Informatics and Cyber-Security

CIS 4412
I. T. Resource Management

Spring 2014
3 Credit Hours
Course Number: CIS4412 – Spring 2014

Course Name: I. T. Resource Management

Course Description: Information technology (IT) is critical to the functioning of today’s organizations. While often focused on removing costs and introducing efficiencies, IT has also proven highly capable of generating substantial value when used strategically. The challenge is learning how to deploy IT to create business value.

Instructor: Professor Mack (Dug) Cooley
Email: cooleym@sar.usf.edu


Suggested Reference Materials: Jon Collins et al, The Technology Garden: Cultivating Sustainable IT-Business Alignment. Wiley, 2007 ISBN-13: 978-0-470-72406-4. Although the research for this book was conducted independently of that in our main text, the authors reach remarkable similar conclusions. One valuable part of this book is the Appendix that presents a complete Balanced Scorecard for managing IT-Business alignment.


Melvin B. Greer, Software as a Service Inflection Point:
Prerequisites: Consult your Adviser for the latest prerequisites.

Course Goals: Rather than learning concepts “free of context”, students are introduced to the complex decisions facing organizations by means of a number of mini-cases. These cases provide an opportunity to apply the models/theories/frameworks presented in the course in order to help students integrate and assimilate this material. Students will thus develop confidence in making recommendations that are aimed at delivering business value with IT.

Performance Objectives: There are four performance objectives for this course:

- Understand the unique challenges in assessing the business value of IT;
- Discover how to create business value with IT;
- Prioritize these opportunities; and
- Make technology-based recommendations that achieve business value with confidence.

Attendance Policy: This course meets Thursday evenings from 6:00 to 8:50 p.m. via Canvas. Logging in to these sessions is considered to be “attendance.

Performance Evaluation and Grading: Student performance will be evaluated based on Mini-Case reports, book review, and an Emerging Technologies presentation. The relative weights for each of these components in determining the final grade are as follows:

- Mini-Case Reports: 50%*
- Internet Research Project: 25%
- Emerging Technologies Presentations: 25%
- Total: 100%

* A total of twelve (12) mini-case reports will be submitted throughout the semester. Each will be scored out of 10
points. Your ten (10) best scores will be counted and weighted by 50% and give you a total of 50 final points towards your final grade.

A grade will be determined based on the total of possible points earned, as follows:
B+: 89 – 87, B: 86 – 83, B-: 82 – 80
C+: 79 – 77, C: 76 – 73, C-: 72 – 70
F: below 60

Except for Week 1, Case Memos are to be prepared in accordance with the Case Memo Template instructions below, and submitted as an attachment to the Assignment Drop Box in Canvas.

Emergency Preparedness
It is strongly recommended that you become familiar with the USF Sarasota-Manatee Emergency Action Plan on the Safety Preparedness site http://www.sarasota.usf.edu/facilities/SafetyPreparedness.php

- **1 (800) Hotline:** The USF hotline at 1 (800) 992-4231 is updated with pre-recorded information during an emergency. The hotline can also be operated by staff during an emergency if the situation necessitates that additional information, direction or resources need to be communicated and the personnel can be put in place in advance, such as in the event of a hurricane or ongoing emergency.

- **Fire Alarm Instructions:**
At the beginning of each semester please note the emergency exit maps posted in each classroom. These signs are marked with the primary evacuation route (red) and secondary evacuation route (orange) in case the building needs to be evacuated.

Religious Observances:
The University recognizes the right of students and faculty to observe major religious holidays. Students who anticipate the necessity of being absent from class for a major religious observance must provide notice of the date(s) to the instructor, in writing, by the second week of classes. Instructors wishing to cancel class for religious observance should announce this fact in the syllabus and make an appropriate alternative assignment.
Disabilities Accommodation:
Students are responsible for registering with the Office of Students with Disabilities Services (SDS) in order to receive academic accommodations. Reasonable notice must be given to the SDS office (typically 5 working days) for accommodations to be arranged. It is the responsibility of the student to provide each instructor with a copy of the official Memo of Accommodation. Contact Information: Pat Lakey, Coordinator, 941-359-4714, plakey@sar.usf.edu, www.sarasota.usf.edu/Students/Disability/

Student Code of Conduct, Academic Integrity, and Academic Disruption

- **Academic Dishonesty:**
The University considers any form of plagiarism or cheating on exams, projects, or papers to be unacceptable behavior. Please be sure to review the university’s policy in the catalog.

