NAME / NOMBRE: STRATEGIC PRODUCT CREATION

PROFESSORS / PROFESORES:

T. Laseter

TERM / TRIMESTRE: Second Term

IESE Business School
Universidad de Navarra

INTRODUCTION / INTRODUCCION

New products offer the lifeblood of any dynamic business organization. Given the increasing use of cross-functional teams in corporate product creation, you may have the opportunity to be a part of this critical process regardless of your planned functional focus. This course will draw upon the recently published book "Strategic Product Creation" (McGraw-Hill, December 2006) coauthored by the course professor. The book takes an executive view of managing corporate product development drawing upon the experiences of global organizations such as Disney Imagineering, Procter & Gamble, Mars Incorporated, Whirlpool Corporation, United Technologies, and IBM. The course will be largely case-based covering a range of industries from software development (Activision) to automotive (GM) but also include some hands on exercises and a group simulation.

OBJECTIVES / OBJETIVOS

This course offers a general management view of product creation by exploring frameworks and case examples from a wide range of industries. It should serve students well who seek a career in a corporate environment or as a consultant serving large corporations.

CONTENT / CONTENIDO

Broadly, the course will examine the key processes in corporate product creation including:

- Product Creation Leadership
- Product Idea Generation
- Technology Capabilities
- Product Creation Process Design
- The Competitive Product Portfolio
- People and Project Management
- Innovation Partnerships

In addition to exploring the general processes of corporate product creation, students will conduct research supported by executive interviews to compare and contrast differences across industries such as:

- Consumer Packaged Goods
- Durable Consumer Products
- Industrial Equipment
- High Tech Software and Hardware
- Pharmaceuticals
- Services

This class will engage in a Socratic dialogue via a mix of case discussions and student report outs and accordingly demands active student participation:

- Prepare the cases and participate in class discussions
- Share personal experiences and research findings
- Actively work in preparing the assignments
- Use personal as well as instructor contacts to conduct field research
- Participate in selected exercises individually and as a team

METHODOLOGY / METODOLOGIA

The course will consist of some mini-lectures and exercises but mostly case discussions and student presentations. Prior to each session, students will typically have several pages of reading of cases, technical notes or book chapters. While a typical case will be accompanied by a list of assignment questions students should think beyond the assignment and engage in debate of the key managerial issues. Although the assigned readings for the course are not overly onerous, reflection and preparation in advance of the class will be critical to reaping the rewards of the material. Students are encouraged to form "learning teams" to discuss cases and to collaborate on assignments but must always indicate collaborators when submitting individual assignments.

EVALUATION / EVALUACION

There will be three major elements to formally evaluating performance. The weight for each element is as follows:

- Class Contribution 40%
- Individual Research Paper and Group Presentations 30%
- Group Simulation and Write-up 30%

The individual research paper will cover an industry of your choice but you will be allowed to collaborate with others in conducting research and interviews with business executives and consultants. The group will jointly develop a presentation to facilitate a class discussion around the industry selected by the group. A group simulation exercise will be held with time allotted during the normal class time for initial planning as a team. Most teams will invest further time to complete the simulation which is not interactive with other teams and accordingly can be completed at your own pace. The team will collectively prepare a three page summary of their plans, results, and learning from the exercise as input to a class session dedicated to discussing the results.

STUDENT PROFILE / PERFIL DEL ESTUDIANTE

There are no specific requirements

FACULTY / CLAUSTRO

Prof. Tim Laseter
Visiting Professor of Production, Technology and Operations Management

Doctor of Philosophy (Operations Management), Darden Graduate School of Business, University of Virginia
Master of Business Administration, Darden Graduate School of Business, University of Virginia
B.S. Industrial Management, Georgia Institute of Technology

Formerly a Booz Allen Hamilton partner and faculty member at the Darden School at the University of Virginia

ADDITIONAL INFORMATION / INFORMACION ADICIONAL

Number of credits / Número de Créditos
1

Language / Idioma
English

Session One: Monday, 12 November, 2007

Objective: Introduce course and set expectations.

Case: The Fate of the Vasa, HBS Case 9-605-020

Reading: Chapter 1, "Product Creation Leadership: Delivering Business Results", Strategic Product Creation (McGraw-Hill, December 2006)

Assignment: Read the assigned materials and come prepared to discuss the following questions:

1. Why did the Vasa sink to the bottom of Stockholm harbor after sailing only 1400 yards on its maiden voyage?
2. Could this failure have been avoided?
3. What lessons for business today can we draw from this 380 year old story?

Session Two: Tuesday, 13 November, 2007

Objective: Exploring the Ideation process through some hands-on exercises.

Case: None. Class exercise instead.

Reading: Chapter 2, "Product Idea Generation: Sensing Customer Needs and Market Opportunities", Strategic Product Creation (McGraw-Hill, December 2006)

Assignment: Read the assigned materials and come prepared to conduct an in-class exercise on ethnographic research.

Session Three: Monday, 19 November, 2007

Objective: Managing fundamental research versus product development.

Case: Reinventing the Automobile: General Motors' AUTOnomy Project, HBS Case 9-604-064

Reading: None

Assignment: Read the assigned materials and come prepared to discuss the following questions:

1. What is your evaluation of GM's strategy and organization for developing fuel cell technology?
2. What explains the different approaches to this technology among GM's competition, in terms of technical choices, make/buy decisions, levels of investment and overall enthusiasm?
3. Should Burns pursue the approach to fuel cells embodied in AUTOnomy or adopt a more incremental approach? Why/why not?
4. Should Burns divert money from its fuel cell program to invest in hybrids? Why/why not?

