ISM 50 - Business Information Systems

Introduction

Instructor: John Musacchio
UC Santa Cruz
3/30/2010

ISM 50 - Course Parameters:
- Tuesdays and Thursdays 4-5:45
- Oakes 105
- WEB PAGE: (write this down, go home, and bookmark it!)
http://www.soe.ucsc.edu/classes/ism050/Spring10

Instructor:
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- TBA

ISM 50

TA
- TBA

What is this class about?

- Supply Chain Management (SCM)

More Examples

- Customer Relationship Management (CRM)
- Other examples?

Business Process Example
What is an information system?

- First let us answer: what is a system?
  - Interrelated components
    - Input
    - Processing
    - Output

  ![SYSTEM Diagram]

  Input → SYSTEM → Output

What is information technology?

- It’s the technology you use to make an information systems
  - Computer Hardware, Software, Networks, etc...

What is an information system?

- Information system
  - A combination of people, hardware, software, networks...
  - that collects, transforms, and disseminates information in an organization.

Why is IT changing so fast?

- ??
What’s happening lately?

- Net Neutrality, What is it?
  
  FCC chair Julius Genachowski
  Internet access providers “must be transparent about their network management practices,”
  
  “We could see the Internet’s doors shut to entrepreneurs, the spirit of innovation stifled... Or we could take steps to preserve Internet openness.”
  
  Senator Kay Bailey Hutchison (R) TX:
  “The case has simply not been made for what amounts to a significant regulatory intervention into a vibrant marketplace.”
  
  [NPR, "FCC Chairman Proposes 'Open Internet' Rules," September 21, 2009]

Courses Objectives

- The objectives of ISM 50 are to understand
  - needs of business
  - role of information systems in supporting those needs
  - How information systems are designed
  - How information technology is evolving
  - How changes in technology can enable new ways of doing business
  - How to conceptualize and analyze new technologies to solve business problems.

Information Systems Management 50

- What it is not:
  - A programming class
    - (Though some simple programming may be required for some assignments and/or projects)
  - A detailed focus in any particular technology,
    - (A survey of IS technology landscape and its relation to business problems)

ISM 50 Course Pre-requisites

- No specific programming language knowledge required, though useful
  - We will assume you know word-processing and PowerPoint
    - PowerPoint is easy to learn
    - We will assume you are motivated and eager to learn!
      - Come to class having done the reading!

What comes first?

- Do business needs drive the design of technology?
- ...Or does the technology drive the design of a business?

What comes first?

- Do business needs drive the design of technology?
- ...Or does the technology drive the design of a business?

- Both!
Course Organization

- Top Down (Roughly)
  - IT Terminology and IT History
  - Businesses and their needs
  - Technological Applications
  - Technology concepts
  - Important “building block” Information Technologies
  - Data Bases
  - Networks
- Case Studies Throughout

Reader 1: Pages from

- Author: David Messerschmitt, Professor of EECS, UC Berkeley
- Focus on
  - Technological concepts in computing and communications.
  - Applications.
- Top down organization, like our course.
- Available now at Bay Tree Bookstore!

Reader 2

- This reader contains
  - Case Studies
  - Other Readings
- Also available now at the Bay Tree Bookstore
- Reader 2 is same as reader from past quarters

Class Webpage

http://www.soe.ucsc.edu/classes/ism050/spring10

Contains
- Syllabus
- Assignments
- Instructor contact information
- Requirements for business paper, database project
- Exam dates

Syllabus (tentative) on web page

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/30</td>
<td>Class Introduction</td>
<td>Assignment 1.1</td>
<td></td>
</tr>
<tr>
<td>4/1</td>
<td>IT History and Background</td>
<td>IT Management from 1800 to 2000 (reader pp 1-20)</td>
<td>Project Paper on Day</td>
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<td></td>
<td></td>
<td>Chapter 1 - Section II of O’Brien</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>(reader pp 47-60)</td>
<td></td>
</tr>
<tr>
<td>4/6</td>
<td>Computing with PC</td>
<td>Assignment 1.2</td>
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<tr>
<td>4/8</td>
<td>Computing with IT (Cont’d)</td>
<td>Assignment 1.3</td>
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<tr>
<td>4/13</td>
<td>Business Processes</td>
<td>Folio 1 Due</td>
<td></td>
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<tr>
<td>4/15</td>
<td>Enterprise Applications: Information Access Terms</td>
<td>Messerchmitt Ch 3.2.1 (5-12)</td>
<td></td>
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<tr>
<td>4/20</td>
<td>Enterprise Applications: Local control</td>
<td>Messerchmitt Ch 3.2.3 (5-13)</td>
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</tr>
<tr>
<td>4/22</td>
<td>E-commerce</td>
<td>Alibris Case (114-124 + figs)</td>
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<tr>
<td>4/27</td>
<td>IT Concepts</td>
<td>Frito-Lay Case (145-164 + figs)</td>
<td></td>
</tr>
<tr>
<td>4/29</td>
<td>Client Server Computing</td>
<td>Sun-N Tier Case (145-164 + figs)</td>
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<td>5/3</td>
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### Syllabus Continued

