

**Graduate School of Management
Department of Marketing
University of California - Davis**

**MGT 241: New Product Development
Spring 2013**

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Course Objectives

Each year, in the US, approximately 30,000 new consumer products (i.e. CPG products) are launched. About 95% of them are failures (see Carmen Nobel (2011), *Clayton Christensen's Milkshake Marketing*). For other product categories the failure rate ranges from 40%-60%. Why is this so? Even though firms have a long history of bringing new products to the market, why do a majority of them fail? As evident from this fact, bringing a new product to market is fraught with uncertainty, and the odds are stacked against you (quite heavily!). While no course can ensure success for every new product introduction you might make, this course will help you think of ways to reduce the possibility of failure – i.e., we will study the challenges of bringing new products to market, and discuss avenues to possibly overcome them. The topics discussed are relevant whether you work for a startup or Fortune 500 firm or whether your firm focuses on the B2B or B2C space. The course focuses on state of the art frameworks, concepts and tools that have been recently validated by innovative companies. We will structure our learning around the following basic steps of the innovation process: Opportunity identification, Idea generation, Product design, Concept testing and Launch strategies. As part of this course you will also learn to deal with multiple entities that speak 'different languages,' helping you develop the ability to communicate ideas to the different constituencies involved in the product development process – i.e., you will be the mediator between the customer and the engineer (see Group Project GP2 for more information). More information about the course follows.

Prerequisites and Course Information

Marketing Management (MGT/P/B 204)

To derive the full benefit of this course, it is **strongly recommended** that you have taken or are currently enrolled in *at least* one of the following four courses: Marketing Strategies (MGT/P/B 248); Marketing Research (MGT/P/B 249); Pricing (MGT/P/B 234); Digital Marketing (MGT/P/B 293). I will assume that you have prior knowledge of pricing and market research techniques.

Please note that due to the nature of the class and group activities, and to facilitate better interactions – the class cannot accommodate more than 40 students – so enrollment will be capped at 40. *If you are a 2nd year and are interested in this course, please register early.*

The class on 5/6 will end at 6:30pm, instead of the usual time at 6pm.

Class Rules

Academic Honor Code

There are two individual level assignments in this course. You are expected to complete the assignments on your own, without help from your peers – i.e., you are not permitted to work with others *on any aspect* of the individually graded coursework. In case you have questions regarding the material or assignments, I'm available either in my office, by phone or email and will be happy to answer your questions.

Use of Electronics in Class

You are allowed to use your laptop/tablet in class – however this use is conditional. You cannot use your laptops for any other activities other than those pertaining to the class. Hence, surfing, emailing, chatting, Facebook visits and other related activities are not allowed. If such activity is observed in class, then laptop privileges will be revoked – *for the entire class*. Smartphone/phone use is not allowed in class – you are welcome to step out of class, with my permission, if you need to answer a call.

Required Course Material

New Product Development TextPak, which consists of articles used in the lectures.

Course Requirement and Grading

The course requirements and their contribution to the overall grade are as follows:

1. Assignment 1 (HW1)	10%
2. Assignment 2 (HW2)	10%
3. Class Participation	15%
4. Group Project 1 (GP1)	15%
5. Group Project 2 (GP2)	50% (see below for grade split)
• Project Presentation	25%
• Project Written Report	25%

Field Trip

In lieu of an extra day of class, we will take a field trip to IDEO in Palo Alto. I will provide more information on this closer to the start of the course. *The field trip is scheduled from 1-2:30pm (at IDEO, Palo Alto) on 4/5/2013 (April 5th, 2013).*

Individual Component

Assignments 1&2 (HW1 & HW2)

Each assignment will consist of a case (as specified in the schedule) that will be given to you for your analysis of the issues the case discusses. Assignment questions related to each case will be handed out on the date specified in the course schedule. The due dates for each assignment are also clarified in the course schedule.

Class Participation

Meaningful class interactions enhance the learning experience. Hence, I consider class participation to be an important component of your education in this course. A lot of your learning about ideation and the creativity process will come from intensive class discussions – so, I expect that you have read all the articles assigned to each class *prior to the class* and come

prepared to discuss your insights about and analysis of the articles. Additionally, feel free to go above and beyond just the class readings – bring articles that caught your attention, any prior experience you might have had with new product development also into the conversation. Conversations that enrich the class discussion are encouraged; at the same time I will discourage conversations that might veer the class off-track. Simply speaking in class without adding constructively to the class discussion will not merit any points. Finally, while I encourage you to voluntarily participate in the class discussion, also expect to be cold called from time to time.

