**Course description**

In classroom discussions, cases, and guest speaker presentations, we address managing and valuing new products in various industries, with special attention given to the entertainment, media and technology business.

We ask whether Microsoft paid too much for Skype (a memorable $8.5 billion) and whether Spotify will ever be profitable; we compute the value of SiriusXM satellite radio and evaluate the possibility that the new low-priced iPhone 5se might change the decline in iPhone sales; we discuss the reasons for the decline in global sales of tablets and what Amazon’s Kindle Fire has to do with this decline; we argue about the regulatory issues facing Uber and why Lady Gaga almost went broke after completing a successful tour in 2009; and we discuss the mistakes Microsoft did when launching Xbox One and Windows 8.

We examine the notion of disruptive innovations such as the USB PD, and ask the question: To whom exactly are they disruptive? We demonstrate the power of social interactions in social networks, and why these interactions are responsible for the fact that growth of new products is a slow process, even for successful products such as portable navigation systems.

In several sessions we’ll use spreadsheets in order to explain and empirically predict the growth of new innovations. Network analysis will also be used to demonstrate the power of networks as accelerators of new product growth.

**Readings**


The book is available at the bookstore, and the cases on XanEdu. The set of transparencies used in class will be distributed in the first session, and are also available in the Resources section of NYU Classes. Additional reading are available at the course website.
Detailed course outline

The course consists of the following units:

1) Marketing strategy & new products
How do new products fit into firms’ marketing strategies? We’ll revisit the framework of marketing strategy, looking at the special role that new products play in segmentation and targeting, positioning, and growth. We conclude with the role of new products in the 4 Ps of marketing tactics.

2) Diffusion and adoption of new products
Can social contagion drive the growth of our new product? Can we identify dominant patterns? Is there a simple way to understand how customers drive the growth of an innovation? We look at examples of such growth patterns in the US and Europe, enabling understanding of why the adoption process is inherently slow.

3) Firm’s valuation of their consumers
Can we put a dollar value on our customers? What does it have to do with customer lifetime value and the value of a new product? We introduce customer attrition and defection and estimate customer lifetime value and long-range customer equity of firms such as E*Trade, Ameritrade, eBay, and Amazon.

4) Marketing actions at the new-brand level
How does entry of a competitor affect our innovation equity? How do retention and social forces differ at the brand vs. the product level? We’ll use the diffusion of mobile services in Europe to demonstrate these concepts. We quantify the effect of “shock jock” Howard Stern on the rivalry between Sirius and XM satellite radio.

5) Forseeing potholes along the diffusion road
Is the decline in our sales permanent, or temporary? What does it have to do with a “saddle” in the midst of new product growth? We discuss the phenomenon of a temporary yet deep decline in sales during the growth stage of the product lifecycle, and look at examples in the US consumer electronics market such as DBS systems.

6) Consumers’ valuation of the product
Can we put a dollar value on each of the attributes of our new product? Can we do it for a product in development, as opposed to existing ones? We’ll demonstrate the use of conjoint analysis as one of the most widely used marketing research methods for measuring consumer preferences.

7) The chilling effects of network goods
Do network effects accelerate the growth process, or do they hold it back? DVD players, CD players and CB radios will serve as examples of the pattern of growth of network goods.

8) Valuing the next generation
How does entry of a new generation affect our innovation equity? How does the interaction between generations translate to innovation equity? We’ll apply our framework to four generations of IBM mainframes in the US, and two generations of mobile phones worldwide.
**Case write-up**

Case discussions are a critical component of this course. Be prepared for all case discussions, whether written individually or in groups. Each student must hand in four case writeups, at least one of which must be done individually; the rest may be done alone or in teams of up to three. In addition to the cases, the PBX assignment is done individually.

In each writeup, specific questions are asked, all of which must be answered. The length of the case writeups should be up to four typed pages, depending on the length and complexity of the case, accompanied if necessary, by a spreadsheet.

The writeups should be e-mailed to both the instructor and the teaching fellow before the class session in which the case is to be discussed.

**Class participation**

Grading class participation is necessarily subjective. Consider the following if you wish to effectively participate:

Are you prepared? Do your comments show evidence of thorough case analysis (vs. stating the facts)? Are you a good listener? Are the points made relevant to discussion? Are you an effective communicator? Are concepts presented in a concise, convincing fashion? Are you respectful? Everyone’s input, unless repetitious, must be valued and encouraged. Feel free to question or disagree with other students; however, such disagreement must be based on the idea and not the person. Universal respect is essential for great discussions and great learning experiences.

**Grading breakdown**

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group case writeups (three cases)</td>
<td>40%</td>
</tr>
<tr>
<td>Individual assignments (one case plus PBX)</td>
<td>40%</td>
</tr>
<tr>
<td>Class participation</td>
<td>20%</td>
</tr>
</tbody>
</table>

There is no final exam

**Attendance and attentiveness**

Attend all class sessions, read cases, and e-mail the assignments before the beginning of class. Please minimize disturbances during class, such as late arrival. Laptops, tablets, smartphones, phablets, or whatever communication devices that might be invented before or during the semester may not be used during class unless needed for a specific activity.
Case writeup questions and submission dates

Dropbox: “It Just Works” (HBS 2014) Thursday, September 22
1. Dropbox is a late mover in a crowded market. What are the key elements of Dropbox’s current business model?
2. Is Dropbox currently profitable? Explain why / not. What’s your assessment of its future profitability?
3. Should Dropbox create a separate version for small and medium-sized businesses?

