

## MI 703 CIS Session #5

- ◆ Digital Rights Management
- ◆ Apple Computer
- ◆ SCM
- ◆ [Midterm exam info](#)

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## Mid-Term Exam

- ◆ Date to be determined. Probably March 14
- ◆ 75 minutes in two parts
- ◆ Part 1: Closed book, closed note
  - **Focus:** “Recall knowledge” on key terminology and concepts
  - **Format:** multiple choice and short answer
- ◆ Part 2: Open book, open note
  - **Focus:** Analysis and applications
  - **Format:** Essay

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## Example Questions

### ◆ Multiple Choice

- Programs and data that are being actively processed are usually stored in:
  - a. Floppy disks
  - b. ROM
  - c. RAM
  - d. Hard disks

### ◆ Short answer

- Briefly explain why Dell's ability to keep only 11 days of inventory on hand (rather than the industry average of 80 days) was an especially important advantage in the PC business.

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## Example Questions (cont)

### ◆ Essay

- Suppose that managers in charge of the Macintosh unit at Apple, and those in charge of the PC unit at Dell are each considering a choice between a large investment in either: (1) the most advanced and popular supply chain management (SCM) package currently available, or (2) the most advanced and popular package to support design and new product development (NPD) currently available. Based on your knowledge of these firms traditional strengths and weaknesses, which investment has the most potential to provide major business value to Apple, and which has the most potential to provide value to Dell? Why?

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## Essay Questions – Likes & Dislikes

### ◆ Likes

- Answers that are clear, and concise
- Answers that show good insights and a depth of understanding
- Answers that cover the most important issues pertaining to the topic of a question
- Answers that are in your own words

### ◆ Dislikes

- Answers that do not stay focused on the specific question (or questions) asked.
- Answers that are “generic” rather than tailored to the specifics of the example.
- Answers that include “filler”, such as repeating the question, or unnecessary introductory phrases. Things like “In my opinion, it is important to consider several aspects of X before we can understand how to decide what to do about Y”.
- Answers repeat verbatim material from an article or slides without indicating you understand those passages

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## Session #1: Friedman

### ◆ Recall knowledge:

- **10 flatteners**: Know definition/meaning of: 1. Windows (i.e., a standard PC architecture), 2. the internet boom/bust, 3. work flow management software, 4. supply chaining, 5. outsourcing, 6. offshoring, 7. insourcing, 8. open sourcing, 9. informing, 10. “steriods” (VoIP, wireless).

### ◆ Analysis/Application:

- What does Friedman mean by a “flat world”? How are the 10 “flatteners” collectively changing the world?
- How do the 10 flatteners relate to IT for management?
- In a flat world, what jobs, knowledge and skills become more (and less) important/valuable? Why?
- What organizational capabilities became more (and less) important/valuable in a flat world? Why

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## Session #2: Five Distinctive IT Characteristics/Trends

- ◆ Recall knowledge:
  - IT Basics: Know definition of: Bit, byte, kilobyte, megabyte, gigabyte, terabyte, microprocessor, CPU, clock speed, megahertz, MIPS, transistor, cache, RAM, virtual memory
  - Digitalization: Know meaning of digitalization and how digital content is superior to prior options
  - Moore's Law: Understand what Moore's law means (both strictly and informally), what kinds of components it applies to
  - Network effects: Know the definition of network effects. Understand the distinctions between the five sources of network effects.
  - Switching costs/lock-in: know the meaning of switching costs and lock-in

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## Session #2: Five Distinctive IT Characteristics/Trends

- ◆ Analysis/Application:
  - For an example technology, be able to discuss the potential implications of digitalization for how content gets created, distributed, priced, and the potential implications for intellectual property protection.
  - Be able to discern situations when increasing returns/virtuous cycles are stronger or weaker and why.
  - Understand what a "digital ecosystem" is. Be able to identify the major components of an ecosystem for a given well known example technology.
  - Be clear on why IT-based products are so often subject to high switching costs and lock-in. Be able to identify switching costs and lock-in potential for a given example technology

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## Session #3: NetFlix/Internet/Enterprise Systems

- ◆ Recall knowledge:
  - Key internet terminology: internet service provider (ISP), routers, IP address, domain name, domain name server (DNS), uniform resource locator (URL), server, client, hypertext transfer protocol (HTTP)
  - How Google works. How it ranks pages in search results. How Google makes money with “Adwords” and “Adsense”
  - What ERP, SCM and CRM software is: Purpose, key features, typical functions
- ◆ Analysis/Application :
  - Be familiar enough with the high points of the NetFlix case to answer a question that uses it as an example
  - Be able to think systematically about crafting strategy in businesses driven by network effects/virtuous cycles

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## Session #4/5: IS Strategy/Dell/Apple/DRM/SCM

- ◆ Recall knowledge:
  - What criteria are necessary for a resource to provide a sustainable competitive advantage
  - What is the difference between operational effectiveness and strategic positioning?
  - What the “resource-based view” says about the requirements for sustained competitive advantage?
  - Typical features and functions on modern PDAs and cell phones
  - Meaning/scope of “digital rights management” (DRM)
  - Meaning/scope “supply chain management” (SCM)

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## Session #4/5: IS Strategy/Dell/Apple/DRM/SCM

### ◆ Analysis/Application:

- Be familiar with the role DRM plays in the legal music/video download business and key issue surrounding the technology.
- Understand the three challenges of supply chain management
- Be familiar enough with the high points of the Dell and Apple cases to answer a question that use them as examples.
- Be able to evaluate the potential for a hypothetical investment to offer a company a sustainable competitive advantage.
- Understand and be able to apply the “five competitive forces” and/or “value chain” frameworks to the analysis of case example.
- Be able to think systematically about using IT for competitive advantage and to navigate industry transitions

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## Session #6: Building an Analytic Capability/Harrah's/Database

### ◆ Recall Knowledge:

- Know what the term “business analytics” refers to
- Understand basic database terminology: Database, file, table, field, record, relational database model, data warehouse, data mart.
- Understand difference between “integrated” and “interfaced” systems
- Understand the main distinctions between data warehouses, data marts, and operational databases

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## Session #6: Building an Analytic Capability/Harrah's/Database

### ◆ Analysis/Application:

- Make sure you understand the Davenport “Building and Analytic Capability” framework (as depicted in the “cone” diagram) quite well. Understand what each element means and how the elements fit together.
- Be familiar enough with the main points of the Harrah’s case to answer a question that uses it as an example.
- Be able to think systematically about building analytic capabilities