JOURNAL OF THE INTERNATIONAL ACADEMY FOR CASE STUDIES

INSTRUCTOR NOTE’S

Editor’s

Dr. Bo Han, Texas A&M University-Commerce

Dr. Herbert Sherman, Long Island University-Brooklyn

The Journal of the International Academy for Case Studies is owned and published by Jordan Whitney Enterprises, Inc. Editorial content is under the control of the Allied Academies, Inc., a non-profit association of scholars, whose purpose is to support and encourage research and the sharing and exchange of ideas and insights throughout the world.
Authors execute a publication permission agreement and assume all liabilities. Neither Jordan Whitney Enterprises nor Allied Academies is responsible for the content of the individual manuscripts. Any omissions or errors are the sole responsibility of the authors. The Editorial Board is responsible for the selection of manuscripts for publication from among those submitted for consideration. The Publishers accept final manuscripts in digital form and make adjustments solely for the purposes of pagination and organization.

The Journal of the International Academy for Case Studies is owned and published by Jordan Whitney Enterprises, Inc, PO Box 1032, Weaverville, NC 28787, USA. Those interested in communicating with the Journal, should contact the Executive Director of the Allied Academies at info@alliedacademies.org.

Copyright 2015 by Jordan Whitney Enterprises, Inc, USA
EDITORIAL BOARD MEMBERS

Shih Yung Chou
University of Texas of the Permian Basin

William Brent
Howard University

Irфан Ahmed
Sam Houston State University

İsmet Anıtsal
Tennessee Tech University

Narendra Bhandari
Pace University

Gary Brunswick
Northern Michigan University

Thomas T. Amlie
Penn State University - Harrisburg

Kavous Ardalan
Marist College

Lisa Berardino
SUNY Institute of Technology

Steve Betts
William Paterson University

Wil Clouse
Middle Tennessee State University

Troy Festervand
Middle Tennessee State University

Barbara Fuller
Winthrop University

Palaniappan Thiagarajan,
Jackson State University

Jeff Mankin
Lipscomb University

Michael Grayson
Texas A&M International University

Terrance Jalbert
University of Hawaii at Hilo

Steve Loy
Eastern Kentucky University

Marlene Kahla
Stephen F. Austin State University

William J. Kehoe
University of Virginia

Marla Kraut
University of Idaho

Paul Marshall
Widener University

Sujata Satapathy
Indian Institute of Technology

Harriet Stephens
Seattle University

James R. Maxwell
Mac Murray College

Greg Winter
Barry University

Marianne L. James
California State University, Los Angeles

Issam Ghazzawi
University of La Verne

Patricia Humphrey
Texas A&M University Texarkana

Kathryn Woods
Austin Peay State University
<table>
<thead>
<tr>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADIO NIGERIA ENUGU NATIONAL STATION</td>
<td>1</td>
</tr>
<tr>
<td>Christiana Akpunonu, Baze University</td>
<td></td>
</tr>
<tr>
<td>D.K. (Skip) Smith, Baze University</td>
<td></td>
</tr>
<tr>
<td>WHAT HAPPENED TO THE TAX EXEMPTION? THE CASE OF THE RICE TABERNACLE CHURCH</td>
<td>19</td>
</tr>
<tr>
<td>Beverley J. Alleyne, Belmont University</td>
<td></td>
</tr>
<tr>
<td>Raymond J. Elson, Valdosta State University</td>
<td></td>
</tr>
<tr>
<td>CREDIT CARD FRAUD: WHEN EMPLOYEES MOVE FROM BEING AN EMPLOYER'S BIGGEST ASSET TO THEIR BIGGEST LIABILITY</td>
<td>23</td>
</tr>
<tr>
<td>Tanya P. Cepeda, PMBA, University of Guam</td>
<td></td>
</tr>
<tr>
<td>Kristine D.R. Gerardo, PMBA, University of Guam</td>
<td></td>
</tr>
<tr>
<td>Karri T. Perez, PhD, SPHR, University of Guam</td>
<td></td>
</tr>
<tr>
<td>John J. Rivera, PhD, PHR, HRMP, University of Guam</td>
<td></td>
</tr>
<tr>
<td>RE-ENERGIZING THE BRAND: SMITH &amp; WESSON HOLDING CORPORATION</td>
<td>31</td>
</tr>
<tr>
<td>Paul J. Costanzo, Western New England University</td>
<td></td>
</tr>
<tr>
<td>Harlan Spotts, Western New England University</td>
<td></td>
</tr>
<tr>
<td>RUNNING WITH THE BIG DOGS (PART A): A COMPETITIVE FORCES AND STRATEGIC ANALYSIS OF THE RUNNING SPECIALTY STORE INDUSTRY</td>
<td>39</td>
</tr>
<tr>
<td>Robin L. Snipes, Columbus State University</td>
<td></td>
</tr>
<tr>
<td>Jennifer Pitts, Columbus State University</td>
<td></td>
</tr>
<tr>
<td>TATA STARBUCKS: HOW TO BREW A SUSTAINABLE BLEND FOR INDIA</td>
<td>43</td>
</tr>
<tr>
<td>Dev Das, Pace University</td>
<td></td>
</tr>
<tr>
<td>Alan B. Eisner, Pace University</td>
<td></td>
</tr>
<tr>
<td>Helaine J. Korn, Baruch College, CUNY</td>
<td></td>
</tr>
<tr>
<td>UTILIZING CURRENCY SWAPS TO HEDGE RISK AT SLC</td>
<td>51</td>
</tr>
<tr>
<td>Benjamin L. Dow III, Southeast Missouri State University</td>
<td></td>
</tr>
<tr>
<td>David Kunz, Southeast Missouri State University</td>
<td></td>
</tr>
<tr>
<td>TIMBERLINE ENERGY INC.: VALUE CREATION VS. CORPORATE WELFARE</td>
<td>61</td>
</tr>
<tr>
<td>Stephen C. Henry, SUNY Plattsburgh</td>
<td></td>
</tr>
<tr>
<td>ACCOUNTING ISSUES RELATED TO ACCEPTING BITCOINS</td>
<td>71</td>
</tr>
<tr>
<td>Andrew Gross, Southern Illinois University Edwardsville</td>
<td></td>
</tr>
<tr>
<td>Jamie Hoelscher, Southern Illinois University Edwardsville</td>
<td></td>
</tr>
<tr>
<td>Brad Reed, Southern Illinois University Edwardsville</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Pages</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>DESIGN PROTOTYPES INC. PROJECT MANAGEMENT (C): WHEN MANAGEMENT DECIDES TO SHORTEN A PROJECT SCHEDULE</td>
<td>75</td>
</tr>
<tr>
<td>Patricia A. Lapoint, McMurry University</td>
<td></td>
</tr>
<tr>
<td>Carrol R. Haggard, Fort Hays State University</td>
<td></td>
</tr>
<tr>
<td>JUHEL NIGERIA LTD</td>
<td>83</td>
</tr>
<tr>
<td>Basil Okoli, Baze University</td>
<td></td>
</tr>
<tr>
<td>RUNNING WITH THE BIG DOGS (PART B): GROWTH THROUGH STRATEGIC POSITIONING AT BIG DOG RUNNING COMPANY</td>
<td>95</td>
</tr>
<tr>
<td>Jennifer P. Pitts, Columbus State University</td>
<td></td>
</tr>
<tr>
<td>Robin L. Snipes, Columbus State University</td>
<td></td>
</tr>
<tr>
<td>THE AMERICAN WHISKEY RENAISSANCE: THE REBIRTH OF AN AMERICAN SPIRIT</td>
<td>99</td>
</tr>
<tr>
<td>Charles A. Rarick, Purdue University Calumet</td>
<td></td>
</tr>
<tr>
<td>Claudia C. Mich, Purdue University Calumet</td>
<td></td>
</tr>
<tr>
<td>UNUSED SERVICES AT GET FIT GYM</td>
<td>103</td>
</tr>
<tr>
<td>Dana Schwieger, Southeast Missouri State University</td>
<td></td>
</tr>
<tr>
<td>James Ricks, Southeast Missouri State University</td>
<td></td>
</tr>
<tr>
<td>DR SOLAR</td>
<td>106</td>
</tr>
<tr>
<td>Joette Wisnieski, Indiana University of PA</td>
<td></td>
</tr>
<tr>
<td>STARTUP PRODUCTION PLANNING UNDER FUNDING CONSTRAINTS</td>
<td>111</td>
</tr>
<tr>
<td>Dennis Zocco, University of San Diego</td>
<td></td>
</tr>
<tr>
<td>DINNER OR NO DINNER: A STUDENT LEADERSHIP DECISION</td>
<td>139</td>
</tr>
<tr>
<td>SPRINKLES CUPCAKES: A CASE STUDY OF CREATING A SUCCESSFUL INTERNATIONALIZATION STRATEGY</td>
<td>159</td>
</tr>
<tr>
<td>Dennis C. Chen, Belmont University</td>
<td></td>
</tr>
<tr>
<td>Jeff Overby, Belmont University</td>
<td></td>
</tr>
<tr>
<td>Barry L. Padgett, Belmont University</td>
<td></td>
</tr>
<tr>
<td>Neda Long, Belmont University</td>
<td></td>
</tr>
<tr>
<td>Lauren Hills Mellott, Belmont University</td>
<td></td>
</tr>
<tr>
<td>Lauren Vandermark, Belmont University</td>
<td></td>
</tr>
<tr>
<td>Nickolette Kennedy, Belmont University</td>
<td></td>
</tr>
<tr>
<td>Leah Boone, Belmont University</td>
<td></td>
</tr>
</tbody>
</table>
HYUNDAI CARD COMPANY: STRATEGIC CHALLENGES IN CHANGING ENVIRONMENT .......................................................... 163
   Boram Han, Ewha Womans University
   Jeonghwan Lee, Myongji University
   Seungho Choi, Ewha Womans University

ORACLE: STACKING HIGH THROUGH TECHNOLOGY INTEGRATION ............ 167
   Myungseon Song, Ewha Womans University
   Yoo Jin Jung, Ewha Womans University
   Jiwon Oh, Ewha Womans University
   Seungho Choi, Ewha Womans University
RADIO NIGERIA ENUGU NATIONAL STATION

Christiana Akpunonu, Baze University
D.K. (Skip) Smith, Baze University

INSTRUCTORS’ NOTE

RADIO NIGERIA ENUGU NATIONAL STATION

CASE OVERVIEW

This case invites students to play the role of Ms. Christiana Akpunonu, a Nigerian who worked for more than 30 years at Radio Nigeria and, at the time of this case, had the role of deputy director in charge of news, marketing, and programs for Radio Nigeria’s Enugu National Station. At one time, Radio Nigeria had a monopoly on broadcast industry in Nigeria; however, in August 1992, private sector individuals and corporate bodies were allowed to establish radio stations in Nigeria. Almost immediately, competition emerged not only in Lagos but also in all major markets in Nigeria, including Enugu, the former administrative capital of the eastern region of Nigeria. In response to the newly emerging competition, Radio Nigeria stations all across the country (including Enugu) found themselves having to compete, for the first time, for audience and market share. At this time, the executive director in charge of Radio Nigeria’s Enugu National Station called Akpunonu to his office and charged her with developing a strategy to be executed within the next four months, so as to protect the audience and market share of Radio Nigeria’s Enugu National Station. The challenge to Radio Nigeria stations all across the country (including the Enugu National Station) was made more severe by the fact that some of the newly emerging private radio stations were far better equipped than the Radio Nigeria National Stations and that it appeared that all of the radio stations (including the new ones) were competing for exactly the same radio audience.

CASE SYNOPSIS

Ms. Christiana Akpunonu, Deputy Director in charge of news, marketing and programs at Radio Nigeria’s Enugu National Station, has been charged by her Executive Director to develop a strategy to ensure that the Enugu National Station manages to compete successfully for audience and market share against new private radio stations which have emerged as a result of the August 1992 deregulation of the broadcast industry in Nigeria.

Additional data and information in the case include:

1) For Nigeria, the Nigerian environment, and the Nigerian economy: Historical background plus selected statistics.
2) For the broadcast industry in Nigeria: Historical background plus selected data and statistics.
3) For the Enugu National Station of Radio Nigeria: Historical background plus selected data and statistics.

4) For Eastern Nigeria (that is, the markets served by the Enugu National Station of Radio Nigeria): Background information on the region, the inhabitants, and some of the characteristic attitudes and behaviors of those inhabitants.

INSTRUCTORS’ NOTE

As indicated in the case, the challenge faced by Ms. Christiana Akpunonu, Deputy Director of News, Marketing, and Programs at Radio Nigeria’s Enugu National Station, is to develop a strategy to ensure that Radio Nigeria’s Enugu National Station manages to compete successfully for audience and market share against the new private radio stations which have emerged as a result of the August 1992 deregulation of the broadcast industry in Nigeria.

As regards lessons and/or information which students should learn from this case, at least the following four points can be made:

1) At the beginning of the case, students will need to consider the extent to which developed-world models and conceptual frameworks can be applied to challenges and opportunities in the developing world. By the end of the case discussion, they will have discovered that some conceptual frameworks (for example, the Sheth 1985 turnaround strategy model and/or the marketing strategy model) can be useful guides to managerial action not only in the developed world but in the developing world as well.

2) Students will be able to compare their solutions to the one chosen by the central figure in the case, Ms. Christiana Akpunonu.

3) Students will discover that managers’ decisions are likely to be powerfully impacted by the conceptual framework they use; they will also discover that the recommendations flowing from alternative conceptual frameworks (for example, the Arken (2002) “deep knowledge of consumers” framework on the one hand or the Sheth 1985 turnaround strategy model on the other) could be quite different.

4) As they work through the case, students are exposed not only to some information and history on an important market in Africa (that is, Nigeria) but also some information and history on the broadcast industry in that country.

DISCUSSION QUESTIONS

We often select one student to lead the discussion. Another approach would be to solicit input from various students at various stages of the analysis. Either way, our usual approach to this case is threefold:

1) Solicit from many students the details of the case, including information about the country, information about the organization, information on the individuals involved in the case, and so on. Usually, we write much of this information on the board, so that if questions regarding “facts of the case” come up, we will have much of that information on the board in front of us.
2) Ask an individual student or the class as a whole to address a very specific series of questions. These questions, and comments relating to possible answers to those questions, are as listed below:

Q &A (#1): WHAT IS THE MAIN PROBLEM? Students usually conclude that Ms. Akpunonu needs to develop (within the next 120 days) a strategy to ensure that Radio Nigeria’s Enugu National Station manages to compete successfully for audience and market share against the new private radio stations which have emerged as a result of the August 1992 deregulation of the broadcast industry in Nigeria. The authors reinforce the idea that this problem statement is very consistent with the information provided in the case.

Q &A (#2): WHAT KIND OF PROBLEM IS THIS? Instructors should not be surprised if there are as many answers to this question as there are students in the class. Clearly, there is no one right answer. However, three alternative approaches, each of which seems quite relevant to the situation, are as indicated below:

i. “Turnaround strategy”
ii. “Marketing strategy”
iii. “deep knowledge of consumers”

Q &A (#3): FOR THE KIND OF PROBLEM IDENTIFIED ABOVE, WHAT ARE THE KEY VARIABLES AND WHICH EXPERT SAYS SO?

For students concluding that the generic problem is the need for a “turnaround strategy,” Sheth (1985) suggests there are nine strategies which can be considered: 1) Entrenchment (that is, fight for a larger share of existing uses of products in existing markets); 2) Consider selling through intermediaries; 3) Mandatory consumption (that is, ask government to pass a law requiring the purchase by consumers of a company’s product or service); 4) Go international; 5) Broaden product horizons (that is, don’t sell just the computer; rather, sell the computer plus a full set of ancillary products and services); 6) In existing markets, identify new applications for products; 7) In existing markets, identify new usage situations; 8) Repositioning (that is, in new markets, identify new uses for products by changing the image of the product); and 9) Redefining markets (that is, in new markets, identify new uses for products by making functional changes in those products. For students concluding that the generic problem is “marketing strategy,” Perreault and McCarthy (2002) suggest that the key marketing strategy variables are: 1) Target market; and 2) The “4Ps” of the marketing mix (that is, place, price, product, and promotion). For students concluding that the generic problem is the need for “deep knowledge of consumers,” Arken (2002) suggests that the key questions which consumers need to be asked are as indicated below:

1) 1st thing that comes to mind when you think about the product/service?
2) “Day in your life” regarding the product/service?
3) Earliest memory regarding the product/service?
4) Best/worst experience with the product/service?
Q &A (#4): WHAT DATA FROM THE CASE RELATE TO THE KEY VARIABLES?

As implied above (and this is one of the key learning points of the case), the data students present will depend on the generic problem they identify. Students believing the generic problem is “marketing strategy” will focus on the five key variables in that concept; Appendix 1 identifies data from the case which relate each of those key variables. Students believing the generic problem is “turnaround strategy” will focus on the nine key alternatives identified earlier; Appendix 2 identifies data from the case which relate to each of these key variables. Students believing the generic problem is “deep knowledge of consumers” will focus on the 11 key questions identified above; Appendix 3 identifies data from the case which relate to each of those key questions.

Q &A (#5): WHAT ALTERNATIVE SOLUTIONS CAN BE IDENTIFIED?

Because research suggests we make better decisions if we first identify alternative solutions and then choose one of those solutions, we require students to identify at least two alternative solutions. Of course, students having difficulties coming up with a second alternative can be reminded that one possible solution is to “do nothing.”

Q &A (#6): WHICH OF THE ALTERNATIVE SOLUTIONS SET FORTH ABOVE DOES THE CLASS/STUDENT RECOMMEND, AND WHY?

“Doing nothing” is unlikely to help Ms. Akpunonu resolve the challenge she faces, that is, to develop a strategy to ensure that Radio Nigeria’s Enugu National Station manages to compete successfully for audience and market share against the new private radio stations which have emerged as a result of the August 1992 deregulation of the broadcast industry in Nigeria. Thus, students believing the generic problem is “turnaround strategy" will likely recommend an approach which focuses on one or more of the nine alternatives in Sheth’s turnaround strategy model from 1985. Students believing the generic problem is “marketing strategy" are likely to recommend focusing on the five key variables of the marketing strategy concept. Students believing the generic problem is “deep knowledge of consumers" are likely to recommend focusing on collecting from members of the target market the answers to the 11 questions in the Arken (2002) conceptual framework.
The decision reached by Ms. Akpunonu was to use the “deep knowledge of consumers” conceptual framework to guide her thinking and recommendations. For additional information on the recommendations associated with this decision, please see the epilogue.

Q&A #7) WHAT NEGATIVES ARE ASSOCIATED WITH THE ALTERNATIVE SELECTED BY THE CLASS LEADER AND/OR OTHER MEMBERS OF THE CLASS?

Very few solutions are risk and/or problem-free. Negatives associated with the solution proposed by the class leader and/or other members of the class could include the following: The chosen alternative, if it requires Radio Nigeria’s Enugu National Station to acquire specialized equipment and/or skills the organization doesn’t currently possess, could be expensive both in terms of time and money. Also, because the case probably doesn’t provide all the data a decision maker would need (in other words, it is likely that some important data is missing), it is possible that assumptions made by the class leader regarding the actual situation faced by Radio Nigeria’s Enugu National Station are incorrect. If so, the proposed solution might be inappropriate.

3. The third and final step in discussing a case with students is to share with them what actually happened and to discuss with them the implications of that outcome. As indicated above, as she thought about developing a strategy to ensure that Radio Nigeria’s Enugu National Station does manage to compete successfully for audience and market share against the new private radio stations which have emerged as a result of the August 1992 deregulation of the broadcast industry in Nigeria, Ms. Akpunonu’s thoughts turned to a “deep knowledge of consumers” conceptual framework very similar to the one developed by Arken (2002). Based on her belief that having the answers to the 11 questions posed by Arken (2002) would be very useful to her, and given the fact that she did not yet possess the answers to those 11 questions, Ms. Akpunonu suggested to the Executive Director that the first step toward developing a strategy to ensure that Radio Nigeria’s Enugu National Station does compete successfully for audience and market share should be to develop “deep knowledge of consumers,” that is, to collect answers to the 11 questions posed by Arken (2002). Regarding the best way to do this: After discussing this issue at length with members of her team, Ms. Akpunonu decided to recommend that Radio Nigeria’s Enugu National Station set up a raffle for which the grand prize would be a brand new Peugeot car, that is, the brand of car loved by the people of the region. Sale of tickets should be at Radio House in Enugu, that is, the home base of Radio Nigeria’s Enugu National Station. Attached to the stub of the ticket kept by the staff of Radio Nigeria’s Enugu National Station would be a listener request card (the purchaser of a raffle ticket would be required to fill out this card) indicating (among other things) the answers to the 11 questions posed by Arken (2002). The raffle campaign was scheduled to last for four months; during this period, the raffle would be promoted intensively by the Enugu National Station. The objectives of the raffle included:

a. To ongoingly place Radio Nigeria on the minds and lips of the listeners; furthermore, the awarding (at the end of the exercise) of a car will heighten not only the visibility but also the credibility of the station.

b. To develop “deep knowledge” regarding the radio listening-related attitudes, behaviors, and preferences of the audience targeted by Radio Nigeria’s Enugu National Station.
Epilogue #1

The Executive Director approved the “deep knowledge of consumers” approach suggested by Ms. Akpunonu. The raffle was held, and the data were collected and analyzed. The sorts of questions asked on the listener response cards, and a sample of the sorts of answers received, are as indicated below:

Question #1: The 1st thing that comes to mind when you think about the product/service?
   Answer: The news which the station gives about the whole of Nigeria, the traditional music the station plays, the football matches with live commentaries, etc.

Question #2: Describe a “Day in your life” regarding the product/service?
   Answer: The mobile broadcast unit visited my school compound and made recordings which they put on air. I took part in a children's program; my mother, brothers, sisters and I heard me make contributions to that program.

Question #3: Your earliest memory regarding the product/service?
   Answer: At age 9, while I was at our community’s primary school, I heard my mother take part in a program for women. Radio Nigeria had come to our town hall to record a show on the proper application (timing, amounts, etc.) of fertilizer.

Question #4: Your best/worst experience with the product/service?
   Answer: My worst experience was when I endeavored to listen to sports commentaries but the sound quality was very poor because of bad weather. This was very frustrating.

Question #5: A pivotal experience for you with the product/service?
   Answer: I heard a storytelling program with morals which changed my attitude to elders. Also, my missing brother (allegedly living in Ghana) was linked back up to our family through Radio Nigeria in Enugu; this brother actually came back and rejoined our family.

Question #6: Your ideal experience with the product/service?
   Answer: The highlife music that plays for one hour nonstop. Also, listeners’ request programs where listeners can call out music to be played for their friends.

Question #7: What prevents you from achieving the ideal experience with the product/service?
   Answer: Where I live, reception is poor.

Question #8: What concerns you most at this time of your life?
   Answer: I am growing and selling farm produce; I need to make enough money from those sales to cover my costs and make a profit. To succeed, I also need to be able to find fertilizer for my farm.

Question #9: What are you happiest about at this time of your life?
Answer: At the end of the day I come home and tune in to a late-night music program from Radio Nigeria. Also, I enjoy hearing live football commentaries from the Radio Nigeria Enugu National Station.

Question #10: What are the most important things you are trying to achieve at this time of your life?

Answer: I need to be able to feed my family of five adequately. Also, I need to be able to pay school fees for my three children. Finally, I would like to be able to build a house for my family.

Question #11: If you had a magic wand, what one thing would you change about the Product/service?

Answer: Radio Nigeria could broadcast from my village, using our local dialect to provide entertainment, information, and news to my community.

Epilogue #2

After reviewing the information collected on the listener response cards, and based on the insights provided by that information, Ms. Akpunonu made the following recommendations to the Executive Director (ED) of Radio Nigeria’s Enugu National Station:

1) In addition to the existing shortwave and medium wave facilities, the Enugu National Station should establish an FM station with state of the art infrastructure. The benefits associated with having an FM capability include: It is easy for people to access, and it makes it possible for the Enugu National Station to provide listeners with additional entertainment, news, education, and information. Also, a new FM capability is well-suited to the new commercial broadcast environment.

2) Every producer, presenter, anchor or any other Enugu National Station staff who has a reason to have time with listeners should install a feedback mechanism, so as to be able to receive feedback (that is, audience response) on his/her presentation. Only by ongoingly collecting feedback from listeners will the Enugu National Station begin to develop deep knowledge and insights on the needs, preferences, and attitudes of listeners.

3) Increase the number of programmes featuring “live phone in,” so that the Enugu National Station is able to learn immediately the reactions and/or audience response to issues discussed in their broadcasts.

4) Begin doing live broadcasts of national sporting events and establish an “all venues network” so that commentators will be able to take listeners from one venue to the other and then back again.

5) Post an Enugu National Station correspondent to each of the local government headquarters of each of the states in the Enugu National Station listening area, with amplified telephone connections linked to Broadcast House in Enugu, so as to foster an interpersonal togetherness of the listeners from the geopolitical zone. Implementing this recommendation should encourage a better balance (during programme planning
sessions) between the views of rural dwellers and city dwellers throughout Enugu National Station’s listening area.

6) Divide the airtime of the Enugu National Station into segments and then sell those segments to local language presenters who are interested in being able to communicate with members of the various language segments.

7) Establish a corporate/public relations department whose duty (among others) is to liaise with the public on courtesy calls. Once organized, such visitations should be covered and reported in the news of the day; this will enhance the image of the station and should encourage corporate and/or governmental bodies to participate in these visitations.

8) The ED of the station should embark on tours of important public and/or private facilities and/or factories; also, the ED should organize courtesy calls on governors and/or other senior level officials. Engaging in such activities and then broadcasting information about these activities will endear the Enugu National Station to the people.

9) Programming: In designing music programmes for the Enugu National Station, adjust the mix of overseas/indigenous music from 80/20 to 60/40. The benefits of this policy will include: 1) We will continue to encourage the growth of local content; but also 2) We will move closer to the mix provided by the new private stations.

10) Use existing groups (for example, Radio Nigeria Choir, Radio Nigeria Drama Club, Radio Nigeria Listeners’ Club, etc.) to increase awareness and build the brand image of the Enugu National Station throughout the station’s listening area.

11) All programs (including news, entertainment, education, etc.) produced by Enugu National Station should now be for sale (that is, available for sponsors to purchase), so as to generate funds to support the purchase of the equipment needed to maintain and/or upgrade the capabilities of the Enugu National Station.

12) Quality Control on Enugu National Station programmes: From now on, there should be monitoring and evaluation on a daily basis of all programs (news, education, entertainment, etc.) produced by the Enugu National Station.

Epilogue #3

The Executive Director of Radio Nigeria’s Enugu National Station implemented each of the recommendations made by Ms. Akpunonu. The results of these initiatives are as indicated below:

1) Regarding the FM station suggestion: Enugu National Station established “Coal City FM”92.8 MHz; it shared the same status as any other private enterprise.

2) Regarding feedback mechanisms and collection: As recommended, each programme, whether live or prerecorded, began collecting audience reaction data. Over time, and in response to the implementation of at least some of the suggestions, many programs became more popular and registered more participation

3) Regarding the need to implement programs featuring live phone in: The Chief Executive of the Enugu National Station used “Ka Oha Malu” (a radio personality) to
launch a live two-hour period of discussion of current issues. The format used resulted in immediate reactions from participants throughout the Enugu National Station listening area, using amplified telephone services

4) Regarding the broadcasting of sports commentaries: These activities were increased. As an example: The Chief Executive sent commentators to the 10th FIFA world youth championship, known at the time as Nigeria 99 game. The commentators (including those from the Enugu National Station) were able to link up to all five of the football match venues at the same time. In other words, the commentators were able to take listeners from Lagos to Ibadan or to Kaduna or to Bauchi or to Calabar or to Port Harcourt and then back to the place from which they had started; sports listeners were delighted by these commentaries.

5) Regarding posting Enugu National Station correspondents to all local government headquarters areas: While the Executive Director of the Enugu National Station did not post correspondents to each local government area headquarters, he did post correspondents to each of the nine states in the Enugu National Station listening area; the role of that correspondent included making input into programming and providing the Enugu National Station with information on the needs, preferences, and attitudes of listeners in his or her portion of the Enugu National Station’s listening area.

6) Regarding the division of airtime into segments and the selling of those segments: The Executive Director offered to sell hour-long language segments to any willing community, so as to be able to serve the needs of people who speak a specific Igbo dialect. As a result of this initiative, there was a scramble from indigenes wishing to reach out to their community members; as for the Enugu National Station, it smiled all the way to the bank.

7) Regarding courtesy calls and/or tours by the CEO and/or the public relations department (that is, recommendations #7 and #8): A very successful courtesy call program was implemented. Furthermore, as these visits were announced on the news, the popularity of the station increased substantially.

8) Regarding the mix (on music programmes) between overseas and indigenous music: The Executive Director changed from 80/20% to 70/30%; he based this decision on his desire not only to encourage the growth of local music but also his desire to offer approximately the same mix as the new private stations.

9) Regarding the use of established groups to promote and build the brand equity of the Enugu National Station:
   a. Choir: the ED supported the group and encouraged it to feature at public events. Although this group (that is, the Radio Nigeria Choir) became moribund in other locations (Lagos, Ibadan, etc.) the Enugu National Station Choir continues not only to function but also to perform at a national level.
   b. Radio Nigeria Drama Club: The ED supported the group and it continued to produce radio dramas. Ultimately, many of the actors found themselves
becoming part of the hugely successful Nigerian film industry known as Nollywood.

c. Radio Nigeria Listeners Club: While the ED did support the group, only a program called “Day Don Break O” (an early-morning chit chat program in pigeon English) had a strong listeners’ club. Ultimately, this club died a natural death.

10) Regarding the sale (to sponsors) of Enugu National Station Programs (for example, news programs, sports programs, music programs, etc.): This policy was successfully implemented.

11) Regarding quality control: The Executive Director supported this suggestion. As a result, a new and more vigorous quality control effort (it involved daily meetings of news, marketing, and programs departments, to discuss program quality, news output, and general performance) was initiated; this effort not only improved the quality of programs broadcast by the Enugu National Station but also assisted the station as it worked to get advertisers to agree to sponsor programs.

CONCLUDING COMMENTS

The above comments describe the initiatives identified by (and recommended by) Ms. Akpunonu to achieve the objectives set by her Executive Director (ED). Readers may be interested in the answers to the following questions:

QUESTION #1: Of the suggestions made by Ms. Akpunonu, which ones did the ED find especially interesting and/or useful?

ANSWER: Although the ED accepted and executed almost all of the recommendations made to him by Ms. Akpunonu, he confessed that recommendations number 5, 6, 7, 8, and 10 especially interested him. Specifically:

Recommendation #5 (posting correspondents to each of the nine states within the Enugu National Station listening area): According to the ED, doing this made it much easier not only to capture the attention and interest of ordinary listeners but also to capture the attention and interest of governors and/or public officers as well.

Recommendation #6 (language-segmented broadcasting): The first of these (Udi Ndee) was fully paid for by individuals representing the Udi speaking people of Enugu State. When other communities heard this programme on air, delegations from other linguistic groups flooded in and a number of unsolicited language segments came on board. When the sale of time segments began in earnest, the popularity of the station increased dramatically; revenues generated by programs also increased dramatically as marketers desiring to reach members of various linguistic groups increased their purchases of air time from the Enugu National Station.
Recommendations #7/8 (courtesy calls and visitations): The ED was interested in these because they provided him an opportunity to meet the people he serves not only in his office but also at their place of work. The courtesy calls and visitations positively impacted the awareness for and image of the Enugu National Station; as a result, both the number of advertisers and the amount of airtime sold increased substantially.

Recommendation #10 (monitoring and evaluating): The National Broadcast Commission (NBC) monitors the programming and performance of all radio stations, including the Enugu National Station; furthermore, companies placing adverts hire research companies to assess the impact of the adverts they have purchased. Once he began ongoingly receiving in-house monitoring of programs and performance, the ED was far less likely to be caught unawares by complaints from either the NBC, the advertisers, and/or the general public.

QUESTION #2: Which of the alternatives suggested by Ms. Akpunonu were implemented and what results were achieved?

ANSWER: All of the alternatives recommended by Ms. Akpunonu were implemented. As for results, they include:

1) Based on the fact that the entertainment, information, and news provided by the Enugu National Station was now based on the needs and interests of local listeners, the station came to be perceived (within the Enugu National Station market area) as more trusted, dependable, and responsible.

2) The Enugu National Station was able to retain its leading position in the face of stiff competition from the new private sector competitors.

3) The Enugu National Station increased its stature and influence at Radio Nigeria headquarters in Abuja.

4) The live participatory program “Ka Oha Malu” had extremely high levels of participation; these high levels of listenership accrued then (and continue to accrue) to the network programs which precede and follow it.

5) On Radio Nigeria’s nationwide “media link” every Saturday morning 8-10AM, the first 3 to 4 voices would invariably come from listeners of the Enugu National Station.

6) The Enugu National Station expanded its business, thus avoiding staff retrenchment. In fact, staff were retained, welfare and promotions were increased, and additional jobs were created. Some staff members earlier poached by the new private radio stations attempted to come back to the Enugu National Station.

QUESTION #3: Are there other alternatives (that is, alternatives other than those suggested by Ms. Akpunonu which were put into play? If so, what were those additional alternatives and what results were achieved?

ANSWER: FM stations were opened in all the nine states within the Enugu National Station listening area. Also, the programming by the Enugu National Station changed from an
approach dominated by the dissemination of national and/or international news from Abuja to an approach characterized by the presentation of entertainment, information, and news created and disseminated locally.

QUESTION #4: Did Radio Nigeria’s Enugu National Station achieve its objectives, that is, to develop a strategy which ensured that Radio Nigeria’s Enugu National Station did compete successfully for audience and market share against the new private radio stations which had emerged as a result of the August 1992 deregulation of the broadcast industry in Nigeria?

ANSWER. The Executive Director indicates that Radio Nigeria’s Enugu National Station did achieve the objectives of competing successfully for audience and market share against the new private stations.

QUESTION #5: Are there any other comments and/or observations which the Executive Director would like to make, regarding either the initiatives which were launched or the short and/or long-term outcomes of those initiatives?

ANSWER: The Executive Director observed that because advertisers want to know how many listeners are exposed to their message, it was (at the time of the case) producers of products and services who had initiated broadcast audience research. Having said this, however, it became very clear (once the research organized by the Enugu National Station had been conducted) that audience research (and deep knowledge of customers) can be of great use not only to advertisers but also to broadcasters and their managers as well.

APPENDIX 1

CASE DATA RELATING TO MARKETING STRATEGY MODEL FOR ENUGU NATIONAL STATION

TARGET MARKETS

The primary groups targeted for programming by the Enugu National Station included: Men, women, children, young people, and farmers.

Products delivered to the targeted audiences

Information regarding the products (that is, the programming) delivered by the Enugu National Station to the target markets listed above at the time the Executive Director made his request included:

1) The day-to-day programme schedule of the Radio Nigeria National Station included educational, informational, and entertainment-based programs. Because the Radio Nigeria National Station did very little audience research, management did not know much about the needs, motives, and/or attitudes of any of the targeted audiences listed above. Given the dearth of knowledge about the attitudes, preferences, and/or behaviors
of the targeted audiences, management’s approach was to broadcast to each audience what management believed they needed. It was also true that management presumed that all the audiences uncritically consumed any and all broadcast information broadcast to them. Management did occasionally receive feedback from listeners; however, management made no attempts to systematically collect information on the attitudes, preferences, and/or behaviors of members of the audiences targeted by the Enugu National Station.

2) Audience participation programs were rare. Such programs as sports commentaries originating from an outside venue (for example, “live” commentaries on a football match and/or a cultural festival) did not take place often. When such programs did take place, they were sometimes simulated.

3) On programmes featuring music, indigenous local music tended to account for about 80% while imported music accounted for the remaining 20%. As in the case of the other programmes offered by the Enugu National Station, this allocation between (on the one hand) local music and (on the other hand) imported music was based not on research regarding the attitudes, preferences, and/or behaviors of the groups targeted by management but rather on assumptions by the management of the Enugu National Station.

**Pricing of the products delivered by the Enugu National Station**

At the time the Executive Director made his request, news broadcast by the station was not paid for by anyone and adverts broadcast by the station were still very cheap. As already indicated, advertisers (that is, not broadcasters) commissioned whatever listener research which was done.

**Promotion**

At the time the Executive Director made his request, the Enugu National Station was doing very little promotion of itself and/or its programs. Readers will remember that for many years Radio Nigeria had had a monopoly on broadcasting in Nigeria; as a monopoly supplier, Radio Nigeria had never felt much need to promote itself and/or its products and services.

**Distribution**

As indicated earlier, at the time the Executive Director made his request, the Enugu National Station distributed (that is, rebroadcast) English language educational programmes and English language national news bulletins using state-owned FM stations throughout the area which had been known as Eastern Nigeria. Each state-owned FM station throughout Eastern Nigeria filled in the broadcast time available by preparing and broadcasting local language content to their local communities.
FOR NEW PRIVATE SECTOR RADIO STATIONS

Primary target market

Adults 18-50 years old.

Product

Because the new private stations not only poached staff but also copied Radio Nigeria’s existing program schedules as well, the format and shape of messages on air did not deviate much from those of the Enugu National Station. The new private stations did allocate more time to music than Radio Nigeria; also, the new private stations built more audience participation into their programme schedules. One consequence of this approach was that the programming of the new private stations (whether sports-related, news-related, or entertainment-related) was very likely to be based on the needs, preferences, and attitudes of the audience. In music, for example, 80% of the programming featured foreign music, while only 20% of the programming featured indigenous music; as indicated earlier, this was the direct opposite of what Radio Nigeria was offering. As for news, while local news was done in Igbo, other local content was done using the dialects of Igbo specific to various locations targeted that local content.

Pricing

While Radio Nigeria did not have a well-developed pricing strategy, the new private stations established a definite cost for every package of broadcast material, irrespective of whether that broadcast material was news, sports, or entertainment.

Promotion

As indicated earlier, as a former monopoly supplier, Radio Nigeria had never felt it necessary to spend much time or energy promoting itself and/or its programmes. The new private stations, however, promoted themselves and their broadcasts over and over, every day.

Distribution

The FM broadcast technology used by the new private stations was more simple and more people-oriented than the medium-wave and short-wave broadcast technology still being used by Radio Nigeria.
CASE DATA RELATING TO THE “TURNAROUND STRATEGIES” MODEL

Entrenchment

According to Sheth (1985), this approach involves taking market share away from competitors. He suggests four alternatives which firms may be able to use; those alternatives and data from the case relating to those alternatives include:

a. Segment the market (and introduce different products and/or services for each segment). The case indicates that the Enugu National Station had identified several segments (adults, children, farmers, etc.); however, the case also indicates that the Enugu National Station had not developed deep knowledge or understanding of the needs, preferences, and/or attitudes of the members of any of these groups.

b. Identify specialty markets: Again, the case indicates that the Enugu National Station has very little information on any of its groups of listeners.

c. Go after heavy users of the product: Again, the case indicates that the Enugu National Station has very little information on any of its groups of listeners.

d. Seek multiple channels of distribution: The case indicates that while the new private stations are using FM (in other words, there is at least one alternative channel of distribution available), Enugu National Station is still using the existing channels of distribution it has used for many years, that is, the medium-wave and short-wave technologies.

switch to intermediaries

In this industry (that is, the broadcast industry), it is not clear that switching to intermediaries is an option.

Mandatory consumption

It seems unlikely that government will pass a law requiring individuals to listen to the Enugu National Station.

Go international

It seems unlikely that the Enugu National Station will (at a time it is already under stress) launch an initiative to go international.