Group Component

At the beginning of the course I will assign students to groups that work together for the entire period of the course. Each group will consist of a minimum of 3 to a maximum of 4 students. *Please note that all group work will be subject to a peer assessment at the end.* Individuals who do not contribute their fair share to the group (*as determined by the group*) will be penalized on all their group work.

Group Observational Project: GPI

As a team, choose a category for new product development. Try not to pick too broad a category – for example, Hair Care instead of Personal Care, Coffee Shops instead of Restaurants – this way you can restrict your analysis to a very specific range of products. Use parts of the *Bootcamp Bootleg* (included in your textpak) relevant to this exercise as your guide.

Each person from the group should find one or two different venues for observation. Spend about an hour or two in each venue. Try, through observations, to learn something interesting about people's needs when using products in your chosen category. Pick a place where you can see how needs (mainstream or otherwise), cultural attitudes etc. impact people's choices. How does this affect the variety of choices in the product category? Take 3-5 photos/shoot some video (your choice). Make notes about the place and how people are interacting in the space. Interview the shoppers – *be nice*, introduce yourself, tell them you are working for a course project. Ask the customers how they use the product, what they wished could be changed, what could be adapted/improved to meet their specific tastes.

Interpret what you see in your own way (be as creative as possible). Don't just stay at sea level, dive deep into the world you are envisioning for the product category. Write at least 3 ideas that summarize your analysis. Come up with *one or two concepts* of a new product based on what you learned. Think about how some innovations might be more likely to be adopted than others. Are consumers more amenable to small changes or dramatic ones? In what categories are disruptive innovations more acceptable? Discuss your interpretations and product ideas with your group to arrive at your group's *top product concept and also come up with a name for it*.

Bring all data, and interpretations for these top ideas to class for your group's presentation of this concept. The presentation should be around 5-7 minutes (depending on the number of groups, exact time will be clarified in class). Your group should also submit a report (3 p. max, 12pt font, double-spaced, not including appendix) that lists the various concepts considered and the rationale behind choosing the top idea. *Finally, you should email me the name of your new product concept the night before the class.*

Group Project 2: GP2

This group project is meant to capture several aspects of the new product development process.

First, it will gauge (and strengthen) your ability to work with teams from a diverse set of backgrounds. Your group will engage with a team (assigned in Class 1) from the Bioengineering school. Students in the Bioengineering school are currently, as part of another course, developing a product to meet the demands of a particular customer. Your group will work with the team from the Bioengineering school on ways to enhance the product concept they are considering. Think of different ways the product can be used– are there other markets with similar needs? Could there be multiple uses for this product? Can minor modifications to the product create new opportunities beyond the current customer profile? Then, while the engineering students work on the technical part of the product development exercise, your group develops a marketing plan and launch strategy for the product. (Please note that due to time/resource constraints the engineering students might not incorporate your ideas into the product concept they are prototyping, however, you must still include your ideas in the final project submission.)

For the marketing plan, you will carry out various standard market research activities that could include, but are not restricted to, interviewing potential customers, gathering ethnographic data, forming price ranges, estimating market potential, analyzing possible competitors, developing a distribution strategy, and suggesting a promotion strategy for market introduction (is a promotion strategy even required?). If possible, run a preliminary concept test with ‘potential customers’. This might not be possible with an actual prototype, but try and judge customer reactions to the concept you develop. All these steps then help you devise a launch strategy for the product.

Finally, apart from accounting for the considerations of your marketing plan in the launch strategy, you must also develop an effective communication plan (message and channel). So your group needs to synthesize and convert the technical advances of the new product being developed into knowledge and benefits easily accessible to the average user of the product.

Remember: *a product is a solution to an existing need of the customer* – sometimes the customer is aware of the need, at other times they are not – it is your job to make this need salient through effective product design, pricing, distribution and communication.

As evident from the above description, this study is self-directed and comprehensive in terms of the different marketing concepts you will need to utilize. There are *4 deliverables* for this project. The *1st deliverable* is a one-page outline of the product market, and what you intend to study and eventually do as part of the project. The *2nd deliverable* is a three-page outline (12pt font, double-spaced) of progress till date. The *3rd deliverable* is a presentation of your final analysis, marketing plan and launch strategy. The *4th deliverable* is a 12-page (12pt font, double-spaced, not including appendix) report detailing all your analysis, marketing plan, recommendations, and launch strategy. The due date for each of these deliverables is listed in the course schedule.

Finally, all groups will meet with me two times during the quarter. The first meeting will be between 4/16 and 4/19. The 2nd meeting will be between 5/7 and 5/10. Groups must email me to set up these meetings. All members of the group need not be present at the meeting (one member is enough)– the idea behind this meeting is to provide you some feedback on your project on a continual basis.

