function of the growth and relative competitive position of each business unit and the company's overall resource position particularly with respect to cash. (Day) Following is a brief discussion of the BCG portfolio model followed by its specific application to the university's undergraduate business program, as well as the university's program and institutional decisions. The problem for organizations is to effectively balance resource allocations. This case discusses the internal competition for resources between a cash cow and a star and ultimately argues for a balanced approach (win, win) to resource allocation rather than a win/lose approach.

The Boston Consulting Group Portfolio Matrix

The Boston Consulting Group matrix provides the recommendations for the development of strategic resource allocation and strategy development in the typical multi-business company. It is argued that relative competitive position and growth are the two fundamental parameters which must be considered in determining the strategy that an individual business should follow when viewed within the context of the company's overall 'business portfolio'. The likely patterns of business strategy which will lead to overall corporate success are discussed and contrasted with those which can lead to disaster. The key is that strategies should be made to differ widely from business unit to business unit, as a function of the growth and relative competitive position of each business unit and the company's overall resource position particularly with respect to cash. (Peters)

**FIGURE 1
THE (BCG) PORTFOLIO MATRIX BASICALLY POSITIONS BUSINESS UNITES INTO A QUADRANT BASED ON TWO MAJOR CRITERIA, MARKET GROWTH RATE AND RELATIVE MARKET SHARE**

Companywide Strategic Planning:



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General Discussion of Model and Strategies

Depending on where a business unit falls on the grid, differing strategies are recommended. If a unit falls in the cash cow category, (high market share, low growth), resources should be allocated to protect market share and invest in product modifications to keep abreast of changes in consumer tastes. The economic, market conditions and business unit position that typify the cash cow categorization of the model are: slow/no growth, much competition, little or no pricing power, some differentiated products

and a relative large market share for the business unit. Demand typically is at equilibrium with supply and perhaps exceeds supply. Oftentimes brands are seen as being very similar or homogenous. At this stage, slight differentiation on a desirable attribute could allow for a defensible market position. Although an organization has a large position it still needs to defend it. A decline in demand would make the environment more competitive as the total 'Pie' has shrunk. Recommendations in this quadrant include product differentiation to stay competitive technologically or to keep up with changes in consumer tastes. If minimal resources are not dedicated to maintain market share, the product becomes stagnant, less competitive and eventually obsolete.

The cola beverage industry serves a good example here. If a program has a good market share in a growth industry, it is classified as a "star". The recommendations here include marketing investment to increase market share. When the product eventually evolves into the mature stage of the product life cycle (low growth) it will possess high market share and move into the 'cash cow' category. Think of Apple's iTunes. The question mark quadrant consists of having a product/program that is in a growth market but has low market demand. These are question marks as they propose the most difficult decisions for management. Should they keep investing or 'pull the plug'. Here management must decide if it will ever increase its market share, or decide their entry in the market is not competitive and then withdraw from the market. Finally, the 'dog' category consists of products that have low market share in a declining market. With the declining market for minivans in the US, both Ford and Chevrolet pulled out of the market as they never had much of a market share and they could not support a low market share product in a declining market. Following is an application of the matrix to a small Midwestern university's multiple programs (business units). It includes a discussion of the consequences of not following the general recommendations of the BCG.

Health Sciences Program- a Star

The health sciences program would be classified as a Star. In these scenarios, demand vastly exceeds supply, there is little or no competition, and there is pricing power. Oftentimes the stars need more resources to continue to grow and increase market share. Since demand exceeds supply, almost any appropriate program will be successful. Many institutions have taken advantage of the growth opportunity in the health care field as demand has increased for degreed students in this area. This institution also took advantage of the demand and dedicated resources to successfully develop new programming in health care, for example, Physical Therapy program and Physician's Assistant program. However, a substantial percentage of the resources to support the new programs came from the business department. Instead of finding resources to maintain the business 'cash cow' and using its excess monies to finance the health services 'stars', the university stripped many resources from the business department which led to a decline in its ability to defend its position.

APPLICATION OF THE STRATEGIC PORTFOLIO TO THE ENROLLMENT HISTORY FOR UNDERGRADUATE STUDENTS AT A SMALL MIDWESTERN UNIVERSITY