Broaden the product horizon

The case suggests there are a number of ways the Enugu National Station could broaden its product horizon, including: 1) Launch an FM station; 2) Do more “live call in” shows; 3) Provide live commentaries on sports and/or cultural events, etc.
New applications

Increasing the frequency of audience “call in” opportunities is one possibility.

New situations

Live commentaries on sporting and/or cultural events is one possibility.

Repositioning

The case indicates that the Enugu National Station has been a monopoly supplier of broadcast services in Nigeria, but that broadcasting has now been opened up to private individuals and/or corporate bodies. It is not clear whether the Enugu National Station might be able to reposition itself to become the broadcasting service of choice to members of its target markets.

Redefine markets

Sheth identifies four alternative approaches to using this strategy. Those four approaches, and data from the case relating to them, are as indicated below:

a. Generic to specialty products: The financial products and services offered by Radio Nigeria’s Enugu National Station are not a generic product; this option does not seem relevant to this situation.

b. Primary to secondary products: The case makes no mention of secondary products.

c. Industrial to consumer products: The retail banking products and services offered by Radio Nigeria’s Enugu National Station are already consumer products; this option does not seem relevant to this situation.

d. Consumer to industrial products: While broadcasts to individuals are a consumer product, the case indicates that the Enugu National Station is eager to “sell” its programs to private sector (that is, individual and/or corporate bodies) sponsors.

APPENDIX #3

CASE DATA RELATING TO THE “DEEP KNOWLEDGE OF CONSUMERS” MODEL

Question #1: 1st thing that comes to mind when you think about the product/service?
Data from the case: No data on this point provided in the case.

Question #2: A “Day in your life” regarding the product/service?
Data from the case: No data on this point provided in the case.

Question #3: Your earliest memory regarding the product/service?
Data from the case: No data on this point provided in the case.

Question #4: Your best/worst experience with the product/service?
Data from the case: No data on this point provided in the case.

Question #5: A pivotal experience for you, with the product/service?
Data from the case: No data on this point provided in the case.

Question #6: For you, an ideal experience with the product/service?
Data from the case: No data on this point provided in the case.
Question #7: What prevents you from achieving the ideal experience with the product/service?
   Data from the case: No data on this point provided in the case.

Question #8: What concerns you most at this time of your life?
   Data from the case: No data on this point provided in the case.

Question #9: What are you happiest about at this time of your life?
   Data from the case: No data on this point provided in the case.

Question #10: The most important things you are trying to achieve, at this time of your life?
   Data from the case: No data on this point provided in the case.

Question #11: If you had a magic wand, what one thing would you change about the product/service?
   Data from the case: No data on this point provided in the case.

BIBLIOGRAPHY


WHAT HAPPENED TO THE TAX EXEMPTION? THE CASE OF THE RICE TABERNACLE CHURCH

TEACHING NOTE

Beverley J. Alleyne, Belmont University
Raymond J. Elson, Valdosta State University

CASE DESCRIPTION

The primary subject matter of this case is the importance of understanding the tax consequences of business decisions in nonprofit organizations. The case is appropriate for a senior or graduate level government and nonprofit accounting course. It could be used in the nonprofit portion of the advanced accounting class. The case is designed to be taught in one class hour and is expected to require approximately one hour of outside preparation by students. The events described in this case are based on real world experiences, but all names have been disguised.

CASE SYNOPSIS

The case concerns the challenges faced by religious organizations when they add activities that might negatively impact their tax exempt status. Rice Tabernacle Church (the Church) is a 2,000-member “mega-church” located in Brandon Hill, Kentucky. The church has experienced a 75% growth in the past years and is literally ‘bursting at the seams.’ In order to handle this growth, church leadership decided to expand the current sanctuary by adding a 120,000-square structure which included a fitness center, a bookstore, and a café. The church’s property tax exemption only applied to the original structure; therefore it applied to the taxing authority for expansion of the exemption to include the additional structure. The exemption was denied since the income from the new businesses was considered unrelated to its mission. The church appealed the ruling and needs to develop a strategy in case its appeal is denied.

INSTRUCTORS’ NOTES

Recommendations for Teaching Approaches

The objective of the case is to help students understand the importance of understanding the tax consequences of business decisions in nonprofit organizations. This case is flexible and could be used in a number of courses at the senior or graduate level. For instance, it is ideal for a discrete government and nonprofit accounting class or the nonprofit portion of the advanced accounting class. Students may need to supplement classroom discussions by researching applicable nonprofit organization and taxation issues in the Internal Revenue Code or other third party sources. The references provided at the end of the teaching note could serve as a starting point.
The case is best completed in groups either as an in-class or out of class graded assignment. The group size, grading scale and assigned points is at the specific instructor’s discretion. If completed in class, the case should be read prior to class by the students and the discussion questions answered in class. It should take approximately one hour to complete the discussion and no advanced preparation time is required by the instructor.

**Learning Outcomes**

Students should be able to:

1. Identify the organizational and tax reporting issues in nonprofit organizations especially religious organizations.
2. Understand the impact of non-mission based activities on religious organizations.

**Case Implementation and Effectiveness**

The case was tested using graduate government and nonprofit accounting students (n=20) at a regional university during the summer 2014. The case was assigned as a non-graded project and students read the case outside of class prior to the in-class debriefing. The lack of a grade did not create a barrier since the students have a good relationship with the course instructor and willing participated in the exercise. The students reported that it took approximately 15 minutes to read the case, and that was interesting and easy to follow. The students were very curious about the tax resolution since this was not discussed in the case. The students also noted that the case effectively illustrated the pitfalls facing a religious organization when they expand in activities outside of their mission.

**DISCUSSION QUESTIONS**

The following are proposed solutions to the discussion questions in the case. The answers are not intended to be all inclusive.

1. **Was the church properly established for federal tax purposes?**

   Yes. Churches and religious organizations, qualify for tax exemption under IRC Section 501(c)(3), and are generally eligible to receive tax-deductible contributions. Unlike other charitable organizations, churches are automatically considered exempt and are not required to apply for and obtain recognition of tax-exempt status from the IRS.

   Rice Tabernacle could elect to seek recognition of exempt status from the IRS. The church would apply for exemption using Form 1023 or 1023 EZ which was recently released by the IRS to streamline the tax exemption application process. Filing for tax exemption would assure the board of directors, members and contributors, and the local property tax board, that Rice Tabernacle is tax-exempted and qualifies for related tax benefits.

   Rice Tabernacle’s status as a valid tax exempt organization was not discussed in the case and it was already recognized as such by the local property tax board through its initial tax relief. The reader could infer that the church was properly established for federal tax purposes.
2. **Should the State Board of Equalization be consulted prior to the expansion?**

   The answer might vary by student. However, if the State Board of Equalization commonly provides such consulting services, they should have been consulted. However, if it is not common practice such consultation cannot be expected.

3. **Is the church correct in suggesting that the fitness center and daycare is part of its mission? Could it be subject to Unrelated Business Taxable Income (UBTI)?**

   Rice Tabernacle could be correct in suggesting that the fitness center and café are part of its mission if it meets certain criteria. Perhaps if the fitness center and café are privileges only offered to members of the church then it might not be subject to UBTI. However, since membership to the fitness center is offered to the community, albeit at a reduced rate then UBTI applies. Rice is performing a valuable service to the community but the additional space, especially the fitness center is not integral to its mission and UBTI does apply.

4. **Should the church have applied for property tax exemption before the project commenced?**

   Expanding on #2 above, if it is normal business practice for the board to review and approve property tax exemption prior to project completion then the church should have applied. Ideally, it would submit its project plan along with the proposed use for board approval. The board could confirm once the project was completed if the building was being used as intended. After all, it is common practice for tax assessor to visit properties periodically to ensure that they are being evaluated or assessed at the right valuation.

5. **What should the church do now that the tax exemption was denied?**

   The following are suggested approaches that Rice Tabernacle could use to address the current financial situation.

   a) In the short term, the church could discuss the property tax situation with the congregation and ask for a special offering to raise the necessary funds. The church could also change the focus of the new facility especially the fitness center by limiting membership to church members and reapply for tax exemption.

   b) In the long term, the church could increase the fitness center rates to be comparable to the market place and use those funds to pay for the annual real estate taxes.

   Since the case is based in Kentucky, some students might note that Kentucky statutes exempt all tangible personal property owned by religious organizations from taxation. *St. Andrews Orthodox Church, Inc. v. Thompson*, KY Court of Appeals (2007) is a similar case as it pertains to property tax. St. Andrews Church owned and rented 2 houses, using outside areas owned as part of the property for recreation. St. Andrews Church appealed the decision of a lower court forcing the church to pay property taxes. The court based this decision on their use (or non-use as it were) of the property. The State Court of Appeals overturned the earlier decision ruling that Section 170 of Kentucky’s State Constitution does not account for use, and as such how the property is used cannot be used in determination of tax.
DISCLAIMER

This case and teaching note was prepared by Beverley Alleyne and Raymond Elson and is intended to be used for class discussion rather than either effective or ineffective handling of the situation. The case is loosely based on a real situation therefore the names of the organizations, the individuals, and locations have been disguised.

ACKNOWLEDGEMENT

The authors would like to thank the students enrolled in the Graduate Government and Nonprofit Accounting course at Valdosta State University during summer 2014 for their valuable input to the case, including providing answers to some of the questions noted in the case.

REFERENCES

Calabresi, M. (2014, July 28). In charities we trust. Time, p12


EPILOQUE

To avoid future tax penalties, Rice Tabernacle transferred management of the fitness center to the local YMCA and closed the bookstore. The property tax bill is still unpaid as Rice Tabernacle continues to negotiate with the State Board of Equalization.
CREDIT CARD FRAUD: WHEN EMPLOYEES MOVE FROM BEING AN EMPLOYER'S BIGGEST ASSET TO THEIR BIGGEST LIABILITY

TANYA P. CEPEDA, UNIVERSITY OF GUAM
KRISTINE D.R. GERARDO, UNIVERSITY OF GUAM
KARRI T. PEREZ, UNIVERSITY OF GUAM
JOHN J. RIVERA, UNIVERSITY OF GUAM

INSTRUCTOR’S NOTES

Discussion Questions

1. You are the store manager, now that you have discovered the fraud and the extent of the fraud, what are your options?

2. What remedies does the manager have with regards to actions taken against the employees? What actions would you take?

3. How could this have been prevented or detected sooner? What are some options for security that can be deployed to prevent theft or detect theft?

4. Now that this has occurred, what measures or systems should be put into place to ensure that this does not happen again?

PREVENTION VS. DETECTION VS. INVESTIGATION

Prevention

From a credit card consumer’s perspective, there are numerous ways to prevent credit card fraud. These methods will reduce the risks, and cut time that will cost the investigation. First and foremost, consumers should keep their credit card number confidential. Upon receiving a new card, the consumer is encouraged to cut up their old card as they expire. Consumers are also advised to keep statements in a safe place, shred all statements, inform the card issuer when traveling, notify the card issuer of any change of address, and inform the card issuer immediately if their card was stolen or lost (Sicilliano, 2013).

Before shopping online, consumers should verify their privacy policy regarding personal information. Upon a successful online transaction, consumers should document their order confirmation. When shopping at a store, consumers should carefully observe employees as they hand over their credit card. The employee may scan the consumer’s credit card to obtain their
number (Sicilliano, 2013).

The consumer should always keep their receipts so they can check them against their statement. In addition, it is good practice for consumers to review and verify transactions online (Sicilliano, 2013). Consumers can also sign up for receiving automatic text messages or emails for every transaction receipt (Mellinger, 2013). They should immediately contact the respective financial institution regarding suspicious transactions. If the consumer thinks that their identity is stolen, then they should contact Equifax, Experian, and TransUnion to issue a fraud alert and to initiate an immediate credit freeze (Sicilliano, 2013).

Detection

Detection is the “identification of actual or potential fraud within an organization” (Fraud Advisory Panel, 2011, para. 1). Employers are mindful that employees and other insiders know how to take advantage of the organization. Insiders committing fraud are stealing confidential customer information. Employees who commit fraud by taking over accounts and ID theft are abusing their positions. This can happen anywhere. Employees may feel the pressure, and opportunities may exist. When employers suspect an employee has committed fraud, it is time to go into detection mode (Mellinger, 2013).

There are multiple methods of detecting employee and insider fraud. One of the first efforts starts with the initial employment screening. Here, effective screening can be useful in identifying individuals that exert specific and peculiar behaviors; thereby identifying the potential for internal theft and fraud. Training can also detect and deter fraud. Fraud prevention and detection training can improve loss prevention efforts by identifying dishonest activities. Furthermore, such training puts employees on notice and serves as a benefit to the organization by informing employees that they are being monitored for such activities.

Every year, employees should have continual training to ensure that policies and expectations are being met. Regardless, of the aptitude and proficiency of an employee’s knowledge or skill, each employee should, even as a refresher, go through such training. Again, employee behavior is a strong indicator of fraud. It is always a good idea to keep an eye on employees that are acting out of character including a sudden change of wealth or expressing content (Mellinger, 2013).

Another effective method of detecting fraud is through the use of surveillance cameras in the organization’s building. Most companies will install cameras on the ceilings or near cash registers. This will enable the security department a better view to monitor how transactions are being conducted. There may be blind spots in certain locations, but by having surveillance cameras closer to the registers, it will help the security department catch the thieves. On a daily basis, the security department should have different staff monitor the surveillance cameras. They should also check the cameras on a daily basis to ensure it is in a working condition (Mellinger, 2013).
Investigation

Fraud activities can include misappropriation of cash or inventory, fraudulent financial reporting, and money laundering. Investigating credit card fraud can be done with various methods. This may include reviewing and inspecting emails, documents and files, databases of all user input and activity, recently opened or accessed or deleted files, and online activities. The company also has the ability to monitor closely compromised or stolen credit cards.

The merchant should immediately report fraud by contacting the local police department, and contact the financial institution to find out the maximum liability for the fraudulent charges. The affected consumer should also act and contact the financial institution to cancel the card, and file a fraud alert with the three credit bureaus – Equifax, Experian, and TransUnion. Both the consumer and merchant are mutually affected by fraud. They should work together with the police and financial institution to track down the people committing the fraud (Deloitte, n.d.).

HISTORY OF CREDIT CARD USE

Early 1900s

Credit cards have been in existence since the early 1900s beginning with oil companies and department stores. Since then, the use of credit cards and its popularity have evolved significantly over time. Today, the use of credit cards have become a lifestyle necessity; even replacing cash as the preferred means of purchase. Who carries cash anymore?

Dating back to the 1900s, certain companies issued their own proprietary cards for use only at their business. This was used as a method of creating customer loyalty and improving customer service (Gerson & Woolsey, 2009). In 1946, a banker in Brooklyn introduced the first bank card known as the “Charge-It” program. When a customer used the bank card for purchases the bill was forwarded to the bank. The Brooklyn bank reimbursed the merchant and later obtained payment from the customer. This system required that cardholders had an account with the Brooklyn bank (Gerson & Woolsey, 2009).

Diners Club

Subsequently, the Diners Club Card made its debut. Frank McNamara had forgotten his wallet while eating dinner one night. Determined to solve his wallet problem he was compelled to find cash alternatives. McNamara would then pay his bill with a cardboard card, coining it as the Diners Club Card. This was mainly for travel and entertainment purposes, but was deemed the first widely used and accepted credit card in the 1950s. By 1951, there were 20,000 Diner Club cardholders (Gerson & Woolsey, 2009).

American Express

Another key rival to the Diners Club Card was American Express. Although American
Expressed was formed in 1850, and specialized in deliveries, they invented money orders (1882) and traveler’s checks (1891), which served as cash alternatives. American Express later brainstormed the idea of creating travel charge cards in 1946. However, it wasn’t until the Diners Club card that American Express jump-started the innovation trend of cash alternatives. By 1958, American Express entered the credit card industry with its own product in full force. In 1959, American Express introduced the first plastic made credit cards (Gerson & Woolsey, 2009). Subsequently, American Express introduced local currency credit cards in other countries. By then, about 1 million credit cards were being used at about 85,000 merchant establishments within the first five years, internationally. In the 1990s, American Express transitioned from being a charge card to an all-purpose card. American Express, now commonly referred to Amex, is about to celebrate its 50th credit card anniversary (Gerson & Woolsey, 2009).

Both the Diners Club and American Express cards were part of a “closed-loop” system; which consisted of the consumer, the merchant, and the card issuer. In this system, the issuer authorizes and handles all aspects of the transaction and settles directly with both the consumer and merchant. At the same time, the idea of revolving balances was introduced. This allowed cardholders more flexibility in managing their money by incurring finance charges rather than paying off their entire bill at the end of each cycle (Gerson & Woolsey, 2009).

**Visa and MasterCard**

In 1966, Bank of America established a corporation franchising the “BankAmericard” brand (later to be known as Visa) to banks nationwide. Another national credit card system was formed when a group of credit-issuing banks joined and created the InterBank Card Association (later to be known was MasterCard). Both Visa and MasterCard became direct rivals and reshaped the industry by creating the general-purpose credit card in an “open-loop” system. Amex, Diners Club, and Discover Card remained “closed-loop.” The open-loop system required interbank cooperation and funds transfers. Visa and MasterCard’s organizations were managed by board members, high-level executives from their banking organization. Visa and MasterCard issued credit cards through member banks and set the processing rules. The credit card industry grew exponentially and more banks became members of either the Visa or MasterCard association (Gerson & Woolsey, 2009).

**Total Amount of Credit Cards Issued**

As of March 31, 2013, Visa issued 278 million cards in the United States and 522 million cards to the rest of the world. MasterCard, as of June 30, 2013, issued 180 million cards in the United States and 551 million cards globally. Lastly, as of June 30, 2013, American Express issued 52.5 million cards in the United States and 51.8 million worldwide (Ghahremani & Ray, 2013).
HOW CREDIT CARD TRANSACTIONS ARE PROCESSED

Other than the credit card number, the most important aspect of processing the credit card transaction is the Card Verification Value (CVV) number; also known as Card Verification Value, Card Verification Code, Card Identification Number, or Card Identification Value. CVV numbers are also Card Security Code (CSC) numbers, as well as CVV2 numbers. It consists of a three or four digit number on the back of the credit card that is printed by the magnetic strip (CVV Number, 2013). The three digit number can be found on Discover cards, MasterCard and Visa cards. A four digit number can be found on American Express cards. The purpose of the CVV is to ensure that the cardholder is in possession of the actual card, since the number cannot be copied from receipts or the magnetic strip. Only the cardholder and the financial institution know the unique code. CVVs may provide some protection for the merchant, but not transactions from a stolen credit card. Fraudsters who have the credit cards can still read and copy the CVV number.

Under privacy laws, retailers are required to keep customers information secure in order to deter fraud. Currently, many receipts show only the last four or five digits of the credit card and must not show the expiration date. This procedure was implemented in 2006, under the Fair and Accurate Credit Transactions Act, to improve financial security. The law applies only to electronic receipts, not to hand printed receipts, and only applies to customer’s receipts and not the business copy. This law is applicable to all businesses that accept credit or debit cards. Merchants who fail to comply with the law will pay a $2,500 per violation (FTC, 2007). The information on receipts may not prevent the stealing of information; however, it is deterrent. The credit card company will never ask for the whole credit card number over the phone. Receipts will show other information from merchant ID number, an approval code, reference sequencing number, and sometimes the terminal number. It is always best for customers to keep their receipts until they have cleared. Once they have cleared, it is best to destroy it.

In addition, there are times when credit card transactions must be manually processed. In such instances the cashier will take the customer’s credit card and requests an authorization from the merchant bank. There are legitimate reasons why credit card transactions need manual authorization. For example, either the credit card strip is unable to track or the amount of the credit card is too high.

Figure 1 in the following page demonstrates an authorization process of manually inputting a credit card transaction:
1. The cardholder presents credit card to cashier to pay for purchases.
2. The cashier contacts the merchant bank by providing the transaction and credit card information, and requesting an authorization from the merchant bank.
3. The merchant bank submits the authorization request to the cashier if it is approved or declined.
4. If approved, the cashier will input the authorization code on the cash register to proceed with the transaction.
5. The cashier returns the credit card to cardholder.
EMPLOYEE THEFT THROUGH CREDIT CARD FRAUD

According to the Association of Certified Fraud Examiners (ACFE), fraud is defined as, “a knowing misrepresentation of the truth or concealment of a material fact to induce another to act to his or her detriment” (2013, para. 2). In general terms, fraud is perceived as a crime for gain, which includes any intentional or deliberate act to deprive another of property or money through deception or unfair means.

Different types of fraud exist. Perpetrators seek to defraud organizations and individuals alike; leaving both victims. Fraud within an organization can be committed either internally or externally; ranging from employees to managers and from vendors to the owners themselves.

The Association of Certified Fraud Examiners’ (ACFE) 2012 Report to the Nations quantifies the impact of occupational fraud with losses of five percent in revenues. This loss equates to $3.5 trillion in global loss, after being applied to the 2011 Gross World Product (2012). In particular, United States merchants lose approximately $190 billion a year to credit card fraud (Shaughnessy, 2011).

The risk of theft increases in correlation to the increase in credit card use. Specifically, retailers may experience theft from fraudsters that are inside their organization. Employee theft of retail customer information has become a major challenge for businesses. As the world transitioned to a technological era, advances in technology also allowed employees to easily steal customer credit card information seamlessly. In addition, lenient security and protocol procedures allow loopholes for easy data misuse and pilfering (Merchant Connect, 2009).

Employees that commit credit card fraud have previously done so in multiple ways. One way is the employee processing a credit transaction to their personal account using the Merchant Point of Sale (POS) device using funds meant for the merchant’s direct deposit account. A second method is the employee noting down the cardholders’ card number information to be used at a later time by the employee. Another method is the employee stealing information from
the customer’s credit card through the use of a “card skimmer.” This handheld device reads a
card’s magnetic stripe and records the cardholder data for later download to a computer.
Following this, the information can be used to make unauthorized purchases or create counterfeit
cards. This is also a form of identity theft (Merchant Connect, 2009).

REFERENCES

highlights.aspx


Consumer Information. (2012). Protecting Against Credit Card Fraud. Retrieved on December
17, 2013 from http://www.consumer.ftc.gov/articles/0216-protecting-against-credit-card-
fraud


Deloitte. (n.d). How To conduct An Appropriate Fraud Investigation. Retrieved on April 23,
2014 from http://www.deloitte.com/view/en_CA/ca/services/financialadvisory/forensicanddisputeser-
vices/726e9b58992fb110VgnVCM100000ba42f00aRCRD.htm

Federal Trade Commission. (2007). FTC Reminds Businesses: Don’t Print Full Credit and

requires-them-truncate-credit-card

Fraud Advisory Panel. (2011). An Introduction To Fraud Detection. Retrieved on December 28,
2013 from https://www.fraudadvisorypanel.org/pdf_show_157.pdf


RE-ENERGIZING THE BRAND: SMITH & WEsson HOLDING CORPORATION INSTRUCTORS' NOTES

CASE DESCRIPTION

The primary subject matter of this case concerns marketing. Secondary issues examined include marketing management, promotional strategy, and marketing career preparation. The case has a difficulty level of three, appropriate for senior and first year graduate level. The case is designed to be taught in three class hours and is expected to require five hours of outside preparation by students.

CASE SYNOPSIS

Students who learn how to apply their marketing skill-set to a wide-range of markets will likely be a valued asset to most business organizations upon graduation. This case provides the reader with a behind-the-scenes perspective on how a newly appointed President/CEO was able to transfer his marketing skill-set to a completely different and seemingly unfamiliar industry. The reader will learn about the processes by which the President/CEO along with his newly appointed marketing manager and his team empowered themselves, and became successful applying their requisite knowledge of marketing.

Plagued by uncertainty in the marketplace spawned by strong controversial public opinion and legal regulation of their products, the case chronicles senior management’s use of their marketing skills in the transformation of a one hundred and fifty year old company. They begin their task by engaging in brainstorming sessions to change their consumers and suppliers’ images of their brand. The challenges for the marketing team soon become evident. How will they formalize business and marketing processes to help a company that was once an industry leader regain market share and re-establish their brand.

This paper addresses the need for Marketing Educators to have access to a teaching case assignment where students learn how to apply their skill-sets to unfamiliar and politically charged market. Students will learn how to recognize, understand, and appreciate the marketability of their skill-sets and personal branding and how their ability relates to future employment opportunities.

CASE OVERVIEW

The case begins with a historical snapshot of a company, once revered and industry-leading steward, now riddled with competitive inroads and market complacency. The corporation is Smith & Wesson and this case chronicles the challenges faced by upper management when implementing change. Included are accounts from the management team on how they learned to adapt and apply their marketing skills. Students can share a unique perspective from upper management as they experiment with ways to adapt their marketing skills to unfamiliar markets.

Today, the Smith & Wesson Holding Corporation continues to evolve as a diversified business. The corporation and its upper management however, experienced several significant shifts in its business focus, consumer orientation, and brand proliferation and identification strategies to respond to changes in the marketplace. All of the aforementioned elements helped to re-energize the Smith and Wesson brand.
The authors present this case to instructors so that they may engage their students in a dialogue on the value of transferability of their marketing skills. The following sample questions are suggestions for class discussion. What market factors enabled the marketing team to initiate and facilitate change? How did the marketing team use their knowledge to identify and secure revenue streams that in the past were loss leaders? How did the marketing team apply their industry specific marketing skill-sets to unfamiliar industries and what organizational factors enabled this to occur?

In 2004, Smith & Wesson Company reported their annual income just over $100 million in revenues and restructuring its upper management has occurred. It provides a platform to discuss the consequences of “marketing myopia” and its influence on company and marketing strategy. Further, it seeks to challenge students to not only familiarize themselves with a unique market segment but also identify related market growth opportunities. The challenge in this case is for students to identify potential market segments in an area that is most likely not familiar and to develop estimates of market potential and demand from industry data. Another important aspect of the discussion focuses on brand equity concepts and the use of market research data to assess the strength of the Smith & Wesson brand. From this standpoint, the discussion can logically turn to product and brand extensions. The experience of the president and vice president of marketing from outside of the firearms industry will provide a good discussion of the transferability of marketing experience across industries. After an assessment of the market and information on Smith and Wesson’s current position is complete, students can make recommendations for future strategy; specifically, company vision, target markets, positioning, product line, distribution, promotions, and expected revenue projections.

Trace the steps used by Mr. Golden to establish the Smith & Wesson brand as unique from their competitors in an industry characterized as “distributor driven” as well as “generally not responsive to sales promotions and advertising”. The creative marketing tactics used by Smith & Wesson executives will help illustrate to students how the characteristics of an industry may often impede the success, or in some instances facilitate the implementation of traditional promotional mix elements. This case will also challenge students by having them apply their knowledge of marketing and promotional strategy to a politically turbulent yet legal business organization.

**INSTRUCTOR NOTE**

This case works at two levels, strategy and tactics, which makes it an appropriate discussion vehicle at either the upper level marketing management or the lower level marketing principles courses. When using the case in a marketing management course the primary focus should be on the marketing strategy discussion, and tactical discussion included as desired by the professor. For the marketing principles course the discussion should focus primarily on the tactical issues with emphasis on the classic 4Ps.

Included with this instructor’s note are two supplemental discussion topics. The first brings in regulatory issues related to the Wildlife Restoration Act of 1937. The second supplemental discussion broadens the use of the case into a promotional strategy course with specific promotional tactics undertaken by Smith and Wesson.
Smith and Wesson has been the “large fish in a small pond,” with the prior management suffering from marketing myopia (Leavitt, 1969). Their perspective was clearly focused on revolver and pistols and failed to take advantage of the Smith and Wesson brand equity built over time. Smith and Wesson is a venerable American brand with a brand image (and equity) similar to that of the classic Harley Davidson motorcycle brand.

This myopic view of the market has caused management to make decisions that load up the channel with inventory. This allowed Smith and Wesson to maintain healthy revenue increases when the industry, overall, was stagnating. Overtime this inventory build-up causes difficulties for both the company and the channel. For the company, future revenues will stagnate; for the channel, too much inventory will likely lead to unwanted price discounting that will affect distributor margins and Smith and Wesson brand equity.

Increased competition causes problems as dealers now have additional options, mostly within the pistol category, at more attractive price points for the consumer and more favorable margins for the dealer. Smith and Wesson appears to be living off their reputation in revolvers, which have seen less interest from consumer. Smith and Wesson has also seen significant decline in product adoption by police departments across the country, a sector of the market that they once dominated.

Golden’s lack of experience with the firearms industry initially creates some credibility issues internally with those employees and managers remaining with the firm. Similar to any highly successful technology firm, expertise within the discipline is important for selling new ideas. It may be that Golden’s experience in plumbing hardware may not be considered the necessary knowledge for turning around a firearms manufacturer. This is not insurmountable, but does mean that Golden will have to work and study hard to provide him with some legitimacy. Of course, the success of his first few strategic decisions will go a long way to convincing everyone that he is the right man for the job.

**MARKETING STRATEGY DISCUSSION QUESTIONS**

1. What issues does senior management face when developing the marketing strategy for the next year?
2. Complete a SWOT analyses for Smith & Wesson. What uncontrollable factors do you think influence the sales of Smith & Wesson products?
3. Smith & Wesson is at a strategic crossroads, what should Golden propose as a strategic vision? What type of positioning strategy would you recommend for the Smith & Wesson brand and why?
4. What options are available to Michael Golden as he attempts to navigate the tumultuous waters of the small firearms industry? How does his branding experience help him in this unfamiliar industry?
5. Write a marketing plan for Smith & Wesson.
6. What obstacles does Michael Golden face in attempting to apply his knowledge in brand marketing to the firearms industry?
MARKETING TACTICS DISCUSSION QUESTIONS

1. Identify each element of Smith & Wesson’s marketing mix (“The 4 P’s”) as of December 2004.
2. What are the advantages and disadvantages associated with the promotional alternatives under consideration for the coming year (see discussion below)?
3. What types of primary and/or selective advertising do you think would be most effective for Smith & Wesson and why?

ELEMENTS OF THE PROMOTIONAL CAMPAIGN

Mr. Golden is now ready to work with his Vice President of Marketing to create a promotional strategy that will elevate the diverse Smith & Wesson product-line. Michael has asked Tom to conduct a systematic review of the company’s current promotional strategy to assess areas that may reflect Smith & Wesson quality and reputation among military, police, and sportsman. Smith & Wesson’s long known reputation as a “handgun only” enterprise was about to change.

The Vice President of Marketing brainstormed with the marketing staff for answers to the question: What innovative promotional tactics may facilitate a well-needed paradigm shift to attract viable customers? Smith & Wesson has identified the following segments as viable customers. 1) sport enthusiasts, 2) law enforcement, 3) security, 4) military professionals, 5) hunters, 6) collectors, and 7) individuals desiring personal protection. The goal is to have these seven segments perceive the Smith & Wesson products as high quality. The VP of Marketing and his team reviewed various options and surmised that to re-establish the Smith & Wesson brand would require a “thinking outside the box” marketing mentality in an industry that has been steadfast in traditional promotional practices and regulated by limited public acceptance of its products marketed for civilian use. The firearms industry is unique and the executives are unfamiliar with this market. They decide to develop innovative promotional tactics that can transcend the firearms industry. Their goal is to help create demand of Smith and Wesson products and re-energize the brand. The marketing team decided to evaluate the following promotional activities.

- The timing and use of multi-level sales promotions including learning seminars taught by Smith & Wesson Company sponsored field experts.
- Introduce consumer and business-to-business sales promotions including rebates and refunds.
- Implement public relation strategies to launch a new military and police product to law enforcement personnel.
- Systematic television advertising of the Smith and Wesson brand, product line, and newly acquired brands on cable television sport related channels.
- Restructure internet/interactive websites to monitor consumer traffic and interest for event sponsorship activities.
- Complete a systematic cost-benefit analysis regarding the feasibility of event marketing and sponsorship of televised sport programing.
- Increase customer contact/touch points with the Smith & Wesson brand. For example, more sponsored events at the local, regional, and national level, direct marketing and selling Smith & Wesson brand products in their retail store.
• The Smith & Wesson sales personnel was to be retrained to make them more adaptable and capable by empowering them to respond to a wider range of sales related activities.

ADDITIONAL DISCUSSION

This case provides the opportunity to discuss additional aspects of the firearms manufacturing industry in the area of ethics and government regulation.

1. Discuss the ethical considerations related to creating marketing strategies for controversial, yet legal, industries like firearms.
2. Discuss the socially responsible activities of firearms manufacturers and support of governmental actions related to the environment (see below).

Wildlife Restoration Act

President Franklin D. Roosevelt signed The Wildlife Restoration Act also named the Pittman-Robertson Act after Senator Key Denson Pittman of Nevada and Representative A. Willis Robertson of Virginia on September 2, 1937 (Brassard, 2010). The passage of the Pittman-Roberson Wildlife Act lead to the development of The Wildlife Restoration Program, which was later, established in 1938. According to the National Shooting Sports Foundation, over $8 billion dollars have been collected from firearm manufacturers. The funds are distributed to U.S. states, commonwealths, and territories. All 50 states, the Commonwealth of Puerto Rico and the Northern Mariana Islands, and territories of American Samoa, Guam, and the U.S. Virgin Islands have received funds from this program (Pittman-Roberson Wildlife Restoration 2011). The Pittman-Roberson Wildlife Act provides funds for a variety of projects intended to restore, conserve, manage, and enhance the nation’s wildlife resources and to provide for public use and benefits from these resources (Briefing for the House Committee on Ways and Means, April 2006, pp.1). This figure according to the National Shooting Sports Foundation makes the firearms industry the largest contributor to conservation in the United States (National Shooting Sports Foundation, Inc. 2013).

EPILOGUE

Smith & Wesson Holding Corporation, NAICS industry codes 332994 – Small Arms, Ordinance, and Ordinance Accessories Manufacturing is a public company, NASDAQ stock ticker SWHC. The closing stock price on April 1, 2004 was $1.66 compared to $ 8.73 on April 1, 2013. The company headquarters are located at 2100 Roosevelt Avenue, Springfield, MA. The website for the company is:www.smith-wesson.com. 
Revenues for the company were $234.8 million on April 30th in 2007. The company employed approximately 1,457 employees (Small Firearms & Ammunition Market in the U.S. 2007). The main manufacturing facility is located in Springfield, MA however; the company has two other facilities located in Maine and New Hampshire. Smith & Wesson reported $98.5 million in net sales in 2003, $117.9.million in 2004, $ 124 million in 2005, 157.9 million in 2006, and 234.8 million in 2007 (Smith & Wesson Annual Report 2007). Net sales for Smith & Wesson in 2013 were $587.51 million (Smith & Wesson Annual Report 2013).
In 2007, Smith & Wesson reported that they employed approximately 45 salespersons who served a network of 24 commercial distributors and 46 law enforcement distributors (Small Firearms & Ammunition Market in the U.S. 2007). The company also sells directly to U.S. law enforcement agencies. Overseas sales are coordinated through international distributors. Smith & Wesson serves the hunting, military and police, and home protection markets. At one time, the leading supplier of handguns to law enforcement with a 98% share, the company noted in its 2007 annual report that it currently has only a 10% share (Smith & Wesson Holding Corporation 2007 Annual Report).

The company estimated that it held the #1 market share in revolvers and the #3 market share in pistols in 2007 and in 2006, Smith & Wesson leveraged its strong brand identity to expand into the long gun market with the launch of the M&P 15 tactical rifles (Small Firearms & Ammunition Market in the U.S. 2007). The company began to diversify in 2007 when it acquired Thompson/Center Arms.

REFERENCES

America’s Sporting Heritage Fueling the American Economy (2011), Congressional Sportsmen’s Foundation.


Bloomsburg Businessweek Executive Profile, Retrieved on September 15, 2014 from http://investing.businessweek.com/research/stocks/people/person.asp?personId=13009156&ticker=SWHC.


Smith & Wesson Holding Corporation, Form 10−K, For the fiscal year ended April 30, 2004, United States Securities and Exchange Commission, Washington, D.C.


RUNNING WITH THE BIG DOGS (PART A): A COMPETITIVE FORCES AND STRATEGIC ANALYSIS OF THE RUNNING SPECIALTY STORE INDUSTRY

Robin L. Snipes, Columbus State University
Jennifer Pitts, Columbus State University

CASE DESCRIPTION

The primary subject matter of this case is a competitive forces analysis of a specialty retail company. Secondary issues examined include choosing an appropriate competitive strategy to deliver a unique value proposition to customer. Students should develop a more in-depth understanding of the impact of external factors and the underlying drivers that affect competitive control and profitability, and learn how to develop strategy in light of these external factors. The case has a difficulty level of three and up, making it appropriate for junior level courses in management information systems, marketing strategy or business strategy. The case is designed to be taught in one or two class sessions and should require approximately 2-3 hours of outside preparation for students, primarily reviewing the case and reading articles related to the competitive forces framework.

CASE SYNOPSIS

The Big Dog Running Company is a running specialty store operating in the highly competitive and growing running shoe and apparel retail industry. In this case, students analyze the specialty running store industry using Porter’s Competitive Forces framework, and assess trends in the industry that affect profitability. Based on the analysis, students evaluate and select a one of Porter’s generic strategies that will enable the company to gain sustainable competitive advantage in the industry. Examining the structure of an industry and the competitive forces that influence profitability will help students develop an understanding of the impact of external factors and the underlying drivers that affect competitive control and profitability.

INSTRUCTORS’ NOTES

Case Learning Objectives

The primary goal of this case is for students to learn how to apply Porter’s Five Forces framework and understand how external forces affect profitability in an industry. A secondary goal is for students to learn how a company can strategically position itself in an industry by leveraging technology and customer-centric strategies to gain and sustain competitive advantage. The case uses a real-world company for students to evaluate and identify current marketing and
technology strategies and make recommendations for the future based on their analysis. This case explores key topics that companies must consider in today’s business environment, making it appropriate for courses in management information systems, marketing or management strategy.

**Recommendations for Teaching Approaches**

It is recommended that instructors utilize this case as an applied exercise following a review of the Porter’s Competitive Forces Model and Generic Strategies. Concepts related to strategic positioning and value creation should also be reviewed prior to students completing the case analysis. To use the case as an in-class exercise, students can be divided into groups and asked to (1) analyze each of the competitive forces that affect profitability in the running specialty store industry, and (2) identify which of the generic strategies the company is using, and then present their analysis to the class. Alternatively, the case can be used as a group or individual assignment and subsequently reviewed in one or more class sessions. The Big Dog Running Company (BDRC) provides an interesting and relevant company for students to evaluate and should generate a lively class discussion related to how technology and social media can be effectively leveraged by small companies to compete in an industry dominated by “Big Dogs.”

The following are recommended case discussion questions and analysis followed by answers for each item.

**Case Discussion Questions and Analysis**

**1) Analyze the Big Dog Running Company using Porter’s Competitive Forces model.**

This question is intended to generate much discussion about the specialty running store industry. Students should first identify BDRC’s main industry, and then discuss their main competitors. After determining the industry and its competitors, students should rate each of the competitive forces as "high," "medium," or "low," in strength. For the athletic shoe and apparel specialty retail industry (in general), competitive rivalry is high since there are many retail outlets that sell athletic shoes. The threat of potential entrants into the local market is low to medium for the local market -- the local market is nearing saturation and the cost of opening a brick-and-mortar retail store is high, but there is a potential threat that a large sporting goods store like Dick's will open their own version of a specialty running store like they have in St. Louis. The threat of substitutes is low since other shoes don't provide the support for sports activities as well as specialty running shoes, and the bargaining power of suppliers is high since they have a lot of control over small specialty store owners (owners have to abide by the supplier agreements that Nike, Reebok, New Balance, and Adidas have if they want to be able to get their supplies and stay in business). The bargaining power of buyers is high (since they can now shop for their shoes online if they are mainly focused on price), and the threat of other stakeholders is medium since the local community is a large part of BDRC's success so any changes in the local...
community, such as the closing or downsizing of Ft. Benning (however unlikely) would have a big impact on BDRC's revenues.

