Introduction to Information Systems

MBA 8120 (Spring 2006) – Week 1
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Course Website:
http://www.cis.gsu.edu/~dtruex/courses/MBA8120/MBA8120-scheduleSp-06.htm

Outline

- Why study information technology?
- Business Organizations in 2006
- Future Predictions
- MBA 8120 course overview
  - Topics
  - Schedule
  - Evaluation
Why Study Information Technology?

- What is the role of information systems in today’s competitive environment?
- What should managers know about information technology?
- How do information systems transform organizations and management?
IT and Business

“How can we leverage information technology to deliver business value?”

“How can we gather, focus, and apply information to deliver business value?”

Dennis Severance, Univ.of Michigan
3/13/06

IT and Business

“How can we (manager) gather (monitor, collect, store), focus (analyze, organize, structure), and apply (share and use for business purposes) information (regarding products, etc.) to deliver (change business processes) business value (increase revenue, lower cost, invest now or in future)?”

Dennis Severance, Uni.of Michigan
3/13/06
Business in the Year 2006

**Business Structure**

- Flattened organization
- Rely on nearly instant information
- Deliver mass-customized products and services uniquely suited to specific markets / customers

Business in the Year 2006

**Business Environment**

- Ubiquitous Computing
- New Businesses
  - The eBay Effect
- 70% of invested capital in service industries
- “Romancing the Segment of One”
Business in the Year 2006

Digital Convergence of Media into Bits (Straub 2004)

Emergence of the Net-Enhanced Organization

- Digitally-enabled relationships with customers, suppliers, employees
- Core business processes via digital networks
- Digital management of key assets
- Rapid sensing & responding to change
- Flattened organizations
- Separating work from location
- Increasing flexibility
- Redefining organizational boundaries

Information systems link buyers & sellers to exchange information, products, services, payments

Source: Straub, 2004
The three scariest words in U.S. industry: “The China Price”

Cut your price at least 30% or lose your customers. Nearly every manufacturer is vulnerable. The result: A massive shift in economic power is under way.

Plus: Rethinking the free-trade model

By Peter Engels, Matthew Reis, and Karen S.Brown

They are the three scariest words in U.S. industry. Cut your price at least 30% or lose your customers. Nearly every manufacturer is vulnerable—from furniture to networking gear. The result: A massive shift in economic power is under way.

By Peter Engels, Matthew Reis, and Karen S. Brown
Year 2006: Changing Face of Business

“What is your China Price?” Retailers expect 30% discounts

Location independence, work travels to where it is wanted
- Global marketplace
- Growth of outsourcing/offshoring

Culture shift
- We don’t meet
- We don’t talk
- We expect instant responses

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Business in the Year 2006
U.S. versus Emerging Economies

Myth
- “U.S. will lead the way in innovation, while emerging economies like India and China will provide low cost operations”

Fact
- “Emerging economies have embraced and are fostering innovation while still able to pursue low cost operations”
- Example: Detroit vs. Japan


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Business – Next 5 Years

“What business would like to do in five years often depends on what its systems will be able to do.”

(Laudon and Laudon, 2006)

Digital firm

– Nearly all organization’s significant business relationships digitally enabled

Business Managers

In the Year 2010

Changing skill set

– Need for business knowledge
– “Versatilists” - deep skills in multiple domains, multiple roles, broad experience
– Focus on process improvement, total quality management, and project management

Why are skills sets changing?

– Increased speed of business
– Flexibility
– Differentiation
– Smooth integration of technology and business

Source: Gartner Group, Nov. 28, 2005.
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Source: Straub, 2004

Friedman’s “Lexus and the Olive Tree” and “The World is Flat”

- Being Digital
- Democratization
What types of democracy?

- Democratization of technology
  - “Printing made us all readers. Xerozing made us all publishers. Television made us all viewers. Digitization makes us all broadcasters.”
    - Lawrence Grossman, NBC President quoted in T. Friedman, p. 50

What types of democracy? (2)

- Democratization of Finance
  - Commercial paper
  - Open and shared performance evaluation
What types of democracy? (2)

- The Democratization of Information
  - Information arbitrage reduced
  - Power in the access, quality and analysis
  - Boundaries erased
    - “IBM was safe as long as the barriers to entry into something as complex as the computer business were so high that the big, slow, firms could be protected from mistakes, even failure, for a long time. And countries such as the Soviet Union were safe as long as the barriers to information were so high -- and the awareness by its own people of competing lifestyles was so low--that the big, slow Kremlin could be protected from its mistakes, even failures, for a long time.” Friedman, pg 79

Democratization of all three
(technology, finance, information) brings...?

- Amazon.com
  - Technology (computing)
  - Finance (credit cards)
  - Information (the internet and e-business)
- What else...?
The World is Flat! : What is being flattened?

- Friedman contends that:
  - Distance
  - Language
  - Location
  - technology

For Friedman...

- Globalization 2.0 is...boundary spanning and stretching
  - conflict of national culture (the Olive Tree) and globalism (The Lexus)
- Globalization 3.0?...
  - Boundary elimination on steroids; hyper speed communication; transparency(/
- Outsourcing...?
  - Homesourcing
  - Burgers too?
- Blogging?
Course Overview

Sessions

- **Infrastructure**
  - Week 1 – Introduction; Digital Age of Global Competition & Systems to support business operations
  - Week 2 – Information systems and corporate strategy
  - Week 3 – Technology and Technology Infrastructures
  - Week 4 – IT Infrastructures and Organizational Design

- **Deployment**
  - Week 5 – Ethics, Privacy, Social Issues and Offshoring
  - Week 6 – Acquiring information systems and Emerging Trends
  - Week 7 – Emerging trends, course wrap-up
  - Exam Week – Final exam
Figure 1.1 The Information Systems Strategy Triangle

The corners are interlocking. Change one and all must adjust.

Manager in the coordinating role

Business Strategy

Information Strategy

Organizational Strategy

Includes the whole concept of organizational design

IS Strategy is affected by the other strategies a firm uses. Changes in IS strategy must be accompanied by changes in the other two.

IS strategy has (sometimes unintentional) consequences on the business and organizational strategies.
Evaluation

- Case write-ups (2) - 30%
- Mid-term Quizz - 15%
- Class participation - 20%
- Group Project &
  - Presentation: - 20%
- Final exam
  (open book, & notes) - 45%

Today’s Agenda

- Course introduction
- Information systems for business operations
- Technology requirements for online course
- Data management
- Project teams
Take Aways

- Businesses operate in a complex environment
- Information systems can have a large impact on the shape of an organization and how it operates
- Managers need to understand the impact of technology on their operations
- Organizations are highly dependent upon information technology
- The success of an organization may depend upon what its information systems are able to do