PBX (Stern 2015) Thursday, September 29
1. In this class assignment we first learn how to predict sales of a durable product using the diffusion framework we discussed in class. This will be demonstrated using data on sales of Private Branch Exchange switchboards.
2. In the second part of the session you will predict sales of digital camera in the US in 2016 using the data provided in the Excel file.

Apple, Inc. in 2015 (HBS 2015) Thursday, October 6
1. Historically, what have been Apple’s competitive advantages, and why did Apple struggle in the PC industry?
2. How sustainable is Apple’s competitive position in smartphones? Do you think that the new low-priced iPhone 5se would change the decline in iPhone sales?
3. Evaluate Apple’s strategy for Apple Watch. Would you suggest any course corrections? If so, which?

Kindle Fire (Kellogg 2014) Thursday, October 13
1. Would you characterize Kindle Fire as a tablet and why?
2. How should Amazon position the Kindle Fire relative to iPad and other tablets?
3. Which target markets look most promising for the Kindle Fire?
4. What might be the reasons to the decline in global sales of tablets in the last couple of years? What might reverse this decline and what might be the role of Amazon in this possible reversal?

Lady Gaga (A) (HBS 2011) Thursday, October 20
1. Which of the three touring options would you pursue for Lady Gaga, and why?
2. How much money does Lady Gaga stand to gain or lose under each option? Do the potential rewards justify the investment, and are there ways to mitigate the risks? Why or why not?
Uber: Technology Confronts Regulation (Stanford 2012) Thursday, October 27

1. What alternatives did Uber have to address regulatory issues when beginning service in new cities? Describe the benefits and difficulties of each.

2. How do you expect the incumbent taxi operators to respond to Uber’s entry into DC? How about other cities, such as Paris?

3. What should Uber do in the face of the proposed DC legislation?

Spotify: Face the Music (IESE 2014) Thursday, November 3

1. Will Spotify ever turn a profit? If so, how?

2. Can Spotify help the music industry grow its revenues after decades of decline? If so, how? If not, why not?

3. What is the likely consequence of Spotify increasing its advertising levels to the free users?

4. Did Taylor Swift make the right decision to pull her entire collection from Spotify in 2014? Why / why not?

Xbox One (Kellogg 2014) Thursday, November 10

1. Why do you think Microsoft faced so much criticism from the hardcore gamer segment? Why is this segment hard to please?

2. Please take a look at Windows 8 introduction issues at ZDNet, March 12, 2012; PCPro, June 28, 2012. What is the common denominator for these two gaffes of Xbox One and Windows 8?

3. Could Microsoft have handled the introductions of these two products better and if so, how?

Microsoft Acquisition of Skype (IMD 2013) Thursday, November 17

1. Suppose you’re given the following Bass diffusion parameters for the growth of Skype: \( p = 0.012; q = 0.549; N = 600m; \) Retention rate = 85% (I’ll show in class how these figures were estimated). Given the numbers for revenues and operating costs given in the case, and the number of subscribers as indicated by these estimates of the diffusion equations, can you find the total Customer Equity of Skype? Assume a discount factor (WACC) of 10%.

2. Under the assumption above, what should have been the average Skype Customer Lifetime Value to justify the price that Microsoft paid? Explain.

XM Satellite Radio (HBS 2004) Thursday, December 1

1. Value proposition: What are the value propositions of XM Satellite Radio? Which one(s) would you emphasize in your initial advertising “blitz”?
2. **Pricing the receiver:** Would you subsidize the receiver by $50? Assume that a $50 subsidy at the manufacturer level would translate into a $100 at the retail level. This means that the retail price of the radio would drop from $300 to $200. You’ll find out that in order to answer this question you have to estimate the growth in subscribers in the first few years. You can do it using analogous products whose growth parameters are found in the file aptly called: “Analogy Data.” You may choose the relevant products but you have to justify your choice. Specify the assumptions that you make in order to arrive at the solution.

Guidelines for Q2 are as follows:

a) You begin by estimating a Bass growth function. If you have the parameters $p$, $q$, and $N$, then use the solution of the Bass equation (“Bass Norway”). How would you guess the $p$ and $q$ parameters (market potential, of course, is taken from Exhibit 9)? Try the analogy method – go to the data page again and look at similar products at the “Analogy Data” file. Hint – do not take Cable TV as the data are incomplete and therefore the parameter values are questionable, but there are others including radio, and CD players that do make sense.

b) Now that you decided to subsidize the radio – what will be the effect on NPV? There are indeed several options here – but Exhibit 9 gives you the effect on market potential $N$. Then compute the difference in sales and revenues between growth based on old price and new subsidized price. You may want to use the following information: On average, the annual cost of serving an XM subscriber is about $60, and the discount factor (WACC) of XM as an entertainment product is about 10%.