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<tr>
<th>Class</th>
<th>Date</th>
<th>Topics</th>
<th>Reading</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>11</td>
<td>5/4</td>
<td>MIDTERM EXAM</td>
<td>Messerschmitt Ch. 6 (157-166)</td>
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<td>Modularity and Layering</td>
<td>Messerschmitt Ch. 7 (190-226)</td>
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<td>5/11</td>
<td>Computer and Comm. Industry</td>
<td>Messerschmitt Ch. 7 (198-226)</td>
<td>Folio 2 (If assigned)</td>
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<td>Database Management</td>
<td>Messerschmitt Ch. 11.1 - 11.2 (325-335)</td>
<td>Messerschmitt Ch. 15.1 - 15.2 (415-425)</td>
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### Exams and Quizes

**Exams**
- Midterm
  - Probably 5/4
- Final
  - June 10
- Closed book
- A mix of short answers and 1 or 2 essays
- One or two analytical questions

**Pop Quizzes**
- 3 quizzes, unannounced times
- Simple questions pertaining to the reading assigned for that day
- Only your top 2 quizzes will count
- 5% of your overall grade

**ORAL PRESENTATION and NEWS FOLIOS**
**Presentation/Folio**

You will be **assigned either**

- Presentation
- News Folio

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**Oral Presentations**

- 5 minutes in length
- **Assigned** to present one of the following:
  - Summary of the case study we will discuss in class that day.
  - Recent news story involving business and information systems.
  - Your group's business paper project
- PowerPoint Presentation,
  - **E-mailed to me by the night before**

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**Presentation Evaluation**

- **Content**
  - Did the summary capture most important aspects of the case study?
  - Was the news story relevant to the class?
- **Delivery:**
  - Organization
  - Voice Articulation
  - Eye Contact
  - Enthusiasm

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**Presentation Tips**

- Ask the following question: Who is my audience and what is my major message?
- Don't try to say too much for five minutes
- Avoid jargon - explain technical concepts with simple examples.
  - Avoid reading
  - Act interested!

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**Folios**

- There are too many of you to have everyone give a presentation.
- Those who are not assigned a presentation will do a “news folio.”
- **Task:**
  - Collect 3 news articles that are relevant to the class
  - Print/copy them
  - For each article, write a 200 word description of how the article relates to issues discussed in class.
- Due dates:
  - Article 1 - 4/15
  - Article 2 - 5/11
  - Article 3 - 6/1

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**Presentation/Folio Summary**

- You will be assigned **either** a news folio or an in-class presentation
- In either case this will be worth 5% of your grade.
Need Presentation Volunteers!

- Thursday 4/1: Two News Stories.
- Tuesday 4/6: Two News Stories.
- The rest of this quarter's presentation assignments will be announced next week.

BUSINESS PAPER

Business Analysis Paper

- Write a paper about a company of your choice.
- Pick a company for which information systems played a key roll in making that company successful.
  - How did information systems help make the company successful?
- Paper Organization
  - Up to your group (Work in groups of 3 to 4)
  - chronologically, by topics, or some combination of both.

Business Analysis Paper

- The paper should answer questions like:
  - What industry does the company compete?
  - What is the competitive environment like?
    - "Porter model" (competitors, substitute products, buyers, suppliers, new entrants...)
  - How did your company use IT to gain a competitive advantage?
  - (Detailed guidelines are posted on the website)

Business Analysis Paper

- How did the company use IT to support or enable its business processes and competitive strategies?
  - What technologies in particular did it use?
  - How much of the company's success do you attribute to its use of IT and/or the company's early adoption of IT into their business processes?

