**TIM 50 - Business Information Systems**

**Introduction**

Instructor: John Musacchio  
UC Santa Cruz  
1/10/2012

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**TIM 50 - Course Parameters:**
- Tuesdays and Thursdays 8-9:45 PM
- Baskin 152
- WEB PAGE:
  - (write this down, go home, and bookmark it!)
  - [http://classes.soe.ucsc.edu/tim050/Winter12/](http://classes.soe.ucsc.edu/tim050/Winter12/)

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- **Office Hours:**

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**TIM 50 - TAs**

- Jing Du (dujing@soe.ucsc.edu)
- Shenshen Liang (erikaeriga@gmail.com)

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**What is this class about?**

- **Warehouse**
- **More Examples**
  - **Customer Relationship Management (CRM)**
  - Other examples?

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**Acquiring a Song in 1982**

- Drive to record store
- Search for hours for desired music
- Buy
Acquiring a car in 2012

Push iTunes Button
Type name of song
Press “Buy”

1982: Who’s got the power?

2012: Who’s got the power?

UPS
- DIAD
  (Delivery Information Access Device)

Business Process Example

A Streamlined Business Process

[Diagrams and text explaining the business processes and systems.]
A Reengineered Business Process

Some Examples

Supply Chain Management
Customer relationship Management
Transaction Processing
...
Enterprise Resource Planning

What is an information system?

First let us answer: what is a system?

- Interrelated components
  - Input
  - Processing
  - Output

What is information technology?

- It's the technology you use to make an information system
  - 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 chairman Julius Genachowski

- Internet access providers “must be transparent about their network management practices” [1].

- “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” [2].

April 2010: Court rules FCC lacks power to censure Comcast.

August 2010: Google and Verizon proposal: neutral wired, less neutral wireless.

Courses Objectives

- The objectives of TIM 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.

TIM 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)

TIM 50 Course Pre-requisites

- No specific programming language knowledge required, though useful

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**

**Reading Material 1**

Selected Chapters from:
- D. Messerschmitt, Understanding Networked Applications

**Reading Material 2**

Selected Chapters from:
- Laudon & Laudon, Essentials of MIS, 9th edition

**Case Studies**

- Otis Elevator
- Cisco Systems
- Alibaba
- Zhejiang Corporation
- Amazon Web Services

**Class Webpage**

http://classes.soe.ucsc.edu/tim050/Winter12/

Contains
- Syllabus
- Assignments
- Instructor contact information
- Requirements for assignments and projects
- Exam dates

**Lecture Plan (Posted on Web page)**

<table>
<thead>
<tr>
<th>Class #</th>
<th>Date</th>
<th>Topics</th>
<th>Reading</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Class Introduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1/12</td>
<td>Business Background and Technology</td>
<td>Laudon &amp; Laudon 6.2 (10/11)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1/17</td>
<td>Competing with IT - Transforming Business Processes</td>
<td>Laudon &amp; Laudon 6.1 (8/11)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1/19</td>
<td>Business Process Transformation/Compliance</td>
<td>Case Study views (4/11)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1/26</td>
<td>Case Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2/2</td>
<td>IT Strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>2/7</td>
<td>Global Server Computing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2/9</td>
<td>More Topics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Regular Exercises (10%)

- Exercises pertaining to the reading and class discussion
- About 6 or so of these in the quarter
- First one due Thursday 1/19!

Database Exercises (10%)

- Early in the quarter, TAs will hold tutorial sessions on MS Access
  - Choose from 3 times in each of week 3 and week 4.
- Scheduled:

In Class Exercises/ Quizzes / Discussion Forum (10%)

- Some classes, we will break into groups to discuss readings and case studies
  - Groups will turn in answers after class
- A online forum will be created
  - Follow up questions from class, and group exercises
- Online Reading quizzes
  - After some readings, we might ask you to fill out an online quiz to check your understanding
- Pop quizzes (In-Class)
  - ~3 per quarter. Easy questions pertaining to reading

Exams

- Midterm
  - Probably 2/9
- Final
  - 3/22
- Closed book
  - A mix of short answers and multiple choice
BUSINESS PAPER

Business Analysis Paper

- Write a paper about a company of your choice.
- Pick a company for which information systems played a key role.
- Work in groups of about 4

Business Analysis Paper

- Paper Should address the following areas:
  - Industry Profile
  - Company Profile
  - Information Technology
  - Leadership
  - Market and Financial Performance
  - Trajectory

Business Analysis Paper

- Industry Profile
  - What is the industry?
  - What value does the industry provide to its customers?
  - Describe the competitive environment (Porter Model)

Business Analysis Paper

- Company Profile
  - What business is your company in?
  - What value does it provide to its customers?
  - In what ways is it different than its competitors?
  - How has its history shaped what it can offer its customers?

Information Technology

Information Technology

- How does the company use IT to support or enable its business processes and competitive strategies?
- What technologies does it use?
- Does the company use existing technologies, develop its own technology, or some combination of both?
- 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?
- Is it used to enhance or differentiate their product, reduce costs, or both?
Business Analysis Paper

- **Leadership**
  - Who are/were the key leaders of the company
  - What decisions did these leaders make, in particular decisions relating to the deployment of IT?
  - What opportunities did they identify that helped make their company what it is today?

Business Analysis Paper

- **Market and Financial Performance**
  - What is the company’s revenue and profit, and how has it evolved over the years?
  - How does the company’s performance compare to its competitors?
  - Industry specific measures:
    - Cost per Available Seat Mile (Airlines)
    - Sales per square foot (retail)

Business Analysis Paper

- **Trajectory**
  - If the company successfully used information systems in its past, has it continued to innovate and improve up until today?
  - Is the company effectively postured for the future?

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 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:


Citing Sources

- The easiest way to lose points on your paper is to not cite sources!
- Guides on class website will be posted soon to help you cite your sources correctly.
- Talk to the TA or instructor if you have questions.
Suggested sources of Information

- Company website
- 10K report
  - (This is the annual report public companies file with Security and Exchange Commission.)
- Business article database
  - See UCSC Library website!
- Industry specific publications
  - Example: Aviation Week
- Books
- Good Magazines (The Economist)
- Consulting groups: Forrester, Gartner, ...

Citing Sources

- To receive Full Credit, you must cite at least 5 print sources.
  - If your source is available both online and in print, cite the print version.

Business Analysis Paper Preferences
Due Tuesday 1/17!

- We want you 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:
  - Names of proposed group members with emails
  - List of companies you would like to study
- Use the form we provide on the class webpage!

Business Paper Preferences 1/17

- To help us create balanced groups...
- ...you will self identify your best skills from:
  - W: Writing
  - A: Accounting and finance
  - C: Computers and technology
  - S: Business strategy
  - L: Literature Search

Business Paper Preferences

- Example:
  - Bob Smith smith@yahoo.com A, L
  - Jane Doe doe@hotmail.com C, W
  - Chris Tomas chris@gmail.com S, W

At least two of your preferred companies must be from this list:
- Wal-Mart
- Southwest Airlines
- Charles Schwab
- Home Depot
- Netflix
- Amazon

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!!!!
- DUE 2 / 2 / 12

Business Paper

First Draft
- draft of your final paper
- The closer the better
- Due 2/28

Business Paper

Final Draft
- Due 3/15 (Last Day of Class).