

Preparation Sheet for MI 703 Computer Information Systems Session #3, Jan 31, 2006: IT-Enabled Business Models

Session Overview

In Session #2 we discussed five distinctive characteristics of IT—digitalization, network effects, Moore’s Law, standardization/commoditization, and switching costs/lock-in.

A related trend is the rise of “IT-enabled business models”, i.e., new kinds of businesses made possible by the distinctive characteristics of IT. It’s no accident that the four youngest firms on the 2006 Business Week list of the top 100 worldwide brands (AOL, Amazon, Yahoo, eBay) all have IT-enabled business models.

IT-enabled business models present attractive new opportunities, but also special challenges. One of these challenges is how to manage the virtuous cycles of adoption that often characterize such business models.

A virtuous adoption cycle occurs when network effects exist that make a product or service more attractive (increases benefits, reduces costs) as the adopter base grows. Many of the most successful firms of the internet era have been masters at figuring out ways to reinforce virtuous cycles.

This leads a key question: How can a firm best manage virtual cycles in adoption? We will use the NetFlix business case to analyze this question and explore related issues.

There are several reasons why you as a future manager should care about virtuous cycles and their implications. One day you may work for a company that has a product or service that is strongly subject to network effects, and hence, virtuous cycles. Or, you may work for a company that is part of the ecosystem (i.e., key supplier, customer or business partner) of such a company. You may be a consultant or a financial analyst that has to understand the prospects of the company, some other ecosystem participant, or the ecosystem as a whole. Finally, you as a manager and consumer will be making adoption decisions about product/services that are subject to network effects and virtuous cycles.

The overall goals of this session are to: reinforce understanding of distinctive characteristics of IT, to understand virtuous cycles and the special opportunities and challenges they present, and to analyze an interesting IT company (NetFlix) and related industry trends (i.e., video on demand).

The first part of class will be devoted to analyzing the NetFlix case. Then I will present a mini-lecture on how to find information on the Web. We will not be discussing the assigned IT Tutorials (on the Internet and Enterprise systems) in class. This is for self study.

Required Readings and Study Questions

1. Case Study: NetFlix Inc (coursepack)

- **Central challenge:** How to manage virtual cycles in adoption.
- **Note:** Check out these [NetFlix screen shots](#) and NF’s recent [VOD announcement](#) and BBI’s [Total Access](#) initiative.

- **Preparation Questions:**

1. What are the drivers of network effects and virtuous cycles in Netflix's DVD-by-mail business? How strong are they? What is NF doing to reinforce these cycles? (Hint: think about what NF has been investing in, and the various features of the service and their website).
2. How good a job is Netflix doing of balancing long term growth vs. current profits? Are they making good choices? Poor choices? How about Netflix's competitors?
3. Which has more potential for strongly reinforcing virtuous cycles, DVD-by-mail or video-on-demand (VOD)? Why?
4. Netflix's long term strategic plan has been to make an eventual transition to VOD, and to become a leading provider of that service. Do you think NF will successfully navigate this transition? Why or why not?
5. How can Netflix increase their chances of making a successful transition to VOD?
6. How bright are Netflix's long term prospects?

2. Internet Search

- Check out [How Google Works](#), and how it makes money through [Adwords](#) (ads that appear to the right and top of search results based on keyword matches), and [Adsense](#) (ads that appear on content sites based on what appears on those sites)

3. IT Tutorials: Internet Technologies, Enterprise Systems

- Note: All of these tutorials are for self study. We will not be discussing them in class.
- **How Stuff Works:** [How Internet Infrastructure Works](#) (**Key terminology:** internet service provider (ISP), routers, IP address, domain name, domain name server, uniform resource locator (URL), server, client, hypertext transfer protocol (HTTP)
 - **Viewing and Printing Hints:** When you click on the links above you are taken to the "printable version" of the online article. This has the whole article on one web page, and so it is convenient for printing. (I also prefer it for viewing.)
- **Darwin:** [The ABCs of Supply Chain Management](#)
- **Wikipedia:** [Enterprise Resource Planning](#)
- **Wikipedia:** [Customer Relationship Management](#)

Optional Readings and Video

- [High Tech Achiever](#), *Fast Company*, October 2005 (MyFiles). This article goes into a bit more detail on some of the technical aspects of the Netflix website.
- Here's a link to a recent [60 Minutes segment on Netflix](#). The segment is broken in to several pieces of about 1-3 minute each.