The Business Program as a Cash Cow

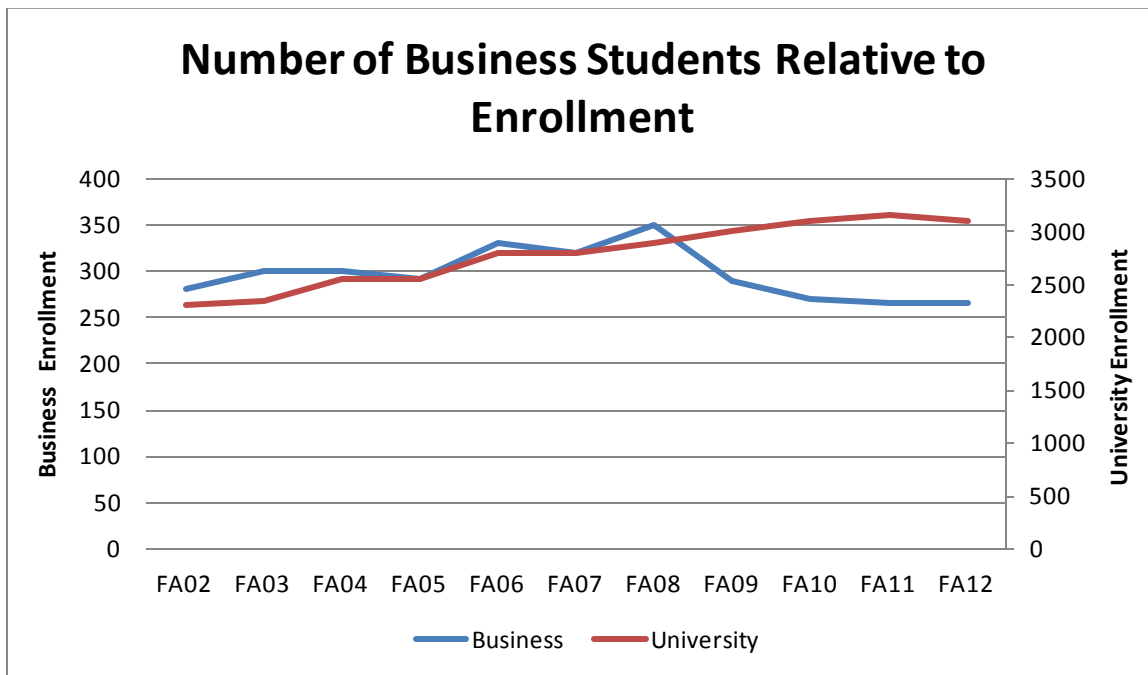
The university was historically known for its education and business departments. Until the mid-2000s, these were typically the largest departments in the university. An internal document that analyzed departments as profit centers/business units, reported that the business department was the most cost efficient unit, generating large amount of cash due to large class sizes and low overhead. Having a good local reputation and a large market share in the business undergraduate market, the department fits the description of a cash cow in the matrix.

One tactic to reduce costs, while maintaining quality, was the use of full time faculty, through overloads, to meet the high demand. The course offerings were quite successful with class sizes of 30-40 and free cash flow generated. Based on the position in the matrix, suggested financial and management strategies would include investment to maintain market share and supply necessary resources to monitor and maintain the program. Another suggestion is to also invest excess cash to new programs (online

courses, new programs, etc.) that show promise. Here is the critical decision that management must make—how to maintain a cash cow while investing in new programs. The business program differentiated itself by having full time tenured staff in most classrooms.

When the recession occurred, the industry became more competitive with newer entrants seeking to take part in the growth and profitability of the market. While national and local statistics business enrollment data showed relatively flat demand, (typical of a ‘cash cow’ situation), the school’s business program suffered significant declines in enrollment. Competitors began to differentiate their products. National competitors such as the University of Phoenix and Upper Iowa aggressively entered the market. At this juncture the university noted that newer competitors were using mostly adjunct faculty to staff part time programs. It relied on using full time staff and used the quality of the instruction (full time tenured faculty) as its competitive advantage to differentiate itself. The university had established a niche (through chance?) of having full time professors teach the evening courses in lieu of adjuncts. Despite the increase in competition the program still prospered as part of the market sought out 'regular professors'. Focus groups conducted by the school confirmed that this was a quality that some students sought. They also indicated that the separation of the nontraditional program and traditional student base was a plus. There were signs that indicated students wanted more flexible program offerings: such as weekend programs and shortened semesters (6-8 week courses). However, beginning in 2007, several managerial decisions severely negatively impacted the business program in terms of resource support. The results can be easily seen below.

FIGURE 2
NUMBER OF BUSINESS STUDENTS RELATIVE TO ENROLLMENT



The nineties offered an even more complex competitive environment, reflecting the later stage of market growth and a maturing market. As the market matured and there was little or no growth in the market to absorb new entrants, competition became fierce with organizations offering multiple programming options for students including weekend programs, lower tuition and in the early nineties promotional items such as free laptops. Survivors of this stage usually are the most adept at offering a

changing market what it wants in terms of program attributes. Popular offerings that we see today include even shorter schedules (six weeks) and hybrid courses.

Managerial Mismanagement--University's Response to the Changing Environments

However, beginning around 2005, just as competition became fierce, the university made management decisions that were counter to conventional Boston Consulting Group recommendations and basic marketing management wisdom.

First, the university reduced the quality of its business course offerings. It did this by eliminating full time positions and relying on adjunct faculty to teach 50% of business courses. This drastically reduced the value proposition to prospective students. In a competitive environment, this was a major strategic mistake. The BCG recommendation would be to at least maintain quality, if not improve it. The university also failed to innovate. While some competitors differentiated themselves with off-site classes, shorter courses, weekend offerings and increasing online offerings, this university failed to respond to any of these.

Lack of Support at Senior Levels

The huge decrease in enrollment can be directly correlated with the removal of a business dean. Despite the relative good enrollment through 2008, the business program was placed under the science division and science dean. Although many business programs experienced a decline due to the economic recession, many have rebounded as the economy has improved. This is clearly not the case for this university. Full time business positions also began to disappear. At least one tenure-track and one full-time lecturer position were eliminated. Overloads for full time faculty were also eliminated. At the same time as positions were being eliminated in business, new full-time positions were being created in the sciences. One can only assume that much of the funding for these new positions was funded by the 'savings' from the business department.

CONCLUSION

The program enrollment data provide aggregate evidence that the undergraduate business program at the school was mismanaged. Had the administration understood the basics of the BCG model, it would have maintained the advantages of the business department, developed new desirable programs, etc. to maintain the market share of the business unit.

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