Citing Sources

- Plagiarism is illegal and cheating and will not be tolerated!!
- More than thirty words verbatim must be cited.
- Any facts or figures that are not your own must be cited.
  - Ebay's revenues in US Revenues in 2002 were $1.39 billion [1].
Citing Sources

You must cite your sources in the body of the text!!!!

"Semiconductors have found a place in virtually every electronic device in existence. This helps explain why the industry was able to reach $200 billion in sales before a slump brought the figure back down in 2001" [1].

End Note:


Suggested sources of Information

- Company website
- 10K report
  - (This is the annual report public companies file with Security and Exchange Commission.)
- Business article database
  - A database of articles from magazines like “Business Week” and economic journals
  - Find it at: http://library.ucsc.edu
  - Click on “articles databases” on left margin.
  - Click on “By subject”
  - Click on “Economics”
  - Try this tonight! And let us know if you have problems
- Industry specific publications
- Examples: Aviation Week
- Books
- Good Magazines (The Economist)
- Consulting groups: Forrester, Gartner, ...

Business Analysis Paper Preferences

Due Thursday April 1!

- You are encouraged to try to form your own groups.
- However, we want a mix of
  - Engineers and non-engineers
  - Experience levels
- So, we may modify the groups.
- As a group, turn in 3 things:
  1. List of your proposed group members.
  2. List of companies you would like to study.
  3. Suggested person to do the 5 minute presentation on your group’s project.
- If you don’t have someone in mind to work with, turn in the above 3 things as an individual.

Business Paper Proposal

Due April 1st!

At least two of your preferred companies must be from this list:

- Southwest Airlines
- Federal Express
- Home Depot
- Wal-Mart Stores
- Charles Schwab
- Amazon.com
- EBay.com

With your preferences in mind, we will make the final company assignments to the groups.

Business Paper Proposal

- As a group write a 2-3 page description of what you plan to investigate in your business paper.
- Show that you’ve done some research!
- Cite some facts, and some technologies and or strategies that you’ve heard about the company that you would like to investigate further.
- Remember to cite your sources properly!!!
Assignments

Database Assignment
- Learn and Use database software
- An opportunity for “hands-on” experience without having to use advanced programming.
- Assignment will be done individually
- We will give you the details of the assignment sometime after the midterm.
- Database Tutorial later in the quarter
- 10% of your grade

Weekly Assignments
- Approximately once every week or two.
- They will be posted on the class webpage in the assignments column of the syllabus.
- Usually,
  - Questions from the textbook
  - Questions pertaining to Case Study Readings.
- However, Assignment 1 is to make a resume and cover letter!

Assignment 1
- Turn in Both:
  - A Resume
  - And Cover Letter
- Due April 5th (1 week from today)
- Resume should be:
  - One page
  - Focus:
    - Education, Experience, Skills and Abilities
    - What can YOU do for an employer?
    - You may choose to use a header with the purpose of the resume highlighted.

Personal Resume Criteria
- Looks appealing. (fonts, format, margins)
- No Spelling mistakes
- Avoid irrelevant information from too far in the past
- One Page
- It takes time to build a good resume...

Building Your Resume
- Some things employers look for:
  - Academically Qualified.
  - Well Rounded (includes extra curricular activities)
  - Summer Internships, or Part-time work During School
  - Professional Presence (Society Memberships)
  - Interested and Understanding of Employer’s Area.
Educational Content

- Degrees held or degrees you are currently working on.
  - Name of the university.
  - Degree Type and Program
  - (Expected) Completion date
  - GPA
- Include High School degree?
  - Maybe if you are a freshman or sophomore.

Work Experience Content

- Reverse Chronological Order
- Provide Complete Information
  - Company Name
  - Location (city and state)
  - Employment dates (from - to)
    - 1999 to Present if still employed
  - Job Title
    - Major responsibilities
    - Major accomplishments
  - How do these pertain to the job you are seeking?

Cover Letter

- A letter of introduction, to accompany resume.
- Include brief description of background
- Write it as if you were applying to take the class, or pretend like you are applying to a job.
- Format it as a business letter.
TO DO:

By Thursday (4/1):
- Read "IT Management from 1960-2000" in Reader
- Read Chapter 1, Section II, of O'Brien Book (this material is also in your reader.)
- Business Paper Preferences
  - (Group members, Companies)
  - Turn in as a group

By Tuesday (4/6):
- Resume & Cover Letter
  - Turn in as an individual