CA441: Business Process Management

Class: EC 4
Lecturer: Martin Crane

What are Business Processes anyway?

- Def: *A collection of interrelated work tasks, initiated in response to an event, achieving a specific result for the customer and other stakeholders of the process* (Sharp & McDermott)
- No Result - No Process!
  - *Customer Relationship Management* is not a process!
  - *Confirm Market Opportunity* is a process
- BPM = Management of Business Processes
A Simple Business Process Example

- **Customer Buying Cup of Coffee**
- **Different Actors involved: Customer, Cashier, Chef**

![Business Process Diagram]

**BPM Timeline**

- **Origins in manufacturing (1700s):**
  - One person making an item from start to finish
  - Specialisation: division of labour (Adam Smith)
- **Analysis of Specialised Tasks/ 'Time & Motion' Studies (1900s)**
- **Work Process Flow (early to mid-1900s) (Frank Gilbreth):**
  - Disenchantment with the Assembly Line (1930s)
- **Workflow (mid-1970s):**
  - Document-based at a departmental process level
- **The Quality Era (1980s):**
  - Continuous Improvement (Total Quality Mgmt- Deming & Juran)
- **Business Process Reengineering (BPR) (1990s):**
  - Revolution V Evolution (Hammer & Champy)
- **Business Process Modelling (2000s):**
  - Multilevel, whole organization process integration & modelling
BPM Caveats....

- BPM has potential to transform organizations into more nimble, agile entities, leveraging both human & tech capital effectively.
  - But many BPM efforts spoiled by emphasizing technology, diagrams, or other pedantry.
- BPM is not primarily about these; its purpose is to improve business.
  - If business value of BPM effort is not demonstrable, start over!
- Processes are a view on organizations, but are an abstraction from reality & do not cover all aspects of a complex system.
  - Don’t mix up the map with the territory it represents.

BPM Caveats....cont'd

- BPM efforts require structure & methodology.
  - Structure to guide efforts at different levels of abstraction (separating what from how), i.e. a level framework.
  - Also need a structure to navigate among the processes of your organization, i.e. a process architecture.
  - Need a methodology to retain & leverage what you have learned about managing & conducting BPM projects
- Shouldn't try to improve everything at once, but review the most important aspect (i.e. 'Pinchpoints') of an organization.
Relationship Between Concepts

**Business Process**
- Is defined as
- Is managed by workflow management system

**Workflow Management System**
- Controls automated aspects of the business process via management of process instances

**Process Definition**
- A representation of what is intended to happen

**Process Instances**
- A representation of what is actually happening

**Activity Instances**
- Tasks allocated to a workflow participant

**Work Items**
- Computer tools/applications used to support an activity

**Invoked Applications**
- Computer tools/applications used to support an activity

**Activities**
- Composed of sub-processes and activities
- Automated activities and manual activities

**Sub-Processes**
- Activities

**Manual Activities**
- (which are not managed as part of the Workflow system)

**Automated Activities**
- During execution are represented by

Stages in Business Process Reengineering

This is where we will start with Workflow

- **1. Develop Vision and Objectives**
- **2. Understand Existing Processes**
- **3. Identify Process for Re-design**
- **4. Identify Change Levers**
- **5. Implement the New Process**
- **6. Make New Process Operational**
- **7. Evaluate the New Process**
- **8. Ongoing Continuous Improvement**

*Source: Vakola et al. (1998)*
Course Structure

**Lectures**

- Introduction - scope, objectives.
- Workflow Modelling (understanding current WF/ new WF design)
- Introduction to Business Process Redesign/Re-engineering
- Case studies in BPR in the Public & Private Sector
- National-Cultural Issues in BPR
- Factors which contribute to Success of Re-engineering Projects
- Socio-Technical Systems
- Workflow Tools/Workflow Management
- WF Management in Practice: Petri-Nets
- Business Process Modelling

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**Timetable**

**Lectures**

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<th>Location</th>
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<tbody>
<tr>
<td>Monday</td>
<td>2 - 3pm</td>
<td>CG05</td>
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<tr>
<td>Thursday</td>
<td>2 - 3pm</td>
<td>CG04</td>
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**Tutorials**

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<tr>
<td>Tuesday</td>
<td>12 - 1pm</td>
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End-of-Semester Mark

Assignments  40%
Exam  60%

Assignments
+ Essay in form of a research paper & other assessment (BP Modelling Project)
+ Details to be announced later

Information

See my web page at:
http://www.computing.dcu.ie/~mcrane/CA441/

Research Papers/Lecture Notes/Assignments on various topics will be put on this page throughout the course
BOOK LIST

Jackson, Michael & Twaddle, Graham Business Process Implementation Addison Wesley.

Hammer, Michael & Champy, James Reengineering the Corporation Nicholas Brealey.


Other books and articles will be recommended for reading from time to time.