(2) What should be the Big Dog Running Company’s business strategy?

Based on the analysis of the competitive forces, firms should choose a competitive strategy that matches their strengths, allows them to dilute high forces, and gives them the potential to create barriers to market entry. It should be obvious to students that BDRC has chosen the "Differentiation Focus" based on their strengths which would probably be: (1) the ability to have more personalized customer service with a smaller, more highly trained sales force; and (2) the ability to sell "top of the line" products to running sport enthusiasts, and (3) the ability to develop long-term customer relationships within the community through event sponsorships, social activities, and the effective use of technology. Because of supplier restrictions and since their size is much smaller relative to the "big box" and the big online retailers (such as Amazon and Zappos), their bargaining power with suppliers is less, so they will not be able to compete based on price. Instead, their value proposition must be their ability to develop relationships and provide their customers with a higher level of service than the big box retailers.

(3) Assess the role played by technology in the company’s business strategy.

Technology plays an important role in the company’s “Differentiation Focus” strategy. Since Reggie Luther is a website owner with extensive knowledge of social media marketing, Big Dog Running Company benefits from having owners who not only recognize the strategic value of technology but also know how to craft an effective marketing strategy that capitalizes on social media. To build their brand and connect with customers, the company should, at a minimum, maintain a website that provides existing and potential customers information about the company’s many value-added activities and events. An effective social media strategy will enable BDRC become more than store in the minds of its customers who are made to feel part of a community whether they are running “newbies’ or have years of experience.

REFERENCES

TATA STARBUCKS: HOW TO BREW A SUSTAINABLE BLEND FOR INDIA INSTRUCTOR’S NOTES

Dev Das, Pace University
Alan B. Eisner, Pace University
Helaine J. Korn, Baruch College, CUNY

CASE DESCRIPTION

This case is primarily intended for use in the corporate strategy section of a business policy or competitive strategy course. It can be used as an overview of the many decisions and actions that an organization has to undertake to sustain a competitive advantage. This case can also be used to augment discussions of strategic analysis, specifically both internal and external environmental analysis and strategic formulation.

The case is rich enough for advanced and graduate students, and has been developed in a manner that will allow students to diagnose the root(s) of the company’s issue(s) as detailed in the case, and then form opinions and suggestions for any strategy that the company should pursue. In doing this, students should consider the activities, history, and goals of the company as presented.

It would be effective at the business strategy level, especially, to discuss the implications of industry life cycles, and at the corporate strategy level to discuss implications of diversification. The case also lends itself to discussions of strategic implementation and the effect of leadership on innovation, especially when trying to maintain a mature brand.

CASE SYNOPSIS

Starbucks entered the Indian market in October 2012 by forming a 50:50 joint venture with the Tata Group. The Indian Café market offered a lot of potential for the new Tata Starbucks alliance. While India was a nation known for its tea drinkers, sipping coffee and socializing at coffee shops was becoming increasingly popular. Domestic consumption of coffee had risen up 80% in the past decade.

The joint venture appeared to be at the crossroads of an important strategic decision. It could either revert to a plan to grow its store count aggressively much like it did in the US. It is possible that this was the original intent. After all, the initial launch pricing had been set to be competitive with Café Coffee Day’s (CCD) pricing (coffee drinks available for as low as Rs 1001). Alternately, it could choose to embrace a premium-priced, niche approach similar to the one it had used successfully in other Asian countries like Japan and China. The premium offering would then cater to an older, business elite with higher spending power. This would result in less rapid growth with a cherry-picked list of high profile, business-friendly locations that could also allow it to build a premium brand with premium pricing.

Would Starbucks and Tata under Davda’s leadership finally be able to crack the code for sustained success in the competitive and complex Indian market? While Davda appeared proud

---

1 Assumed 50 Rs = 1 US Dollar
of what the alliance had achieved at the 2014 Starbucks annual shareholders meeting, some critical strategic choices would need to be made to ensure the long term success of Starbucks in India.

TEACHING PLANS

Given Starbucks’ history, goals, and current strategy in emerging markets, the focus of general discussions should center on what the issues were and whether there were ideas presented in the case that might sustain improvement for the Tata Starbucks joint venture. Details in the case provide the basis for discussion and analysis of strategies, potential markets and products, diversification, organizational structure and leadership, and external factors such as the economy, the industry and the global market.

As a General Discussion Business Case: It is sufficient here that the instructor simply allows students to speculate and discuss what they think is right/wrong with the company, what they think of the company’s decisions and what they think of the company's future, possibly using a simple SWOT analysis.

One approach to help move students through this process is to put them in groups and ask them to discuss within their groups what they think about Tata Starbucks’ competitive environment as detailed in the case, using either a simple SWOT or Porter’s 5 forces model (detailed use of this follows in the teaching note). In smaller classes, have the students put their answers on the board. This will allow students to see where they agree and where they disagree and, in that manner, foster further discussion.

The instructor's role in this scenario is to guide students through the discussion such that they begin to realize that there are key tensions or issues in this case that must be addressed before conclusions can be drawn. At this point, in-depth analysis of the issues is more difficult without instructor direction. However, students can still see that their conclusions rely on certain assumptions regarding the organization's internal environment, its external environment, its business and corporate strategy alternatives and then its ability to implement those decisions. In general, then, students should begin to develop some ideas about the strategic direction for Avon, based on what’s been tried in the past.

As an Advanced Case: It is assumed that students at this point in the class have been exposed to the various frameworks associated with different types of analyses. The instructor should feel comfortable in this application being more direct in guiding the discussion and asking students to incorporate various types of analyses into the discussion, such as the previously mentioned 5 forces framework, VRIN analysis, generic competitive and diversification strategies, as well as the implementation challenges of an emergent strategy. Here is where additional assigned reading might prove helpful. As a way to conclude this strategy discussion, students could be asked if they would recommend Tata Starbucks seek additional alliances to penetrate the market, why or why not.

In terms of environmental analysis, this case could encourage a discussion of external environmental forces (such as demographic, socio-cultural, technological and political-legal issues), how these forces relate to Porter’s five-force model; and therefore how such forces affect the ability to sustain performance in an industry. In terms of internal analysis of the firm, a discussion of value-chain and resource-based analyses could provide hints for how integration challenges across the value-chain activities in diverse product lines could affect growth and performance. Are synergies present?
As a business-level strategy case, this case can be used to discuss Porter’s generic competitive strategies (is Tata Starbucks a differentiated product line or have they utilized a combination or niche strategy), the advantages and disadvantages of those strategies and how the implementation of those strategies might be affected by the life cycle of the industry.

As a corporate-level strategy case, this case can be used to discuss advantages and disadvantages of various diversification strategies, in specific helping students to understand the many issues associated with the decision to diversify a business, and the importance of assessing core competencies and synergies.

**ICEBREAKER**

Since Starbucks is a household name among most US students, a good icebreaker would be to ask for a show of hands of those who drink Starbucks regularly versus those who do not. It is likely that a large number of students will be regulars. Next, the instructor can ask the students for what they think is the secret to Starbucks’ success in the US.

After some discussion on this topic, the instructor can switch gears to find out how many students have been to a Starbucks location outside the country. It is likely that the number of students who have had this experience will be relatively small. Students can then be asked to ponder whether they think Starbucks’ success drivers would be the same outside the US.

**SUMMARY OF DISCUSSION QUESTIONS**

Here is a list of suggested discussion questions. The instructor can decide which questions to assign, and also, which additional readings or exercises to include to augment each discussion.

- What key forces in the industry environment affect Tata Starbucks’ choice of strategy?
- What internal resources does Tata Starbucks have that may give it a competitive advantage over other foreign and domestic players within the Indian café market?
- What should Tata Starbucks do to ensure sustained growth and profitability within the Indian café market?
- How should Starbucks tackle the emerging threat from the quick service restaurant category e.g. McCafé?

**DISCUSSION QUESTIONS AND RESPONSES**

1. What key forces in the industry environment affect Tata Starbucks’ choice of strategy?

To answer the question about the current forces in the Indian café market that affect Tata Starbucks’ ongoing strategy, it is necessary to assess the segments of the external competitive environment that include competitors, customers and suppliers, substitutes and new entrants. Porter’s five forces model allows strategists to anticipate where the industry might be most vulnerable (see Figure TN1).
Figure TN1 Porter’s Five Forces

Suggested: Many rivals compete for market share. The company experiences direct competition from domestic giant Café Coffee Day, as leading players have vertically integrated and source their coffee beans from company owned or affiliated plantations.

Suggested: There is a low threat from substitute products. Leading players have incorporated potential substitutes to coffee (e.g. tea) into their offerings.

Suggested: The threat of entry is medium. There are low entry barriers i.e. low capital requirements, for quick service restaurants e.g. McDonalds.

Suggested: Since buyers are not organized into groups, they do not wield much bargaining power.
Suppliers – Low Threat

The suppliers in the Indian café market appear to have low bargaining power. The leading players are vertically integrated. Both Tata Starbucks and Café Coffee Day source their coffee from company owned plantations. Through the joint venture, Tata Starbucks is able to source coffee beans from plantations owned by the Tata Group in the Coorg region. Café Coffee Day is part of the Amalgamated Bean Coffee Trading Company Ltd (ABCTCL) conglomerate that produces and trades coffee beans on the international market.

Buyers – Low Threat

Since the company’s products are sold via retail locations, the end consumers are the buyers of the products. Buyers are not organized into buying groups and hence, do not wield much bargaining power with regards to the pricing of coffee products. However, this dynamic could change in the future as Tata Starbucks competes more directly for share with Café Coffee Day. This would involve a price war as both players woo the large younger, more price conscious and socially active demographic.

Industry Rivalry – High Threat

The company operates in a highly competitive industry and experiences competition from an entrenched domestic leader (Café Coffee Day) and experienced foreign players (Gloria Jean Company). A strong marketing response can be expected from one or more players, as Tata Starbucks attempts to grow volume and market share.

New Entry – Medium Threat

The threat of new entrants is medium. Large real-estate related capital investments would otherwise create a big entry barrier for new entrants. However, the impending threat from quick service restaurants (QSRs) like McDonald’s and Dunkin Donuts raises the threat level as these players can leverage existing real estate to begin to sell coffee at minimal incremental costs. In the case of McDonald’s, McCafe counters could easily be introduced throughout the country with minimal structural adjustments to existing McDonald’s locations.

Substitutes – Low Threat

There is low threat from substitute products like tea because the leading players have included tea-related drinks to their menus. Ordinarily, this could have been a big threat within a tea-drinking nation that has tea sellers at every street corner selling tea at nominal prices.
2. What internal resources does Tata Starbucks have that may give it a competitive advantage over other foreign and domestic players within the Indian café market?

Analyzing the Internal Environment

To answer the question of how to support a competitive strategy, it is important to consider the concept of the resource-based view of the firm, and the three key types of resources: tangible resources, intangible resources, and organizational capabilities. Tata Starbucks’ profile might look like the following:

Tangible Resources

Human

Tata Starbucks has a strong community of “partners” who represent the face of the company while serving coffee. The company is known to have a rigorous recruiting and training process to make sure that these brand ambassadors enhance the customer experience in each store.

Physical

Individual stores are known to be designed tastefully to enhance the customer experience. The stores cater to both the practical needs (free internet, spacious seating) as well as emotional needs (cultural artifacts, pleasant music).

Technological

Starbucks has been implementing a number of technology related offerings to enhance customer experience. A smartphone application allows customers to place coffee orders prior to getting to the store thereby reducing the time spent waiting in line. Loyalty cards reward customers for repeat purchases at the store.

Intangible Resources

Human

The company invests heavily in its “partners” and this translates into high motivation and a positive attitudes towards work. By owning a share of the company even at the most junior levels, employees feel a sense of ownership and pride.

Innovation and creativity

Tata Starbucks has been innovative in its selection of sites for stores, the interior designs for each store. It has also been creative in developing a store menu that appeals to both the seasoned coffee drinker as well as the dabbler and snacker.
Reputation

Both partners in the Tata Starbucks joint venture enjoy a solid reputation of being respectable companies that care about quality and social responsibility.

Organizational Capabilities

Starbucks is known to invest in training and education programs for its employee “partners”. The partnership with Tata also provides the local muscle to negotiate attractive rental/purchase prices for its new stores. The Tata partnership also gives the joint venture access to company owned coffee plantations. This vertical integration helps minimize supply and pricing uncertainty.

Determining whether the internal resources are valuable, rare, difficult to imitate, or difficult to substitute (VRIN) can help a firm sustain competitive advantage. The VRIN analysis provides a deeper understanding of how a company stacks up in terms of critical resources that are needed for any company to compete effectively in the market.

FORMULATING BUSINESS-LEVEL STRATEGIES

Several types of competitive strategies can be used, including the three generic strategies to overcome the five forces and achieve a competitive advantage:

- Overall cost leadership
  - Low-cost-position relative to a firm’s peers
  - Manage relationships throughout the entire value chain
- Differentiation
  - Create products and/or services that are unique and valued
  - Non-price attributes for which customers will pay a premium
- Focus strategy –
  - Narrow product lines, buyer segments, or targeted geographic markets
  - Attain advantages either through differentiation or cost leadership

3. What should Tata Starbucks do to ensure sustained growth and profitability within the Indian café market?

Within the US, Starbucks was able to achieve success in two phases. It first established a strong quality and premium brand image for itself. It then expanded the number of stores to flood out the competition and satisfy the coffee drinking needs of every potential customer. Tata Starbucks can consider a similar strategy within the Indian café market.

4. How should Starbucks tackle the emerging threat from the quick service restaurant (QSR) category e.g. McCafe?

Tata Starbucks could use its premium quality image and branding to tackle the new entrants. QSR’s usually differentiate on convenience and speedy service (“fast food”), not
high quality. It could continue to leverage the elevated experience it offers in its cafes which are more professional and quiet than QSR locations.

As a wrap-up, let students know that at this point, it is not clear which business strategy is best. They don’t have to pick one strategy, just use this discussion to explore the implications of how strategy is developed, and what are the pros and cons for each business decision. Whatever decisions students come to can be checked by asking “is this strategy sustainable”?

TEACHING NOTE REFERENCES


INSTRUCTORS’ NOTE

UTILIZING CURRENCY SWAPS
TO HEDGE RISK AT SLC

Benjamin L. Dow III, Southeast Missouri State University
David Kunz, Southeast Missouri State University

CASE DESCRIPTION

The primary subject matter of this case is the utilization of currency swaps to reduce long-term currency exposure. Secondary issues examined include counter-party risk and exploiting a comparative advantage. The case requires students to have an introductory knowledge of accounting, statistics, finance and international business thus the case has a difficulty level of four (senior level) or higher. The case is designed to be taught in one class session of approximately 3 hours and is expected to require 3-4 hours of preparation time from the students.

CASE SYNOPSIS

St. Louis Chemical (SLC) is a regional chemical distributor, headquartered in St. Louis. Don Williams, the President and primary owner, began SLC ten years ago after a successful career in chemical sales and marketing. The company has gradually expanded its product line and network of manufactures. Five years ago, SLC completed a joint venture with a German chemical distributor that included the option purchase the remaining 49% interest in the foreign subsidiary at a predetermined price. SLC is currently considering whether to exercise the option and more specifically, how to finance the debt needed to complete the purchase and reduce the additional currency risk that would accompany the conversion of the joint venture to a wholly owned subsidiary.

CASE OVERVIEW

St. Louis Chemical (SLC) is a regional chemical distributor, headquartered in St. Louis. Don Williams, the President and primary owner, began SLC ten years ago after a successful career in chemical sales and marketing. The company reported small losses during its first two years of operation but has since reported eight consecutive years of increasing sales and profits. During the first week of 2014, Williams was reviewing the financial report prepared by the corporate finance division concerning the conversion of RMO International from a joint venture to a wholly owned subsidiary. Five years earlier, SLC had closed on a joint venture with Heidelberg regarding RMO International and as a result of the transaction, SLC will now have to make a decision whether to exercise the option to purchase the remaining 49% stake in RMO International or keep the existing joint venture agreement in place.
SLC would need to borrow the equivalent of about $135 million in order to raise the 100 million euros necessary for the deal at the current exchange rate of $1.35/EUR. SLC’s US investment bank had estimated SLC could conservatively raise $135 million by issuing 5.9% annual coupon bonds at face value with a 5 year maturity. Deutsche Bank (which had handled the joint venture between SLC and Heidelburg five years ago) had proposed a 5-year 100 million Eurobond denominated in euros that would need to carry a 6.1% annual coupon in order to sell at face value. The report did note that although the coupon rate was higher, future euro cash flows from RMO would likely be sufficient to cover the Eurobond coupon payments. In addition, this would significantly reduce the amount the euro cash flows remitted back to SLC and thus significantly reduce the exchange rate risk embedded in the deal.

On the surface, the financial analysis favored the conversion of RMO International into a wholly owned subsidiary. However, one of the most prominent uncertainties in the analysis is the significant foreign currency exchange rate exposure that would be transferred to SLC. Future euro cash flows generated by RMO would be remitted back to SLC and converted into US dollars at exchange rates that are not known today. If the euro strengthens in value from its current level, SLC will benefit from the higher conversion value and the return on investment increases. If the euro weakens in value from its current level, SLC will receive fewer dollars per euro and the return on investment decreases.

There was a suggestion of utilizing a currency swap agreement as a possible way to mitigate the exchange rate risk but no formal analysis had been completed to date.

**TASKS TO BE PERFORMED**

The most important consideration for Williams is to be able to explain to the board how the currency swap might help SLC reduce their borrowing costs and reduce their exchange rate exposure if they decide to covert RMO International from a joint venture into a wholly owned subsidiary.

1) **What is the anomaly in current market conditions that makes the currency swap a viable alternative?**

A currency swaps is a viable alternative for both parties due to the quality spread differential that exists in each market. The US dollar market assigns a credit quality differential of 80 basis points between SLC (5.9% coupon) and Eagle Aero (6.7% coupon). However, the euro funds market has assigned a credit quality differential of only 20 basis points between SLC (6.1%) and Eagle Aero (6.3%). This leads to a quality spread differential (QSD) of 60 basis points. Moreover, the quality spread differential may not be a unique one time anomaly as the market for currency swaps has grown significantly over the last 15 years. It may also be argued that all types of debt instruments are not regularly available for all borrowers. Thus, the currency swap assists in completing the market for a specific form of financing desired by a particular borrower. The discrepancy in lending rates is likely due to the partnerships and ongoing relationships that domestic companies usually have with local lending authorities. Based on the
comparative advantage of borrowing in their domestic market, both counterparties engaged in the swap transaction, as well as the swap broker/dealer, can benefit from financing that is more suitable for their asset structure. SLC has a comparative advantage in the US dollar market allowing it to borrow at 80 basis points less than Eagle Aero compared to only 20 basis points less in the euro market. Eagle Aero has a comparative advantage in the euro funds market by only having to pay 20 basis points more in the euro funds market compared to 80 basis points more in the US dollar market.

2) Assume SLC borrows locally by issuing a $135 million face value 5.9% annual coupon bond with a maturity of five years at par and engages in a currency swap with Zuetsche Bank for a five-year 100 million euro interest only loan at 5.8%. Simultaneously, Eagle Aero borrows locally by issuing a 100 million euro denominated bond with a 6.3% annual coupon and engages in a currency swap with Zuetsche Bank for a five year $135 million interest only loan at 6.5%. Describe the initial exchange of cash flows related to SLC, Zeutsche Bank, and Eagle Aero.

SLC will obtain $135 million from US dollar bondholders. SLC will exchange the $135 million with Zeutsche Bank for a 100 million euro loan. At time period 0, SLC is simply exchanging the $135 million for 100 million euros. The 100 million euros will be used for the purchase of the remaining 49% ownership in RMO international. Eagle Aero will obtain 100 million euros from Euro bondholders. Eagle Aero will exchange 100 million euros with Zeutsche Bank for a $135 million loan. The $135 million will be used for the expansion of Eagle Aero’s US subsidiary. At time period 0, Eagle Aero is simply exchanging 100 million euros for $135 million. Zeutsche Bank has no exposure at time period zero. Zeutsche Bank is receiving $135 million from SLC and loaning out $135 million to Eagle Aero. Simultaneously, Zeutsche Bank is receiving 100 million euros from Eagle Aero and loaning out 100 million euros to SLC. The initial cash flows from the currency swap are relatively straightforward.
Currency Swap
Initial Cash Flows

<table>
<thead>
<tr>
<th>RMO International</th>
<th>Eagle Aero US subsidiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>€100 mil from Zeutsche Bank</td>
<td>€100mil from EagleAero</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SLC Inc</th>
<th>Zeutsche Bank</th>
<th>Eagle Aero</th>
</tr>
</thead>
<tbody>
<tr>
<td>$135 mil from sale of US$ bonds</td>
<td>$135mil from SLC</td>
<td>€100 mil from sale of € bonds</td>
</tr>
</tbody>
</table>

US dollar bondholders | Euro Bondholders

3) Describe the annual interest cash flows that occur each year over the next five years related to SLC, Zeutsche Bank, and Eagle Aero and discuss any additional risks that SLC may occur over the five year period.

At the end of the first year, SLC will receive euro cash flows from RMO International. The cost in euro to repay the €100 million loan from Zeutsche Bank is €5.8 million (€100 million*0.058 = €5.8 million). The currency swap agreement requires Zeutsche Bank to pay SLC $7.965 million ($135 million*0.059 = $7.965 million). The $7.965 million will be used by SLC to repay US bondholders. Thus every year SLC will exchange €5.8 million for $7.965 million with Zeutsche Bank.

Simultaneously, Eagle Aero will use US dollar cash flows from the Dallas subsidiary to repay the $135 million loan it received from Zeutsche Bank. The cost in US dollars is $8.775 million ($135 million*0.065 = $8.775 million). The currency swap requires Zeutsche Bank to pay Eagle Aero €6.3 million (€100 million*0.063 = €6.3 million). Thus every year Eagle Aero will exchange $8.775 million for €6.3 million with Zeutsche Bank. The €6.3 million will be used to repay European bondholders.
From Zeutsche Bank’s perspective they will be receiving €5.8 million from SLC and paying €6.3 million to Eagle Aero at the end of each year. Thus Zeutsche Bank will have to make a net payment of 500,000 euros. However, Zeutsche bank will be receiving $8.775 million from Eagle Aero and paying $7.965 million to SLC resulting in a net receivable of $810,000 per year. Zeutsche Bank will have a net outflow of 500,000 euros and a net inflow of $810,000 at the end of each year.

The additional risk to SLC would arise if RMO does not produce enough euro cash flows to cover the currency swap agreement at which point SLC would need to purchase the shortfall of euros in the open market. This will either increase or decrease the cost of borrowing from SLC’s perspective depending on future exchange rate movements. However, this is similar to the risk SLC would have if it borrowed euro denominated bonds directly. Because Zeutsche Bank is acting as the swap broker/dealer there is no counterparty risk with regards to Eagle Aero.
4) Describe the principal repayment cash flows that occur at the end of five years related to SLC, Zeutsche Bank, and Eagle Aero and discuss any additional risks that SLC may occur when the principal repayment is due in five years.

At the end of five years, SLC will obtain €100 million from RMO and exchange it for $135 million with Zeutsche Bank. The $135 million SLC received from Zeutsche Bank will be used to repay the US bondholders. Eagle Aero will obtain $135 million from their US Subsidiary and exchange it for €100 million with Zeutsche Bank. The €100 million Eagle Aero received from Zeutsche Bank will be used to repay Euro bondholders.

The additional risk to SLC would arise if RMO does not produce enough euro cash flows to cover the €100 million principal repayment at which point SLC would need to purchase the shortfall of euros in the open market. This will either increase or decrease the cost of borrowing from SLC’s perspective depending on future exchange rate movements. However, the currency swap provides the exact same exposure that would exist from SLC borrowing euro denominated bonds directly.

5) How does the currency swap reduce the cost of borrowing for both SLC and Eagle Aero?

The currency swap allows SLC to convert a $135 million loan at 5.9% into a €100 million loan at 5.8%. This reduces SLC cost of borrowing in euros from 6.1% to 5.8% resulting in a savings to SLC of 30 basis points. The currency swap allows Eagle Aero to convert a €100 million loan at 6.3% into a $135 million loan at 6.5%. This reduces Eagle Aero cost of borrowing in US dollars from 6.7% to 6.5% resulting in a savings to Eagle Aero of 20 basis points. The 60 basis point quality spread differential described in question 1 has now been allocated as follows: 30 basis point reduction for SLC, 20 basis point reduction for Eagle Aero, so the remaining 10 basis point differential will be how Zeutsche Bank receives compensation for acting as the broker dealer and removing any counterparty risk between SLC and Eagle Aero.

6) How does Zeutsche Bank profit from the currency swap if it has no exposure to the initial exchange of cash flows nor does it have exposure when the principal repayment of cash flows are made at year five?

While Zeutsche Bank has no exposure to the initial exchange of cash flows nor does it have exposure when the principal repayment of cash flows are made, Zeutsche Bank has essentially created a position equivalent to a series of long forward contracts in regards the annual interest cash flows. As part of the annual interest swap agreement, Zeutsche Bank has a resulting net inflow of $810,000 per year and a net outflow of €500,000. In essence, Zeutche Bank is agreeing to buy €500,000 and has $810,000 with which to purchase the euros without incurring a loss. This is an implied exchange rate of $1.62/euro. As long as the future spot rate on the euro does not appreciate from its current level of $1.35/euro to level above $1.62/euro over the next five years, Zeutsche Bank will profit from the swap agreement. Zeutsche Bank
may also choose to lock in a profit today by hedging the swap agreement with a series of forward contracts.

7) Calculate Zeutsche Bank’s profit (both as a dollar amount and as a percentage of the $135 million notional amount) per year assuming it is able to hedge its exposure to the currency swap agreement by taking a long position in a series of one- to five-year forward contracts each with a forward rate of $1.35/euro.

1 year forward rate = $1.35/euro
2 year forward rate = $1.35/euro
3 year forward rate = $1.35/euro
4 year forward rate = $1.35/euro
5 year forward rate = $1.35/euro

Zeutsche Bank’s net cash flow position for each year is given below:

<table>
<thead>
<tr>
<th>Year</th>
<th>US dollars</th>
<th>Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Receives $135 mil from SLC</td>
<td>Receives €100 mil from Eagle Aero</td>
</tr>
<tr>
<td></td>
<td>Pays $135 mil to Eagle Aero</td>
<td>Pays €100 to SLC</td>
</tr>
<tr>
<td>Yr 0 Net</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Year 1</td>
<td>Receives $8.775 mil from Eagle Aero</td>
<td>Receives €5.5 mil from SLC</td>
</tr>
<tr>
<td></td>
<td>Pays $7.965 mil to SLC</td>
<td>Pays €6.3 mil to Eagle Aero</td>
</tr>
<tr>
<td>Yr 1 Net</td>
<td>$810,000 inflow</td>
<td>€500,000 outflow</td>
</tr>
<tr>
<td>Year 2</td>
<td>Receives $8.775 mil from Eagle Aero</td>
<td>Receives €5.5 mil from SLC</td>
</tr>
<tr>
<td></td>
<td>Pays $7.965 mil to SLC</td>
<td>Pays €6.3 mil to Eagle Aero</td>
</tr>
<tr>
<td>Yr 2 Net</td>
<td>$810,000 inflow</td>
<td>€500,000 outflow</td>
</tr>
<tr>
<td>Year 3</td>
<td>Receives $8.775 mil from Eagle Aero</td>
<td>Receives €5.5 mil from SLC</td>
</tr>
<tr>
<td></td>
<td>Pays $7.965 mil to SLC</td>
<td>Pays €6.3 mil to Eagle Aero</td>
</tr>
<tr>
<td>Yr 3 Net</td>
<td>$810,000 inflow</td>
<td>€500,000 outflow</td>
</tr>
<tr>
<td>Year 4</td>
<td>Receives $8.775 mil from Eagle Aero</td>
<td>Receives €5.5 mil from SLC</td>
</tr>
<tr>
<td></td>
<td>Pays $7.965 mil to SLC</td>
<td>Pays €6.3 mil to Eagle Aero</td>
</tr>
<tr>
<td>Yr 4 Net</td>
<td>$810,000 inflow</td>
<td>€500,000 outflow</td>
</tr>
<tr>
<td>Year 5</td>
<td>Receives $8.775 mil from Eagle Aero</td>
<td>Receives €5.5 mil from SLC</td>
</tr>
<tr>
<td></td>
<td>$7.965 mil to SLC</td>
<td>Pays €6.3 mil to Eagle Aero</td>
</tr>
<tr>
<td></td>
<td>$135 mil to SLC</td>
<td>Pays €100 to SLC</td>
</tr>
<tr>
<td></td>
<td>Receives $135 mil from Eagle Aero</td>
<td>Receives €100 from SLC</td>
</tr>
<tr>
<td>Yr 5 Net</td>
<td>$810,000 inflow</td>
<td>€500,000 outflow</td>
</tr>
</tbody>
</table>
If Zeutsche Bank is able to hedge its position using the forward rates provided then Zeutsche Bank hedged position would be:

<table>
<thead>
<tr>
<th></th>
<th>US DOLLAR</th>
<th>EUROS</th>
<th>FORWARD RATE</th>
<th>COST OF EUROS AT FORWARD RATE</th>
<th>NET REVENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$810,000</td>
<td>-500,000</td>
<td>$1.35/1€</td>
<td>$675,000</td>
<td>$135,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>$810,000</td>
<td>-500,000</td>
<td>$1.35/1€</td>
<td>$675,000</td>
<td>$135,000</td>
</tr>
<tr>
<td>Year 3</td>
<td>$810,000</td>
<td>-500,000</td>
<td>$1.35/1€</td>
<td>$675,000</td>
<td>$135,000</td>
</tr>
<tr>
<td>Year 4</td>
<td>$810,000</td>
<td>-500,000</td>
<td>$1.35/1€</td>
<td>$675,000</td>
<td>$135,000</td>
</tr>
<tr>
<td>Year 5</td>
<td>$810,000</td>
<td>-500,000</td>
<td>$1.35/1€</td>
<td>$675,000</td>
<td>$135,000</td>
</tr>
</tbody>
</table>

The $135,000 net revenue per year ($675,000 total over five years) profit represents a 0.10% (10 basis points) return per year relative to the $135 million notion amount of the contract. Recalling the 60 basis point quality spread differential that existed between SLC and Eagle Aero, it now possible to see how the currency swap benefited all parties absent any exchange rate risk. SLC was able to reduce their borrowing costs by 30 basis points, Eagle Aero was able to reduce their borrowing costs by 20 basis points and Zeutsche Bank was able to earn 10 basis points as the broker dealer.

8) Calculate Zeutsche Bank’s profit (as a dollar amount) per year assuming it is able to hedge its exposure to the currency swap agreement using a series of one- to five-year forward contracts where the forward rate is determined from interest rate parity. The current exchange rate is $1.35/1 euro and the applicable yield curve available to Zeutsche Bank is flat with US dollar interest rates at 3% per year and euro interest rates at 2% per year.

Given a current exchange rate assumption of $1.35/1 euro and US interest rates at 3% and euro interest rates at 2%, the implied forward rates are calculated from the interest rate parity condition where the implied forward rate at time (t) is equal to:

\[(FX_t) = FX_0 \left(\frac{1+R_{us}}{1+R_{eur}}\right)^t\]

The implied forward rate for year 1 = 1.35*[(1.03)/(1.02)]1 = $1.3632/1 euro
The implied forward rate for year 2 = 1.35*[(1.03)/(1.02)]2 = $1.3766/1 euro
The implied forward rate for year 3 = 1.35*[(1.03)/(1.02)]3 = $1.3901/1 euro
The implied forward rate for year 4 = 1.35*[(1.03)/(1.02)]4 = $1.4037/1 euro
The implied forward rate for year 5 = 1.35*[(1.03)/(1.02)]5 = $1.4175/1 euro

If Zeutsche Bank is able to hedge its position using the implied forward rates calculated above, then Zeutsche Bank hedged position would result in a profit per year equal to:
The total profit to Zeutsche Bank over the five year period is $574,450 using the implied forward rates calculated from a current spot rate and interest rates available to Zeutsche Bank. This hedge could also be performed via a money market hedge if forward rates are not available. Zeutsche bank would use current money market rates to create euro denominated assets worth 500,000 euros per year and US dollar liabilities of $810,000 per year for each of the five years of exposure. The profit to Zeutsche Bank would be the same as those above if interest rate and exchange rate assumptions do not change.

<table>
<thead>
<tr>
<th></th>
<th>US DOLLAR</th>
<th>EUROS</th>
<th>FORWARD RATE</th>
<th>COST OF EUROS AT FORWARD RATE</th>
<th>NET REVENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$810,000</td>
<td>-500,000</td>
<td>$1.3632/1€</td>
<td>$681,600</td>
<td>$128,400</td>
</tr>
<tr>
<td>Year 2</td>
<td>$810,000</td>
<td>-500,000</td>
<td>$1.3766/1€</td>
<td>$688,300</td>
<td>$121,700</td>
</tr>
<tr>
<td>Year 3</td>
<td>$810,000</td>
<td>-500,000</td>
<td>$1.3901/1€</td>
<td>$699,050</td>
<td>$114,950</td>
</tr>
<tr>
<td>Year 4</td>
<td>$810,000</td>
<td>-500,000</td>
<td>$1.4037/1€</td>
<td>$701,850</td>
<td>$108,150</td>
</tr>
<tr>
<td>Year 5</td>
<td>$810,000</td>
<td>-500,000</td>
<td>$1.4175/1€</td>
<td>$708,750</td>
<td>$101,250</td>
</tr>
</tbody>
</table>
TIMBERLINE ENERGY INC.: VALUE CREATION VS. CORPORATE WELFARE

Stephen C. Henry, SUNY Plattsburgh

CASE DESCRIPTION

The case of Timberline Energy is designed to encourage students to think about an investment decision in the context of value creation. Is the proposed wind-energy project a value-creating investment? Under what circumstances will it be a good investment? Who benefits? Who bears the costs? And what are the implications for public policy?

The case is aimed at MBA or advanced undergraduate students of finance who are well-versed in the process of making capital investment decisions. It is designed to be taught in a single 75-minute class period, after 3-4 hours of student preparation. The firms, individuals, and projects described are fictitious, though they are based upon a composite of real-world entities.

CASE SYNOPSIS

Over the past few years, an increase in public awareness and concern over sustainability, combined with a sharp runup in energy prices, has made the development of renewable energy sources a top priority for many private- and public-sector entities. Energy companies are tempted by the prospect of profitable new markets, and policymakers are thrilled by the promise of creating "green" jobs for their constituents. Indeed, the potential economic and environmental benefits of such development are undeniable. However, when politics are injected into the financial decision-making process, less-than-desirable outcomes can occur.

Timothy Albright is the founder and strong-willed CEO of Timberline Energy, a Midwestern developer of wind energy installations ("wind farms"). In early 2014, Albright is faced with a potential project that carries with it both new obstacles and new opportunities. With more than a decade of successful wind farm development to his credit, Albright is confident of his ability to navigate this new environment. However, a chance encounter with an elected official and an economics professor casts his investment decision in a new light.

SUGGESTED ASSIGNMENT QUESTIONS

1. Analyze the proposed wind farm investment, first without regard to the government subsidy.
   a. Estimate the cost of capital appropriate for this project.
   b. Estimate the cash flows incremental to this project.
   c. Is the project expected to create economic value? How much? Would you recommend that Timberline pursue the project if there were no government participation?
2. Now, consider the effect of the proposed subsidy.
   a. How does it affect Timberline's cost of capital, if at all?
   b. How does it affect the project's cash flows, if at all?
   c. Does the subsidized project create value? How much? What is the source of that value?
   d. Does the subsidy change your decision?

3. Consider Professor Arrington’s argument from a public policy perspective.
   a. Do you think that the subsidy (interest-free loan) offered to Timberline would be a wise expenditure of public funds?
   b. How much would it cost?
   c. How much value would it create?
   d. Who ultimately benefits from the subsidy?

INSTRUCTOR’S NOTES

This case ultimately consists of three basic elements; (1) WACC estimation, (2) a relatively straightforward capital budgeting analysis, and (3) consideration of the effects of the subsidy. All of the calculations should be familiar to any student who has taken an introductory finance course. The case can be used as an uncomplicated capital budgeting exercise by simply leaving out the subsidy and the surrounding controversy, and referring only to assignment question 1.

A summary of the WACC estimation required by assignment question 1A is presented in exhibit TN1. The calculations are based on the financial statements and capital market data presented as case exhibits 1, 2, and 3, using market value weights for the debt and equity components. The WACC turns out to be approximately 8.1%.

Question 1B invites the student to analyze the project in the absence of the subsidy. As revealed in the attached instructor spreadsheet (Exhibit TN2), the project, on its own merits, is something of a non-starter. The construction costs, the maintenance expenses, and the fixed-price power purchase agreement make the project, as described, a value-destroying (negative NPV) proposition. Note that figures for years 10-20 are hidden for display formatting purposes, but are included in the NPV calculations. The values are identical to years 8-9. The complete spreadsheet may be retrieved from http://goo.gl/PSTxLI .

The format of the spreadsheet analysis follows the example of Ross, Westerfield, and Jordan (2013). The cost of the assets is assumed to occur at time 0, along with the initial $25 million lease payment. The lease payment is treated as an expense at that time, while the capital investment is depreciated according to the prescribed MACRS schedule. As stated in the case, any investment in working capital is negligible, and ignored in this analysis. The production of electricity is expected to begin about one year after groundbreaking, so no cash flows are recognized in year 1. The turbines’ estimated salvage value at the end of the project is based on the current scrap-value estimate.
At the calculated WACC of 8.1003%, the analysis results in an NPV of -$21,065,103; clearly, on the strength of its cash flows alone, the project should be rejected. The NPV is sufficiently negative to allow students some room for deviation in the WACC or cash flow estimates. The project does not create economic value, but rather destroys it. This may be somewhat surprising, given that wind farms literally extract energy from thin air; the largest cost is maintenance, which amounts to only about 20% of annual revenue. The obstacle is the capital cost: wind generation equipment is costly relative to the amount of power it produces, making it a highly capital-intensive investment.

Exhibit TN3 presents the same analysis, with a line added to account for the value of the interest subsidy (question 1C). Due to space limitations, only the first five years of cash flows are shown; the remainder of the cash flows are identical to those in exhibit TN2. Students should be encouraged to consider for themselves how best to account for the subsidy and to estimate its value. Some may try to approach it by adjusting the cost of capital to account for the interest-free financing, but that approach will be challenging at best. Students may need to be reminded that the interest subsidy only lasts for five years, while the project goes on for twenty. After five years, the project will have to be financed at market rates.

The best way to account for the subsidy is to simply assume a positive after-tax cash flow equivalent to the after-tax capital cost that would have been incurred in the absence of the subsidy. While financing-related cash flows are normally not considered as part of a capital budgeting analysis, this case presents an exception. Because the interest subsidy is contingent upon the acceptance of this project, it can legitimately be considered an incremental cash flow.

The annual capital cost that is avoided amounts to the initial investment amount multiplied by the after-tax cost of capital: ($172,900,000)(0.081003) = $14,005,419 per year for five years. Regardless of EDB’s capital structure, it makes sense that Timberline will take maximum advantage of the free financing by borrowing as much as possible under the program.