Session Four: Tuesday, 20 November, 2007

Objective: Considering organizational models for research & development in a corporate environment.

Case: Intel Research: Exploring the Future, HBS Case 9-605-051

Reading: Chapter 3, "Technology Capabilities: Separating Invention and Execution", Strategic Product Creation (McGraw-Hill, December 2006)

Guest: Ian McGavisk, Vice President and General Manager, Ametek.

Assignment: Read the assigned materials and come prepared to discuss the following questions:

1. Why do firms get blindsided by new technologies? Is Intel more or less prone to this problem?
2. Evaluate Tennenhouse's approach to designing an exploratory research organization? What are its main elements? How do these elements work together? How could its design be improved?
3. Should Intel fund projects like PlanetLab and Sensor Networks? How do they generate value?
4. How can Tennenhouse measure the performance of his organization? And of the Berkeley Lablet?

Session Five: Monday, 26 November, 2007

Objective: Understanding the stage-gate process of product development.

Case: Activision: The *Kelly Slater's Pro Surfer* Project, HBS Case 9-605-020

Reading: Chapter 4, "Product Creation Process Design: Leveraging Discipline and Judgment", Strategic Product Creation (McGraw-Hill, December 2006)

Assignment: Read the assigned materials and come prepared to discuss the following questions:

1. What are the competitive dynamics of the video game industry in 2002? What does Activision need to do well to compete effectively in this industry?
2. Evaluate Activision's Green Light process for game development? What are its strengths and weaknesses? How would you improve this process?
3. When should Activision launch the "Kelly Slater Pro Surfer" game? Be prepared to share your reasoning AND your analysis in class.

Note: A spreadsheet with the financial projections for KSPS from Exhibit 13 is available from the professor for your use.

Session Six: Tuesday, 27 November, 2007

Objective: Defining the role of outside parties and the processes for integrating them into product development.

Case: Whirlpool Corporation: Supplier Innovation, UVA Case OM-1192

Reading: Chapter 7, "Innovation Partnerships: Connecting the Extended Enterprise", Strategic Product Creation (McGraw-Hill, December 2006)

Assignment: Read the assigned materials and come prepared to discuss the following questions:

1. Will the supplier innovation process that Mark developed be effective? What are its best and worst characteristics?
2. What criteria should Mark use to determine the quality of the supplier innovation ideas?
3. Rate the three supplier ideas using the criteria that you developed. Which of the three offers the best opportunity for Whirlpool?
4. What suggestions do you have for improving the innovation process at Whirlpool? For rewarding employees and suppliers?

Session Seven: Wednesday, 28 November, 2007

Objective: Gain a practitioner's view on supplier involvement in new product development.

Case: None.

Reading: None/TBD

Guest: Marco Kesteloo, Vice President, Booz Allen Hamilton, Inc.

Assignment: Come prepared to listen and then ask engaging questions of our guest.

Session Eight: Monday, 3 December, 2007

Objective: Developing products within overall product architecture.

Case: Carrier Corporation, Montluel, France: The Aquasnap Design Project, UVA Case OM-0972

Reading: Chapter 5, "The Competitive Product Portfolio: Integrating Process and Product Architecture", Strategic Product Creation (McGraw-Hill, December 2006)

Assignment: Read the assigned materials and come prepared to discuss the following questions:

1. How should Thierry Jomard think about the Aquasnap decision?
2. Should he go ahead with the idea of integrating the hydronic kit into the air conditioner? What if doing this will delay the launch date by a year? Assume a discount rate of 15 percent. Also, assume that with tightening environmental regulations, neither of the current concepts will be feasible beyond 2002. Analyze the information you have and think about what other information, if any, might impact your recommendation.
3. What would you want to ask Thierry Jomard about that might impact your recommendation?
4. What are the challenges in designing a "global" product like the Global Chiller? What organizational or other changes can help manage these challenges?

Session Nine: Tuesday, 4 December, 2007

Objective: Developing an appreciation for global product design and sourcing through a simulation exercise.

Case: Global Supply Chain Simulation, HBS

Reading: Global Supply Chain Simulation Instructions

Assignment: Engage in the simulation with your assign teams:

Session Ten: Monday, 10 December, 2007

Objective: Exploring the challenges of managing people in the product development context.

Case: AvantGo, HBS Case 9-601-095

Reading: Chapter 6, "People and Project Management: Inspiring and Leading the Workforce", Strategic Product Creation (McGraw-Hill, December 2006)

Assignment: Read the assigned materials and come prepared to discuss the following questions:

1. What are the differences in managing product development staff versus staff in other company functions?
2. What experience have you had with forced-curve appraisal systems? What are the pros and cons?
3. What would you advise Owen to do regarding the human resource system…and his informal feedback regarding his senior manager?

Session Eleven: Tuesday, 11 December, 2007

Objective: Share research into industry development practices

Case: None.

Reading: TBD.

Assignment: Group discussions will be organized around common industry choices of the individual papers.

Session Twelve: Wednesday, 12 December, 2007

Objective: Sharing the learning from the simulation exercise, your industry research, and the course overall.

Case: Global Supply Chain Simulation, HBS

Reading: TBD.

Assignment: Come prepared to discuss your learning from the simulation exercise and to present your industry research if assigned.