- **Academic Disruption:**
The University does not tolerate behavior that disrupts the learning process. The policy for addressing academic disruption is included with Academic Dishonesty in the catalog. Occurrences of academic disruption should be addressed by the professor (depending on the situation, the student may be asked to leave or security may be called). Following the incident, the professor should establish with the student terms for continued course participation, and the professor should also submit a report to the dean. The consequences to the student can range from an administrative reprimand to suspension from USF.
# Class Schedule: (Revised: 12/26/2013)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
</table>
| **Week 1** (01/09/14) | Course Introduction  
|            | Introduction to Case Analysis (See attached “Case Memo Template”)  
|            | Emerging Technologies Presentations  
|            | Internet Research Project |
| **Week 2** (01/16/14) | **Readings:**  
|            | McKeen – Chapter 1, “Developing and Delivering on the IT Value Proposition”  
|            | Chapter 2, “Developing IT Strategy for Business Value”  
|            | **Mini-Case:** “Building Shared Services at RR Communications”  
|            | Due: 1/23 |
| **Week 3** (01/23/14) | **Readings:**  
|            | McKeen – Chapter 3, “Communicating with Business Managers”  
|            | Chapter 4, “Building a strong Relationship with the Business”  
|            | **Mini-Case:** “Investing in TUFS”  
|            | Due: 1/30 |
| **Week 4** (01/30/14) | **Readings:**  
|            | McKeen – Chapter 5, “Developing IT Professionalism”  
|            | **Mini-Case:** “Delivering Business Value with IT at Hefty Hardware”  
|            | Due: 2/6 |
| **Week 5** (02/06/14) | **Readings:**  
|            | McKeen – Chapter 6, “Information Management: The Nexus of Business and IT”  
|            | **Mini-Case:** “Creating a Process-Driven Organization at AgCredit”  
|            | Due: 2/13 |
| Week 6  (02/13/14) | **Readings:**  
McKeen – Chapter 7, “The IT Budgeting Process”  
Chapter 8, “Creating and Evolving a Technology Roadmap”  
**Mini-Case:** “IT Planning at ModMeters”  
**Due:** 2/20 |
|---|---|
| Week 7  (02/20/14) | **Readings:**  
McKeen – Chapter 9, “Delivering IT Functions: A Decision Framework”  
**Mini-Case:** “Information Management at Homestyle Hotels”  
**Due:** 2/27 |
| Week 8  (02/27/14) | **Readings:**  
McKeen - Chapter 10, “IT Sourcing”  
McKeen – Chapter 11, “Application Portfolio Management”  
**Mini-Case:** “CRM at Minitrex”  
**Due:** 3/6 |
| Week 9  (03/06/14) | **Readings:**  
McKeen – Chapter 12, “Strategic Experimentation with IT”  
Chapter 13, “Enabling Collaboration with IT”  
**Mini-Case:** “Managing Technology at Genex Fuels”  
**Due:** 3/20  
**Internet Research Project Due (3/6):** Must be submitted as an attachment sent to Canvas not later than 6:00 p.m. |
<p>| (3/13/14) | <strong>Spring Break – No Classes</strong> |</p>
<table>
<thead>
<tr>
<th>Week 10</th>
<th>Readings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(03/20/14)</td>
<td>McKeen - Chapter 14, “Social Computing: How should IT be managed?”</td>
</tr>
<tr>
<td></td>
<td>Chapter 15, “Information Delivery: IT’s evolving Role”</td>
</tr>
<tr>
<td></td>
<td><strong>Mini-Case:</strong> “Innovation at International Foods”</td>
</tr>
<tr>
<td></td>
<td><strong>Due:</strong> 3/27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 11</th>
<th>Readings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(03/27/14)</td>
<td>McKeen – Chapter 16, “Master Data Management”</td>
</tr>
<tr>
<td></td>
<td><strong>Mini-Case:</strong> “Leveraging IT Vendors at SleepSmart”</td>
</tr>
<tr>
<td></td>
<td><strong>Due:</strong> 4/3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 12</th>
<th>Readings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(04/03/14)</td>
<td>McKeen - Chapter 17, “Developing IT Capabilities”</td>
</tr>
<tr>
<td></td>
<td><strong>Mini-Case:</strong> “Project Management at MM”</td>
</tr>
<tr>
<td></td>
<td><strong>Due:</strong> 4/10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 13</th>
<th>Readings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(04/10/14)</td>
<td>McKeen - Chapter 18, “Building Better IT Leaders from the Bottom Up”</td>
</tr>
<tr>
<td></td>
<td><strong>Mini-Case:</strong> “Customer Service at Datatronics”</td>
</tr>
<tr>
<td></td>
<td><strong>Due:</strong> 4/17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 14</th>
<th>Readings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(04/17/14)</td>
<td>McKeen – Chapter 19, “Managing IT – Based Risk”</td>
</tr>
<tr>
<td></td>
<td><strong>Technology Presentations Due 6pm 4/24/14</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 15</th>
<th>Course Wrap-Up and Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(04/24/14)</td>
<td><strong>Technology Presentations via Elluminate</strong></td>
</tr>
</tbody>
</table>