Valued at the firm’s 8.1% cost of capital, the five subsidy “cash flows” have a present value of over $55 million. This can be added to the original NPV estimate, or (as in exhibit TN2) the subsidy cash flows can be added to the project cash flows in years 1-5. Either way, the project’s NPV shifts from about -$20 million to +$36 million. Suddenly, the project looks a lot more attractive.

Assignment question 2A asks whether the subsidy affects Timberline’s cost of capital. One of the key tenants of corporate financial decision making is that projects should be judged against a discount rate that reflects the risk of that project. That is, if capital market conditions and project risks imply that the appropriate risk-adjusted discount rate for a project is 8%, then that should be the hurdle rate, regardless of the firm’s overall cost of capital. The subsidy may lower the firm’s realized cost of capital during the first five years, but it should not affect the hurdle rate by which the project is judged.

Question 2B asks the student to determine the effect of the subsidy on the project’s cash flows is. There is no plausible effect on the operating cash flows, but the value of the subsidy can be estimated as the PV of the forgone capital costs.

Question 2C asks whether the revised project creates economic value, and if so, what is its source? Clearly, in the presence of the subsidy, the project creates value for Timberline’s
owners (Energia do Brasil), and from their perspective, the project should be accepted. However, the ~$36 million of value that will accrue to the shareholders of EDB only exists at the expense of Michigan taxpayers, who are providing a subsidy worth ~$55 million.

Question 3 asks students to step back and view the project and the subsidy from a public policy perspective, rather than a financial management perspective. While the subsidized project is clearly valuable to Timberline, is the subsidy a wise expenditure of public funds?

The answer is not obvious. It is difficult, though, to make the case that spending $55 million to provide a $36 million benefit to the shareholders of a foreign corporation is a wise use of taxpayer money. Any taxpayer-funded subsidy of this sort is likely to be justified by its supporters on the basis of some sort of externalities that will purportedly be created by the project. Students may be prompted to think of other financial and nonfinancial ways in which the state of Michigan is affected by the project. Some obvious examples might include: the reduction of greenhouse gases, decreased reliance on fossil fuels, and increased employment. Conversely, there are negative externalities to consider: the aesthetic impact of wind turbines on the landscape, noise pollution, and harmful effects on birds and other wildlife. All are valid points for debate, but it’s not realistically possible to place dollar values on effects like these.

The intent of this case is not to promote a particular viewpoint regarding investment in sustainable energy sources, or even regarding public-sector subsidies of such projects. Rather, the point is to encourage students (and taxpayers, and policymakers) to adhere to financial best practices when evaluating investment projects and the identifying the targets of subsidies. Setting aside the issue of externalities for the moment, from a finance perspective, projects are considered “good” if they create economic value, and “bad” if they destroy it (carry a negative NPV). If a project’s costs are larger than the present value of the benefits generated, it is a value-destroying project, and is to be avoided. The fact that a government agency is willing to offset part of the cost may make the project palatable to its developer, but it does not change the reality that the costs outweigh the benefits. It only shifts the burden to the public sector. This is the essence of Professor Arrington’s argument. The reference to Warren Buffett is factual; Pfotenhauer (2014) provides the original quote:

“For example, on wind energy, we get a tax credit if we build a lot of wind farms. That's the only reason to build them. They don't make sense without the tax credit.” – Warren Buffett, May 2014

In short, a bad project is a bad project, regardless of who is paying for it. Subsidies can encourage firms to invest in negative-NPV projects, but cannot change the value-destroying nature of such investments. It would be simple enough to revive the buggy-whip industry, if a generous enough subsidy program were to be established… but it wouldn’t make buggy-whip manufacturing a value-creating endeavor.

When governments subsidize negative-NPV projects, they do not stimulate growth, but rather discourage it… benefitting the subsidy recipients, at the expense of taxpayers. The implication for public policy is clear: governments should be judicious in their use of targeted subsidies.
investments into good ones, governments should take steps to enable and encourage firms to make good investments. In the context of this project, examples of this might include relaxing zoning restrictions regarding the placement of wind turbines (effectively reducing the installation costs), or fostering research into new technology to make the turbines more efficient. Subsidies that target only the financing side of the balance sheet do not affect the viability of the underlying business, but rather, merely conceal a portion of the cost.

One might argue that the subsidy for the Saginaw project is worthwhile, given the local jobs that were created by the enterprise. This is not obvious, and not likely given the dollar figures at stake. The project would ultimately cost the state $55 million, but create only 15 permanent jobs, totaling $24 million in salary and benefits over the project’s 20-year life. The state’s economy may have been better served by simply giving money directly to the 15 employees, rather than having them work at a value-destroying enterprise (and in the process, lining the pockets of EDB’s shareholders as well). Admittedly, the value placed on the other externalities may lead one to a different conclusion.

REFERENCES

### Exhibit TN1
Energia do Brasil
Weighted Average Cost of Capital
12/31/2013

<table>
<thead>
<tr>
<th><strong>Equity capital</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk-free interest rate</td>
<td>4.50%</td>
</tr>
<tr>
<td>Market Risk Premium</td>
<td>5.00%</td>
</tr>
<tr>
<td>Beta</td>
<td>0.95</td>
</tr>
<tr>
<td>Share price</td>
<td>$ 61.27</td>
</tr>
<tr>
<td>Shares outstanding</td>
<td>244,710,000</td>
</tr>
</tbody>
</table>

Cost of equity            9.250%

**Market value of Equity** 14,993,381,700

<table>
<thead>
<tr>
<th><strong>Debt capital</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond weighted average maturity</td>
<td>13.5</td>
</tr>
<tr>
<td>Bond coupon rate</td>
<td>7.50%</td>
</tr>
<tr>
<td>Bond price quote</td>
<td>94.75</td>
</tr>
<tr>
<td>Average tax rate</td>
<td>33%</td>
</tr>
</tbody>
</table>

Cost of debt            8.148%
Cost of debt (after tax) 5.459%

**Market value of debt** 6,526,948,500

Weight of equity         0.70
Weight of debt           0.30

**WACC** 8.1003%
### Timberline Energy - Saginaw Project

#### Exhibit TN2a - NPV Analysis (years 1-5)

<table>
<thead>
<tr>
<th>Description</th>
<th>Year</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of turbines installed:</strong></td>
<td></td>
<td>133</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Generation capacity per turbine (megawatts):</strong></td>
<td></td>
<td>1.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Capacity factor</strong></td>
<td></td>
<td>0.375</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average output (megawatts):</strong></td>
<td></td>
<td>89.775</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expected annual output (MWh):</strong></td>
<td></td>
<td>786,429</td>
<td>(average output * 24 * 365)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Energy sold per year (KWh):</strong></td>
<td></td>
<td>786,429,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contract price per KWh:</strong></td>
<td></td>
<td>$0.035</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Annual project revenue:</strong></td>
<td></td>
<td>$27,525,015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Annual maintenance cost (per turbine):</strong></td>
<td></td>
<td>$40,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Annual labor expense:</strong></td>
<td></td>
<td>$1,200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Royalty to landowner ($/MWh):</strong></td>
<td></td>
<td>$0.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other overhead (per year):</strong></td>
<td></td>
<td>$100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Installed cost per turbine:</strong></td>
<td></td>
<td>$1,300,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Initial lease payment:</strong></td>
<td></td>
<td>$25,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EDB marginal tax rate:</strong></td>
<td></td>
<td>33%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expected life span (years):</strong></td>
<td></td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Salvage value (per turbine):</strong></td>
<td></td>
<td>100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Operating Cash Flow

<table>
<thead>
<tr>
<th>Description</th>
<th>Year</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EBIT</strong></td>
<td>(25,000,000)</td>
<td>(14,028,878)</td>
<td>(34,776,878)</td>
<td>(12,645,678)</td>
<td>633,042</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tax</strong></td>
<td>(8,250,000)</td>
<td>(4,629,530)</td>
<td>(11,476,370)</td>
<td>(4,173,074)</td>
<td>208,904</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td>(16,750,000)</td>
<td>(9,399,348)</td>
<td>(23,300,508)</td>
<td>(8,472,604)</td>
<td>424,138</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Capital Spending

<table>
<thead>
<tr>
<th>Description</th>
<th>Initial lease payment</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initial Outlay</strong></td>
<td></td>
<td>(172,900,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aftertax Salvage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Capital Spending</strong></td>
<td></td>
<td>(172,900,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Project CFs</th>
<th>Initial lease payment</th>
<th>Aftertax Salvage</th>
<th>Total Capital Spending</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(189,650,000)</td>
<td>25,180,652</td>
<td>32,027,492</td>
<td>24,724,196</td>
<td>20,342,218</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost of Capital</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Net Present Value</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>($21,065,103)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Timberline Energy - Saginaw Project

#### Exhibit TN2b - NPV Analysis (years 6-21)

<table>
<thead>
<tr>
<th>Year:</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>27,525,015</td>
<td>27,525,015</td>
<td>27,525,015</td>
<td>27,525,015</td>
<td>27,525,015</td>
</tr>
<tr>
<td>Royalty payment</td>
<td>353,893</td>
<td>353,893</td>
<td>353,893</td>
<td>353,893</td>
<td>353,893</td>
</tr>
<tr>
<td>Maintenance</td>
<td>5,320,000</td>
<td>5,320,000</td>
<td>5,320,000</td>
<td>5,320,000</td>
<td>5,320,000</td>
</tr>
<tr>
<td>Labor</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Other overhead</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>EBITDA</td>
<td>20,551,122</td>
<td>20,551,122</td>
<td>20,551,122</td>
<td>20,551,122</td>
<td>20,551,122</td>
</tr>
<tr>
<td>Depreciation %</td>
<td>11.52%</td>
<td>5.76%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>19,918,080</td>
<td>9,959,040</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBIT</td>
<td>633,042</td>
<td>10,592,082</td>
<td>20,551,122</td>
<td>20,551,122</td>
<td>20,551,122</td>
</tr>
<tr>
<td>Tax</td>
<td>208,904</td>
<td>3,495,387</td>
<td>6,781,870</td>
<td>6,781,870</td>
<td>6,781,870</td>
</tr>
<tr>
<td>Net Income</td>
<td>424,138</td>
<td>7,096,695</td>
<td>13,769,252</td>
<td>13,769,252</td>
<td>13,769,252</td>
</tr>
</tbody>
</table>

#### Operating Cash Flow

<table>
<thead>
<tr>
<th></th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT</td>
<td>633,042</td>
<td>10,592,082</td>
<td>20,551,122</td>
<td>20,551,122</td>
<td>20,551,122</td>
</tr>
<tr>
<td>Depreciation</td>
<td>19,918,080</td>
<td>9,959,040</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Taxes</td>
<td>208,904</td>
<td>3,495,387</td>
<td>6,781,870</td>
<td>6,781,870</td>
<td>6,781,870</td>
</tr>
<tr>
<td>OCF</td>
<td>20,342,218</td>
<td>17,055,735</td>
<td>13,769,252</td>
<td>13,769,252</td>
<td>13,769,252</td>
</tr>
</tbody>
</table>

#### Capital Spending

- **Initial lease payment**: 8,911,000
- **Initial Outlay**: 8,911,000
- **Aftertax Salvage**: 8,911,000
- **Total Capital Spending**: 8,911,000

<table>
<thead>
<tr>
<th></th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Project CFs</td>
<td>20,342,218</td>
<td>17,055,735</td>
<td>13,769,252</td>
<td>13,769,252</td>
<td>22,680,252</td>
</tr>
</tbody>
</table>
Timberline Energy - Saginaw Project  
Exhibit TN3 - NPV Analysis (with subsidy, years 1-5 only)

Number of turbines installed: 133
Generation capacity per turbine (megawatts): 1.8
Capacity factor 0.375
Average output (megawatts): 89.775
Expected annual output (MWh): 786,429 (average output * 24 * 365)
Energy sold per year (KWh): 786,429,000
Contract price per KWh: $0.035
Annual project revenue $27,525,015

Annual maintenance cost (per turbine) $40,000
Annual labor expense $1,200,000
Royalty to landowner ($/MWh) $0.45
Other overhead (per year) $100,000
Installed cost per turbine $1,300,000
Initial lease payment 25,000,000

EDB marginal tax rate 33%
Expected life span (years) 20
Salvage value (per turbine) 100,000

<table>
<thead>
<tr>
<th>Year</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>27,525,015</td>
<td>27,525,015</td>
<td>27,525,015</td>
<td>27,525,015</td>
<td>27,525,015</td>
<td></td>
</tr>
<tr>
<td>Royalty payment</td>
<td>25,000,000</td>
<td>353,893</td>
<td>353,893</td>
<td>353,893</td>
<td>353,893</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>5,320,000</td>
<td>5,320,000</td>
<td>5,320,000</td>
<td>5,320,000</td>
<td>5,320,000</td>
<td></td>
</tr>
<tr>
<td>Labor</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td></td>
</tr>
<tr>
<td>Other overhead</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td>EBITDA</td>
<td>(25,000,000)</td>
<td>20,651,122</td>
<td>20,651,122</td>
<td>20,651,122</td>
<td>20,651,122</td>
<td></td>
</tr>
<tr>
<td>Depreciation %</td>
<td>20.00%</td>
<td>32.00%</td>
<td>19.20%</td>
<td>11.52%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>34,580,000</td>
<td>55,328,000</td>
<td>35,196,800</td>
<td>19,918,080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBIT</td>
<td>(25,000,000)</td>
<td>(13,928,878)</td>
<td>(34,676,878)</td>
<td>(12,545,678)</td>
<td>733,042</td>
<td></td>
</tr>
<tr>
<td>Tax</td>
<td>(8,250,000)</td>
<td>(4,596,530)</td>
<td>(11,443,370)</td>
<td>(4,140,074)</td>
<td>241,904</td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td>(16,750,000)</td>
<td>(9,332,348)</td>
<td>(23,233,508)</td>
<td>(8,405,604)</td>
<td>491,138</td>
<td></td>
</tr>
</tbody>
</table>

Operating Cash Flow

| EBIT | (25,000,000) | (13,928,878) | (34,676,878) | (12,545,678) | 733,042 |
| Depreciation | 34,580,000 | 55,328,000 | 35,196,800 | 19,918,080 |
| Taxes | (8,250,000) | (4,596,530) | (11,443,370) | (4,140,074) | 241,904 |
| OCF | (16,750,000) | 25,247,652 | 32,094,492 | 24,791,196 | 20,409,218 |

Capital Spending

Initial lease payment 25,000,000
Initial Outlay (172,900,000)
Aftertax Salvage (172,900,000)

| Interest Subsidy | 14,005,419 | 14,005,419 | 14,005,419 | 14,005,419 | 14,005,419 |
| Total Project CFs | (189,650,000) | 14,005,419 | 39,253,070 | 46,099,910 | 38,796,614 |

Cost of Capital 8.10%

Net Present Value $35,310,967

Value of Subsidy $55,772,062.14

=NPV(B57,C51:G51)
ACCOUNTING ISSUES RELATED TO ACCEPTING BITCOINS

Andrew Gross, Southern Illinois University Edwardsville
Jamie Hoelscher, Southern Illinois University Edwardsville
Brad Reed, Southern Illinois University Edwardsville

CASE DESCRIPTION

This case explores accounting issues related to Overstock.com’s recent decision to accept Bitcoins as payment from customers. Students examine the potential financial accounting & reporting issues related to accepting Bitcoins. Issues examined include: (1) the proper classification of Bitcoins on the balance sheet, (2) recognizing changes in value of Bitcoins after they are received. Due to the new and unique nature of Bitcoins, there is no formal accounting guidance on how to report Bitcoins. Due to the lack of specific guidance, students must use critical thinking skills and reasoning by analogy to come to reasonable conclusions. Additionally, due to the new nature of electronic currency, the case presents a good forum for a discussion of the need for broad accounting principles and concept statements. Passages from the Accounting Standards Codification as well as recent court cases provide support for conclusions. The student will produce a memo presenting an analysis of issues related to reporting Bitcoins in the financial statements. This case is appropriate for a senior or graduate level financial accounting course. The difficulty of this case is a 3/5.

CASE SYNOPSIS

Bitcoins are a new and much discussed type of electronic currency. As the popularity of Bitcoin has grown, many companies have made strategic decisions to accept Bitcoins as payment from customers as a way to attract new customers. While a decision to accept Bitcoins may be a good strategic decision, it presents some potentially significant accounting issues that need to be analyzed and resolved in order for a company’s financial statements to not be misleading.

The student is put in the place of a junior accountant at Overstock.com. Overstock.com recently decided to accept Bitcoin’s as payment. Currently Overstock.com immediately converts the Bitcoins they receive into U.S. Dollars. The CFO of Overstock.com thinks that it is possible that in the future.

INSTRUCTORS’ NOTES

Questions:

1. What are the definitions of Cash and Cash Equivalents provided in the Accounting Standards Codification? Do Bitcoins fit the definition of Cash or Cash Equivalents.
The first requirement to recognize an element in the financial records and financial statements is that the item being considered fit the definition from the accounting standards. Definitions from the ASC Codification glossary for Cash and Cash Equivalents are as follows:

**Cash**- Consistent with common usage, cash includes not only currency on hand but demand deposits with banks or other financial institutions. Cash also includes other kinds of accounts that have the general characteristics of demand deposits in that the customer may deposit additional funds at any time and also effectively may withdraw funds at any time without prior notice or penalty.

**Cash Equivalents** - Cash equivalents are short-term, highly liquid investments that have both of the following characteristics:

- a. Readily convertible to known amounts of cash
- b. So near their maturity that they present insignificant risk of changes in value because of changes in interest rates.

Based on these definitions Bitcoins should be classified as a cash equivalent. Since Bitcoins are not currently held as demand deposits with financial institutions, Bitcoins do not fit the technical definition of Cash. While the accounting standards to distinguish between Cash and Cash Equivalents, most companies, including Overstock.com combine both of these categories into a single item on the balance sheet. Therefore, the distinction between Cash and Cash Equivalents is not particularly significant.

If Overstock accepts and holds Bitcoins and classifies the Bitcoins as Cash Equivalents, how should Overstock report gains and losses resulting from changes in value of the Bitcoins?

If Overstock classifies Bitcoins as a Cash Equivalent, Overstock would need to recognize that Bitcoin is not the functional currency for Overstock.com. In this regard Bitcoins and Bitcoin transactions would be similar to foreign currency transactions. Using an analogy of a foreign currency, Bitcoin transactions are similar to a sale denominated in Swiss francs, and the holding of Swiss francs by an entity whose functional currency is the dollar.

According to ASC 830-20-35-1 A change in exchange rates between the functional currency and the currency in which a transaction is denominated increases or decreases the expected amount of functional currency cash flows upon settlement of the transaction. That increase or decrease in expected functional currency cash flows is a foreign currency transaction gain or loss that generally shall be included in determining net income for the period in which the exchange rate changes.
3. Based on this guidance, changes in the Bitcoins being held by Overstock.com would result in “Transaction gains or losses” that should be included in the current period income.

3. If Overstock accepts and holds Bitcoins and classifies the Bitcoins as Cash Equivalents, how should Overstock measure the value of Bitcoins reported on the balance sheet?

According to ASC 830-20-35-1- At each balance sheet date, recorded balances that are denominated in a currency other than the functional currency of the recording entity shall be adjusted to reflect the current exchange rate. At a subsequent balance sheet date, the current rate is that rate at which the related receivable or payable could be settled at that date.

While this guidance applies specifically to payables and receivables, it would be appropriate to apply the same logic to the Bitcoins classified as Cash Equivalents.

4. When Overstock accepts Bitcoins in exchange for inventory, is the earnings process substantially complete to allow the recognition of revenue/profit? What are the key considerations?

ASC 605 on Revenue Recognition states the following:

The recognition of revenue and gains of an entity during a period involves consideration of the following two factors, with sometimes one and sometimes the other being the more important consideration:

a. Being realized or realizable. Revenue and gains generally are not recognized until realized or realizable. Paragraph 83(a) of FASB Concepts Statement No. 5, Recognition and Measurement in Financial Statements of Business Enterprises, states that revenue and gains are realized when products (goods or services), merchandise, or other assets are exchanged for cash or claims to cash. That paragraph states that revenue and gains are realizable when related assets received or held are readily convertible to known amounts of cash or claims to cash.

b. Being earned. Paragraph 83(b) of FASB Concepts Statement No. 5, Recognition and Measurement in Financial Statements of Business Enterprises, states that revenue is not recognized until earned. That paragraph states that an entity's revenue-earning activities involve delivering or producing goods, rendering services, or other activities that constitute its ongoing major or central operations, and revenues are considered to have been earned when the entity has substantially accomplished what it must do to be entitled to the benefits represented by the revenues. That paragraph states that gains commonly result from transactions and other events that involve no
earning process, and for recognizing gains, being earned is generally less significant than being realized or realizable.

According to this guidance on Revenue Recognition, Overstock must meet the earnings test and the realizability test in order to recognize revenue. When Overstock ships the goods to its customers, and title to the goods passes to the customer, Overstock.com has completed the earnings process. Because Bitcoins are convertible to known amounts of cash at any time, the realizability test is satisfied. Therefore, when Overstock.com completes a sale and Overstock accepts Bitcoin as payment and subsequently holds the Bitcoin, it is appropriate for Overstock.com to recognize revenue at the time of sale.

5. Comprehensive Example. Assume that Overstock.com sells goods on 11/1/2013 for 10 Bitcoins. On 2/1/2014, Overstock.com converted 5 of the Bitcoins for cash. On 3/1/2014, Overstock.com used the other 5 Bitcoins to purchase inventory from a supplier. The supplier accepts Bitcoins. Prepare all necessary accounting journal entries and adjusting journal entries for Overstock.com related to these Bitcoin transactions assuming that Overstock accounts for Bitcoins as Cash Equivalents similar to foreign currency.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Accounting Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/1/2013</td>
<td>Record the sale for Overstock.com</td>
</tr>
<tr>
<td></td>
<td>Cash Equivalents $10,000</td>
</tr>
<tr>
<td></td>
<td>Sales Revenue $10,000</td>
</tr>
<tr>
<td>12/31/2013</td>
<td>Cash Equivalents Gain $2,000</td>
</tr>
<tr>
<td>2/1/2014</td>
<td>Cash $3,750</td>
</tr>
<tr>
<td></td>
<td>Loss $2,250</td>
</tr>
<tr>
<td></td>
<td>Cash Equivalents $6,000</td>
</tr>
<tr>
<td>3/1/2014</td>
<td>Inventory $4,250</td>
</tr>
<tr>
<td></td>
<td>Loss $1,750</td>
</tr>
<tr>
<td></td>
<td>Cash Equivalents $6,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,000</td>
<td>$1,200</td>
<td>$750</td>
<td>$850</td>
<td></td>
</tr>
</tbody>
</table>
DESIGN PROTOTYPES INC. PROJECT MANAGEMENT
(C): WHEN MANAGEMENT DECIDES TO SHORTEN A
PROJECT SCHEDULE

Patricia A. Lapoint, McMurry University
Carrol R. Haggard, Fort Hays State University

CASE DESCRIPTION

The primary subject matter of this case concerns project management. A secondary issue examined is team politics. This case can be used in Project Management, Operations Management, or Quality Management courses. The case has a difficulty level of four. The case is designed to be taught in two class hours and is expected to require four hours of outside preparation by students.

CASE SYNOPSIS

After 10 years at Design Prototypes, Inc., Raef Conley is leading his first major project team. Raef has assembled a highly qualified, diverse yet cohesive team and has the full support of his boss on the project, the regional Electrical Engineering (EE) Director, Jonathon Wright. It has been almost 6 months since the Alpha C306 project was green lighted by top management. Raef and other members of the project team have met several times during those 6 months to track the progress of the project activities and from Raef’s perspective the team works well together and is still highly motivated.

Initially, the project was envisioned as taking a year and a half (548 days) to complete. However, Raef and his team had developed a Work Breakdown Schedule (WBS) that projected completion in 515 days, giving the team 33 days of slack time. Developing a 515 day plan was a very fortunate decision, as at this point the project is in the concluding stage of activity K (product testing) and due to unforeseen delays the 33 days of slack time have been expended. Thus the team is using the 515 day WBS for the just under one year remaining to complete the project. Top management is requesting that the project be shorted by a month (480 day schedule) or preferably two months (450 day schedule). In addition, the VP of Engineering’s son, Simon, has been added as a team member. Simon, who has been with the company only 2 years and lacks technical qualifications, is attempting to use the project as a way to demonstrate his value to upper management. Therefore, Simon’s agenda is very different from that of the other team members, creating a source of conflict. The case revolves around the questions of: Can the team develop workable shortened time schedules for completing the project in 480 and 450 days? Are the added costs of reducing the schedule economically sound? How do Raef and the other team members cope with the late addition of a divisive, politically connected team member?
INSTRUCTORS’ NOTES

Recommendations for Teaching

This case, the third in a series of cases on project management, provides an opportunity for students to examine the crashing of a project’s timetable while coping with the addition of a politically connected new team member 6 months into the project. Although not required, since this case is written as a “stand alone” case, students and instructors may obtain a fuller understanding of the nuances of the case by examining the two prior cases (Authors, 2012, 2013). Students are challenged to apply the somewhat subjective time and cost estimates provided by team members in order to develop two crash schedules. The instructor should prepare students on how to use Project Management Software prior to assigning the case. These instructor notes include information that will be useful to the discussion leader in guiding students through the process of analyzing the decision and examining the potential impact of the decisions.

The preferred teaching strategy for this case includes student assignments and class discussion. After assigning the case for reading ask the students to prepare written responses to the questions listed below in the “discussion questions” section.

In order to frame the issues, instructors may wish to assign a video for students to view. Two excellent recent videos are available. The first is Project Management Fundamentals (Biafore & Ross, 2012). This 2 hour DVD provides comprehensive coverage of the process of effectively managing a project, including how to keep the project on track. The second is Managing a design project (Breitnemoser, McCannon, & Ahmed, 2012). This 32 minute DVD describes how to both create and manage a project plan. Interest is added by including interviews regarding planning for the London Olympics.

Note that the decision point in this case is very apparent as students must determine whether the project can be crashed by 480 and 450 days. While the former is possible, the latter is not. To make the decision, students must compile data from the case in order to construct the 480 and 450 (455 day) WBSs. A secondary issue involves how the team will respond to the addition of the divisive and politically connected new member, Simon.

This case will allow the instructor to meet the following objectives. To:

1. Develop students’ understanding of project management
2. Develop students’ understanding of the process of crashing a project timeline.
3. Develop students’ understanding of the impact of the addition of a politically connected group member on the development of a functioning group.

DISCUSSION QUESTIONS

1. **What would the project timelines for a 480-day and 455-day crash schedule timelines look like? What are the critical paths for both?**
   Students would need to recognize that the one month crash would be based on 480 days while the two month crash is based on 455 days rather than the 450 days initially mentioned in the case.
NOTE: To run the Timelines and WBSs, there is a free download of Excel OM from the publisher website *Operations Management, 10th* edition. MHHE.com/heizer. (Heizer & Render, 2011). Other project software is available as well.

### TIMELINE FOR THE 480-DAY SCHEDULE

<table>
<thead>
<tr>
<th>Activity</th>
<th>Early Start</th>
<th>Early Finish</th>
<th>Late Start</th>
<th>Late Finish</th>
<th>Slack</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>0</td>
<td>60</td>
<td>414</td>
<td>474</td>
<td>414</td>
</tr>
<tr>
<td>C</td>
<td>0</td>
<td>80</td>
<td>394</td>
<td>474</td>
<td>394</td>
</tr>
<tr>
<td>D</td>
<td>80</td>
<td>86</td>
<td>474</td>
<td>480</td>
<td>394</td>
</tr>
<tr>
<td>E</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>34</td>
<td>36</td>
<td>56</td>
<td>22</td>
</tr>
<tr>
<td>G</td>
<td>0</td>
<td>46</td>
<td>20</td>
<td>66</td>
<td>20</td>
</tr>
<tr>
<td>H</td>
<td>14</td>
<td>66</td>
<td>14</td>
<td>66</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>34</td>
<td>44</td>
<td>56</td>
<td>66</td>
<td>22</td>
</tr>
<tr>
<td>J</td>
<td>66</td>
<td>72</td>
<td>66</td>
<td>72</td>
<td>0</td>
</tr>
<tr>
<td>K</td>
<td>72</td>
<td>154</td>
<td>72</td>
<td>154</td>
<td>0</td>
</tr>
<tr>
<td>L</td>
<td>154</td>
<td>184</td>
<td>154</td>
<td>184</td>
<td>0</td>
</tr>
<tr>
<td>M</td>
<td>184</td>
<td>194</td>
<td>184</td>
<td>194</td>
<td>0</td>
</tr>
<tr>
<td>N</td>
<td>194</td>
<td>269</td>
<td>194</td>
<td>269</td>
<td>0</td>
</tr>
<tr>
<td>O</td>
<td>269</td>
<td>289</td>
<td>269</td>
<td>289</td>
<td>0</td>
</tr>
<tr>
<td>P</td>
<td>289</td>
<td>329</td>
<td>289</td>
<td>329</td>
<td>0</td>
</tr>
<tr>
<td>Q</td>
<td>329</td>
<td>379</td>
<td>329</td>
<td>379</td>
<td>0</td>
</tr>
<tr>
<td>R</td>
<td>379</td>
<td>454</td>
<td>379</td>
<td>454</td>
<td>0</td>
</tr>
<tr>
<td>S</td>
<td>454</td>
<td>474</td>
<td>454</td>
<td>474</td>
<td>0</td>
</tr>
<tr>
<td>T</td>
<td>474</td>
<td>480</td>
<td>474</td>
<td>480</td>
<td>0</td>
</tr>
</tbody>
</table>

### TIMELINE FOR THE 455-DAY SCHEDULE

<table>
<thead>
<tr>
<th>Activity</th>
<th>Early Start</th>
<th>Early Finish</th>
<th>Late Start</th>
<th>Late Finish</th>
<th>Slack</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>0</td>
<td>60</td>
<td>389</td>
<td>449</td>
<td>389</td>
</tr>
<tr>
<td>C</td>
<td>0</td>
<td>80</td>
<td>369</td>
<td>449</td>
<td>369</td>
</tr>
<tr>
<td>D</td>
<td>80</td>
<td>86</td>
<td>449</td>
<td>455</td>
<td>369</td>
</tr>
<tr>
<td>E</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>34</td>
<td>36</td>
<td>56</td>
<td>22</td>
</tr>
<tr>
<td>G</td>
<td>0</td>
<td>46</td>
<td>20</td>
<td>66</td>
<td>20</td>
</tr>
<tr>
<td>H</td>
<td>14</td>
<td>66</td>
<td>14</td>
<td>66</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>34</td>
<td>44</td>
<td>56</td>
<td>66</td>
<td>22</td>
</tr>
<tr>
<td>J</td>
<td>66</td>
<td>72</td>
<td>66</td>
<td>72</td>
<td>0</td>
</tr>
<tr>
<td>K</td>
<td>72</td>
<td>154</td>
<td>72</td>
<td>154</td>
<td>0</td>
</tr>
<tr>
<td>L</td>
<td>154</td>
<td>184</td>
<td>154</td>
<td>184</td>
<td>0</td>
</tr>
<tr>
<td>M</td>
<td>184</td>
<td>194</td>
<td>184</td>
<td>194</td>
<td>0</td>
</tr>
<tr>
<td>N</td>
<td>194</td>
<td>264</td>
<td>194</td>
<td>264</td>
<td>0</td>
</tr>
<tr>
<td>O</td>
<td>264</td>
<td>284</td>
<td>264</td>
<td>284</td>
<td>0</td>
</tr>
<tr>
<td>P</td>
<td>284</td>
<td>319</td>
<td>284</td>
<td>319</td>
<td>0</td>
</tr>
<tr>
<td>Q</td>
<td>319</td>
<td>359</td>
<td>319</td>
<td>359</td>
<td>0</td>
</tr>
<tr>
<td>R</td>
<td>359</td>
<td>434</td>
<td>359</td>
<td>434</td>
<td>0</td>
</tr>
<tr>
<td>S</td>
<td>434</td>
<td>449</td>
<td>434</td>
<td>449</td>
<td>0</td>
</tr>
<tr>
<td>T</td>
<td>449</td>
<td>455</td>
<td>449</td>
<td>455</td>
<td>0</td>
</tr>
</tbody>
</table>
2. What are the crash costs per day for both the 480-day and 455-day schedules?

### Normal Table for the 515-Day Completion Time

<table>
<thead>
<tr>
<th>Task/Activity</th>
<th>Normal Time</th>
<th>Normal Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td>B</td>
<td>60</td>
<td>$25,000</td>
</tr>
<tr>
<td>C</td>
<td>80</td>
<td>$78,500</td>
</tr>
<tr>
<td>D</td>
<td>6</td>
<td>$2,500</td>
</tr>
<tr>
<td>E</td>
<td>14</td>
<td>$25,200</td>
</tr>
<tr>
<td>F</td>
<td>20</td>
<td>$12,500</td>
</tr>
<tr>
<td>G</td>
<td>46</td>
<td>$63,750</td>
</tr>
<tr>
<td>H</td>
<td>52</td>
<td>$130,000</td>
</tr>
<tr>
<td>I</td>
<td>10</td>
<td>$12,500</td>
</tr>
<tr>
<td>J</td>
<td>6</td>
<td>$1,250</td>
</tr>
<tr>
<td>K</td>
<td>82</td>
<td>$91,500</td>
</tr>
<tr>
<td>L</td>
<td>30</td>
<td>$18,750</td>
</tr>
<tr>
<td>M</td>
<td>10</td>
<td>$4,000</td>
</tr>
<tr>
<td>N</td>
<td>95</td>
<td>$106,000</td>
</tr>
<tr>
<td>O</td>
<td>25</td>
<td>$16,600</td>
</tr>
<tr>
<td>P</td>
<td>40</td>
<td>$162,500</td>
</tr>
<tr>
<td>Q</td>
<td>50</td>
<td>$83,500</td>
</tr>
<tr>
<td>R</td>
<td>85</td>
<td>$125,000</td>
</tr>
<tr>
<td>S</td>
<td>20</td>
<td>$37,500</td>
</tr>
<tr>
<td>T</td>
<td>6</td>
<td>$2,500</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td></td>
<td><strong>$999,050</strong></td>
</tr>
</tbody>
</table>

### Crash Table for the 480-Day Completion Time

<table>
<thead>
<tr>
<th>Task/Activity</th>
<th>Normal Time</th>
<th>Normal Costs</th>
<th>Crash Time</th>
<th>Crash Costs</th>
<th>Cost/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>B</td>
<td>60</td>
<td>$25,000</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>C</td>
<td>80</td>
<td>$78,500</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>D</td>
<td>6</td>
<td>$2,500</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>E</td>
<td>14</td>
<td>$25,200</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>F</td>
<td>20</td>
<td>$12,500</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>G</td>
<td>46</td>
<td>$63,750</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>H</td>
<td>52</td>
<td>$130,000</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>I</td>
<td>10</td>
<td>$12,500</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>J</td>
<td>6</td>
<td>$1,250</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>K</td>
<td>82</td>
<td>$91,500</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>L</td>
<td>30</td>
<td>$18,750</td>
<td>30</td>
<td>$18,750</td>
<td>No change</td>
</tr>
<tr>
<td>M</td>
<td>10</td>
<td>$4,000</td>
<td>10</td>
<td>$4,000</td>
<td>No change</td>
</tr>
<tr>
<td>N</td>
<td>95</td>
<td>$106,000</td>
<td>75</td>
<td>$165,000</td>
<td>$2,950</td>
</tr>
<tr>
<td>O</td>
<td>25</td>
<td>$16,600</td>
<td>20</td>
<td>$24,600</td>
<td>$1,600</td>
</tr>
<tr>
<td>P</td>
<td>40</td>
<td>$162,500</td>
<td>40</td>
<td>$162,500</td>
<td>No change</td>
</tr>
<tr>
<td>Q</td>
<td>50</td>
<td>$83,500</td>
<td>50</td>
<td>$83,500</td>
<td>No change</td>
</tr>
<tr>
<td>R</td>
<td>85</td>
<td>$125,000</td>
<td>75</td>
<td>$175,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>S</td>
<td>20</td>
<td>$37,500</td>
<td>20</td>
<td>$37,500</td>
<td>No change</td>
</tr>
<tr>
<td>T</td>
<td>6</td>
<td>$2,500</td>
<td>6</td>
<td>$2,500</td>
<td>No change</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td></td>
<td><strong>$999,050</strong></td>
<td></td>
<td><strong>$1,116,050</strong></td>
<td></td>
</tr>
</tbody>
</table>

- No change is based on the Normal Table data
### CRASH TABLE FOR THE 455-DAY COMPLETION TIME

<table>
<thead>
<tr>
<th>TASK/ACTIVITY</th>
<th>NORMAL TIME</th>
<th>NORMAL COSTS</th>
<th>CRASH TIME</th>
<th>CRASH COSTS</th>
<th>COST/DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>B</td>
<td>60</td>
<td>$25,000</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>C</td>
<td>80</td>
<td>$78,500</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>D</td>
<td>6</td>
<td>$2,500</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>E</td>
<td>14</td>
<td>$25,200</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>F</td>
<td>20</td>
<td>$12,500</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>G</td>
<td>46</td>
<td>$63,750</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>H</td>
<td>52</td>
<td>$130,000</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>I</td>
<td>10</td>
<td>$12,500</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>J</td>
<td>6</td>
<td>$1,250</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>K</td>
<td>82</td>
<td>$91,500</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>L</td>
<td>30</td>
<td>$18,750</td>
<td>30</td>
<td>$18,750</td>
<td>No change</td>
</tr>
<tr>
<td>M</td>
<td>10</td>
<td>$4,000</td>
<td>10</td>
<td>$4,000</td>
<td>No change</td>
</tr>
<tr>
<td>N</td>
<td>95</td>
<td>$106,000</td>
<td>70</td>
<td>$185,500</td>
<td>$3,180</td>
</tr>
<tr>
<td>O</td>
<td>25</td>
<td>$16,600</td>
<td>20</td>
<td>$16,600</td>
<td>No change</td>
</tr>
<tr>
<td>P</td>
<td>40</td>
<td>$162,500</td>
<td>35</td>
<td>$184,500</td>
<td>$4,400</td>
</tr>
<tr>
<td>Q</td>
<td>50</td>
<td>$83,500</td>
<td>40</td>
<td>$102,400</td>
<td>$1,890</td>
</tr>
<tr>
<td>R</td>
<td>85</td>
<td>$125,000</td>
<td>75</td>
<td>$125,000</td>
<td>No change</td>
</tr>
<tr>
<td>S</td>
<td>20</td>
<td>$37,500</td>
<td>15</td>
<td>$48,500</td>
<td>$2,200</td>
</tr>
<tr>
<td>T</td>
<td>6</td>
<td>$2,500</td>
<td>6</td>
<td>$2,500</td>
<td>No change</td>
</tr>
<tr>
<td><strong>TOTAL PROJECT COSTS</strong></td>
<td><strong>$999,050</strong></td>
<td></td>
<td><strong>$1,247,450</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- No change is based on the 480-day Crash Table.

### Alternative teaching strategy

Instructors who want to make the case slightly more challenging can omit the crash times and total crash costs from the 480 and 455 day tables provided in the case so that students have to read the dialogue to ferret out which activities are crashed, by how much, at what per day cost from the case and then compute the total costs/activity.

### 3. What are the risk analyses for the three options?

Using the decision tree, students should develop a Payoff Table for all three options using the Expected Monetary Value method. Again students would need to recognize that one of the options was 455 days not 450 days.
4. What recommendation should Raef make to management?

Given the complete analysis, students will develop a recommendation to management. It is suggested that students make a formal presentation to the class supported by the objective, fact-based analysis. Students are likely to develop various recommended actions based on their analysis. There are several approaches the student presentations can take which can lead to a lively discussion.

