INTRODUCTION

“How does one challenge bright young minds to explore mundane business topics?” A difficult question at best. Once every few years two of us (Boyer and Yermish) are faced with this challenge as we prepare for our two semester course, “The Business Entity: A Systems Approach”, taught within the St. Joseph’s University undergraduate honors program. The course is intended for non-business majors looking for some insights into business concepts. This sequence is part of the honors distribution requirements for these select students. It is not enough to teach them business fundamentals; we must make these concepts vibrant with experiential exercises. We must also be sure they have mastered those critical basic concepts without the boredom of incessant lecture. With these challenges in mind we have formulated a course sequence that mixes self-directed textbook study, experiential exercises and a major semester-long project. It is this semester project that is the focus of this paper.

While the students study basic entrepreneurial and small business management concepts through reading, short lectures and self-diagnostic examinations in small-business concepts (e.g. with a text like Longenecker, Moore and Petty 1997) they are also learning to function as a team. This is in preparation for the second semester project. In the past this project involved the creation of small business teams. These teams would identify a business opportunity, develop a business plan and actually start the business. Sometimes unexpected events happen with these projects. For example, there was a still notorious incident several years back with the “Bo Must Go!” T-shirt Company, a reference to a losing coach on a campus very much devoted to its basketball teams. This year, as we have mellowed in our years, we planned a different approach – the creation of a student constructed business simulation.

The second semester began with the announcement of the project. These students, nurtured on computer games were to create one of their own. The stipulation, however, was that the game be based on some sort of business decision making process. The team of four students (three women and one man) selected the management of an NFL Football team as their project. We were also able to enlist the support of two information systems (IS) majors who were looking for advanced work in software development to aid in this game creation project. This created a serendipitous opportunity to explore the issues of interdisciplinary project management. The regular honors students would do the basic game research and, using Microsoft Excel, would prototype the game. In the meantime, the IS students would be studying Visual Basic programming concepts in preparation for the actual game implementation. The semester started without a clear idea of where the game would go or whether the project could be implemented within the fifteen-week semester.

PROJECT STRATEGY

It was immediately obvious that the students faced a daunting task. They had no idea of the complexity of the situation when they selected their project. The goal of the project was to provide a platform for players to make business decisions and see how these decisions would affect their profitability but the students were hard-pressed to identify the kinds of decisions that were actually made. Even if they could
identify some of the decisions they could not model the results of these decisions. As instructors, our first step was to introduce project management concepts: scope was the key. We agreed to organize the game around a typical year for the general manager of a team. This year would be broken down into significant periods instead of calendar periods. A decision would have to be made before each period and then the model would track the financial results of that decision into the next period. The following are the stages of the game:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
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<tbody>
<tr>
<td>Startup</td>
<td>Selection of team and parameters</td>
</tr>
<tr>
<td>Post-Superbowl</td>
<td>First decisions after close of previous season</td>
</tr>
<tr>
<td>Preseason</td>
<td>Decisions before the start of preseason games</td>
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<tr>
<td>First Half</td>
<td>Decisions before the start of first half of regular season</td>
</tr>
<tr>
<td>Second Half</td>
<td>Decisions before the start of second half of regular season</td>
</tr>
<tr>
<td>Final Results</td>
<td>End of season team and financial results</td>
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This structure simplified the modeling decisions and the control of the game.

Next, we introduced the concepts of project management planning though the use of formal planning techniques (Moder, Phillips and Davis, 1983). We identified those tasks that each of the sub-teams (Honors and IS) would be responsible for and the sequencing and timing necessary to accomplish the overall project goals. The four Honors team members would be responsible for researching the decisions and the mathematics, the IS team would translate their models into an attractive and functional computer program. Figure 1 is an approximation of the GANTT chart developed to organize the control of the project progress.

Next, the Honors sub-team constructed a standard financial statement to be used to display the results of each period’s play. Simplifying decisions were made to keep the project manageable. Figure 3 shows a typical Excel spreadsheet for the Balance Sheet and Income Statement. This structure was then incorporated by the IS sub-team into a display as shown in Figure 4. In the program game structure, this financial profile could be displayed at any time, the values dependent upon the decisions and the game stage.

Before each game period play, the player is required to make a strategic decision for that period. For example, at the beginning of the season, the player must establish a ticket pricing policy. Using modeling techniques (e.g. from Bodily, 1985) the students developed random-
ized results so that each play of the game would be different even though student decisions would be the same. The financial profile for the beginning of the next phase of the game would reflect these results. In Figure 5 we see a typical set of decisions for one of the periods of play as prototyped in Excel. Figure 6 shows this same set of decisions as implemented in the Visual Basic program. After the various decisions are made for the year the final results are computed and shown in Figure 7.

**CONCLUSION**

Could this game actually be used to train future NFL general managers? Probably not. Of course that was not the intention. Have the designers and implementers of the game profited by the experience? Certainly. The process of creating the game was the simulation exercise, not the game itself. As instructors we seek unusual opportunities to put life into droll academic topics. As students we seek ways to explore content in interesting and challenging ways and to gain skills that will translate into future success. The interdisciplinary approach was key to the success of this endeavor. The Honors students could not have implemented the code of the live game while the IS students may not have had the interest in constructing the mathematical relationships and underlying business models. Together, they succeeded admirably.

**Note:** A demonstration of the game and models will be available for demonstration.

**REFERENCES**


FIGURE 1
Project GANTT Chart
FIGURE 2
ACCESS Team Database

FIGURE 3
Typical Prototype Excel Financial Statement
FIGURE 4
Typical Financial Profile from Game Program

FIGURE 5
Typical Excel Prototype Decision Sheet
FIGURE 6
Typical Game Decision Input Form

Post Superbowl

Your first decision as owner is to decide how much to charge the fans to sit in the different types of seats available.

There are three different categories within the seating hierarchy: General, Premium, and Box. General is the most economical, Box the most luxurious.

Please enter the amounts that you wish to charge in dollars for each type of seat in the spaces provided below.

<p>| | |</p>
<table>
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<tr>
<th></th>
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<tbody>
<tr>
<td>General</td>
<td>35</td>
</tr>
<tr>
<td>Premium</td>
<td>125</td>
</tr>
<tr>
<td>Box</td>
<td>250</td>
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FIGURE 7
Game Final Results Screen

First Year Results

Harry Houdini, Congratulations, You have finished your season. The record was 8 wins and 8 losses. Throughout the season your revenue increased by $60,838,960.70 a 80.43% increase. You have also managed to increase your net income by $50,286,467.77 a 39.48% increase.

Thanks for Playing