

Preparation Sheet for MI 703 Computer Information Systems Session #4, February 7, 2007: IT for Competitive Advantage

Session Overview

In this session we will analyze the role IT plays in creating competitive advantage. This issue is of interest to managers that work for firms seeking to use IT for competitive advantage, and also to analysts and consultants that need to understand the competitive position of specific firms, and how IT can affect that position.

The first assigned reading is one of the classics in the IT field. Despite being over twenty years old, this article clearly lays out essential concepts related to IT and strategy, such as what competitive advantage is and where comes from, how IT can be used to get a competitive advantage, how IT affects industry structure, and how managers can systematically analyze the potential for IT to create competitive advantage for their firm. The article includes a concise explanation of two classic strategy frameworks (the Five Competitive Forces model and the Value Chain Model) *as they relate to IT*.

The second assigned reading is a Primer on Strategy and Technology by BC professor John Gallagher. Naturally much has been learned about strategy and IT in the 20 years since the Porter and Millar article, and this Primer surveys these advances.

The last required reading is an interview with Michael Dell that appeared in *HBR*. This is not a traditional Harvard case, of course, but it does provide enough depth of information about Dell to support a good case analysis.

The first part of class will be devoted to analyzing the Dell case. Then I will present a mini-lecture on technologies to support supply chain management.

Required Readings and Study Questions

1. **How Information Gives You Competitive Advantage**, Porter and Millar, *Harvard Business Review*, 1985 (Coursepack)
 - What does it mean to get a *competitive advantage* from IT?
 - How does IT affect industry structure? A firm's internal value chain?
 - Porter and Millar close the article by recommending five steps a manager can use to exploit IT for competitive advantage. Are these steps as pertinent now as they were 20 years ago?
2. **Strategy and Technology: A Primer**, John Gallagher, BC Carroll School of Management, 2006 (Coursepack)
 - What is the difference between operational effectiveness and strategic positioning? Which is a more promising route to long term competitive advantage from IT?
 - What does the "resource-based view" say about the requirements for sustained competitive advantage? Where does IT fit in according to this view?
 - Does technology lower barriers to entry or raise them?
 - When is IT most likely to provide a first-mover advantage?
3. **Case Study: Dell: The Power of Virtual Integration: An Interview with Dell Computer's Michael Dell**, Magretta, *HBR*, 1998 (Coursepack)
 - **Central Challenge:** How to use IT to create competitive advantage.
 - **Preparation questions:**
 1. What are the key features of Dell's business model? How does it differ from what came before? Why do these differences matter so much in the PC industry?

2. Consider the many initiatives devoted to improving the value chain at Dell (i.e., connections with customers and suppliers). What kinds of advanced IT have enabled these initiatives? What kinds of advantages have they produced? Have they caused shifts in any of the Five Competitive Forces?
3. Why were the advantages Dell got from its business model and use of IT sustainable for so long?
4. Lately Dell has fallen on (relatively) hard times (see readings below). What happened? What should Dell do now?

4. **Current articles to quickly skim:**

- [Dark Days at Dell](#), Business Week, August 2006 (web)
- [Dell in the Penalty Box](#), Fortune, Sept. 5, 2006 (web).