If only the costs and risk factors drove the decision, then management would elect to stay with the 515-day schedule. It is the least costly and has the highest probability of success. But students might vary their recommendation based on marketing issues. Even though there is no hard data to develop a marketing analysis, students might add this subjectively and talk about the costs to market share and being the leader to market advantages if the 515-day option were approved by management. Thus there might be different justifications provided by students to management during the presentation, as management is required to make a judgment – is a shorter timeline worth the extra costs. Students can highlight their position in their presentation to the class. This can lead to a highly engaged discussion within the classroom about the 3 options of what would you do and why?
5. Describe the team in terms of Tuckman’s 5 stages of group development. What stage is the team in now? Provide examples from the case which support your position.

While the team was in the performing stage (Raef describes as working well together and are still motivated), the addition of Simon moves them back to the storming stage. While some might argue that due to the addition of a new member, the team went back to the forming stage, this is a difficult case to make since 7 members have been working together for 6 months and they all know who Simon is. Therefore, it is much easier to build a case that the team has gone back to the Storming stage in that there are now conflicts over roles – Simon vs. Raef for leadership, and there is a lack of trust (Pierce and Billy’s comments.)

6. What are some of the political nuances related to Simon’s membership on the team?

The most obvious political issue is Simon’s relationship to the VP of Engineering, Thomas Wright. Based on the ‘subtle’ inferences during the conversation between Raef and his boss, Jonathon Wright, it is clear that Raef had no choice but to allow Simon on the team. The second political issue is shown by Billy and Pierce’s covert comments about Simon both during and following the meeting. It is obvious that there is an undercurrent of resentment by Billy and Pierce based on nepotism.

REFERENCES

JUHEL NIGERIA LIMITED
INSTRUCTOR’S NOTE

Basil Okoli, Baze University

CASE OVERVIEW

This case challenges students to develop alternatives for (within the next 12 months) very substantially increasing the revenues of a pharmaceutical company in Nigeria called Juhel Nigeria, Ltd. The case is appropriate for senior-level undergraduates as well as students in MBA and Executive Development programs. It is designed to be taught in a one hour and a half class session, and is likely to require at least a couple hours of preparation by students.

CASE SYNOPSIS

Dr. Ifeanyi Okoye is the founder and promoter of Juhel Nigeria, Ltd., a pharmaceutical manufacturer and marketer in Nigeria. At its inception, the company focused on manufacturing and selling pharmaceuticals in Eastern Nigeria; now, however, the company sells its pharmaceutical products not only in Eastern Nigeria but all across Nigeria. While the company is already believed to be one of the top five pharmaceutical manufacturers in Nigeria, Dr. Okoye is eager to dramatically increase the pharmaceuticals-related sales and revenues of the company.

Additional data and information in the case include:
1. Regarding Nigeria: Historical overview, a sample of recent demographic statistics from the World Bank, (and for benchmarking purposes, comparable statistics for the United States), plus information on the economy of Nigeria.
2. Regarding the company: Business model, current marketing strategy, current performance, and numerous factors impacting that performance.
3. Additional information: Information on the pharmaceutical-related activities and behaviors of members of the market the company has targeted, information about competing products and companies, and information about the pharmaceutical industry in Nigeria.

INSTRUCTOR’S NOTE

As indicated in the case, the challenge faced by Mr. Ben Odu is to provide the founder of Juhel Nigeria Ltd with suggestions on how to substantially grow (within the next 12 months) the business. As regards lessons and/or information students can learn from this case, at least the following 4 points can be made:

1) The extent to which models and concepts developed economies can apply in less-developed economies such as Nigeria.
2) Students will be in the position to compare suggestions offered by them during class discussions to that provided by the management consultant, Mr. Ben Odu.

3) Students will also be in a position to find out that managers’ decisions are influenced by the conceptual framework they tend to apply and that conceptual frameworks can lead to varying recommendations.

4) Background information on Nigeria and Juhel Nigeria Limited will go a long way to enrich the students’ knowledge of the biggest economy in Africa with a GDP of $501.9 billion (that is, well above the figures for South Africa and Ghana, two major democracies on the African continent that are one way or the other in competition with Nigeria).

**DISCUSSION QUESTIONS**

In the class, usually a student could be selected to lead the discussion. Three methods or approaches may sufficiently be used to deal with this case namely:

1) The students can be called upon after reading the case to provide details they have gathered from the case regarding information that touched on the country, the organization, individuals that played some roles in the case, etc. It is instructive to note the information emanating from the students, on the board. Such provides a template of “facts of the case” that may be found useful as the discussion progresses.

2) Another approach is to elect a student or the entire class members to address certain specific questions regarding the case. For this particular case we hereunder present such series of questions and relative comments to those questions.

**Q#01: What is the main problem?**

Students are likely to decide that the main problem is that Mr. Odu must develop a set of alternative strategies which have the potential (within the next 12 months) to substantially increase the revenues of the company. We reinforce the idea that this definition of the main problem is very consistent with the facts of the case.

**Q#02: What kind of problem is this?**

The students’ response to this problem may be many reflecting their different views about the issue raised in the case. Undoubtedly, there is no one right answer. In any case two alternative approaches can be used as each seems relevant to the situation. The approaches are indicated as follows:

1) “Grow the Business”
2) Turnaround strategy

**Q#03: For the problem identified above, what are the key variables and which expert postulated them?**
For students who conclude that “growing the business” is the main problem, Ansoff (1957) suggests that the following are the key alternative approaches to growing a business:

1) Market penetration
2) Market development
3) Product development
4) Diversification

For students concluding that the main problem is the need for a “turnaround strategy,” Sheth (1985) suggests there are nine strategies which can be considered:

1) Entrenchment (that is, fight for a larger share of existing uses of the product or service in existing markets);
2) Consider selling to intermediaries;
3) Mandatory consumption (that is, ask government to pass a law requiring the use of a product or service);
4) Go international;
5) Broaden product horizons (that is, don’t sell just the computer; rather, sell the computer plus a full set of ancillary products and services);
6) In existing markets, identify new applications for products;
7) In existing markets, identify new usage situations;
8) Repositioning (that is, in new markets, identify new uses for products by changing the image of the product); and
9) Redefining markets (that is, in new markets, identify new uses for products by making functional changes in those products).

Q#04: WHAT DATA FROM THE CASE RELATE TO THE KEY VARIABLES:

The data the students suggest will depend on the problem they have identified. Students believing that the main problem is to “Grow the Business” will pay attention to the four variables in that concept; Appendix 1 shows the data from the case relating to each of those key variables. Similarly, students believing that the main problem is the need for “turnaround strategy” will focus on data from the case relating to those nine alternatives; Appendix 2 shows the data from the case relating to each of those alternative strategies.

Q#05: WHAT ALTERNATIVE SOLUTIONS CAN BE IDENTIFIED?

It is an acceptable assumption that better decisions can be made if alternative solutions are identified and then one of them can be chosen. The student will be required to provide at least two alternative solutions and should be advised that providing only one possible solution can be considered inappropriate.

Q#06: WHICH OF THE ALTERNATIVE SOLUTIONS PROVIDED ABOVE DOES THE STUDENT/CLASS RECOMMEND AND WHY?

Changing nothing” is unlikely to help Mr. Odu achieve his objective of identifying a set of alternatives for achieving the objectives set by the CEO of JHL, that is, to substantially
increase the revenues of JHL within the next 12 months. Thus, students believing the main problem is the need to “grow the business” will recommend an approach which focuses (or re-focuses) on the four options identified by Ansoff (1957), that is, penetration, market development, product development, and diversification. Students believing the main problem is the need for a “turnaround strategy” are likely to recommend consideration of one or more of the alternatives identified by Sheth.

It turns out that the approach recommended by Mr. Odu was a “turnaround strategy” approach remarkably similar to the approach suggested by Sheth (1985). For additional information on what happened, please see the epilogue.

Q#07: WHAT NEGATIVES ARE ASSOCIATED WITH THE ALTERNATIVE CHOSEN BY THE CLASS AND/OR OTHER STUDENTS:

There are usually some negatives associated with the solution proposed. If the chosen alternative requires Juhel Nig. Ltd to source more raw materials or open up new locations for its products and/or even acquire more skilled labor, these imply increases in the cost of inputs and/or increases in marketing costs. The details relating to these aspects of information required to make decisions are absent in the case, consequently, the decision maker could be inexact in his or her suggestions.

The third and final step in discussing the case with the students is to share with them what really happened and to discuss with them the implications of that outcome. As indicated above, as he thought about identifying alternatives to increase the revenues of JHL within the next 12 months, Mr. Odu’s thoughts turned to the turnaround strategy conceptual framework suggested by Sheth (1985). Based on the nine turnaround strategy alternatives suggested by Sheth (1985), Mr. Odu identified (and suggested to the CEO) the following alternatives for substantially increasing the revenues of JNL over the next 12 months:

1) Entrenchment-related recommendations. Based on the four entrenchment-related options identified by Sheth (segmentation, specialty markets, heavy users of the product, and multiple channels of distribution), Mr. Odu identified the following alternatives for increasing JNL revenues within the next 12 months:

   a. Segmentation: From the full set of all direct and indirect consumers in Nigeria, identify the subsets (or segments) able and willing to purchase quality generic pharmaceuticals and committed to the idea that ongoing access to high quality generic pharmaceuticals will enhance the quality of life for themselves and/or their customers. Once these subsets of all direct and indirect consumers in Nigeria have been identified, conduct (with each group) a study of the perceived “value for money” offered by each major category of JNL products (that is, antibiotics, anti-infective cardiovascular, anti-diabetics, anti-malarial, cough and cold, vitamins and minerals, anxiolytics, anti-histamines, etc.), compared to the perceived “value for money” offered by competing products; for a model of the process which can be used to measure perceived “value for money,” see Gale (1994).
i. For JNL products perceived by the above subsets of direct and indirect customer (that is, those able and willing to buy, and committed to the idea that high quality pharmaceuticals will enhance their quality of life) as offering high “value for money,” focus intense promotional effort on those products to the relevant subsets. Regarding these promotional efforts: the message could stress the enhanced quality of life theme, for individuals and for families. As for getting this message to members of the targeted subsets of all direct and indirect consumers: In addition to the usual approaches used by JNL and other marketers of pharmaceutical products (that is, personal selling, advertising, and sales promotions), perhaps JNL could offer non-governmental organizations (NGOs) and/or faith-based and/or other organizations financial support in return for efforts by these organizations to help promote JNL and its products already perceived by direct and/or indirect customers as providing high “value for money.”

ii. For JNL products not perceived by the relevant subsets of direct and/or indirect customers as offering high “value for money”: Before launching promotions for these products, JNL should use the results of its “value for money” analyses to increase the perceived “value for money” for those products; once the perceptions of direct and/or indirect customers have improved, intense promotional efforts can be launched for these products as well.

b. Specialty markets: As indicated in the case, nearly 70% of Nigerians are poor, and many are not able to afford medical treatment. If there are ways in which JNL can help make treatment affordable (by reducing costs, by partnering up with corporate entities and/or NGOs and/or social groups) to the large percentage of Nigerians who are currently unable to afford pharmaceuticals (the case indicates that 55% of Nigerians cannot afford to purchase anti-malarials, 60% cannot afford TB treatments, and 80% cannot afford HIV/AIDS treatments), this should massively increase the demand for JNL products.

c. Heavy users of the product: From the full set of all direct and indirect consumers in Nigeria, identify the subsets (or segments) who are heavy users of pharmaceutical products. Once members of these segments (that is, the heavy user segments of direct and indirect users of pharmaceuticals) have been identified, focus an intense promotional effort on persuading members of these heavy user segments that ongoing access to the pharmaceuticals manufactured and/or marketed by JNL will improve the quality of life for themselves and/or their customers. For these groups (that is, heavy users of pharmaceutical products), schemes to provide savings and generate additional income could be pursued. It seems worth asking the question whether the “product” offered by JNL should be access to a bundle of health care-related products and services which includes not only the pharmaceuticals manufactured and/or marketed by JNL but also wraps around those pharmaceuticals a package of health care-related services designed to maximize the benefits and the quality of life of the direct and indirect customers. While it is not clear exactly what features this package should include. it seems likely that physical exams and/or
provision of inexpensive but effective diagnostic tests should maximize
the attractiveness of JNL products and services to heavy user segments of
direct and/or indirect customers. Under this alternative, pharmaceuticals
manufactured and/or marketed by JNL become a secondary product; the
primary products are the packages designed to maximize the quality of
life-related benefits of purchasing “products” offered by JNL.

d. Multiple channels of distribution: The case indicates that approximately
75% of expenditures on health are made by the private sector. So in
addition to efforts JNL makes to pursue opportunities with federal, state,
and/or local governments, the company needs to vigorously pursue all
possible private sector opportunities. The case does not indicate whether
JNL has attempted to partner up with faith-based and/or social
organizations; if JNL has not, it should immediately launch an effort to
partner up (before competitors do so) with these sorts of organizations. In
other words, JNL should look for opportunities to partner up not only with
for-profit organizations but with not-for-profit organizations as well.

2) Sell through intermediaries-related recommendations. Under this heading, Sheth
(1985) recommends that companies re-organize their selling efforts and utilize
third parties to make sales. In the case of anti-malarials, perhaps JNL would be
able to partner up with corporate bodies eager to protect the health (and
productivity) of their workers; the idea would be to sell anti-malarials to corporate
bodies who would distribute these treatments to members of their workforce, in an
attempt to avoid the situation described in the case (that is, that the cumulative
prevalence rate for malaria infection in most parts of the country is 100%) where
because (during the course of a year) every worker is falling ill, corporate
productivity and profitability are low.

3) Mandatory consumption-related recommendations. As indicated in the case, the
Federal Government of Nigeria (FGN) has passed a law outlawing the importation
of 18 pharmaceutical products. Assuming that JNL produces some of the
products on this list, and assuming that these JNL products are perceived by the
relevant subsets of direct and indirect customers (that is, those able and willing to
purchase high quality pharmaceuticals and believing that the use of high quality
pharmaceuticals has to potential to improve their quality of life) as offering high
“value for money,” JNL could launch an initiative to capture as much of this
business as possible.

4) Go international-related recommendations. Sheth indicates that sometimes a
company which is failing can rescue itself by pursuing overseas opportunities.
The case study lists nine pharmaceutical companies exporting to ECOWAS; JNL
is not one of those nine. If JNL is not currently involved in international sales,
perhaps this could be an opportunity for JNL.

5) Broaden the product horizon-related recommendations. Sheth (1985) indicates
that sometimes a company can rescue itself by adding ancillary products and/or
services to their basic product and/or services. Perhaps there are some ways this
could be done: One alternative (if JNL is not already doing this): Perhaps the
company could begin organizing and offering health care-related events and
experiences for local community groups all across Nigeria. Assuming for example that JNL produces artemether/lumefantrine and/or artesunate/amodiaquine (the treatments of choice for malaria, everywhere in Nigeria): The company could organize malaria prevention and treatment sessions with social groups in villages all across Nigeria; the theme of such sessions could be “_____(the name of a child from that village who died of malaria recently) didn’t have to die.” Another possibility here, if JNL is not already doing it, would be to provide (on each pack of pharmaceuticals) a phone number the buyer can call, to verify the fact that this particular pack of pharmaceuticals is the real thing, not a fake. There are undoubtedly a number of other ways in which JNL could broaden the range of products/services it is offering to direct and/or indirect consumers, by wrapping one or more health care-related services (designed to maximize quality of life benefits) around the products offered by JNL.

6) New situations-related recommendations. Sheth (1985) suggests that sometimes a business can be turned around by putting an existing product or service into new usage situations. For the sorts of pharmaceutical products which JNL manufactures (i.e. treatments for various illnesses), it is not so clear that there might be new situations in which use of some products might be appropriate.

7) New applications-related recommendations. Sheth (1985) suggests that sometimes a business can be turned around by putting products and/or services to work in new and different applications. JNL already manufactures the sorts of small doses (81mg) of aspirin which individuals elsewhere in the world take once a day, just to enhance their health and/or quality of life; it seems possible that there may be other products JNL produces which could also be promoted to individuals as something which can be used not only to treat medical problems but also as something which could and/or should be taken daily, so as to enhance health and/or quality of life.

8) Repositioning-related recommendations. According to Sheth, this strategy involves redefining a product’s image into new usage situations within the same general application context. For the sorts of pharmaceutical products which JNL manufactures (i.e. treatments for specific illnesses), it is not so clear that there might be new situations in which use of some products might be appropriate.

9) Redefine markets-related recommendations. Sheth identifies four alternative approaches to using this strategy. Those four approaches, and comments relating to them, are as indicated below:

a. Generic to specialty products: For JNL products perceived by direct and/or indirect customers as offering high “value for money”: If JNL has not already created its own brand (that is, a manufacturer brand), the company could create its own brand and then promote that brand vigorously to direct and/or indirect customers.

b. Primary to secondary products: As mentioned earlier, it seems possible that pharmaceuticals produced by JNL could be re-positioned (and then promoted) to be part of a bundle of products and services designed to enhance health and/or improve the quality of life for individuals and their families.

c. Industrial to consumer products: Many of the pharmaceuticals JNL produces (for example, the OTC products) are already consumer products; however, depending on the rules and regulations, perhaps it would be possible to convert some prescription (that is, “industrial,” in the sense that
they are sold to hospitals and/or pharmacies and/or other corporate bodies) products to OTC products.

d. Consumer to industrial products: It seems possible that JNL could approach corporate bodies and offer to sell them bulk amounts of products such as anti-malarials. The unique selling proposition for such a move would be the idea that by providing their workers with anti-malarials, the companies would reduce the incidence of malaria (100% probability that a worker will come down with malaria at least once, during the course of a year) to some much lower level and, in the process, increase the productivity and profitability of that company. Another possibility would be for JNL to pursue WHO pre-qualification status, with the idea that if JNL is successful, it would then be able to tender for international procurement opportunities

CONCLUDING COMMENTS

The above comments describe the alternatives identified by (and recommended by) Mr. Odu to achieve the objectives set by the CEO of JHL. Readers may be interested in the answers to the following questions:

Question #1: Of the alternatives suggested by Ben Odu which one did the CEO of Juhel Nigeria Limited find particularly interesting and/or useful?

ANSWER: The CEO of JNL indicates that both the suggestion regarding “going international” (that is, exploring the possibility of exporting pharmaceuticals into other ECOWAS markets) and the suggestion regarding going for WHO prequalification are especially interesting.

Question #2: Have any of the alternatives suggested by Mr. Ben Odu been implemented? If so, which alternatives were implemented and what results have been achieved so far?

ANSWER: JNL had (in the past) tried to sell into ECOWAS markets but had encountered regulatory problems and issues. The products there are sold through 3rd party exporters; there may be ways forward around this issue. JNL is still working with NGOs and similar organizations (including the Crown Agents) and the prospects for success are very encouraging.

Question #3: Are there other alternatives (that is, alternatives other than those suggested by Mr. Odu) which have been put into play? If so, what are these additional alternatives and what results have been achieved so far?

ANSWER: An additional alternative is to develop incentives for certain JNL products, so as to motivate the salespersons. For example, a certain percentage of the profit could be given when a salesperson sells a given quantity; historically incentives like this have generated increases in sales.
QUESTION #4: Overall, does it appear likely that Juhel Nigeria Limited will achieve its objectives, that is, to substantially increase its revenues within the next 12 months?

ANSWER: While it is still early days, a substantial increase in revenues within the next 12 months could still be possible.

QUESTION #5: Are there any other comments and/or observations which the CEO would like to make regarding either the current situation and/or prospects for the future?

ANSWER: Because of regulatory considerations governing the manufacturing and marketing of pharmaceuticals, some of the suggestions made by Mr. Odu may not be possible. Regarding the possibility of “new applications,” for example: Because getting approval to use a pharmaceutical in a new application is likely to require very costly (in terms of both time and money) specialized trials and/or research, medium-sized companies like JNL may not be able to afford to invest the time and/or money which pursuing these sorts of alternatives would entail.

BIBLIOGRAPHY

Ansoff, I (1957), Strategies for Diversification, Harvard Business Review, September-October, pp. 113-124


APPENDIX 1

CASE DATA RELATING TO THE KEY VARIABLES IN ANSOFF’S MARKET GROWTH MODEL (that is, the cross-classification of “products” and “markets”)

Product-related data (existing products) from the case:

As indicated earlier, the major pharmaceutical products on offer by the company include: Antibiotics and anti-infective drugs; analgesics, steroids and antispasmodics; vitamins, minerals and hematics; antacids, cough cold and catarrh; cardiovascular, diuretics, antihistamine and anxiolytics; anti-malarias, anti-diabetics and anti-helminthics; and infusion products which include also infusion water, ear and eye drops, etc.

These pharmaceutical products are meant to deal with common diseases that plague not only Nigeria but also tropical Africa in general. In other words, they are meant to serve markets not only in Nigeria but also beyond the boundaries of Nigeria.

Product-related data (new product opportunities) from the case: In addition to increasing the percentage of treatments for malaria, tuberculosis, and HIV/AIDS produced locally, there is an opportunity to manufacture and market treatments for “neglected childhood diseases.”
Market-related data (existing markets) from the case:

Regarding private sector sales: Many pharmaceutical companies in Nigeria have adopted selective distribution strategies, that is, they appoint selected drug stores located in different cities of Nigeria to market their products to open market and other retailers. In such a system, the selected drug stores are the entities who sell the products of the manufacturer to end consumers. While Juhel Nigeria Ltd uses the same method, the company also sells directly to hospitals and clinics. To service its growing numbers of retailers, JNL currently maintains depots in cities such as Lagos, Onitsha, Aba, Port Harcourt, and Abuja. It seems worth noting that in the private sector, and as indicated above, manufacturers and importers have their own distribution channels and can sell to wholesalers, retailers and hospitals. One implication of this system is that medicines and medical supplies are often sold by unregistered and unlicensed premises and, in some cases, by non-pharmacists.

Regarding sales to government, the following observations can be made:
1) The Government (including Federal, State and Local Government Areas) supplies pharmaceutical products to its various health institutions. The Federal Government is responsible for policy formulation and technical guidance to all healthcare providers. In addition, the Federal Government supplies drugs and medical supplies to tertiary healthcare centers (University Teaching Hospitals) and Federal Medical Centers located in all 36 states. State governments are responsible for providing healthcare to state hospitals as well as offering technical support to the Local Government Areas (LGAs). The LGAs take care of healthcare services at primary healthcare level. As indicated earlier, the private sector, traditional health practitioners and non-governmental agencies provide healthcare services at all three levels of the healthcare system.
2) At one time, under a government initiative to deliver health care to Nigerian citizens, JNL was involved in the contract production of drugs for government.
3) Nigeria’s HIV/AIDS supply chains – many of which include separate procurement, warehousing, and distribution systems – are owned and operated by various federal, state, nongovernmental and faith-based stakeholders with oversight from the Federal Ministry of Health (FMoH) and the National Agency for the Control of AIDS (NACA).

Market-related data (new market opportunities) from the case:
1) Increases in purchasing power should increase the percentage of individuals able to afford to purchase medical care including pharmaceuticals.
2) There is an opportunity to increase exports within (or perhaps even outside) ECOWAS.
3) The initiative by the Federal Government of Nigeria (FGN) to establish a National Health Insurance Scheme (that is, to provide universal healthcare) offers the prospect of a huge increase in funding for medical services and supplies.

APPENDIX 2

DATA FROM THE CASE RELATING TO KEY VARIABLES IN SHETH’S TURNAROUND STRATEGY MODEL

1) Entrenchment (that is, fight for a larger share of existing uses of the product or service in existing markets): The case indicates that the vision of JNL Nigeria Ltd. (hence, JNL) is to “product cost-effective generic products to fill the gap left by multinational companies operating in Nigeria.” In other words, the case indicates that
the ways JNL fights to win market share away from competitors include: 1) Offering
generic versions of various branded pharmaceuticals; and 2) Offering products which
fill gaps not covered by multinational pharmaceutical companies operating in Nigeria.
2) Consider selling to intermediaries: The case indicates that JNL already sells both
to direct customers (wholesalers, large retailers, hospitals, clinics, pharmacists, and
doctors) but also (through the direct customers) to indirect customers (small retailers,
market ladies, and individual customers). The case also indicates that JNL already
sells through both private sector and government channels of distribution. Finally, the
case indicates that at one time JNL was involved in the contract production of drugs
for government.
3) Mandatory consumption (that is, ask government to pass a law requiring the use of
a product or service): It seems unlikely that any governmental entity will pass a law
requiring customers to purchase pharmaceuticals from JNL.
4) Go international: The case indicates that several pharmaceutical companies in
Nigeria (not including JNL) are selling their products throughout the ECOWAS
region.
5) Broaden product horizons (that is, don’t sell just the computer; rather, sell the
computer plus a full set of ancillary products and services): The case does not
indicate whether JNL is selling “products” which include both a pharmaceutical and
services relating to that pharmaceutical.
6) In existing markets, identify new applications for products: The case does not
address this issue; however, given the rules and regulations around the prescribing of
pharmaceuticals, it seems likely that getting an approval for a new application for a
particular pharmaceutical might be quite a lengthy and complicated process.
7) In existing markets, identify new usage situations: The case does not address this
issue; however, given the rules and regulations around the prescribing of
pharmaceuticals, it seems likely that getting an approval for a new use for a particular
pharmaceutical might be quite a lengthy and complicated process.
8) Repositioning (that is, in new markets, identify new uses for products by changing
the image of the product): Again, while the case does not address this issue, given the
rules and regulations around the prescribing of pharmaceuticals, it seems likely that
getting an approval for a new use for a particular pharmaceutical would be quite a
lengthy and complicated process.
9) Redefining markets (that is, in new markets, identify new uses for products by
making functional changes in those products): Again, while the case does not address
this issue, given the rules and regulations around the prescribing of pharmaceuticals, it
seems likely that getting an approval for a new use for a particular pharmaceutical
could be quite a lengthy and complicated process.
RUNNING WITH THE BIG DOGS (PART B):
GROWTH THROUGH STRATEGIC POSITIONING AT
BIG DOG RUNNING COMPANY

Jennifer P. Pitts, Columbus State University
Robin L. Snipes, Columbus State University

CASE DESCRIPTION

The primary subject matters of this case are (1) choosing an appropriate growth strategy and (2) leveraging technology and social media to build customer relationships and deliver a unique value proposition to customers. Students should develop a more in-depth understanding of how to strategically position a company by developing market-specific strategies and effectively using technology to gain sustainable competitive advantage. The case has a difficulty level of three and up, making it appropriate for junior level courses in management information systems, marketing strategy or business strategy. The case is designed to be taught in one or two class sessions and should require approximately 2-3 hours of outside preparation for students, primarily reviewing the case and reading articles related to the competitive forces framework. This case can be used as a follow-up to the Part A case or as a stand-alone case focused on strategic positioning using technology-based initiatives.

CASE SYNOPSIS

The Big Dog Running Company is a running specialty store operating in the highly competitive and growing running shoe and apparel retail industry. The company started in late 2010 in the middle of an economic recession and against formidable odds in an industry dominated by large retailers and price competitive Internet-based companies. Based on an external market analysis, students evaluate and "tweak" a competitive strategy for a retail location that is not currently successful. Students will also recommend one of Ansoff's generic Product-Market Growth strategies to enable the company to continue to grow. Students assess the company’s strategies and tactics to identify and understand how the company continues to deliver a unique value proposition to their customers in other distinct market locations.

INSTRUCTORS' NOTES

Case Learning Objectives

The primary goal of this case is for students to learn how a company can strategically position itself in an industry by leveraging technology and customer-centric strategies to gain and sustain competitive advantage. The case uses a real-world company for students to evaluate and identify current marketing and technology strategies and make recommendations for the future based on their analysis. This case explores key topics that companies must consider in today’s business environment, making it appropriate for courses in management information systems, marketing or management strategy.
Recommendations for Teaching Approaches

It is recommended that instructors utilize this case as an applied exercise following a review of strategic positioning and value creation. To use the case as an in-class exercise, students can be divided into groups and asked to (1) analyze how the local market conditions affect the company's competitive strategy, and (2) identify which of Ansoff's Product-Market Growth strategies may be used to grow the company, and then present their analysis to the class. Alternatively, the case can be used as a group or individual assignment and subsequently reviewed in one or more class sessions. The Big Dog Running Company (BDRC) provides an interesting and relevant company for students to evaluate and should generate a lively class discussion related to how technology and social media can be effectively leveraged by small companies to compete in an industry dominated by “Big Dogs.”

The following are recommended case discussion questions and analysis followed by answers for each item.

Case Discussion Questions and Analysis

(1) Should BDRC sell the Auburn location? If they decide to keep the store, what changes ("tweaks") will Big Dog Running Company need to make to its competitive strategy in the Auburn store to turn it around?

This question is designed to get students to think about how the local competitive market affects competitive strategy development for a specialty retailer. Some students may argue that BDRC should sell the Auburn location in light of recent national buying patterns for sports apparel. However, the owners have already invested a lot of time and energy building customers in this location. After an evaluation of each of the five "success" factors in the Auburn location (location, store ambiance, sales staff, event programming, and inventory management), the owners of BDRC realized that Auburn was lacking in at least three of them, so they decided not to sell the location and instead stay and "tweak" Auburn's strategy.

For starters, unlike the two Columbus locations, the Auburn store was not in a prime location. It was more than a mile away from the downtown area and in an unattractive strip. It became clear that their current location was a problem. On Auburn football weekends, the number of people in the downtown area more than tripled while traffic and sales at the existing location languished. So, the owners made the decision to relocate to the downtown area. Secondly, they hired a new manager who was a former Auburn track star, and new employees who were running enthusiasts and involved in the Auburn running community. These employees were knowledgeable and could provide outstanding service, easily spread the word-of-mouth, and they also knew how to develop targeted running events in Auburn. Finally, they came up with a rather unique relationship-building strategy to spread the word among college students: they convinced members of local sororities to become "Big Dog Ambassadors." As Big Dog Ambassadors, the students would participate in “running fashion shows,” provide feedback on inventory, and promote the store in the college community. In return for being Big Dog Ambassadors, sorority members would receive discounts off product purchases for themselves and any friends that they brought into the store with them. So far, these changes seemed to have worked -- the Auburn store sales have increased significantly and continue trending upward.
(2) In what ways does Big Dog Running Company leverage technology to effectively compete in the industry?

BDRC leverages technology in several ways that help the company build strong brand in the local market and reach new and existing customers in a low-cost and effective way. The company’s social media marketing efforts are particularly effective in engaging customers and promoting the store’s brand. Weekly events and group training are effective in driving customers to the store. Once there, the value-added services offered by the store far exceed the customer experience at a “big box” sports store or mall-based athletic shoe stores. For example, the each store offers a high-tech gait analysis service to customers to ensure they are purchasing the right shoe for their running type.

Technology also plays a key role in helping the owners manage inventory in each of the three locations, and ensure each store has the right mix of shoes, apparel, and accessories for its market. The company’s point-of-sale system captures sales data and customer information from each location and is analyzed to understand trends and forecast future sales. Customer information captured by the system also allows the company to proactively remind runners when they are due for new shoes.

(3) What do you think should be Big Dog’s next competitive move given their current competitive environment?

This question is designed to give the class a chance to creatively brainstorm appropriate growth strategies based on BDRC’s current competitive situation. The Ansoff Product-Market Matrix (1957) may help students to think about growth strategies that might work in this situation (see figure below).

![Product-Market Matrix](image)

The Product-Market Matrix is a strategic planning tool that provides a framework for analysis based on two key considerations: (1) growth through the introduction of new products, and (2) growth by adding new markets (demographic or geographic). Market penetration strategies try to grow the firm by looking for new ways to market existing products to existing customers. Examples of market penetration strategies for BDRC would be new marketing/advertising techniques (such as targeted cable advertising), or new distribution techniques, such as offering home delivery of BDRC products (shoe suppliers have prohibited small brick-and-mortar retailers from selling their products online, but they may be able to provide...
some type of home delivery of their products). Product development strategies try to grow the firm by looking for new products that may increase overall revenues targeting a similar group of customers. An example of a product development strategy for BDRC might be adding a line of yoga wear (since participation in yoga is increasing and many runners also do yoga). Market development strategies try to grow the firm by looking for new demographic or geographic markets. An example of a market development strategy for BDRC would be to investigate the possibility of adding a store in another city that has a high participation in running but doesn't have a specialty running store, such as Savannah, Georgia. And lastly, diversification strategies look for ways to grow the firm by creating new products and services targeting a new group of customers. An example of a diversification strategy for BDRC would be if they started selling triathlon shoes and equipment in addition to running shoes. This targets a different group of customers.

REFERENCES

INSTRUCTORS’ NOTE
THE AMERICAN WHISKEY RENAISSANCE: THE REBIRTH OF AN AMERICAN SPIRIT

Charles A. Rarick, Purdue University Calumet
Claudia C. Mich, Purdue University Calumet

CASE DESCRIPTION

The primary subject matter of this case involves the rise of the American whiskey industry after decades of stagnation and the sustainability of the industry’s popularity. Secondary issues examined include globalization and ethical concerns. The case has a difficulty level appropriate for junior level students. The case is designed to be taught in one class hour and is expected to require three hours of preparation by students.

CASE SYNOPSIS

American made whiskey is once again a hot product, especially in the premium priced segment of the market. Fueled in part by the popularity of American movies and television shows, along with changing tastes and preferences, the American whiskey industry is experiencing a boom in sales. American whiskey is not only popular among drinkers in the United States, but international sales are exceeding all expectations. The case looks at the rebirth of this American industry and its prospects for the future.

With soaring demand for American whiskey the future looks bright for a number of American of distillers. Increased demand and increased profits have caused a number of American whiskey producers to begin to expand production capacity. After a few lost decades American whiskey is once again a hot product, both domestically and internationally. This case asks students to analyze why the industry has suddenly become once again successful and to chart a strategy for the industry to remain a popular spirited drink. The case also allows for the exploration of ethical issues in the promotion (including that funded by the federal government) of an export that has potential harmful health effects. The case attempts to incorporate multimedia elements with hyperlinks to videos concerning history, whiskey making, and commercials to enhance the case and make it more interesting to students.

TARGET AUDIENCE AND TEACHING STRATEGY FOR THE CASE

This case can be used in a number of courses including marketing, international business, strategic management, an introduction to business class, and others. The primary audience for the case is an undergraduate course, however, the case is flexible enough to serve other purposes. The case can be taught in-class or assigned as a group project. It would be helpful to require students to do some additional research into the whiskey industry, however, the case can stand alone without this additional research. Students should be encouraged to think of the future of the
whiskey industry and the means by which the industry can sustain growth. Students should be
couraged to think critically about the strategic direction of the industry as a whole. In addition,
the sale of liquor has some ethical considerations. Propositions made by students need to be
supported by reason and not opinion. Theories of ethics can and should be brought into the
discussion.

OBJECTIVES OF THE CASE

The main objectives of the case are to have students explore in greater detail how a
product once considered as bland can become very popular again, and to assess the probability
that the product will remain popular. The case seeks to have students explore and analyze
consumer trends and what makes a product suddenly become popular with consumers.
Additionally, the case seeks to show the increasingly global nature of product wants and the
ability of American companies to capitalize on this trend. The case can also address ethical
issues as the expanding export of whiskey may be seen as unethical by some, especially given
government support of the export efforts.

ANALYSIS

The case asks students to answer five discussion questions. Instructors using the case
should feel free to add any additional questions they feel are important for their course. While
the discussion questions listed at the end of the case are ones considered important by the authors
of the case, they in no way are meant to represent the only way to approach the analysis of the
case. Likewise questions deemed unimportant can be eliminated from discussion.

Question 1: Considerable debate may occur concerning this question. While there is no
right or wrong answer to this question, the depth of thought and analysis makes some answers
better than others. Factors favoring an enduring popularity of whiskey include the significant
influence American culture has on the rest of the world, but that influence is dependent to an
extent on whiskey remaining popular in the United States as well. Different types of drinks can
remain popular for some time, and innovative and effective advertising can keep demand strong.
Factors which may reduce the popularity of whiskey as a drink of choice include the continuing
changes in the tastes and preferences of the consumer market. There is an element of fashion to
the image of drinking and that fashion is subject to trends. The problem discussed in  the case
concerning supply issues is also a potential problem. If supply of aged whiskey continues to run
low and prices rise consumers may be inclined to switch to another drink. Predicting future
demand is of course not an easy thing to do, and one cannot say with certainty what will happen
to the demand for American whiskey. Overall a case could be made that the like so many
changes in other drink preferences that whiskey demand will not stay as strong as it is currently.
How long the popularity will remain strong is subject to speculation.

Question 2: In order to continue the popularity of American whiskey, both domestically
and abroad, producers must maintain the special appeal of whiskey in a market that offers many
competing choices. Consumer tastes and preferences are always changing and it will take effort
to keep whiskey a popular drink. All too often producers who find themselves benefiting from a
favorable shift in consumer preferences assume the trend will continue. This may not be the case
with American-made whiskey, and in fact, if history is any guide to the future the trend will not
stay constant. How long the trend will last is subject to speculation but producers must be
cognizant of the fact they will probably see a drop in demand at some point in the future. Marketing will be critical to maintaining the longevity of the trend. Creative advertising, promotional tours, and product placement in movies and television shows will be important to selling the product. The use of social media will also be important. Measuring the demographics and psychographics of the market and finding further means to appeal to these market segments will be helpful. With an increasing number of women being whiskey consumers, this segment of the market will require special attention.

**Question 3:** After viewing the commercials students can see that there is a common theme to many of the different brands. The American commercials stress history, simplicity, and tradition mostly. This is also true of the Irish whiskey, Jameson, but the history component is fictional. What seems to be a focus of the American whiskey brands is the historical aspect of the product and an old fashion appeal. Many American whiskey products on store shelves have an old-time whiskey look. Why this appeals to modern consumers is subject to some speculation and students can debate the motives which seem to be driving the popularity of this approach. Through additional research students may be able to find other themes and motives they feel are important to selling the product. Not all advertisements have an historical theme, especially the commercial for Fireball, and the message is different due in part to the target audience. Fireball is also not an American-made whiskey. The more modern and more graphically interesting content of whiskey advertising may have some merit in attracting different segments of the market.

**Question 4:** There are essentially two explanations for the lack of correlation between quality and price in the study. One explanation could be methodology limitations. While all the elements for a good experiment appear to be present – blind tasting, expert tasters, and multiple events, it could be that we are still looking at a problem of sample size. It is possible that a larger sample of events and more expert tasters would produce different results. One could also argue that “expert tasters” may not be the relevant people to be judging the products. A sample of mass consumers cutting across different demographic groups may be more appropriate. There may also be other issues with the experiment that make the results less than accurate. On the other hand, the second explanation is that there really is no correlation between price and quality and that the price commanded is due more to marketing than the taste of the product. Given the amount of money spent on promotion by distillers, it would be reasonable to assume that image factors are important to selling the brand.