Course Schedule

Date	Topic
Introduction to the Innovation Process	
4/1	<p>Class Logistics Assignment of groups and projects Meeting with project partners from the Engineering School (<i>Tentative</i>)</p> <p>Reading</p> <ol style="list-style-type: none"> 1. The Path to Epiphany: The Customer Development Model (Chapter 2, <i>The Four Steps to Epiphany</i>, Blank 2004)
4/5	Field Trip to IDEO
Identifying Opportunity and Assessing Market Potential	
4/8	<p>Readings</p> <ol style="list-style-type: none"> 1. Turn Customer Input into Innovation (Ulwick 2002) 2. The Customer Centered Innovation Map (Bettencourt & Ulwick 2008) 3. Blue Ocean Strategy (Kim & Mauborgne 2004) 4. Customer Discovery and Validation for Entrepreneurs (Cespedes, Eisenmann & Blank 2012) <p>HW1: a. Votizen (A) & (B) (Han & Siegelman 2012) (<i>Due: 4/15</i>)</p>
Design & Ideation	
4/15	<p>Readings</p> <ol style="list-style-type: none"> 1. Design Thinking. (Brown 2008) 2. Design Thinking and Innovation at Apple. (Thomke & Feinberg 2012) <p><i>External Speaker (TBD)</i></p> <p>GP1: Group Observational Project Assigned (<i>Due: 4/22</i>)</p> <p><i>Supplemental Readings for GP1:</i></p> <ol style="list-style-type: none"> a. Direct Observation: Some Practical Advice (Patnaik & Becker 1999, A Jump White Paper, http://bit.ly/dsCuq9). b. Bootcamp Bootleg (http://stanford.io/ipaPIa) <p>GP2 Deliverable 1: Submit a 1-page report on your product, and the market you will study. This should establish the scope of your expected project goals.</p>
Empathy & Observational Skills: A Class on Experiential & Emotional Design	
4/22	<p>In class Presentation of ‘GP1: Group Observational Project’ (Also submit all data collected and your group’s analysis <i>by email</i>)</p> <p>In Class Exercise on Design (100 minutes)</p>

Conjoint Analysis and Concept Testing	
4/29	<p>Conjoint Analysis</p> <p><i>What is Conjoint Analysis?</i></p> <ol style="list-style-type: none"> Prior to class visit: http://bit.ly/fl1dqA Also visit: http://www.sawtoothsoftware.com/solutions/conjoint_analysis Look at their short video tutorial and then demo the conjoint surveys for CBC, ACBC, ACA and CVA. <i>Come to class prepared to discuss your understanding of the method.</i> Did it work for you? What were your results from the demo? What product recommendations did you receive? How were the questions structured? <p><i>Why is it used?</i> – Reading</p> <ol style="list-style-type: none"> A Practical Guide to Conjoint Analysis (Wilcox 2003) <p>Concept Testing – Reading</p> <ol style="list-style-type: none"> Concept Testing (Dolan 1989)
New Product Launch Strategies	
5/6	<p>Readings</p> <ol style="list-style-type: none"> Hasbro Games – POX (A) & (B) (Godes & Ofek 2004, 2005) <ol style="list-style-type: none"> <i>Supplemental Reading:</i> Why Most Product Launches Fail (Schneider & Hall 2011) TruEarth Healthy Foods: Market Research for New a Product Introduction (Kasturi Rangan & Yong 2009) Kookaburra Cricket Bats: Dealing with Cannibalization (Hennessy 2012) <p>HW2: a. Metabical: Pricing, Packaging and Demand Forecasting for a New Weight-Loss Drug (Quelch & Beckham 2010) (<i>Due 5/20</i>)</p> <p>GP2 Deliverable 2: Submit a 3-page report of your progress. This should summarize what you have done till date and what you intend to do.</p>
5/13	<p>Reading</p> <ol style="list-style-type: none"> Dropbox: ‘It Just Works’ (Eisenmann, Pow & Barley 2012) <p><i>External Speaker (Tentative)</i></p>

New Topics in Innovation	
5/20	<p>Collective Intelligence – Readings</p> <ol style="list-style-type: none"> 1. Decisions 2.0: The Power of Collective Intelligence (Bonabeau 2009) 2. OpenIDEO (Lakhani, Fayard, Levina & Pokrywa 2012) <p>Frugal Innovations to Better Society – Readings</p> <ol style="list-style-type: none"> 3. Innovation's Holy Grail (Prahalad & Mashelkar 2010) 4. The New Corporate Garage (Anthony 2012) 5. A Framework for Scaling Local Innovations (Soman, Kumar, Metcalfe & Wong 2012) <p>Class Wrap-up and Discussion of GP2</p>
6/3	<p>GP2 Deliverable 3: Project Presentation</p> <p>GP2 Deliverable 4: Project Report</p>