PAGE 6
Case Memo Template

Each memo should use the template depicted below. The word limit is 250 so don’t waste words on things like fancy headings. All you need are the following words: “To”, “Business Impact Statement”, “Recommendation 1”, “Recommendation 2”. In the header include the “Word Count”.

To: [Address the memo to a specific decision maker within the case]

Business Impact Statement: [Describe the organization’s overall situation/predicament as accurately as possible linking business impacts to causes]

Recommendation 1: [Present two independent (but complementary) recommendations that directly address the problems/opportunities identified within your assessment above]

Recommendation 2:

Header: [In the header of your Word document, include the following]
  • Word Count: [State your word count. Memo must not exceed 250 words]

Recommended Procedure (and Tips) for Analyzing Mini-Cases

For each mini-case, you will perform a “business impact assessment” following the four step procedure outlined below. This procedure (referred to as the “250”) is designed to ensure that you thoroughly analyze the case, focus on causes as opposed to symptoms, consider issues within the appropriate organizational context, and create recommendations that are directed at the real (business) problems. Your skill level in using this technique should increase dramatically with practice over the course.

Step 1: List the problems cited in the case
Cite evidence directly from the case. In practice, the evidence would be gathered from your organization

Step 2: Identify the business impact of each problem
Knowing the business impact of problems provides a sense of their relative severity and/or urgency

Step 3: Craft a business impact statement
Describe the organization’s overall situation/predicament as accurately as possible linking business impacts to problems

Step 4: Offer two independent (but complementary) recommendations
Recommendations should be actionable and linked directly to the organizational assessment
It takes practice to learn how to analyze these cases effectively. However, here are some tips to get started.

1. **Follow the format provided ... exactly.** Don’t even think about exceeding the 250 word limit. You have been warned!

2. **Concentrate on the business impact of problems.** While IT may have a lot of problems, the most pressing ones are always the problems that prevent the business from functioning effectively. These may be technology-based or situated within IT but you need to understand and articulate what the impact of these problems is for the business. Your business impact statement should not be an IT assessment!

3. **Watch for the “elephant(s) in the room”**. Make sure you focus on the major problem(s) in your problem statement. While each case depicts several problems, you need to identify the major problem(s) that could cause the business to go under or cause serious damage if not addressed.

4. **Do not assume that structural changes will solve all problems.** Structural changes such as “creating a CIO position” are tempting but not a panacea. Having a CIO is not going to get business leaders to cooperate for instance. So be careful with using this type of recommendation and make sure it’s appropriate to the problem when you do use it.

5. **Avoid generic recommendations that seek to “boil the ocean”**. Generic approaches such as “align with the business” or “open communication channels” are mostly ineffective. Be clear and specific! Make sure your recommendations directly address the organization situation you have identified. Recommendations should be “actionable”; upon reading them, it should be clear what should be done “on Monday morning”.

6. **Read the cases VERY carefully.** With these mini-cases, every sentence has a purpose and things are only said once … so it can be easy with a quick read to miss significant issues. Also, the best evidence that you can use to buttress your assessment is verbatim evidence from the case – often in the form of a quote.
# Emerging Technology Presentation Evaluation

Date: _____________

Name: _________________________________________________________

Emerging Technology: _____________________________________________

<table>
<thead>
<tr>
<th></th>
<th>Inadequate</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Description of Technology:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>B) Current Applications:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>C) Future Applications:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>(i.e., how will it change business?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D) Implementation Issues:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>E) Overall Quality of Presentation:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

F) Overall Score_______________