**Question 5:** Any questions concerning ethics will produce different opinions. While it will be troubling to some to learn that the U.S. government financially supports the sale of American-made liquor in foreign markets, others may conclude that ultimately it is a consumer’s choice to drink or not to drink. Also, selling American products abroad increases employment in the United States. Students who have studied ethics may provide insight into the different ethical views of the action. An important consideration in dealing with this question is to allow for competing viewpoints. The range of possible answers may run from students who feel it is wrong to even drink alcohol to a more consequentialism viewpoint that the “end justifies the means.” The end result being the creation of American jobs and international consumers getting a product they want. The purpose of the question is to allow students to think and explore, not to champion a particular viewpoint.
CLOSING NOTE

The rebirth of an industry that was struggling just to survive a decade ago into a thriving industry having trouble meeting demand is a very interesting case study. There are lessons to be learned and interesting discussions to be had using this case. It should be remembered that the subject matter of the case, alcohol, has negative social consequences. Responsible consumption is something which might be worth mentioning when using the case.
UNUSED SERVICES AT GET FIT GYM

Dana Schwieger, Southeast Missouri State University
James Ricks, Southeast Missouri State University

CASE DESCRIPTION

The case describes the implementation and lack of member acceptance of virtually-led classes at a moderate sized fitness facility. The primary issue of the case is the lack of user acceptance and the steps that can be taken now to turn a struggling investment around and eventually into a competitive advantage. Students should have an introductory level understanding of business strategy, marketing, and general business issues. The case is primarily designed for junior or senior-level undergraduate students majoring in marketing or management and has a difficulty level of three or higher. The case is designed to be taught in less than 1 class hour and is expected to require approximately 2 hours of outside preparation by students.

CASE SYNOPSIS

The case tells the story of Get Fit Gym, a fitness facility in an area housing approximately 67,000 people. The facility implemented virtual fitness class programming to phase instructor led fitness classes out while continuing to provide similar services as their competition. The project was implemented under the direction of the facility manager in reaction to corporate budget cuts with no input from affected stakeholders nor plan for helping customers to embrace the classes. Now that the investment has been made, the manager needs to start crafting a plan to turn their virtual class programming into a competitive advantage and prevent similar situations from occurring in the future.

RECOMMENDATIONS FOR TEACHING APPROACHES

The case can be taught from multiple perspectives in several difference courses such as upper level marketing, business strategy, or health management. Case coverage should take approximately 45 minutes of course time. Senior level students may be asked to analyze and write up the case using a case analysis template such as:

- Background
- Main Problem
- Minor Problems (stemming from main problem)
- Possible Solutions
- Recommended Solution and Implementation

A series of questions may be provided to junior level students such as the following.

1. Describe the one main problem that has created the current situation? Explain why this problem occurred?

   Get Fit Gym did not use proper project management practices in implementing virtual classes. The project management process begins with a project initiation phase. Once a project is
identified, a feasibility analysis needs to be conducted to determine whether or not the company has the resources, capabilities, and a need for the project. Stakeholders also needed to be involved in the process of determining the feasibility and value of the project. Neither members nor current instructors were asked to give their opinions about adding virtual classes to the services offered. A cost benefit analysis could have been conducted during this stage as well to determine whether or not the investment would generate sufficient benefits. In addition, Get Fit did not have a strategy in place for getting members enthusiastic about taking virtual classes. Enthusiasm could start by getting the stakeholders involved in the decision making process.

2. What should have taken place originally, to prevent the current problem?

Bob, in the role of project manager, should have formed a focus group comprised of a representative cross section of members and employees to research ways to decrease costs without affecting the services offered. They could also examine the wants and needs of the members by developing a survey to distribute at the front desk and online. Once the survey data was compiled and evaluated, they could better determine what their members are wanting from their memberships and a direction for researching possible project solutions. Once a project was selected, the team should ensure that the project aligns with Get Fit’s vision and begin developing a strategy and operational plan for implementing the new program.

3. Describe one management model that should have been used to assess the situation or implement the project?

A. Which model did you select and why? What benefits could this model contribute?
B. Apply the model and explain your findings.

Instructors could highlight a number of models for decision making and change management such as a SWOT analysis, Leavitt’s Diamond, Lewin Schein or the Kotter Change models, or Gladwell’s Tipping Point Model for introducing new products.

4. What do you think the solution to their current problem should be now?

Get Fit currently is offering virtual classes that are either empty or have minimal usage. A focus group of members representing a cross section of Get Fit’s member base as well as employees could be assembled to meet on a regular basis to discuss promotions and services that would be of interest to present and future members. The team could initially be tasked with increasing awareness and usage of the virtual classes and then maintained for continued input regarding operations and services. Focus group members could be encouraged to start attending classes and to ask their friends to join them.

To introduce members to the variety of virtual classes offered, Get Fit could have a promotion in which members earn a shirt for attending a specified number of virtual classes over a month’s time. Punch cards could be issued to members wishing to participate and each time they attend a virtual class, they could receive a punch on their cards. Through this promotion, members would become familiar with the classes, meet other people who are
attending the classes, develop a habit of attending the virtual classes, and possibly develop a core group that would meet together on a regular basis for a particular class.

5. How can Get Fit Gym use technology and social media to increase awareness of, and user satisfaction with, virtual classes?

Examples of some of the ways in which social media could be used include:

1. Virtual class schedules could be posted online.
2. Facebook groups could be formed to encourage camaraderie and provide a means for specific class enthusiasts to communicate and let the other members know when they plan on attending a class.
3. Members could be encouraged to post a comment after a class to receive a small incentive.
4. Tweets could be used to remind members of specific classes or to brag when a virtual class has a large number of participants.
5. Polls could be posted to get members’ reactions to new class releases.
6. Incentives could be periodically posted for attending a virtual class that day.

6. Once virtual classes become more popular at Get Fit Gym, what can they do to incorporate them into their future business strategy?

Get Fit needs to revisit their mission and re-define or develop new strategies to move in that direction. They also need to determine the role that virtual classes will play in that strategy. Once virtual classes are more readily accepted, depending upon the limitations of their virtual class subscription, Get Fit might look into offering virtual classes to members through a private VPN connection in case they are unable to go to the gym.

Eventually, a virtual membership might be developed for those members outside the service area. Traditional members could also be allowed access to the online virtual classes through their standard membership agreement. If subscription restrictions prevented offering the classes online and demand justified the offering, the facility could consider developing their own virtual video series. To further enhance an online membership option, Get Fit might also consider providing online meetings with trainers and nutritionists as well as individual and group-based diet programs.
**DR SOLAR**

Joette Wisnieski, Indiana University of PA

**INSTRUCTOR’S NOTES**

**CASE DESCRIPTION**

This case focuses on a young entrepreneur pondering whether or not to start his own business. This case is useful in an entrepreneurship class as it contains most parts of a business plan and allows students to work up the numbers and determine whether to proceed or not. In addition, this case could be used in a strategy class or a technology management class.

Some of the information and original research was done as a Small Business Institute Case as a feasibility study for the entrepreneur. The entrepreneur decided not to pursue the business.

This case would be useful with junior level or senior level courses. The pertinent points can be easily covered in a one hour period and depending on how much emphasis the instructor wants to put on the numbers would require probably 1-3 hours of outside class work preparation.

The case provides enough information for the students to do their own feasibility study. It would also lend itself to students doing a comparison in their own state.

The students can be assigned to research both their own state incentives and alternative energy sources along with the current state of solar power something always changing.

**CASE SYNOPSIS**

This is a story of a young man not far out of college considering starting his own business. The idea of solar energy given fluctuating gasoline and gas prices along with the fact that solar energy is considered clean and environmentally friendly makes it an attractive industry to consider.

Several pieces of the feasibility study are there but there are some notable exceptions such as marketing. Students should be able to identify what pieces of information are still missing and provide suggestions to fill in the gaps. A fairly robust analysis of the solar industry was provided, but it is an industry that is constantly changing so students could be asked to research where that industry is now. Other alternative energies are not really discussed either.

Some costs are provided so students could also be asked to work up some numbers. Also two different business models are presented but nothing firm is decided about which would be better. Numbers for both models could be worked up.
Discussion Questions

What do you think about DR’s basic concept? Describe the business in terms of the nature of the goods/services, target market, etc. Express whether you think this is a good business opportunity?

The students have plenty of information to discuss the general macro environmental trends in support of solar energy.

Positives for the business:

- Solar energy is clean and renewable
- Worries about global warming
- Rising costs for homeowners of electricity
- Limited competition

Cons:

- Dave has limited business experience
- Pittsburgh may not be the best choice
- No state or local incentives

Ask the students to do research on which states and cities have more incentives than PA. Also, ask the students to do research on their own state as to whether it is doing more to promote alternative energies.

Do you believe that this is a complete and appropriate feasibility analysis and an appropriate market industry feasibility analysis for Dave to make a decision?

Students should recognize that essentially there is no real feasibility study. Yes he has done research but there is still a lot missing. The most obvious thing missing is a marketing plan and an operation plan.

Some follow-up questions in class might be--- What are the positives of this product and what might make it difficult to market? Can you use traditional forms of marketing? How much consumer education will need to be done and how highly trained will the employees have to be to do it? Do the students think solar energy and how it works is clearly understood?

Which model is better leasing or selling?

Leasing
- What happens if owner sells home. Large up-front costs for Dave.
- Limited revenue stream. If he splits 70/30 with the consumer then his revenue for this investment is $291.06/annually per installation plus the extra he receives for the installation. Does the money work? What split might work?

Selling
- Limited upfront monies but his profit is from installation only. No repair liability
Is there a clear competitive advantage? If there is, is it a sustainable competitive advantage? Why or why not?

If there is a clear competitive advantage it is certainly not articulated in the case. With only 3 competitors, he would be an early entrant and could build a reputation for quality but while he can work hard to keep that reputation, it can easily be copied.

What does a SWOT analysis show?

Strengths
Dave has a technical background and experience in the industry
 Seems passionate about this
 Did some research

Weaknesses
No real plan developed
Financials missing
Dave has little business experience

Opportunities
Pittsburgh has a history of supporting economic development and start ups
Industry is growing
Tax credits at federal level
Continuing unrest in the middle east and Russia—large oil suppliers

Threats
Competitors
Changing technology—a new advance could put Dave out of business
Declining costs of fossil fuels

What barriers to entry does DR Solar face? How significant are these barriers?

While there is not as yet much competition, there are other barriers to entry. Solar panels are still a costly technology. He would definitely need investment capital along with trained employees for installation. If he needs to hold inventory, then he runs severe risks that a major change in the technology could make his inventory obsolete almost overnight. Currently, there appears to be no large entrants but if this becomes an attractive segment what would stop a national large electric company to start to offer installation to their customers. It appears many countries are far ahead of the US, should he worry about foreign competitors also?

How does DR Solar’s business model motivate its customers? On a scale of 1 to 5 (5 is high), how motivated do you think customers will be to purchase this product?

There is some cost savings offered to customers but is it enough of a payback on their investment. Issues of having a renewable energy source along with the good citizen aspect of
not contributing to global warming can be brought up. Also, for a small market segment, they might like being free of the grid.

**What are the main challenges that you feel DR Solar will face in both the immediate and the long-term future?**

With no clear strategy, no clear marketing plan this venture has immediate issues. If you want you can ask students, how to fix these problems. Bigger threats are changing technology, wind technology being developed for home use and changes even in solar power for homes. If it becomes a large market, more established competitors may move into the markets.

**What recommendations would you make to Dave?**

  Don’t do it in PA. There are definitely sunnier states with bigger tax breaks that would increase profit potential.
  Find a partner with business experience.
  Fully develop this plan. He has a nice start but there is still too much missing.

**REFERENCES**


INSTRUCTORS' NOTE

STARTUP PRODUCTION PLANNING UNDER FUNDING CONSTRAINTS

Dennis Zocco, University of San Diego

CASE DESCRIPTION

The primary subject matter of this case concerns relationships between three critical decisions facing founders of startups in planning for initial production capacity: space leasing, subcontracting, and cash burn. A startup wind turbine manufacturing company faces these decisions under an initial funding cash constraint as they plan the company’s first two years of production capacity. Secondary issues are to understand 1) the elements of a manufacturing facility lease, 2) the rationale and motivations for subcontracting all or a subset of the product’s component parts, 3) the financial forecasts necessary to determine the cash burn associated with various levels of production capacity, and 4) the complexities of integrating these decisions and forecasts in developing the optimal initial production capacity for the startup. The case has a difficulty level of four, appropriate for senior level. The case is designed to be taught in three or four class hours, depending on the student proficiency in finance, and is expected to require three hours of outside preparation by students.

CASE SYNOPSIS

WindPower is a wind turbine manufacturing company founded by an American executive from General Electric, an executive from a large German electric utility, and a young Norwegian scientist just graduated from MIT, with a Ph.D. in aeronautical engineering. The two executives bring to the startup a combined $7 million in cash. The scientist brings with him a patent for a two-blade, flexible housing turbine that will generate an energy efficiency yield higher than any wind turbine on the market. The company has received interest in their wind turbine from wind farms in the U.S. and Europe. However, these farms are reluctant to place orders with the new company without being sure of their production capacity. Therefore, they ask the WindForce founders how many turbines they can produce and sell to them in the next two years. The WindForce founders are now faced with selecting the manufacturing site and size of facility as well as the components that will be produced in-house and will be subcontracted, which in a recursive fashion affect the size of the facility. These decisions need to be made under the constraint of the initial cash available for use in the company and the desire to not only maintain a minimum monthly cash balance but have sufficient cash at the end of the two years to accelerate production beginning in year three. A relational set of financial models are used in the case to facilitate the understanding of how these decisions are inter-related and of the implications of these decisions on cash burn.
RECOMMENDATIONS FOR TEACHING APPROACHES

This finance/accounting case was written to be used in both undergraduate and graduate courses. The instructor may adjust the rigor and depth of material to reflect the skill and background of the student audience. However, the issues are meaningful and relevant to the learning experience of undergraduates and graduates. This case is primarily designed to be used in 1) a case course in Entrepreneurial Finance or 2) in a financial modeling course or 3) a case course in which the students have accounting knowledge. It is an experiential learning exercise based on the application of financial and accounting principles. The case is self-contained in that the material needed to understand the necessary concepts and calculations are contained in the case. The case can be taught using three approaches.

Approach 1 is a qualitative analysis of the case and has the students making decisions on the manufacturing space location and the component subcontracting versus in-house manufacture. The sales and production forecasts, however, can be discussed in the context of how the subcontracting vs. in-house decisions (Table 1 in case) and manufacturing space location (Table 3 in case) will affect the forecasts, and more specifically, the cash available for production. By focusing on the process instead of making the actual forecasts, the students can explore the implications of the amount of cash brought into the venture at founding, the customer and vendor credit policies, the compensation of the founders, inventory policy, and the funding of R&D. The discussion questions at the end of this Instructors’ Notes document allows for a rich in-class discussion. As a discussion-based exercise, the case can be completed in one 50- or 75-minute class.

Approach 2 is the first quantitative approach. A financial decision model is available with this case and can be provided to students to allow them to make sales and production forecasts within the context of the initial funding constraint of $7 million. The decision model is comprised of three decision sub-models—the manufacturing space lease decision model, the component subcontracting decision model, and the production planning model—and a corporate tax calculation model. The decision sub-models are explained in detail below and are fully populated with the case assumptions and sample sales and production forecasts. This approach still requires the discussion elements of Approach 1 in order to understand the process embodied in the model.

Approach 2 will require two 50- or 75-minute classes. The first 50- or 75-minute class can be used to set up the case, identify the decisions that need to be made, and explain the objective of the financial model, and discuss the impact of cash flow on production planning (explained below). The students can then be assigned the task of using the model to make their decisions and their sales and production forecasts within the cash constraints of the case.

Approach 3 is another quantitative approach which combines Approaches 1 and 3 except that instead of providing the student with the financial model, the student’s assignment as part of the case is to construct the financial model. If the objective is to have the model as complete as the one provided with this case, the task for the student will be formidable. In addition, the instructor will need to examine each model to verify that it is constructed correctly. This takes a significant amount of time. Students can be assigned to teams, easing the burden on students and reducing the number of models the instructor
Approach 3 will require three 50- or 75-minute classes. The first 50- or 75-minute class can be used to set up the case, identify the decisions that need to be made, and explain the objective and structure of the financial model. The students can then be assigned the task of constructing the model during the time between classes. This should be a few days as it can be a time-consuming class for students not proficient in using Excel. Student teams would address this issue as the instructor can make sure that each team has at least one student with proficiency in Excel. Before the next class meeting, the instructor may want to have the students show the instructor their model for verification that it is built correctly. Then the next class meeting can be devoted to working the model to make the decisions necessary in the venture’s production planning. In the third class meeting, the students can present their forecasts and explain their decisions.

THE DECISION MODELS

There are three key decisions students need to make in developing their primary production capacity decision. They are 1) the subcontracting vs. in-house manufacturing decision, 2) the manufacturing lease space decision, and 3) the production scheduling decision. These decisions are interrelated as the following model descriptions explain. The decision models, provided upon request in one Excel spreadsheet, integrate these three decisions to allow students to see and analyze the implications of their two-year forecast of production capacity for WindForce. The model ties the three decisions together financially and mathematically and can be provided to the students with the case description. Alternatively, students can be assigned the development of the model. However, in this latter approach, significant time and effort will be required on the part of the student to develop and test the models and for the professor to verify the model.

The decision models are shown schematically in Figure 1 below. A Corporate Tax Model is included for calculation purposes only and is linked to the income statement’s corporate tax entry in the Production Planning Model.

These three models are interrelated in that each provides information needed by another. For example, the decisions made in the Component Subcontracting Decision Model determine the component costs and capital expenditures that are accessed by the
Production Planning Model, which contains the two-year monthly sales and production forecast and accompanying financial statements. The subcontracting model also determines the in-house manufacturing space requirements which are accessed by the lease decision model to determine the rent and security deposit cash flows which are in turn accessed by the production planning model to be used in the financial statements.

The interrelationships between the three models requires the production planning process to be an iterative one in that the sales and production forecasts are made under a cash constraint, specifically, the cash brought to the venture by the founders and the subsequent operational cash flow. There is no one set of correct or best forecasts and decisions. Many realistic forecasts can be made. The key takeaway is that the forecast is constrained by the condition that monthly cash balances cannot fall below a prescribed minimum cash balance of five percent of sales.

Normally the question arises from students: Do I start with forecasting the production schedule or the component subcontracting decisions or the manufacturing space lease decision? The sequence that seems to work best is to first make the component subcontracting decision. This decision establishes the production cost per turbine as well as the space savings that results from subcontracting. Then the students can make their preliminary monthly two-year production schedule forecast in the Production Planning Model. It is preliminary because the forecast, along with the assumptions from the case, populates the financial statements in the Production Planning Model. However, at that point, the lease decision has not been made so the financial statements still need the rent and lease security deposit amounts. Even though these amounts are missing from the financial statements at this point, the amounts are small compared to the other costs and expenses of the company which are included in the financial statements. So the students can make their production forecasts and get a good idea of how that forecast influences the monthly cash balances of the company. One of the important insights in making the production forecast is its impact on monthly cash flows which is why the monthly cash flows are shown directly under the forecast of each month’s production.

The instructor has two options in providing students with guidance in starting the process. Option 1 is to allow the students to analyze the entire model and then decide the best approach to begin the process. Option 2 is to instruct the students to begin the process with the subcontracting decision model, then make the preliminary sales and production forecasts in the Production Planning Model, then the make the lease decision, then return to the Production Planning model and begin adjusting the sales and production forecasts to determine their effect on monthly cash balances with the objective of not allowing cash balances to fall below the prescribed minimum.

The decision model has assumptions stated in the case that provide the structure within which the sales and production forecasts are made. Cells in which the assumed data are entered are in shaded cells in the figures in this teaching not and green cells in the spreadsheet. All other cells are either references or calculation. Therefore, the instructor can change any of these assumptions or can assign students to perform a sensitivity analysis on production capacity under various assumption scenarios. The instructor can provide the models with assumptions already entered (the model is provided to the instructor in this way, however the assumptions can be changed by the instructor) or have
THE COMPONENT SUBCONTRACTING DECISION MODEL

The objective of this model is to allow the student to make the decisions on which components will be manufactured in-house and which will be subcontracted for manufacture. The key decision factor is Sal’s desire to protect WindForce’s ownership of the proprietary nature of Jo’s design. The case provides Jo’s assessment of which components are uniquely critical to the design and it is likely that students will choose those for subcontracting. However, subcontracting has other benefits such as reduced cost, reduced capital expenditures, and reduced requirement for manufacturing space. Sal’s decision to subcontract the blades and turbines is logical in that wind turbine blades can be as large as 116 feet long and towers 212 feet high. Sal estimates that the in-house manufacture of the blades and tower would triple the manufacturing space requirements whereas subcontracting their manufacture would reduce the cost of production and rent as well as eliminate the need for capital expenditures related to their manufacture.

Table 1 shows the assumptions for key variables in the model.

<table>
<thead>
<tr>
<th>Space Requirement</th>
<th>Second Year Turbine Production (units; excluding production of blades and tower)</th>
<th>Direct Labor Cost per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>61</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>151</td>
<td></td>
</tr>
</tbody>
</table>

The tranches of the space requirement assumptions are approximations, so there is no guarantee that in actual production these space sizes would be appropriate under all conditions for the manufacture of wind turbines. The manufacturing space requirements are based on the largest annual production in the forecast years. Sal’s reasoning is that if he would lease space to accommodate the highest of, say, a four-year forecast (assuming that production will increase annually), WindForce would be paying for substantial unused space in the early years when cash is scarcest. He assumes that if more space is needed after the second year, additional space can be leased as an addendum to the existing lease or an additional lease can be taken.

Sal estimates that up to 60 units produced annually during either of the first two years of WindForce operation will require 10,000 square feet of manufacturing space. From 61 to 150 units, the requirement would increase to 17,000 square feet. Above 151 units, 26,000 square feet will be required. No additional production levels are considered due to the fact that cash constraints during the first two years would be a limiting factor in the production capacity.

Further assumptions are that the cost savings on subcontracting component manufacture over in-house manufacture will be 10% and the direct labor cost per hour is $45. A corollary assumption is that the manufacture of blades and towers will be
subcontracted, as the space required for that manufacturing would be prohibitive.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hub</td>
<td></td>
<td>$30,000</td>
<td>10.00</td>
<td>$3,600</td>
<td>$33,600</td>
<td>10%</td>
<td>$30,240</td>
</tr>
<tr>
<td>Pitch Mechanism &amp; Bearings</td>
<td></td>
<td>$30,000</td>
<td>12.00</td>
<td>$4,320</td>
<td>$34,320</td>
<td>10%</td>
<td>$30,888</td>
</tr>
<tr>
<td>Spinner, Nose Cone</td>
<td></td>
<td>$3,000</td>
<td>10.00</td>
<td>$3,600</td>
<td>$6,600</td>
<td>10%</td>
<td>$5,940</td>
</tr>
<tr>
<td>Drive train, nacelle housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaft and Bearings</td>
<td></td>
<td>$23,000</td>
<td>8.00</td>
<td>$2,880</td>
<td>$25,880</td>
<td>10%</td>
<td>$23,292</td>
</tr>
<tr>
<td>Gearbox</td>
<td></td>
<td>$105,000</td>
<td>8.00</td>
<td>$2,880</td>
<td>$107,880</td>
<td>10%</td>
<td>$97,092</td>
</tr>
<tr>
<td>Mechanical Break</td>
<td></td>
<td>$1,800</td>
<td>6.00</td>
<td>$2,160</td>
<td>$3,960</td>
<td>10%</td>
<td>$3,984</td>
</tr>
<tr>
<td>Generator</td>
<td>1</td>
<td>$67,200</td>
<td>7.00</td>
<td>$2,520</td>
<td>$69,720</td>
<td>10%</td>
<td>$62,748</td>
</tr>
<tr>
<td>Variable speed electronics</td>
<td>1</td>
<td>$82,000</td>
<td>8.00</td>
<td>$2,880</td>
<td>$84,880</td>
<td>10%</td>
<td>$76,392</td>
</tr>
<tr>
<td>Yaw drive &amp; bearing</td>
<td>1</td>
<td>$14,000</td>
<td>14.00</td>
<td>$5,040</td>
<td>$19,040</td>
<td>10%</td>
<td>$17,136</td>
</tr>
<tr>
<td>Main frame</td>
<td>1</td>
<td>$64,000</td>
<td>8.00</td>
<td>$2,880</td>
<td>$66,880</td>
<td>10%</td>
<td>$60,192</td>
</tr>
<tr>
<td>Electrical connections</td>
<td>1</td>
<td>$42,000</td>
<td>8.00</td>
<td>$2,880</td>
<td>$44,880</td>
<td>10%</td>
<td>$40,302</td>
</tr>
<tr>
<td>Hydraulics, Cooling system</td>
<td>1</td>
<td>$12,000</td>
<td>6.00</td>
<td>$2,160</td>
<td>$14,160</td>
<td>10%</td>
<td>$12,744</td>
</tr>
<tr>
<td>Nacelle Cover</td>
<td>1</td>
<td>$12,000</td>
<td>8.00</td>
<td>$2,880</td>
<td>$14,880</td>
<td>10%</td>
<td>$13,392</td>
</tr>
<tr>
<td>Control, Safety system, Condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td>1</td>
<td>$25,000</td>
<td>8.00</td>
<td>$2,880</td>
<td>$27,880</td>
<td>10%</td>
<td>$25,092</td>
</tr>
<tr>
<td>Blades</td>
<td>1</td>
<td>$105,000</td>
<td>16.00</td>
<td>$5,760</td>
<td>$110,760</td>
<td>10%</td>
<td>$99,684</td>
</tr>
<tr>
<td>Tower</td>
<td>1</td>
<td>$90,000</td>
<td>25.00</td>
<td>$9,000</td>
<td>$99,000</td>
<td>10%</td>
<td>$89,100</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>$706,000</td>
<td>162.00</td>
<td>$58,320</td>
<td>$764,320</td>
<td></td>
<td>$687,888</td>
</tr>
</tbody>
</table>
The following is a description of the columns in the Component Subcontracting Decision Model.

1. Component Description. The list of components required to produce a WindForce turbine.
2. Subcontract (1:Yes; Blank:No). Placing a “1” in this column indicates that the component manufacturing will be subcontracted. Leaving it blank indicates in-house manufacturing.
3. Component Cost per Turbine. These are the in-house costs of manufacturing components.
4. Direct Labor Allocation (Manpower Days) per Turbine. The number of manpower days required to manufacture or assemble the component.
5. Direct Labor Cost per Turbine. The direct labor cost calculated as the manpower days times eight hours per day times the direct labor cost per hour.
6. Total In-House Cost Per Turbine. Component material costs as shown in Table 2 and direct labor cost per turbine.
7. Component Subcontracting Cost Savings Factor. The reduction from in-house manufacturing and assembly total cost if subcontracted.
9. Cost of In-House Component Production. Total component cost is shown if the component is selected for in-house manufacture.
10. Cost of Subcontracted Component Production. Total component cost is shown if the component is selected for subcontracting.

Table 2b
The Manufacturing Subcontracting Decision Model

<table>
<thead>
<tr>
<th>Component</th>
<th>Subcontract (1:Yes; Blank:No)</th>
<th>Cost of In-House Component Production</th>
<th>Cost of Subcontracted Component Production</th>
<th>Capital (Equipment) Expenditure Required for In-House Production</th>
<th>Capital Equipment Expenditure Required for Components Produced In-House</th>
<th>Reduction in Required Space if Component Production Subcontracted</th>
<th>Manu. Space Requirement Reduction under Subcontracting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hub</td>
<td>$33,600</td>
<td>$50,000</td>
<td>$50,000</td>
<td></td>
<td></td>
<td></td>
<td>10.0%</td>
</tr>
<tr>
<td>Pitch Mechanism &amp; Bearings</td>
<td>$34,320</td>
<td>$45,000</td>
<td>$45,000</td>
<td></td>
<td></td>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>Spinner, Nose Cone</td>
<td>$6,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.0%</td>
</tr>
<tr>
<td>Drive train, nacelle housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaft and Bearings</td>
<td>$26,880</td>
<td>$75,000</td>
<td>$75,000</td>
<td></td>
<td></td>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>Gearbox</td>
<td>$107,880</td>
<td>$30,000</td>
<td>$30,000</td>
<td></td>
<td></td>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>Mechanical Break</td>
<td>$4,960</td>
<td></td>
<td></td>
<td>$33,000</td>
<td>$33,000</td>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>Generator</td>
<td>1</td>
<td>$62,748</td>
<td>$5,000</td>
<td></td>
<td></td>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>Variable speed electronics</td>
<td>1</td>
<td>$76,902</td>
<td>$23,000</td>
<td></td>
<td></td>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>Yaw drive &amp; bearing</td>
<td>$19,040</td>
<td></td>
<td></td>
<td>$45,000</td>
<td>$45,000</td>
<td></td>
<td>10.0%</td>
</tr>
<tr>
<td>Main frame</td>
<td>1</td>
<td>$60,192</td>
<td>$15,000</td>
<td></td>
<td></td>
<td></td>
<td>10.0%</td>
</tr>
<tr>
<td>Electrical connections</td>
<td>1</td>
<td>$40,392</td>
<td>$5,000</td>
<td></td>
<td></td>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>Hydraulics, Cooling system</td>
<td>1</td>
<td>$12,744</td>
<td>$34,000</td>
<td></td>
<td></td>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>Nacelle Cover</td>
<td>1</td>
<td>$13,392</td>
<td>$30,000</td>
<td></td>
<td></td>
<td></td>
<td>10.0%</td>
</tr>
<tr>
<td>Control, Safety system, Condition Monitoring</td>
<td>1</td>
<td>$25,092</td>
<td>$25,000</td>
<td></td>
<td></td>
<td></td>
<td>10.0%</td>
</tr>
<tr>
<td>Blades</td>
<td>1</td>
<td>$99,684</td>
<td>$350,000</td>
<td></td>
<td></td>
<td></td>
<td>10.0%</td>
</tr>
<tr>
<td>Tower</td>
<td>1</td>
<td>$89,100</td>
<td>$160,000</td>
<td></td>
<td></td>
<td></td>
<td>10.0%</td>
</tr>
<tr>
<td>Totals</td>
<td>$231,280</td>
<td>$479,736</td>
<td>$1,000,000</td>
<td>$353,000</td>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>
11. Capital (Equipment) Expenditure Required for In-House Production. The cash outflow required to purchase equipment for in-house component manufacturing.

12. Capital Equipment Expenditure Required for Components Produced In-House. The capital expenditure required for those components not subcontracted.

13. Reduction in Required Space if Component Production Subcontracted. Since any components subcontracted for manufacture will require no in-house manufacturing space, the percent represents the reduction in space from subcontracting as compared to manufacturing the component in-house.

14. Manufacturing Space Requirement Reduction under Subcontracting. Based on the assumptions made in the subcontracting model and the decisions on which of the components will be produced in-house and which subcontracted, the model provides results (Table 3) for production cost per turbine, capital expenditure provided, and in-house manufacturing space requirement. These metrics are provided for all in-house production (as a reference point) and for the in-house production given the decisions to subcontract the manufacture of selected components.

| Table 3  |
|------------------|------------------|------------------|
| Component Subcontracting Decision Model Results |
| Production Cost per Turbine | Capital Expenditure Required | In-House Manufacturing Space Required |
| All In-House | $764,320 | $1,000,000 | 17,000 |
| With Indicated Subcontracting | $711,016 | $353,000 | 8,500 |

The results shown in Table 3 are based on the Table 1 assumptions and the costs and subcontracting decisions shown in Table 2. The space requirement uses the forecasted second year production made in the Production Planning Model first to determine the space requirement if all manufacturing were done in-house (using the space requirement assumptions shown in Table 1) and then reducing that space requirement by the percentage space reduction resulting from subcontracting (Column 13). Given the recommended step sequence of Subcontracting Model, Space Lease Model, and finally the Production Planning Model, the subcontracting decisions will be made before the production planning forecast is made. Therefore, the space requirement shown in the subcontracting model will be zero since no production forecast has been made yet. The space requirement shown in Table 3 is accessed by the Manufacturing Space Lease Decision Model (Table x).

**The Production Planning Model**

This model allows students to make their monthly sales and production forecasts (in units) for the first two years of operations. The constraint on their forecasts is the cash available for production and for the operational expenses of the company. The objective of the production schedule forecast is to determine a forecast that would 1) satisfy the
minimum cash balance requirement of 5% of sales and 2) provide enough cash balance to significantly ramp up production in Year 3 under the assumption that Jo’s design will result in WindForce turbines providing an industry-leading wind energy extraction percentage and, therefore, wind farms will be receptive to buying WindForce turbines.

Assuming students have made their component subcontracting decisions, they can begin making their monthly production forecasts. Students normally understand that production needs to start slowly due to two factors: 1) the cash constraint of the initial $7 million in funding and 2) the assumed reluctance of wind farms to place large orders of a very high-priced turbine with a company that has not yet proven the stated benefits of their turbines or yet sold a turbine.

The format of the Production Planning Model is shown in Table 4.

<table>
<thead>
<tr>
<th>Table 4 Structure of the Production Planning Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumptions</td>
</tr>
<tr>
<td>Sales and Cash Collections Schedule (Y1)</td>
</tr>
<tr>
<td>Cost of Production Schedule (Y1)</td>
</tr>
<tr>
<td>Cost of Goods Sold Schedule (Y1)</td>
</tr>
<tr>
<td>Gross Earnings Estimate (Y1)</td>
</tr>
<tr>
<td>Inventories Schedule (Y1)</td>
</tr>
<tr>
<td>Cash Budget (Y1)</td>
</tr>
<tr>
<td>Sales and Cash Collections Schedule (Y2)</td>
</tr>
<tr>
<td>Cost of Production Schedule (Y2)</td>
</tr>
<tr>
<td>Cost of Goods Sold Schedule (Y2)</td>
</tr>
<tr>
<td>Gross Earnings Estimate (Y2)</td>
</tr>
<tr>
<td>Inventories Schedule (Y2)</td>
</tr>
<tr>
<td>Cash Budget (Y2)</td>
</tr>
</tbody>
</table>

The assumptions of the Production Planning Model are shown in Table 5 and explained below.
Table 5
Production Planning Model Assumptions

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Cash Equity Funding</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>Shares Issued</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Share Par Value</td>
<td>0.01</td>
</tr>
<tr>
<td>Value of Intellectual Property</td>
<td>$3,500,000</td>
</tr>
<tr>
<td>Years left on patent</td>
<td>19</td>
</tr>
<tr>
<td>Debt Financing</td>
<td>0</td>
</tr>
<tr>
<td>R&amp;D CapEx</td>
<td>$100,000</td>
</tr>
<tr>
<td>Average Depr. Life (Years)</td>
<td>10</td>
</tr>
<tr>
<td>Y1 G&amp;A Exp.</td>
<td>$516,000</td>
</tr>
<tr>
<td>Min. Required Cash Balance as Percent of Sales</td>
<td>5%</td>
</tr>
<tr>
<td>Customers</td>
<td>0%</td>
</tr>
<tr>
<td>Vendors</td>
<td>100%</td>
</tr>
<tr>
<td>Month 1</td>
<td></td>
</tr>
<tr>
<td>Month 2</td>
<td></td>
</tr>
<tr>
<td>Month 3</td>
<td></td>
</tr>
<tr>
<td>Credit Terms (Percentage by Month of Cash Received from Customers and Paid to Vendors)</td>
<td></td>
</tr>
</tbody>
</table>

The following is a description of the model assumptions:

1. Initial Cash Equity. The cash brought to the venture by Sal ($4 million) and Christa ($3 million).
2. Shares Issued. Sal incorporated WindForce as a C-corporation with twenty million shares authorized and one million of those authorized shares issued to the founders as a group and allocated according to their percentage ownership.
3. Share Par Value. Each share will have a $0.01 par value.
4. Value of the Intellectual Property. Jo brought his patent to the founding of the company and as a result of a discussion among the founders, they decided to value the patent at $3.5 million, a value halfway between the cash amounts brought to the venture by Sal and Christa. This may seem subjective and somewhat arbitrary, but patents that have not yet been made operational are extremely difficult to value. Without Jo’s patent, likely there would be no WindForce. So the founders accept that there is some value embodied in the patent, but until the design is implemented in a WindForce turbine and the high wind extraction efficiency that the patent promises is achieved, the value is speculative. In reality, the value of the patent is the discounted free cash flows generated as a result of the design embodied in the patent, but until the production process is started and WindForce turbines are sold to wind farms, free cash flow projections would be extremely speculative. The founders realize that the ultimate value of the patent could be much more or much less than $3.5 million, but they feel as if that is a reasonable figure to put in the balance sheet (debited to Patent and credited to Additional Paid-In Capital).
5. Years Left on Patent. The assumption of the case is that Jo was awarded the patent one year prior to the founding of WindForce. Patents are awarded for twenty years, so the patent has nineteen years left and that term is used for the amortization of the patent in the income statement.
6. Debt Financing. There is no debt financing for WindForce.
7. R&D CapEx. The amount allocated to the purchase of equipment to carry out the company’s research and development effort.
8. Average Depreciation Life. The assumption is that the average depreciation life for the company’s depreciable assets is ten years.
9. State Income Tax. WindForce is incorporated and has its headquarters in Virginia, which has a state corporate income tax of 6%.
10. G&A Expense. General and administrative expenses for each of the first two years is...
assumed to be $516,000 and includes salaries, rent, transportation, and temporary office space in Germany.

11. R&D Expenses. These are expenses related directly to the research and development effort and are estimated to be $60,000 for each of the first two years.

12. Minimum Required Cash Balance as a Percent of Sales. The founders have agreed that the production schedule should allow for a minimum cash balance of 5% of sales. This is a constraining factor on the production forecast. The model calculates this minimum cash balance and, for any production forecast, will display the resulting monthly cash balances over or under the minimum required.

13. Price Markup. Based on Christa’s guidance, the founders agreed to a 25% markup over direct costs. A reduction of this markup could increase demand for WindForce turbines, but also have an adverse effect on cash flow.

14. Credit Terms. Credit terms given to customers and received from vendors have a significant influence on the cash flow of the company. The credit terms shown in Table 5 for both customers and vendors are on a three month basis. The customer credit assumption of the model is that all orders are received on the first day of the month, production time on the order regardless of size is one month, the customer pays nothing up front (0% in Month 1) and 50% on the first day of Month 2 (when delivery is made on the turbine order) and 50% on the first day of Month 3. Orders are sent to vendors on the first day of the month and the vendors require full payment when the order is received (100% in Month 1).

The process of developing the two-year production forecast is an iterative one with the first forecast being a rough estimate just to be able to examine the impact of production on monthly cash balances. Table 6 below shows the forecast section of the Production Planning Model. Notice that sales are included as part of the forecast. Forecasting both sales and production allows students to make decisions on inventory policy. For example, if the monthly sales forecast identically matches the monthly production forecast, the student is deciding that no inventories are kept. If more units are produced than are forecasted, then the difference will need to be kept in inventory. Assume that the leased space allows for inventory and that the subcontractor will keep a limited number of blades and towers for a limited amount of time. In reality, that would likely not be the case and more space would have to be leased just for inventory purposes. However, that added degree of complexity might be appropriate for a commercial real estate case, but the WindForce case is mainly concerned with the relationship between production and cash balances, so just informing the student of the impact of inventory policy on space requirements should be sufficient.
The Sales and Production Forecast section also contains two cash-related metrics. The first is “Cash Balance Over (Under) the Required Minimum Balance.” This metric allows the student to see a running total of the cash balance resulting from the sales and production forecasts. The second metric is Cash Build (Burn) which shows the cash increase (build) or decrease (burn) during each month. If the student has not yet made the space lease decision, the cash flow related to lease rent and security deposit is not yet included in the displayed cash flow metrics. However, these cash flows are relatively low compared to the manufacturing costs, operational expenses (other than rent), and capital expenditures. Therefore, after the initial forecast is made, the student can go to the Manufacturing Space Lease Decision Model and select the space address. When that is done, the lease-related cash flow will be integrated into the financial model and the cash metrics in the Production Planning Model will be complete.

If the student decides to choose the manufacturing space before making the sales and production forecast, the Manufacturing Space Lease Decision Model will not provide the first year lease rent and security deposit values as the model will not know the space square footage required which is determined by the second year production forecast. The student can then go to the Production Planning model, make the first two-year sales and production forecasts, which will determine (along with the subcontracting decision) the space required, and then return to the Manufacturing Space Lease Decision Model to see the rent and security deposit cash flow that results from the forecast.

The cash metrics shown in the Sales and Production Planning model are generated from the series of schedules and financial statements contained in the model.

The Sales and Cash Collections Schedule (for years 1 and 2) draws monthly data from the sales and production forecast (in units) and price mark-up from the assumptions section (of the Production Planning model), and in-house and subcontracting costs from the Component Subcontracting Decision model. Using this data, the price of the WindForce turbine is calculated, as shown below in Table 7. Having determined the price based on total cost per turbine and price markup, net sales can be calculated. Then the credit terms, shown in the assumptions section, are used to determine cash collections and accounts receivable, which are accessed by the balance sheet, statement of cash flows, cash budget, and the cash build (burn) calculation.
TABLE 7
SALES AND CASH COLLECTIONS SCHEDULE

<table>
<thead>
<tr>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Forecast (Units)</td>
</tr>
<tr>
<td>Production Planning Model</td>
</tr>
<tr>
<td>Sales Forecast</td>
</tr>
<tr>
<td>Production Forecast (Units)</td>
</tr>
<tr>
<td>Production Planning Model</td>
</tr>
<tr>
<td>Production Forecast</td>
</tr>
<tr>
<td>Direct Costs:</td>
</tr>
<tr>
<td>Cost Per Turbine</td>
</tr>
<tr>
<td>In-House Costs</td>
</tr>
<tr>
<td>Component Subcontracting Decision Model</td>
</tr>
<tr>
<td>+ Subcontracted Costs</td>
</tr>
<tr>
<td>Component Subcontracting Decision Model</td>
</tr>
<tr>
<td>Total Cost</td>
</tr>
<tr>
<td>Calculation</td>
</tr>
<tr>
<td>Price Mark-up</td>
</tr>
<tr>
<td>Production Planning Model</td>
</tr>
<tr>
<td>Assumption</td>
</tr>
<tr>
<td>Price [Total Cost x (1+ Price Markup)]</td>
</tr>
<tr>
<td>Calculation</td>
</tr>
<tr>
<td>Net Sales (Revenues)</td>
</tr>
<tr>
<td>Calculation</td>
</tr>
<tr>
<td>Cash Collections</td>
</tr>
<tr>
<td>Calculation</td>
</tr>
<tr>
<td>Accounts Receivable</td>
</tr>
<tr>
<td>Calculation</td>
</tr>
</tbody>
</table>

The Cost of Production Schedule (Table 8) draws the in-house and subcontracted costs from the Component Subcontracting Decision model, sums them to get total costs per turbine, and then uses the vendor credit terms specified in the assumptions section to determine cash disbursements and accounts payable. Assume that all expenses are paid when incurred.
The Cost of Goods Sold Schedule (Table 9) shows the monthly cost of goods sold, found by multiplying the total cost per turbine (from the Sales and Cash Collections Schedule) by the monthly unit sales (from the sales forecast).

The Gross Earnings Estimate (Table 10) is found by simply subtracting the cost of goods sold from net sales (each in dollars and each on a monthly basis).

The Inventories Schedule (Table 11) is determined by the relationship between the
sales and production forecasts. If the production forecast matches the sales forecast exactly, the student has made the decision to carry no inventory. If, however, the forecast shows more production than sales, then inventory will be kept and shown in the Inventories Schedule shown in Table 11.

<table>
<thead>
<tr>
<th>TABLE 11</th>
<th>THE INVENTORIES SCHEDULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventories Schedule</td>
<td>Source</td>
</tr>
<tr>
<td>Beginning inventory</td>
<td>Y1 beginning inventory is zero; Y2 ending inventory is Y1 ending inventory</td>
</tr>
<tr>
<td>+ Cost of Production</td>
<td>Cost of Production Schedule</td>
</tr>
<tr>
<td>Total (beg. + additions)</td>
<td>Calculation</td>
</tr>
<tr>
<td>- Cost of Goods Sold</td>
<td>Cost of Goods Sold Schedule</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>Calculation</td>
</tr>
</tbody>
</table>

The Cash Budget (Table 12) nets the cash collections and the cash disbursements to determine the monthly cash build or cash burn which then is either added (build) or subtracted (burn) from the beginning cash balance to derive an ending cash balance. The cash budget also shows the cash balance over or under the required minimum cash balance based on the assumption of 5% of sales in each month.
The Key Financial Metrics section of the Production Planning model (Table 13 below) provides a summary of the cash-and profit-related metrics. There are two key analytical takeaways from the summary metrics. First, even though the sales and production forecast for the second year (150) is significantly higher than the first year (60),

<table>
<thead>
<tr>
<th>TABLE 12</th>
<th>CASH BUDGET</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Budget (Y1)</td>
<td>Y1 beginning cash balance is $7 million; Y2 beginning cash balance</td>
<td></td>
</tr>
<tr>
<td>Beginning Cash Balance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash Receipts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Cash Collections from Customers</td>
<td>Sales and Cash Collections Schedule</td>
<td></td>
</tr>
<tr>
<td>Total Cash Available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash Disbursements:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Production Costs</td>
<td>Cost of Production Schedule</td>
<td></td>
</tr>
<tr>
<td>+ General &amp; Administrative</td>
<td>Production Planning Model</td>
<td></td>
</tr>
<tr>
<td>+ Lease Rent</td>
<td>Manufacturing Space Lease Decision</td>
<td></td>
</tr>
<tr>
<td>+ R&amp;D</td>
<td>Production Planning Model</td>
<td></td>
</tr>
<tr>
<td>+ Interest Expense</td>
<td>Production Planning Model</td>
<td></td>
</tr>
<tr>
<td>+ Lease Security Deposit</td>
<td>Manufacturing Space Lease Decision</td>
<td></td>
</tr>
<tr>
<td>+ Equipment</td>
<td>Component Subleasing</td>
<td></td>
</tr>
<tr>
<td>+ Corporate Taxes</td>
<td>Corporate Tax Model</td>
<td></td>
</tr>
<tr>
<td>Total Disbursements</td>
<td>Calculation</td>
<td></td>
</tr>
<tr>
<td>Cash Build (Burn)</td>
<td>Production Planning</td>
<td></td>
</tr>
<tr>
<td>Cash Balance</td>
<td>Calculation</td>
<td></td>
</tr>
<tr>
<td>- Minimum Cash Balance Desired</td>
<td>Calculation</td>
<td></td>
</tr>
<tr>
<td>Cash Over (Under) Required Minimum</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
the ramp-up resulted in a year-over-year cash balance increase of over $4 million. Clearly, this cash is generated internally as no new cash is entering the company from equity or debt sources. Furthermore, the increase is the result of the relatively high profit margin (and actual profit) generated from the sale of each turbine.

If the student’s forecast results in a significantly high end-of-second-year cash balance, the student may decide that there is excess capacity and increase the second-year sales and production forecast or alter it slightly (with production exceeding sales in some months) to maintain an inventory of turbines. However, the cash balance at the end of the second year is also the cash balance that is available for third-year operations, so the student must decide what level of cash balance he/she would be comfortable with going forward beyond the forecast. There is no correct answer here, just a logical reasoning that even though the student’s production planning focus is on the first two years, he/she can’t lose sight of the fact that the company’s operations are ongoing after that planning period.

Based on the forecast, WindForce will have a net cash burn during the first year (notice that the sum of the ending cash balance and cash burn is the $7 million starting cash of the company) and net cash build during the second year.

The forecast also produced a substantial revenue and net profit increase in the second year. However, the net profit margin is expected to remain relatively constant. Students can explore areas of the company that would result in an increase in that profit margin, such as increasing the price markup, subcontracting the manufacture of more components, experiencing economies of scale as the company grows, or some combination of those factors.

The Production Planning Model also contains an income statement (Table 14) and balance sheet (Table 15) for the two years of the forecast. A Statement of Cash Flow is also contained in the model and all line items are calculated.
<table>
<thead>
<tr>
<th>TABLE 14</th>
<th>PRODUCTION PLANNING MODEL INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Statement</td>
<td>Source</td>
</tr>
<tr>
<td>Net Sales (Revenues)</td>
<td>Sales and Cash Collections Schedule</td>
</tr>
<tr>
<td>- Cost of Goods Sold</td>
<td>Cost of Goods Sold Schedule</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>Calculation</td>
</tr>
<tr>
<td>Gross Profit Margin</td>
<td>Calculation</td>
</tr>
<tr>
<td>General &amp; Admin.</td>
<td>Production Planning Model Assumption</td>
</tr>
<tr>
<td>Lease Rent</td>
<td>Component Subcontracting Decision Model</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>Production Planning Model Assumption</td>
</tr>
<tr>
<td>Depreciation</td>
<td>Calculation (based on equipment purchases from Component Subcontracting Decision Model and product life assumption from Production Planning Model)</td>
</tr>
<tr>
<td>Amortization</td>
<td>Calculation</td>
</tr>
<tr>
<td>EBIT</td>
<td>Calculation</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>Calculation</td>
</tr>
<tr>
<td>EBT</td>
<td>Calculation</td>
</tr>
<tr>
<td>Corporate Inc. Tax</td>
<td>Corporate Tax Model</td>
</tr>
<tr>
<td>Net Earnings (loss)</td>
<td>Calculation</td>
</tr>
<tr>
<td>Net Profit Margin</td>
<td>Calculation</td>
</tr>
</tbody>
</table>
The net cash build (burn) metric allows the founding team to have a dynamic view of the impact of the production forecast on cash. They decided to monitor the net cash build or burn for each of the first two years of WindForce operation. This would provide a good overview of whether the company is either building or burning cash for each year. The calculation Net Cash Build (Burn) is in three parts as shown below and contained in the Cash Build (Burn) section of the Production Planning Model.

\[
\text{Cash Burn} = \text{CGS (Variable/Direct Costs)} + \Delta \text{Inventory} + \text{Gen. & Admin.} + \text{Lease Rent} + \Delta \text{R&D} + \text{Interest} + \Delta \text{Prepaid Expenses} - \Delta \text{Accrued Liabilities} - \Delta \text{Accounts Payables} + \Delta \text{Lease Security Deposit} + \Delta \text{Gross Fixed Assets} + \text{Taxes}
\]

\[
\text{Cash Build} = \text{Net Sales (Revenues)} - \Delta \text{Accounts Receivable}
\]

\[
\text{Net Cash Build (Burn)} = \text{Cash Build} - \text{Cash Burn}
\]

If Cash Build is greater than Cash Burn, there is Net Cash Build. If Cash Burn is greater than Cash Build, there is Net Cash Burn. The Average Net Cash Build (Burn) can be found by dividing Net Cash Build (Burn) by 12.
THE MANUFACTURING SPACE LEASE MODEL

The Manufacturing Subcontracting Decision Model provides the space lease terms for twenty-two alternative sites for the WindForce manufacturing facility. The case assumes that each site has no limitation on the amount of space available to WindForce. Students will need to select one of the addresses based Sal’s requirements of a four-year lease with a B+ grade or better space and the lease terms for each address presented in the model. There are no visuals on the addresses.

Table 16 shows the two model assumptions: the space requirement which is drawn from the Manufacturing Subcontracting Model and the lease term (in years) which is entered directly into this model based upon Sal’s intention of signing a four-year lease.

<table>
<thead>
<tr>
<th>TABLE 16</th>
<th>MANUFACTURING SPACE LEASE DECISION MODEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space Requirement (Sq. Ft.)</td>
<td>8,500</td>
</tr>
<tr>
<td>Lease Term (Yrs.)</td>
<td>4</td>
</tr>
</tbody>
</table>

Tables 17a, 17b, and 17c show the structure of the model populated with the lease terms for each address. The student first will need to analyze the lease terms for the addresses that meet Sal’s space lease term and space grade conditions. With an input of “4” in the “lease term” assumption, addresses 9, 18, and 20 do not qualify for consideration based on the landlord minimum or maximum lease term. The model will have “N/A” for the calculated values in the model for those non-qualifying addresses. Addresses 4, 6, 14, 16, 18, 19, 20 do not qualify for consideration because they have a quality rating less than Sal’s required B+. For the remaining fourteen addresses, the students will consider multiple lease term that affect the cash outflow due to the lease rent and security deposit. There is no one best address. The address most selected by past students is Address 11.
<table>
<thead>
<tr>
<th>Address</th>
<th>Selected</th>
<th>Building</th>
<th>Minimum Lease Term</th>
<th>Maximum Lease Term</th>
<th>Monthly Lease Rent</th>
<th>Annual Base Rent Increase</th>
<th>Tenant Percent of Landlord's Tax and Operating Expenses</th>
<th>Average Landlord's Annual Tax and Operating Expenses for Each</th>
<th>One-Time Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address 1</td>
<td></td>
<td>B+</td>
<td>36</td>
<td>60</td>
<td>$1.37</td>
<td>3.10</td>
<td>2.40</td>
<td>$15,000</td>
<td>$5.00</td>
</tr>
<tr>
<td>Address 2</td>
<td></td>
<td>A-</td>
<td>36</td>
<td>60</td>
<td>$1.47</td>
<td>3.20</td>
<td>2.50</td>
<td>$18,000</td>
<td>$5.00</td>
</tr>
<tr>
<td>Address 3</td>
<td></td>
<td>B+</td>
<td>36</td>
<td>60</td>
<td>$1.32</td>
<td>3.12</td>
<td>2.60</td>
<td>$15,000</td>
<td>$9.30</td>
</tr>
<tr>
<td>Address 4</td>
<td></td>
<td>B</td>
<td>24</td>
<td>48</td>
<td>$1.25</td>
<td>3.17</td>
<td>2.40</td>
<td>$20,000</td>
<td>$12.10</td>
</tr>
<tr>
<td>Address 5</td>
<td></td>
<td>B+</td>
<td>48</td>
<td>72</td>
<td>$1.30</td>
<td>2.99</td>
<td>2.40</td>
<td>$17,000</td>
<td>$5.50</td>
</tr>
<tr>
<td>Address 6</td>
<td></td>
<td>B-</td>
<td>36</td>
<td>60</td>
<td>$1.20</td>
<td>3.16</td>
<td>2.00</td>
<td>$21,000</td>
<td>$13.10</td>
</tr>
<tr>
<td>Address 7</td>
<td></td>
<td>B+</td>
<td>36</td>
<td>60</td>
<td>$1.32</td>
<td>2.86</td>
<td>2.00</td>
<td>$15,000</td>
<td>$12.60</td>
</tr>
<tr>
<td>Address 8</td>
<td></td>
<td>B+</td>
<td>36</td>
<td>72</td>
<td>$1.36</td>
<td>3.07</td>
<td>2.50</td>
<td>$15,000</td>
<td>$14.90</td>
</tr>
<tr>
<td>Address 9</td>
<td></td>
<td>A-</td>
<td>60</td>
<td>120</td>
<td>$1.45</td>
<td>3.30</td>
<td>2.40</td>
<td>$17,000</td>
<td>$4.50</td>
</tr>
<tr>
<td>Address 10</td>
<td></td>
<td>A-</td>
<td>36</td>
<td>60</td>
<td>$1.44</td>
<td>2.83</td>
<td>2.30</td>
<td>$15,000</td>
<td>$10.00</td>
</tr>
<tr>
<td>Address 11</td>
<td></td>
<td>B+</td>
<td>48</td>
<td>66</td>
<td>$1.30</td>
<td>2.85</td>
<td>2.30</td>
<td>$22,000</td>
<td>$11.60</td>
</tr>
<tr>
<td>Address 12</td>
<td></td>
<td>A-</td>
<td>36</td>
<td>60</td>
<td>$1.44</td>
<td>2.97</td>
<td>2.40</td>
<td>$18,000</td>
<td>$3.10</td>
</tr>
<tr>
<td>Address 13</td>
<td></td>
<td>A-</td>
<td>36</td>
<td>48</td>
<td>$1.42</td>
<td>2.84</td>
<td>2.40</td>
<td>$21,000</td>
<td>$11.30</td>
</tr>
<tr>
<td>Address 14</td>
<td></td>
<td>B</td>
<td>36</td>
<td>48</td>
<td>$1.35</td>
<td>2.91</td>
<td>2.80</td>
<td>$15,000</td>
<td>$9.30</td>
</tr>
<tr>
<td>Address 15</td>
<td></td>
<td>A-</td>
<td>36</td>
<td>60</td>
<td>$1.47</td>
<td>3.08</td>
<td>2.30</td>
<td>$15,000</td>
<td>$2.50</td>
</tr>
<tr>
<td>Address 16</td>
<td></td>
<td>B</td>
<td>36</td>
<td>60</td>
<td>$1.29</td>
<td>3.09</td>
<td>2.40</td>
<td>$15,000</td>
<td>$13.70</td>
</tr>
<tr>
<td>Address 17</td>
<td></td>
<td>B+</td>
<td>24</td>
<td>48</td>
<td>$1.35</td>
<td>3.29</td>
<td>2.40</td>
<td>$15,000</td>
<td>$14.40</td>
</tr>
<tr>
<td>Address 18</td>
<td></td>
<td>C</td>
<td>24</td>
<td>36</td>
<td>$1.19</td>
<td>3.04</td>
<td>2.80</td>
<td>$26,000</td>
<td>$9.60</td>
</tr>
<tr>
<td>Address 19</td>
<td></td>
<td>B-</td>
<td>48</td>
<td>72</td>
<td>$1.30</td>
<td>3.03</td>
<td>2.70</td>
<td>$22,000</td>
<td>$8.40</td>
</tr>
<tr>
<td>Address 20</td>
<td></td>
<td>C</td>
<td>12</td>
<td>36</td>
<td>$1.20</td>
<td>3.05</td>
<td>2.40</td>
<td>$24,000</td>
<td>$6.10</td>
</tr>
<tr>
<td>Address 21</td>
<td></td>
<td>B+</td>
<td>36</td>
<td>60</td>
<td>$1.39</td>
<td>2.96</td>
<td>2.10</td>
<td>$16,000</td>
<td>$5.10</td>
</tr>
<tr>
<td>Address 22</td>
<td></td>
<td>B+</td>
<td>36</td>
<td>60</td>
<td>$1.38</td>
<td>3.22</td>
<td>2.20</td>
<td>$15,000</td>
<td>$7.50</td>
</tr>
<tr>
<td>Address</td>
<td>Selected</td>
<td>Parking Space Allotment</td>
<td>Security</td>
<td>Lease Rent, First</td>
<td>Lease Security Deposit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>--------------------------</td>
<td>----------</td>
<td>-------------------</td>
<td>-----------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.4</td>
<td>First and Last</td>
<td></td>
<td>$139.74</td>
<td>$23,290</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.3</td>
<td>First and Last</td>
<td></td>
<td>$149.94</td>
<td>$24,990</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.0</td>
<td>First, Second, and Last</td>
<td></td>
<td>$134.64</td>
<td>$33,660</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.8</td>
<td>First and Last</td>
<td></td>
<td>$127.50</td>
<td>$21,250</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.4</td>
<td>First, Second, and Last</td>
<td></td>
<td>$132.60</td>
<td>$33,150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.2</td>
<td>First and Last</td>
<td></td>
<td>$122.40</td>
<td>$20,400</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>0.9</td>
<td>First and Last</td>
<td></td>
<td>$134.64</td>
<td>$22,440</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.5</td>
<td>First and Last</td>
<td></td>
<td>$138.72</td>
<td>$23,120</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.2</td>
<td>First and Last</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.6</td>
<td>First and Last</td>
<td></td>
<td>$146.88</td>
<td>$24,480</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.2</td>
<td>First, Second, and Last</td>
<td></td>
<td>$132.60</td>
<td>$33,150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>0.8</td>
<td>First and Last</td>
<td></td>
<td>$146.88</td>
<td>$24,480</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.4</td>
<td>First and Last</td>
<td></td>
<td>$144.84</td>
<td>$24,140</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.0</td>
<td>First and Last</td>
<td></td>
<td>$137.70</td>
<td>$22,950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.6</td>
<td>First and Last</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.2</td>
<td>First, Second, and Last</td>
<td></td>
<td>$149.94</td>
<td>$37,485</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.2</td>
<td>First and Last</td>
<td></td>
<td>$131.58</td>
<td>$21,930</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>0.9</td>
<td>First and Last</td>
<td></td>
<td>$137.70</td>
<td>$22,950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.6</td>
<td>First and Last</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.2</td>
<td>First, Second, and Last</td>
<td></td>
<td>$132.60</td>
<td>$33,150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.1</td>
<td>First and Last</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>0.8</td>
<td>First and Last</td>
<td></td>
<td>$141.78</td>
<td>$23,630</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1.0</td>
<td>First and Last</td>
<td></td>
<td>$140.76</td>
<td>$23,460</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>Select</td>
<td>Lease Rent Cost (including Tenant Contribution to Landlord)</td>
<td>Improve - ment Allowa</td>
<td>Parking Spaces Free with</td>
<td>Lease Rent, First Year, for Selected</td>
<td>Security Deposit, First Year, for Selected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>-------------------------------------------------------------</td>
<td>----------------------</td>
<td>-------------------------</td>
<td>---------------------------------------</td>
<td>---------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$586.93</td>
<td>$42,500</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$565.85</td>
<td>$79,050</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$556.29</td>
<td>$46,750</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$514.98</td>
<td>$111,35</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$563.30</td>
<td>$107,10</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$582.45</td>
<td>$126,65</td>
<td>13</td>
<td>$138,72</td>
<td>$23,120</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$614.31</td>
<td>$85,000</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$555.53</td>
<td>$98,600</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$615.94</td>
<td>$26,350</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$606.52</td>
<td>$96,050</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$576.99</td>
<td>$79,050</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$629.42</td>
<td>$21,250</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$552.66</td>
<td>$116,45</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$580.02</td>
<td>$122,40</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$557.37</td>
<td>$71,400</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$594.14</td>
<td>$43,350</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>$592.14</td>
<td>$63,750</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following are descriptions of the spreadsheet columns used in the model.

1. **Address.** Available manufacturing spaces. Note: The Manufacturing Space Lease Decision Model contains an index of building grade descriptions.
2. **Selected:** Enter 1. Used for selecting the space.
3. **Building Grade.** Quality measure of building (descriptions displayed within spreadsheet at bottom of model). Sal’s requirement is that the building grade is B+ or higher, which eliminates all addresses with building grades inferior to a B+ ranking.
4. **Minimum Lease Term (Months).** The minimum number of months for which the landlord is willing to sign a lease.
5. **Maximum Lease Term (Months).** The maximum number of months for which the landlord is willing to sign a lease.
6. **Monthly Lease Rent ($/SF).** Lease rent per month per square foot.
7. Annual Base Rent Increase (%). The percent rent increase each year of the lease.
8. Tenant Percent of Landlord's Tax and Operating Expense Annual Increases (%). In leasing commercial space, the landlord will require that the tenant pay for the increase in the landlord's annual tax and operating expense on a pro-rata leased space basis. For WindForce, this percent is an estimate of that percent and is applied to the estimate of the average landlord's annual tax and operating expense increases for each year during the term of the lease as shown in the next category.
9. Estimate of Average Landlord's Annual Tax and Operating Expense Increases for Each Year during the Term of the Lease. This is assumed to be constant for all years of the lease.
10. One-Time Improvement Allowance ($/SF). This is the dollar allowance per square foot that the landlord will pay for space improvement if the tenant wants the improvement. The tenant will need approval by the landlord for any improvements.
11. Parking Space Allotment (#/000 SF). This is the number of parking spaces provided to the tenant as part of the lease and is based on the square footage leased.
12. Security Deposit. The security deposit is paid immediately prior to the beginning of the lease and can either be in the form of “first and last” or “first, second, and last” month’s rent.
13. Lease Rent, First Year. This is the total cash outflow for rent during the first year of the lease.
14. Lease Security Deposit, First Year. This is the total security deposit required.
15. Lease Rent Cost (including Tenant Contribution to Landlord Op. Exp. Increases), All Years. The total cash outflow for rent and tenant contributions to landlord expense increases for all years of the lease.
16. Improvement Allowance. Total dollar amount of improvement allowance based on the square footage leased and the allowance per square feet leases allowed by landlord (Col. J).
17. Parking Spaces Free with Lease. The number of parking spaces provided with the lease free of charge. All additional spaces are provided on a monthly fee basis.
18. Lease Rent, First Year, for Selected Space. This column has the first year lease rent for the address selected in Column B and it will be the cash flow and lease expense shown in the Income Statement, Cash Budget, and calculations of Break-Even Revenues and Cash Burn/Build in the Production Planning Model.
19. Security Deposit, First Year, for Selected Space. This column has the security deposit required for the address selected in Column B and it will be shown in the cash flow and lease expense shown in the Balance Sheet, Statement of Cash Flows, Cash Burn Calculation, and Cash Budget in the Production Planning Model.

The Space Lease Model results are the first year lease rent and the security deposit which are used in the financial models in the Production Planning Model to determine the implications on WindForce’s monthly cash balance from various production planning forecasts. A forecast for increased sales and production may require an increase in production space, which in turn will increase the cash outflow and impact the cash balance levels in the Production Planning Model.
CORPORATE TAX MODEL

The company headquarters will be in Richmond, Virginia, corporate tax rate in Virginia is a flat 6% and can be used as a deduction in calculating the federal corporate tax (Table 18).

| TABLE 18 |
| CORPORATE TAX CALCULATION |

<table>
<thead>
<tr>
<th>Inputs and Results</th>
<th>Federal Tax Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable Income (EBT)</td>
<td>$9,721,000</td>
</tr>
<tr>
<td>State Tax Rate</td>
<td>6%</td>
</tr>
<tr>
<td>State Tax</td>
<td>$583,261</td>
</tr>
<tr>
<td>Federal Taxable Income</td>
<td>$9,137,749</td>
</tr>
<tr>
<td>Federal Tax</td>
<td>$3,106,385</td>
</tr>
<tr>
<td>Effective Federal Tax Rate</td>
<td>34.0%</td>
</tr>
<tr>
<td>Combined Fed. And State Tax</td>
<td>$3,690,095</td>
</tr>
<tr>
<td>Effective Overall Corp. Tax Rate</td>
<td>38.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>If taxable income is over</th>
<th>The tax is over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50,000</td>
<td>-</td>
</tr>
<tr>
<td>50,000</td>
<td>75,000</td>
<td>7,500</td>
</tr>
<tr>
<td>100,000</td>
<td>13,750</td>
<td>34%</td>
</tr>
<tr>
<td>335,000</td>
<td>22,250</td>
<td>39%</td>
</tr>
<tr>
<td>10,000,000</td>
<td>133,900</td>
<td>34%</td>
</tr>
<tr>
<td>15,000,000</td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td>18,333,333</td>
<td>22,250</td>
<td>39%</td>
</tr>
<tr>
<td>15,000,000</td>
<td>133,900</td>
<td>34%</td>
</tr>
</tbody>
</table>

DISCUSSION QUESTIONS

1. **What are the reasons for determining the production capacity of WindForce for the first two years of operation?**
   Certainly, the WindForce founders want to sell as many wind turbines as possible during the first two years of operations. However, they realize that production capacity is limited, as it is even with mature companies. They do not want to accept orders from wind farms and then have to tell the wind farm owners that they cannot fill the entire order. So the founders want to have an estimate of how many turbines are possible during the first two years and then manage the expectations of customers as to how many they can order.

2. **What are the critical constraints on the production schedule?**
   The most critical factor is cash available for production. WindForce started with $7 million in cash. This is a very good start for any company, but with each of the company’s products having a total cost of production of $764,320 and customer terms dictating that no cash is received up front and only 50% on delivery and 50% a month later, the startup production burden on that initial $7 million funding is substantial. Furthermore, vendors are requiring WindForce to pay when the order is placed. In addition to the production draw on cash, the company needs to purchase equipment and pay expenses. However, when orders are received and production begins, cash will be generated internally from the company’s expected net profit margin of 11%. The decision to have some component manufacture in-house versus take advantage of the 10% cost savings from subcontracting is also a constraining factor.

3. **Why is the sales forecast made when planning production?**
Making a sales forecast in conjunction with the production forecast forces the student to make an inventory policy decision and to analyze the cash flow implications of that decision. If production exceeds sales, then inventory must be kept. This requires more space and more burden on cash flow as expenditures are being made to vendors in advance of collections received from sales even when sales exist. Production before sales orders are received brings the burden of uneven cash flows even more in play.

4. What areas of the company might the founders have control of in easing the cash constraints on production?
The founders could subcontract the manufacture of more components. They could negotiate more favorable customer and vendor credit terms that would ease the burden on cash flow. They could also be willing to accept manufacturing space of lesser quality which likely would reduce lease-based cash flow by being less expensive. They could also reduction of R&D capital expenditures and expenses. Each of these possibilities brings disadvantages with them. More subcontracting increases the potential for loss of protection of the proprietary design features of turbine. More favorable customer credit terms might decrease demand of the WindForce turbines. More favorable vendor credit terms might result in the use of vendors of lesser quality. Use of a lower grade manufacturing space may compromise product quality. Finally, the reduction of R&D capital expenditures and expenses may have long-term adverse effects.

5. Since subcontracting offers a 10% reduction in the cost of production, why don’t the founders subcontract the manufacture of all components?
Sal wants to protect the integrity of Jo’s design by keeping in house those components most associated with the unique design. For those components, Sal believes that in-house manufacture will allow better quality control. Also, subcontracting of components, especially the blades and towers, close to the customer’s location reduces delivery costs.

6. Is the objective in determining production capacity to have the maximum production possible over the twelve-month planning period with just meeting the 5% of sales minimum monthly cash balance requirement? Why?
There are rationales for both “yes” and “no” answers. For “yes”, the rationale would be that the founders chose five percent of sales as the monthly minimum cash balance because they believed that it would provide a sufficient safety stock of cash for operations. Planning production that would result in more than that minimum would be allowing cash to stand idle when it could be used to generate profits. On the other hand, the rationale for a “No” answer would be that the minimum was set to be the floor on cash balance but does not rule out keeping more cash for valid reasons. The question is: What would those reasons be? Cash balances are subject to many influences internal and external that will influence cash collections and disbursements. They are customer and vendor credit policies, component and direct labor costs,
capital expenditures, and R&D expenditures and expenses. For example, customers may be late with payments that were expected under the credit policy, Vendors may be out of critical materials in the production process forcing WindForce to acquire those materials from alternative vendors who may charge higher prices. More equipment than expected might be needed. R&D expenditures and expenses might have been underestimated. Although the 5% of sales minimum requirement was set to handle those situations without the company running out of cash, the minimum cash balance in early months of the two-year planning period will be small due to low sales. Also, there might be periods when there are no sales and therefore no cash inflow. It is difficult to lay off labor as it then could be difficult to hire them back if they took other more secure jobs. So it is likely that the labor force will remain in slow times in which labor-related cash outflows will persist. Another factor is that the cash balance at the end of the two-year period is the cash balance that begins the third-year. The student must decide what cash balance he/she would feel comfortable with going into the following year.

7. **Which of the financial statements do you believe warrants the most attention from the founding team in their production planning? Why?**

   The cash budget, statement of cash flows, and cash build (burn) calculation are the most critical as they provide both a dynamic and static view of the cash condition of the company. Although the income statement and balance sheet are important and provide insights into the profitability and book value of the company, effective cash management will keep the company in business.

8. **What factors influence the manufacturing space decision?**

   The two constraining conditions are term of lease (4 years) and building grade (B+ or better). Either of these conditions would eliminate addresses before the terms of the lease are analyzed. Of those addresses that meet the two conditions, the most important factor is the rent per square foot and the annual rent increases. These two factors will contribute most to the cash outflow over the term of the lease. The tenant’s contribution to the annual increase in landlord’s expenses, space improvement allocation, and parking spaces are important, but to a lesser degree than rent.
INSTRUCTOR NOTES

DINNER OR NO DINNER: A STUDENT LEADERSHIP DECISION

CASE DESCRIPTION

The primary subject matter of this case concerns leadership, governance and the roles of board members and individual and institutional reputation. Secondary issues examined include stakeholder analysis; conflict management; and decision analysis by the student leaders. The case has a difficulty level of two through five. The case is designed to be taught in 45-75 minutes and is expected to require 30-45 minutes of outside preparation by students.

CASE SYNOPSIS

This case portrays the mismatch between the requirements and expectations of a leadership position and the capabilities of the elected student leader to fulfill the role. The emotional tension that arises when peers don’t measure up to expectations or organizational requirements leads to conflict and in this case the conflicts are acute requiring action to protect and enhance the reputations of individuals and a university school of management. The case dramatizes the challenges and choices of the organization’s executive leadership board to intervene productively to change the situation, including removing the board president, and still achieve a positive outcome for a high profile event annually hosted by the organization for the entire university community. The stakes are high in this case because the student organization, a business fraternity, has undertaken an annually recurring, highly public event that carries reputation risk for the fraternity, the school of management that hosts the group and the alumni affairs function of the university. The case is a real-time drama of students evaluating a sensitive situation, seeking advice from their chapter faculty adviser, whose role is to facilitate and mentor the organization, developing options for action, and through Socratic questioning helped them select and implement a preferred option. The case offers students an opportunity to project themselves into situations common to student-led organizations that carry similarities to organizational leadership challenges in the professional world.

RECOMMENDATION FOR TEACHING APPROACHES

The two approaches to consider in this case are student teams that engage and discuss the various aspects of the case from an organizational behavior and leadership viewpoint; or, role-playing, which allows the students to adopt the personae of the student characters and the faculty adviser in the case. There is ample room for creativity by the instructor to use the case in either setting. In the option of student teams, students would prepare individually, then come together in teams to formulate a response to the situation from a point of view in the case. In the role-
playing option, individual students would assume principal roles in the case and play out the scenarios to a conclusion. The class would evaluate the outcome based on the issues at stake in the case.

**DISCUSSION QUESTIONS**

1. **What are the issues the organization is facing and prioritize them in terms of urgency and importance.**

   The instructor might start by having the small groups brainstorm a list of at least 5 issues facing the organization. After they have about 5 minutes to do this then start listing them on the board. You will get a variety of responses. Among the responses you might get:
   
   A. Inconsistent leadership by Joe
   B. A confused command structure
   C. Short timeline to put on a successful Dinner with the Industry event
   D. Unwillingness of the members to confront Joe
   E. Conflict avoidance that has hidden the problem
   F. Impact on recruiting new members, if the Dinner with the industry is not successful
   G. Impact on current members’ continued interest in participating in the organization
   H. Reputation of the School of Management

   As you write the list, the instructor should ask respondents to clarify any overly vague issues. Once you have exhausted the responses, use the two-dimensional chart (TN Figure 1) chart to categorize according to urgency and importance. While many of these issues will be seen as important, get them to identify the truly urgent ones. You might want to suggest an issue (if one is not apparent from their responses) and an example of one that is urgent but of lower importance.

   ![TN Figure 1. Importance and Urgency Issues Matrix](image)

   TN Figure 1. Importance and Urgency Issues Matrix
What should become clear is that there are some important issues to deal with including the leadership of Joe Strawn, the morale of the organization, etc., but the dinner with the industry event is the most urgent of these important issues because of the timeline it is under and the actions that must still be taken to get it off in time and with the quality required given the high visibility of the event with stakeholders. This will lead into the next question on stakeholders.

Students should have sufficient time to formulate their own views prior to joining in with others in a small-group setting. In this way, individual contribution and learning can be maximized. The decision, however, is that of a group and as much as possible, the small groups should simulate the executive board of the business fraternity. The outcome of this section would be to identify succinctly the issues the organization faces, their priority, and an initial view of the enablers and inhibitors to the positive resolution. Importantly, this section would define what “positive resolution” is based on the use of the tools in this Teaching Note.

2. Who are the stakeholders regarding Dinner with the Industry and how should they be addressed?

Using the stakeholder map below (Freeman & McVea, 2001), students should be encouraged to use a four-step process to map the stakeholders based on two variables: impact of the stakeholder on problem resolution; and, the probability that the stakeholder will intervene. The students should be encouraged to debate actively the relative standing of each stakeholders or stakeholder groups. Once students have filled out the map (this can be done in the whole group or in small groups), students can weigh the strategies to anticipate and react to a stakeholder group that intervenes. Intervention in this case is to leverage the influence of a stakeholder to affect the outcome in the intervener’s favor. One element of discovery is to observe if the students choose to act peremptorily to influence a stakeholder. The preemptory intervention is a key method of organizational control and influence and an excellent way to identify critical thinking among the students. For example, the issue might arise, if a student identifies an important stakeholder whose intervention would upset the entire structure. The effect would be high, but the likelihood of intervention would be low.
TN Table 1 identifies the key stakeholders by probability of intervention and impact of intervention. The stakeholders identified in the table are mapped in TN Figure 2.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Probability of Intervention</th>
<th>Impact of Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni Affairs (A)</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Leadership Council (B)</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>University Administration (C)</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Fraternity Board (D)</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Career Services Department (E)</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Faculty Adviser (F)</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

3. What should the faculty adviser do for Heddins and Burns? What about Joe Strawn?

A critical factor in the case is the role that the faculty sponsor plays in the scenario. The faculty sponsor is available to Burns, Heddins and the executive board. Here students will likely take one of two sides: 1) the sponsor should be more proactive in managing the executive board so that it is not set up to fail or 2) he should let them solve the problem on their own with guidance on how to do that. Let the students hash out the pros and cons for each of these positions. For instance, students could say that a reason for him to take charge more actively is that otherwise high profile events like Dinner with the Industry can compromise the School’s reputation. Try to get students to explore this position more and apply it to other real business situations where junior employees must make important decisions that pose reputational risk to the larger enterprise. (Examples include 22-year old part-time Baristas at Starbucks, the retail clerk at Nordstroms who is the interface with the customer, the commodities trader who takes positions worth millions of dollars.)
The other position will likely be defended by students as well. Possible support for this is that it is the students’ issue and they must solve it. Also, you can bring in the notion of learning and that this is a leadership learning opportunity. It can open up the topic of leadership and that leaders must often have the courage to take on conflict even if it is unpopular. You might have students reflect on situations where they had to take on conflict or been necessarily unpopular in order to lead. Have them share these.

It is likely that most will agree that it is the students who must take responsibility, which raises the question of how the sponsor should intervene. The position is a delicate one in that the sponsor’s role is not to take sides, but through Socratic questioning, to help the students reach their own conclusions as they consider and prioritize the alternatives available to them. For example, in the case of Heddins, Burns and the executive board, the faculty sponsor could adopt the role of intuitive listener, including listening to the emotional frustration that Heddins and Burns feel. Allowing them to “vent” their frustrations with him, he would ask them what role they thought the executive board had in the situation of the Dinner and its success. Then, after that conversation, he could ask them about the executive board’s role in managing Strawn’s leadership, his role in the immediate project of the Dinner, and the longer-term effectiveness of Strawn’s leadership style on the organization.

The concept is to elevate the conversation to one of governance and oversight in an objective way from the current position of blame and frustration that polarizes so many conflict situations. The conversation goes ultimately to the roles of Heddins and Burns as senior leaders and how they guide the organization to managing positively the situation with the Dinner and the leadership issues including the relationships with all of the stakeholders. Ultimately, the faculty adviser should seek to help the student leaders recognize the tools they have at their disposal: the message is that they aren’t powerless; they have options.

One thing we suggest the instructor consider to help students see how leaders can facilitate and guide without taking over the problem is to role play the meeting of the sponsor with Burns and Heddins. The instructor can play the sponsor role and demonstrate the Socratic nature of his intervention. We suggest you give the students who will play Heddins and Burns some time to know the role so they can do the role play.

Once you have completed the discussion and role plays regarding Heddins and Burns, you can ask the students about what the Sponsor should do about Joseph Strawn. Does he let the students through the executive board deal with Strawn or does he intervene? This should generate good discussion as again some students can make the case that the sponsor should intervene. The instructor can help guide the discussion by asking students about their own experience in teams and if anyone has been on a team that had an assigned or putative leader who was dysfunctional like Joe. Ask what they did about it? Did they want the instructor to take care of it? What did they do, if anything to take care of it? They may admit that they didn’t do anything about it but just suffered with it, complained about it, and tried to get done with the project.

Students can also make a solid case of the Sponsor to intervene with Joe, but maybe without taking any of the responsibility from the board for dealing with him also. If some students think that the sponsor should call a meeting with Strawn, ask them what the Sponsor
should do in that meeting. Again, this can lead students towards the idea of asking questions rather than telling Joe what to do. For example, the faculty sponsor can pose some probing questions such as: what is your assessment of the Dinner project and the role of the executive board in getting it done successfully? At this point, ask students what the goal of the meeting with Strawn should be? Possible responses from students include:

- Reinforce the urgency of the dinner event and discuss his role in getting it done.
- Encourage him to listen to the board more.
- Ask him to assess where things are with the Dinner and overall operation of the executive group.
- Ask him what his plans are for getting things moving forward.
- Explore how he perceives how things are going with the board (does he feel he has the support of the board.
- What is the best configuration of the team to ensure success?
- How do you measure your effectiveness and the effectiveness of the organization in its pursuit of its agenda?
- Ask him if he is happy in his leadership role.

From the discussion, students should recognize the sponsor’s role is a nuanced one: how does he or she coach all of the parties to a solution that they devise; but, does not allow the program to fail ultimately? Similar to intervention with Burns and Heddins, the instructor could have students’ role play an intervention with Strawn. Again the instructor could take on the role of the faculty sponsor and a student could take on Joe Strawn’s role. Alternatively, you could switch this and give students the chance to practice leading and the instructor play the role of Strawn.

4. What should the students do regarding the Dinner with the Industry?

Ultimately, groups must reach a decision about the Dinner with the Industry and about Joe Strawn’s role as president. It is critical that the students separate the two issues even though they are connected: the Dinner and the leadership of Joe Strawn. There are three basic alternatives for the Dinner in the immediate term that the students should consider: cancel the event; postpone it to a later time; or, continue as planned and scheduled.

**Continue as planned**

The instructor might begin with the choice to continue as planned and scheduled and see if this is a viable alternative. Can the organization get everything completed at a high quality that would impress “industry” and not injure the reputation of the school? What are the risks of trying to stay on that timeline given the problems identified by the students in the case? What about fallout from not staying on plan? If it is decided that the dinner is not a viable alternative at
this time then the Executive Board must decide either to cancel the event or postpone it to a later time.

**Cancel the Event**

Dinner with the Industry is the Hallmark event of the Fraternity. It gives the school and the student’s great visibility with the business community. It is also a great recruiting tool for the Fraternity. The students should quickly come to the conclusion this is a very poor option to take.

**Postpone the Event**

First determine if this is a viable alternative. Students may come to the conclusion that by default this is the best option because neither of the first two will work. If this is a viable alternative then students must think through what would need to be done to make it work. First, they must recognize and notify all relevant stakeholders ASAP. They must draft a letter explaining why the dinner has been postponed and state the date when the dinner will be rescheduled. In fact the students should contact all stakeholders either in person or by phone followed by the letter. Both the letter or in person/phone call should show regret that the dinner had to be postponed but that they hope to make the event even better for subsequent years.

Longer term, the students could look at mitigating their risk by seeking a co-sponsor among student organizations, combining it with an alumni organization, or seeking a sponsoring organization like a corporation friendly to the university and the school of management. The key is for the students to think strategically: what do they need to do now versus what do they need to do long term. In the process of evaluation and discussion, the students should evaluate critically the alternatives with a keen eye to consequences of their actions today.

5. **What should the students do about Joe Stawn?**

Regarding Joe Strawn, can the executive board work out an improvement plan for Strawn, should the board offer him an option to resign, or should they go through the process of unseating him? The key is that the students should establish a process for evaluation, development of alternatives and selection of a preferred option in a balanced and objective way. Boards use committees for the purposes of evaluation and development of alternatives. Frequently, an executive-board committee also is charged with developing options and a preferred choice. This is a key learning moment for the students in the area of organizational governance: boards are responsible for the entire organization and represent less of themselves than they do the interests of the organizational as a whole. A key for the students to consider is this: how does everyone maintain their pride and self esteem, while moving the organization forward in its priorities and goals? If departure is the option for Strawn, how should Strawn leave his position? The board could hold a vote of no confidence; they could meet with him and recommend resignation in the face of a no-vote; they could engage the faculty adviser to act as intermediary. Given the facts, circumstances and influences, which position do the students in the class support? In this section, the students have to present succinctly and directly their decisions and the rationale for them. Emphasizing the framework of creating winners among all
of the stakeholders that matter in the case could be an important outcome of the process. Avoiding “zero-sum” outcomes would be preferential as a learning experience.

EPILOGUE

After the consultation with the faculty advisor, the student executive board postponed the Dinner until the spring semester, allowing more time to plan the event and, importantly, to consolidate the support of the career services director of the university and the alumni affairs department. Both of these stakeholders were critical to success. The Dinner with the Industry Board that was chaired by Nick broadened its base and outreach to a wide network of stakeholders. More industry leaders and more students attended the Dinner than in the past, a record of success that was attributed to good group leadership rather than the achievements of a few individuals. The faculty adviser in this critical incident played a key role in coaching the students to engage the conflict and make a decision on the dinner after evaluating the facts, rather than just let it go and await a decision from a “higher authority” to resolve the issue. It was critical that the students “own” the issue and its controversy as much as they “own” the ultimate success of the event. Also, the faculty adviser counseled Joe Strawn about his interests and motivations in this situation. The question of his intention, whether he wanted the leadership position and whether he felt he had the confidence of the executive board were critical discussions between the time of the meeting when Heddins and Burns left frustrated to the week later when the dinner was postponed and Strawn resigned. Within a week of this critical incident, Joe Strawn resigned his position as president. This incident revealed the importance that student groups can play in the experiential learning of students and the need to have faculty commitments to act as coaches and mentors to students and to their organizations that sometimes are in conflict.

This critical incident begins with a seemingly simple and straightforward issue of bad group dynamics. Yet, on closer evaluation, its simplicity reveals a trove of learning opportunities. The process begins with the learning and awareness of the individual and grows through the process of analysis and discussion to the learning of a group and ultimately the class. The TN Figure 3, below, depicts the process of learning accumulation over time (Mauffette-Leenders, Erskine, Leenders, 2007). It represents the way a small group process can influence and enrich the entire class as a large group outcome. The process provides a rich level of detail and dynamics for undergraduates to learn by observing, analyzing, summarizing and acting after critically thinking through various actions and consequences. The situation is also one that they have faced in their own campus organizations from time to time. The faculty adviser in this case played a role of mediator, mentor and group adviser without the group feeling manipulated or “managed.” The key role of the faculty adviser was to encourage and coach a productive outcome that resulted from the students struggling with a real organizational and leadership situation then making a decision they reached independently.
TN Figure 3. Accumulated Learning Continuum (Mauffette-Leenders, Erskine & Leenders, 2007).

REFERENCES


INSTRUCTOR’S NOTES
SPRINKLES CUPCAKES: A CASE STUDY OF
CREATING A SUCCESSFUL
INTERNATIONALIZATION STRATEGY

Dennis C. Chen, Belmont University
Jeff Overby, Belmont University
Barry L. Padgett, Belmont University
Neda Long, Belmont University
Lauren Hills Mellott, Belmont University
Lauren Vandermark, Belmont University
Nickolette Kennedy, Belmont University
Leah Boone, Belmont University

CASE DESCRIPTION

The primary subject matter of this case concerns developing an internationalization strategy for a growing business, Sprinkles Cupcakes. The business owners, Candace and Charles Nelson have grown their business from one store in 2005 to 17 stores in the US and 1 in the Middle East under a licensing agreement. Their innovations include using the highest quality ingredients (e.g. sweet cream butter, bittersweet Belgian chocolate, pure Madagascar vanilla, fresh bananas, carrots, real strawberries, and natural citrus zests) baked fresh daily in small batches, and the creation of a 24-hour cupcake ATM machine. Questions that students should consider include how should Sprinkles continue to grow their business? What types of internationalization strategy could they consider? Should they focus on domestic growth first? Which countries could they target for growth? What changes if any could/should they make to their business/product when they expand internationally? What considerations should they take into account if licensing or entering wholly owned operations when expanding internationally? The case has a difficulty level appropriate for a junior or senior level course, although it may be used at a first-year graduate level, depending on the amount and complexity of the background information that is assigned. The case requires one hour (if the goal is class discussion only) to three hours (if the instructor’s goals involve presentations by individuals or teams of students). This is relevant topic to students studying international business and how to successfully create and implement an internationalization strategy.
CASE SYNOPSIS

Everyone loves a good cupcake. Sprinkles Cupcake owners, Candace and Charles Nelson, have created over 20 delicious cupcake recipes. They have grown their business from one store in 2005 to 17 stores in the US and 1 in the Middle East under a franchising agreement. Now they need to consider an internationalization strategy to continue to grow their business. This case raises several internationalization strategy questions. How do they develop an internationalization strategy? How does an internationalization strategy differ from their corporate strategy? Should they continue to expand internationally or instead focus on growth domestically? If they do decide to continue international expansion, what countries should they target first and why? Finally, how should they expand internationally, by franchising or by wholly owned subsidiaries?

Importance of an Internationalization Strategy

Business professors and instructors are very often interested in providing their students valuable and useful tools to help fill their business toolbox - tools which can assist these future business managers and executives in creating value for their businesses. In the field of international business, one such tool is the ability to create an effective internationalization strategy.

Developing an effective internationalization strategy can help guide businesses to successful growth outside of their domestic markets. An effective internationalization strategy can help organizations focus their limited resources into the markets and countries where they can create the most value. An effective internationalization strategy can also help guide internal functions and departments to work effectively together to meet the business’ vision, mission, and goals.

Figure 1 depicts a model of internationalization strategy that some of the authors have employed in the instruction of MBA students. Figure one is a combination of strategies collected from previous research (Bartlett and Ghoshal, 2002; Yip, 1989) and leads the decision maker through the various steps that are required in developing an internationalization strategy.

The need for such a framework is evident as many multinational firms have failed to effectively manage their international expansions, due in part to the lack of a well-developed internationalization strategy (Phan, 2005; Chandrasekhar and Dawar, 2009). Such failures may have been in any one or more of the areas discussed within the internationalization framework, FROM NOT having a clear corporate mission/vision, from conducting incomplete country analyses and from poor execution of operational decisions.
Figure 1. Internationalization Strategy

An Effective Internationalization Strategy

The internationalization strategy illustrated in Figure 1 consists of eight distinct areas, each of which will be discussed in further detail: 1. Corporate Mission/Vision, 2. Internationalization Motivation and Objectives, 3. Business Analysis, 4. Country Analysis, 5. Industry Globalization Drivers, 6. Internationalization Strategy, 7. Entry Strategy, and 8. Operational Decisions. Each of these sections is an important part to an effective internationalization strategy, and no one part should take priority over another, nor should any one part be eliminated.

Corporate Mission/Vision

All effective strategies start with the corporate mission and vision. An effective internationalization strategy should be structured to support the corporate mission and vision. Any lack of clarity in the corporate mission and vision will only amplify itself throughout the internationalization strategy process.

Resources are available on how to develop a corporate mission/vision, and therefore this activity will not be covered in detail within this note. However, effective internationalization strategy must start with a clear and effective corporate mission/vision.

Researchers consistently assert that management commitment is critical to successful internationalization. Without commitment from the top, middle and lower-level managers are not likely to have the resource support to carry through with international projects, and senior managers are likely to pull out of such projects at the first sign of trouble (i.e., limited market share, recurring financial losses, foreign government interference, etc.).

Strategy exists at both the corporate and business unit level. Corporate strategy generally involves the choice of what businesses the organization competes in and how the various businesses units contribute value to the overall corporate profile. Although there are certainly international considerations at the corporate strategy level, the focus of this note and generally of graduate-level international business classes is at the business unit level. Therefore, our model is structured around internationalization at the strategic business unit level.

Helpful questions to help stimulate conversation may include:

What is Sprinkles’ corporate mission and vision?

What should Sprinkles consider adding or removing from its corporate mission and vision?

Internationalization Motivation and Objectives

The second area of an effective internationalization strategy involves the internationalization motivation and objectives. What is often helpful in this stage is simply
thinking through a series of questions. This can be done with a cross-functional executive team or be assigned to a lower level team and later reviewed by a cross-functional executive team.

Helpful questions to help stimulate conversation may include:

- Why does Sprinkles want to expand at this particular time?
- Why does Sprinkles want to expand internationally?
- What benefits do they expect from international expansion?
- Where does Sprinkles see their international presence five years from now?
- What are Sprinkles’ competitors doing internationally and why?
- What has been Sprinkles’ successes and challenges?

The answers to these questions are likely to be many and varied. However, there are several important motives that often emerge. The most cited motive is access to new markets. This motive can be driven simply by a proactive desire for new customers or reactively to changing market conditions in the home market, such as market saturation, falling profitability, increasing domestic regulation, or a poor domestic economy.

A second motive often involves the need to achieve lower costs and economies of scale. The more markets a company enters, the more it is able to spread fixed costs and improve overall operating efficiencies.

Another motive involves access to foreign resources. Those resources can include everything from foreign capital, affordable labor, advanced technologies, and natural endowments, such as organic and nonorganic materials, renewables and non-renewables.

A more strategic motive sometimes entails a company attempting to spread operating risk across a wider sphere. For example, an automobile manufacturer might actually reduce risk by maintaining engine plants in several diverse locations around the globe. Similarly, constructing an efficient value chain requires that each element (whether internally owned or externally contracted) be placed in the most efficient and effective location possible.

Another strategic motive might be the desire to exploit one’s core competencies. Once a firm has built a core competency, it often makes sense to capitalize on that competency in as many places as possible and as quickly as possible, particularly if the competency is likely to be quickly replicated by competitors.

In the case of Sprinkles, they were approached by leading franchise operator M.H. Alshaya to license their business in the Middle East. Now, they should consider being more pro-active in developing their internationalization motivation and objectives.

**Business Analysis**

Conducting a formal business analysis takes the motivation and objectives a step further. Specifically, what are the organization’s core competencies? Core (distinctive) competencies are the product of firm resources and capabilities (Prahalad and Hamel, 1990). Firm resources represent internal assets such as patents, brand equity, reputation, and knowledge. Capabilities are internal skills and practices that a firm possesses such as manufacturing processes, research and development, sales, distribution, and financial control. Distinctive competencies arise when
an organization is able to use certain capabilities with certain resources so well that a rival is not able to duplicate the result. A good test of distinctiveness is when this competency enables the organization to deliver superior customer value.

According to Prahalad and Hamel (1990), three tests should be applied to determine an organization’s core competencies: 1) it should provide potential access to a wide variety of markets, 2) it should be perceived as a significant contributor to customer benefit(s), and 3) it should be difficult for competitors to imitate.

Possible sources of global competitive advantage that have been identified in the literature include:
- transferring core competencies
- production economies of scale
- global experience
- logistical economies of scale
- marketing economies of scale
- product differentiation
- local responsiveness
- proprietary product technology

In terms of internationalization, an important question that must addressed is whether an organization’s core competencies are transferrable. If it will be difficult to transfer a core competency (e.g., brand loyalty, technological superiority) into international markets, then internationalization may not be easily or successfully achieved.

Given that strategy is ultimately about finding ways to deliver superior value, another important concept is the value chain. According to Porter (1985), the value chain represents each major stage where value is added, from conception to end use. The chain includes core processes, including research and development, suppliers, production, marketing, distribution, and ultimately final customers. Along the way, corporate services support the core processes. A well-designed value chain in itself can actually be considered a core competency. Therefore, it is important for a firm to analyze its value chain in order to identify weak points where greater value could be added and opportunities for improving the process.

There are obvious international implications for value chain analysis and design. For example, automobile manufacturers often require their suppliers to be located within a specified geographic radius in order to minimize the costs of transportation and maximize the speed of input deliveries. By exploiting both upstream and downstream information, firms are able to optimize their value chains and sometimes even create new business models, especially when they are able to bypass intermediaries and/or create innovative solutions.

Helpful questions to help stimulate conversation may include:

- What are Sprinkles’ competitive advantages?
- What are some of Sprinkles’ core competencies and capabilities?
How transferrable are Sprinkle’s core competencies to other countries and foreign markets?
What are the key considerations in designing Sprinkles’ value chain as they expand internationally? Which materials should be sourced locally and which from abroad?

Students may suggest that Sprinkles’ competitive advantages include being the world’s first cupcake bakery, its commitment to the freshest of ingredients, innovation with the cupcake ATM, and innovation with combining cupcakes with ice cream at their bakery locations.

The core competencies and capabilities of Sprinkles may include the ability to innovate - developing new and tasty cupcakes, ice creams and other food recipes. The competencies may also include the ability to innovate new retail channels such as the cupcake ATM.

The question around transferability of Sprinkles’ core competencies should lead to debate among the students. Some students may argue that Sprinkles’ ability to innovate product and service offerings will be easily transferrable. Others may argue that Sprinkles has no competitive advantage that cannot be easily copied internationally and is therefore doomed to fail if they continue to expand internationally.

Finally, Sprinkles’ value chain analysis could lead the discussion in multiple directions. How should Sprinkles’ decide what to purchase locally and what to source globally; from raw material ingredients for the cupcakes and ice cream, to equipment for the kitchen and displays, decorations, tables, and chairs, for the bakery? What process might the students propose for making these decisions? Separating the class into groups to draft a process flow chart may be useful in discussing potential value chain analysis decision processes.

Country Analysis

Conducting a country analysis of potential countries for Sprinkles Cupcakes to consider is an important exercise. A common and useful tool is the CAGE analysis framework (Ghemawat, 2001), which is shown as Table 1. Students could use the framework to identify and evaluate a list of countries along each of the CAGE dimensions (Cultural, Administrative, Geographical, and Economic distance). This exercise would then help students identify a subset of countries which Sprinkles might consider.

Detailed country analyses are critical to an internationalization strategy and should be conducted on all potential countries of interest. A funnel type of approach should be used, beginning with a large number of countries that are considered and analyzed with broad tools (i.e., criteria that are viewed as important to the firm). The CAGE framework could be used to help screen and filter countries from a large population to a much smaller subset. Once a handful of countries have been identified, then more detailed country analyses should be completed, possibly including several introductory visits to the countries to obtain first-hand knowledge.

Helpful questions to help stimulate conversation may include:

*Using the CAGE framework, what countries should Sprinkles consider expanding?*
*Using the CAGE framework, what countries should Sprinkles avoid?*
*Which of the CAGE dimensions is most relevant to Sprinkles? Why?*
Figure 2. CAGE Framework (Ghemawat, 2001)
Industry Globalization Drivers

Aside from internal issues, the external industry environment can have a significant effect on internationalization potential. Yip (1989) discusses four key globalization drivers for industries: market, cost, competitive, and government (see Figure 3). These drivers can either increase (or decrease) the potential motivation of an industry or particular business to pursue globalization of markets or globalization of production.

For example, market drivers include common customer needs and tastes, global customers and channels, transferable marketing, and leading countries. These market drivers may cause companies to seek globalization. Similarly, cost drivers include global scale economies, steep experience curve, favorable transportation costs, differences in country costs (including foreign exchange), high product development costs, and fast-changing technology. These cost drivers could either positively support a company or industry to move towards globalization or negatively support a company or industry to move away from globalization.

Competitive drivers may include high exports and imports, interdependence of countries, competitors from different countries, globalized competitors, transferable competitive advantage, and equally application in service businesses.

Using this industry globalization framework, the key work to be completed in developing an internationalization strategy is to analyze a particular industry and business and determine which industry drivers are present for that industry or business. This detailed analysis can be utilized in conjunction with a similar business and country analysis and collectively be used as inputs into selecting the proper internationalization strategy. The flow of this analysis is illustrated in Figure 1.

![Figure 3. Industry Globalization Drivers (Yip, 1989)](image)
Helpful questions to help stimulate conversation may include:
Which of Yip’s (1989) four industry globalization drivers might impact Sprinkles and the global baked goods market?
What are some Market drivers for the global cupcake and baked goods industry?
What are some Cost drivers for the global cupcake and baked goods industry?
What are some Competitive drivers for the global cupcake and baked goods industry?
What are some Government drivers for the global cupcake and baked goods industry?

**Internationalization Strategy**

After analyzing both firm-specific advantages, industry globalization drivers, and other external factors, a firm is able to assess the importance and appropriateness of internationalization to the goals of the firm. Assuming a firm has determined that internationalization is important and appropriate, a strategy for internationalization must be developed. Such a strategy involves answering several questions:

Which value chain elements are involved?
Where to compete?
How to compete?

The model shown in Figure 4 characterizes appropriate internationalization strategies along with the relevant elements involved. The model is not intended to be prescriptive but rather descriptive. However, it does identify the key decisions that must be made in order to formulate an appropriate internationalization strategy.

A firm’s internationalization strategy can be defined as the actions that managers take to attain the goals of the firm. Profitability can be defined as the rate of return the firm makes on its invested capital. Profit growth is the percentage increase in net profits over time. The more value customers place on the firm’s products, the higher the price the firm can charge for those products. The value created by a firm is measured by the difference between $V$ (the price that the firm can charge for that product given competitive pressures) and $C$ (the costs of producing that product). Firms can increase their profits by adding value to a product so that customers are willing to pay more for it or by lowering the costs. There are two basic strategies for improving a firm’s profitability: a differentiation strategy or a low cost strategy.

Strategic Positioning. A central tenet of the basic strategy paradigm is that in order to maximize its long run return on invested capital, a firm must: 1) pick a position on the efficiency frontier that is viable in the sense that there is enough demand to support that choice; 2) configure its internal operations so that they support that position; and 3) make sure that the firm has the right organization structure in place to execute its strategy. The value chain is one model for helping to design a strategic position. (Hill, 2014)

A common tool for selecting a broad international strategy is the Bartlett and Ghoshal (2002) international strategy 2x2 matrix. In this matrix, firms should identify the pressure for local adaptation that exists in a particular industry and the pressure to reduce costs that the firm
experiences in that industry as well. Based upon these two dimensions, the firm can effectively select which international strategy may best be suited for the product or product category.

Helpful questions to stimulate conversation may include:

Which internationalization strategy (Home Replication, Multi Domestic, Global, or Transnational) might be the most appropriate for Sprinkles? Why?
What details should be included in their internationalization strategy stated above?

Entry Strategy

The entry strategy centers around two decisions: location and mode. Location has been discussed on a broad scale under country analysis, but can be focused more narrowly to cities and specific locations in a city for a given country. A sample framework is provided that could be useful in location analysis. It is often referred to as a factor rating tool, but allows for managers/executives to place quantitative analysis on more typical qualitative questions. Figure 4 shows a location Analysis Factor Rating tool that could be used in developing an entry strategy for Sprinkles.
Mode of entry involves the various forms of market entry which are available to organizations, including: exporting, licensing, franchising, joint ventures, and wholly owned subsidiaries.

Discussion of which of these modes of entry is available and preferable to Sprinkles Cupcakes should lead to an interesting class discussion. Students should realize immediately that exporting cupcakes from the US would not be a preferable solution. However, discussion around whether franchising, joint ventures, and wholly owned subsidiaries is a more preferred method becomes less clear.

Helpful questions to help stimulate conversation may include:

*Which location(s) should Sprinkles prioritize? Why?*
*Which mode of entry should Sprinkles pursue for each country? Why?*
*How can the location analysis factor rating be used to help make qualitative decisions more quantitative?*

**Figure 4. Location Analysis Factor Rating (example), Scale: 1 to 5, with 5 the highest**

<table>
<thead>
<tr>
<th><strong>Location Factors</strong></th>
<th><strong>Weight</strong></th>
<th><strong>A</strong></th>
<th><strong>B</strong></th>
<th><strong>C</strong></th>
<th><strong>D</strong></th>
<th><strong>E</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Size</td>
<td>30</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Labor Availability</td>
<td>20</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Competition</td>
<td>21</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Country Regulations</td>
<td>14</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Supply of Raw Materials</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Ranking</strong></td>
<td><strong>100%</strong></td>
<td>2.92</td>
<td>2.27</td>
<td>2.48</td>
<td>3.27</td>
<td>2.33</td>
</tr>
<tr>
<td></td>
<td><strong>2</strong></td>
<td><strong>5</strong></td>
<td><strong>3</strong></td>
<td><strong>1</strong></td>
<td><strong>4</strong></td>
<td></td>
</tr>
</tbody>
</table>
Operational Decisions

Operational decisions include (but are not exclusive to) areas of organizational structure, human resources, marketing, and production. Each of these areas requires attention and could be used to spark discussion among the students. Questions that could be used to stimulate discussion include but are not limited to the following.

**Organizational Structure**
- What organizational structure would be appropriate for the Sprinkle’s international ventures?
- What decisions are foreign stores allowed to make? Local original recipes? Modification of recipes? Substitution of ingredients? Decoration of the stores? Prices that can be charged? How much centralization/decentralization of decisions will be allowed?

**Human Resources**
- Does opening an international location require foreign owners/operators to spend time at a US location?
- Should Sprinkles assign US owner/operators at a foreign location for a period of time to train the local employees and staff?
- What similarities and differences should there be in regards to pay and benefits of local employees as compared to US employees?

**Marketing**
- How should Sprinkles market the products for each particular country? Are the target customers the same for each foreign country and are they the same demographic as in the US?
- Should Sprinkles include foreign locations on their US website and in their marketing in the US? Why or why not?
- How similar or different should the appearance of the stores be than in the US?

**Production**
- What changes in recipes or new products, if any, should Sprinkles consider for each foreign country?
- Which raw materials should be sourced locally and which should be sourced from the US?
- What equipment requirements will there be for each foreign location?
- How will the foreign locations ensure quality control?
- How will the foreign location employees and staff be trained?
Summary

The Sprinkles Cupcake case is a case that allows business students to improve their skills in creating an internationalization strategy for a growing business. While the solutions may not be black and white for the company, the value of discussing a framework for creating an internationalization strategy and for utilizing tools to help create a strategy should prove useful in training future business leaders to meet the growing demands of a global economy.

REFERENCES


HYUNDAI CARD COMPANY: STRATEGIC CHALLENGES IN CHANGING ENVIRONMENT: INSTRUCTOR’S NOTE

Boram Han, Ewha Womans University
Jeonghwan Lee, Myongji University
Seungho Choi, Ewha Womans University*

CASE DESCRIPTION

The primary subject matter of this case concerns differentiation strategy of Hyundai Card as a late entrance. Secondary issues examine include strategic challenges in changing environment. The case has a difficulty level of two, appropriate for sophomore level. The case is designed to be taught in 2 hours and it expected require 2 hours of outside preparation by students.

CASE SYNOPSIS

This case study examined Korean credit card industry, focusing on the case of Hyundai Card Company. Even though Hyundai Card entered lately into the credit card industry, it rapidly grew. Furthermore, under the hostile condition of overall credit card market, CEO Tae-young Chung took in charge of Hyundai Card and made its’ successful restructuring.

Hyundai Card differentiated its services from other competitors by providing different card services based on customer’s life style. Based on segmentation Hyundai Card provided the ‘alphabet series cards’. For example, ‘M’ card stands for ‘Motor’ which provides the benefit related to automobiles. Chung directed Hyundai Card to be a design-oriented company. This innovative design brought a great attention from the public. Moreover, as Hyundai Card focused on differentiation, Hyundai Card implemented aggressive marketing by organizing cultural events. Also, in 2005, Hyundai Card formed a joint venture with GE Capital. By forming this strategic partnership with GE Capital, Hyundai Card raised its capital and obtained GE’s advanced risk management and credit management know-how. To emphasize the efficiency of its operation, Chung implemented new human resource practices. To keep Hyundai Card’s innovativeness, he developed organizational culture that emphasizes talents, diversity, open communication, and effective decision-making process.

However, in 2012, the Korean government announced the Credit Card Market Structure Improvement Plan, which limits the growth of credit card industry. Moreover, to deter customer’s excessive consumption, Korean government encourages the usage of debit card instead of credit cards. In addition, intense competition and imitation of competitors deteriorate Hyundai Card’s growth. As the overall market size has been shrunken, the industry members’ competition is getting intense. While Hyundai Card’s cultural event and market segmentation succeed in grasping customer’s attention, competitors imitate its’
strengths. By facing these challenges, Hyundai Card should proactively respond to them and find ways for its future growth.

TEACHING OBJECTIVES AND ASSIGNED QUESTIONS

This case study’s overall object is to enhance readers’ thorough understanding of Korea Credit Card industry and to know successful strategies of Hyundai Card, which was a late mover to a highly competitive Korean credit card market. This case also explains the evolution of Korean credit card industry. By analyzing the Hyundai card’s key success factors, students learn about Hyundai Card’s differentiated strategy. The following three assignment questions would help readers to achieve the reading goal.

(1) What were the key success factors that enable Hyundai Card to successfully position in the Korean credit card industry?
(2) How has the new policy of Korean government in 2012 affected the Hyundai Card Company?
(3) How can Hyundai Card overcome current Hyundai Card Company’s challenges?

What were the key success factors that enable Hyundai Card to successfully position in the Korean credit card industry?

To survive the intense competition as a late entrant in the Korean credit card market, Hyundai Card needs to differentiate its credit cards from others.

First, Hyundai Card segments the market by life style of consumers. Hyundai Card adopted brand portfolio in the card industry. Hyundai Card launched credit cards based on the consumers’ different needs.

Second, Hyundai Card differentiates its services by focusing on credit card design. Innovative card design such as transparent card and side plate painted card gained the attention from the customer and successfully established its unique brand image.

Third, Hyundai Card aggressively organized various cultural events such as Super Concerts, Super Matches, and Super Talks. These cultural events gave consumers unique experiences leading to enhance customer loyalty.

Fourth, by forming a joint venture with GE, Hyundai Card obtained GE’s know-how of operating credit card business.

Fifth, CEO Chung Tae-young’s leadership changed Hyundai Card to be a more efficient and innovative company. Chung implemented effective communication systems and new management practices. Under the supervision and leadership of Chung, Hyundai Card has developed organizational culture that emphasizes talents, diversity, open communication, and effective decision-making process.

How has the new policy of Korean government in 2012 affected the Hyundai Card Company?

Overall the new policy of Korean government affected Hyundai Card unfavorably. The new regulations have following implication to Hyundai Card. First, by strengthening the qualification of the applicants, the overall credit card market size has been shrunk. Second,
the new regulation includes the increased tax deduction on debit card payments up to 30% from 25% and it reduced tax deduction benefits of credit cards to 25% from 30%. It encourages usage of debit cards rather than usage of credit cards. As the main debit card issuers are bank-controlled companies, Hyundai Card Company, non-bank controlled company, might lose its market share to bank-controlled firms. Third, the credit card companies should lower the merchant fee to small merchants down to 1.5% from 1.8% of transaction amount and should have raised the fee for large merchants to 2% of transaction from 1.5%. As the main income of the credit card companies comes from the merchant fees of small merchants, Hyundai Card’s profit might decrease. Fourth, credit card companies also should publicly announce its interest rate and make customers easily compare their interest rates with other firms’ interest rate. Hyundai Card compete to lower its interest rates with other firms.

**How can Hyundai Card overcome current Hyundai Card Company’s challenges?**

In order for Hyundai Card to overcome current Hyundai Card Company’s unfavorable financial situation, the company should alter current strategy, which pursues wide and various products of portfolio and aggressive marketing.

Scrutinizing past success factors is crucial in altering strategic direction. Hyundai Card need to reduce its wide product lines. Overall, Hyundai Card’s net profit is threatened by government policy and competitors imitation. Therefore, Hyundai Card’s effort to reduce redundant operating cost is necessary. Therefore, through value evaluation of their product line, Hyundai Card should eliminate the redundant product which cost more than profit.

Currently, Hyundai Card has pursued aggressive marketing activities by organizing massive cultural events and they contributed to build its reputation. However, in the current situation, Hyundai Card should evaluate the effectiveness and efficiency of these events. Also, while Hyundai Card’s cultural events are imitated by competitors, Hyundai Card need to discover the way to differentiate its events from competitors’ imitation. Moreover, as Korean government encourages customer’s debit card usage, Hyundai Card should consider its debit card service. While Hyundai Card is non-bank controlled credit card company, enrolling the debit card users requires efforts and time. Therefore, Hyundai Card Company might make its existing customers to use not only its credit cards but also debit card by providing additional benefit.

**ACKNOWLEDGEMENT**

Seungho Choi is a corresponding author (Tel: +82-2-3277-4138, choise@ewha.ac.kr).
ORACLE: STACKING HIGH THROUGH TECHNOLOGY INTEGRATION

Instructor’s Note

Myungseon Song, Ewha Womans University
Yoo Jin Jung, Ewha Womans University
Jiwon Oh, Ewha Womans University
Seungho Choi, Ewha Womans University

CASE DESCRIPTION

This case describes how Oracle manages technology integration, one of the post-acquisition issues derived from vigorous acquisitions on multiple product stacks. Specifically, Oracle faces difficulties in managing and integrating acquired companies with respect to technology integration, resulting in problems in product compatibility and security instability. This case provides an overview of Oracle within the software industry. The case can be covered in one class period. Student preparation time of two hours will suffice. The case can be used for the topic of international business and strategy. The case has a difficulty level appropriate to students leveling to juniors in bachelor’s degree for business.

CASE SYNOPSIS

In the software industry, merger and acquisitions have been one attractive approach in accelerating technological innovation, since internal development for technology would otherwise require substantial capital investment and time. Under the hypercompetitive software market, establishing a complete and full software stack has become critical for software companies. In “stack war” among major software companies, Oracle has successfully exploited the opportunities and equipped itself with the most expanded stack through acquisitions. This has contributed to strengthening Oracle’s core competencies in the IT industry as well as gaining outstanding financial performance for decades.

Although Oracle succeeded in vertically expanding its product stack from application to database, systems, and storage: the so called “Oracle’s Red Stack”, by implementing vigorous acquisition in multiple product stacks, Oracle faced several difficulties in integrating all the components into one compatible system. Arising problems such as product compatibility and security instability cast doubt on whether Oracle is sufficiently capitalizing on the benefits from acquiring IT vendors with specific functions that Oracle had required. How can Oracle resolve the associated complexity involved in post acquisition integration and maximize its synergy from aggressive acquisitions?

Discussion Questions

1. What are the major success factors of Oracle?
Vigorous Acquisitions
Oracle has completed over 100 acquisitions between 1994 and 2013. Oracle’s aggressive acquisitions have accelerated the completion of their total software stack much faster than internal development. By acquiring necessary technology from acquired firms, Oracle was able to deliver increased value to its customers by extending its product offerings.

The Charismatic Leadership of Larry Ellison
Larry Ellison managed Oracle over 30 years and established it as the world’s largest database software company with his ambition and insights. Larry Ellison pursued acquisitions to eliminate its competitors and acquire advanced and new technology. Also, he paid close attention to recruit highly intelligent and self-motivated people who are able to improve Oracle’s system, processes, and outcomes.

2. What are the potential strategic issues Oracle could face?

Technology Integration among Software Products
Oracle’s attempt in becoming the leader of the software industry through aggressive acquisitions has brought technology integration problems between acquired software and its existing software. Although acquiring new technologies into Oracle’s product stack helps them establish a complete set of software services, integrating new technology with the existing technology generates challenges for Oracle. For example, when Siebel was acquired, Oracle struggled in making Siebel’s CRM product compatible with platform of Oracle because it was based on IBM’s platform. In addition, after Sun Microsystems’ acquisition, their main product, Java, experienced security problems. Hackers had exploited vulnerabilities of Java, and targeted attacks on Java users such as Microsoft, Apple, and Facebook, etc. This case represents Oracle’s failure in fully integrating the acquired systems into the existing one.

Employee Retention
Oracle faces challenges to retain employees of acquired firms after acquisitions. When Peoplesoft was acquired by Oracle, nearly 50 percent of its employees voluntarily left the company since they are not satisfied with the acquiring firm’s system, value, and culture. The loss of human capital of acquired firm leads to loss of technology and knowledge embedded in employees. It leads to difficulty to stimulate technology integration, communication, and cooperation between target firms and Oracle, hampering efficient management of post acquisition integration.

3. Given Oracle is not effectively integrating software products of acquired companies into one compatible system, how can Oracle improve and facilitate its technical integration among software products that are developed by diverse acquired companies?

Establish Integration Tower
Integration Tower would be responsible for planning, organizing, and managing the entire acquisition process. By establishing the department in charge of overseeing the whole acquisition process, Oracle can systematically handle and concentrate on acquisition management.
Integration Tower tackles mainly two parts of post acquisition issues: technology sharing and human resources.

1. Sharing Center

The Sharing Center is a program within the Integration Tower that educates the acquired employees about Oracle’s software stack, its entire corporate processes, systems, and technologies. Education within a group of employee is critical in directing the employees from different backgrounds towards a certain unified direction. The lack of understanding on each other’s systems can be considered as one of the main causes for product incompatibility and security instability. Therefore, acquired employees must be educated on how their technological knowledge can be contributed to Oracle’s overall product integration. It would significantly raise the acquired employees’ commitment towards Oracle and help them find ways to contribute to Oracle’s product development. Also, when Oracle’s employees know the specifics of the acquired company’s technologies, it would facilitate its understanding and use, improving efficiency in finding a way to make products compatible, and minimize technical problems.

2. Employee Retention Policy

Under the purpose to retain key employees from the acquired companies, it is crucial to identify core talents to maximize the use of technology it is acquiring and to build emotional and interpersonal connection with the prospective employees to resolve possible incongruity.

First, the Integration Tower can classify the employees according to their roles, functions, skills, and abilities early in the acquisition process to attain the needed technological knowledge and skills while maintaining the optimal size of the company. According to the research from Towers Watson, companies that identified top talents early in the acquisition process were 2.5 times more successful than those that retained employees after the deal (Cianni, 2012). Therefore, it is needed for Oracle to identify the core human resources as soon as possible to manage the core talents and thus increase the synergy in terms of technology integration. Even though identifying essential talents early in the stage where acquisition deals are not closed is often difficult because of limited access to the employee information of the acquired companies, informal steps are available in advance to assess the prospective employees.

Second, the Integration Tower can provide attractive conditions to the prospective employees through retention agreement. It is crucial in developing the agreement to recognize the value while simultaneously appealing to the individual’s financial, emotional, or interpersonal interests. With the informal employee information gathered during the preliminary assessment, Oracle can effectively identify the needs and wants of the prospective employees and prevent any personal problems that can possibly occur after the acquisition. Furthermore, by being offered retention agreement through personal contacts from Integration Tower management of Oracle, employees in target firms can not only develop interpersonal connections with Oracle in advance but also have a sense of being respected by the acquirer.

Third, the Integration Tower can provide various programs to build strong connections between the prospective employees and Oracle’s existing employees. Specifically, the Integration Tower can facilitate incorporation of the target employees by pairing up a target key employee with Oracle employees. While developing higher engagement into organization
process, corporate mission, and goals with the help of existing Oracle employees, the acquired firm’s key employees would ultimately enhance understanding on Oracle overall system and culture as well as being encouraged teamwork amongst employees.

ACKNOWLEDGEMENT

Seungho Choi is a corresponding author. Assistant Professor, Department of Management, Ewha School of Business, Ewha Womans University, Seoul, South Korea
Email: choise@ewha.ac.kr