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

![Diagram of a simple business process example]
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.
- However, often BPM efforts are spoiled by an emphasis on technology, diagrams, or other pedantry.
- BPM is not primarily about these; its purpose is to improve business. If you cannot demonstrate the business value of a BPM effort, go back to the drawing board.
- 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 a set of activities to achieve a goal.
- Process Definition is an agreement of how to achieve a goal.
- Workflow Management System controls automated aspects of the business process and includes one or more Invoked Applications.
- Process Instances are representations of activities actually happening during execution.
- Activity Instances are representations of what is intended to happen.
- Work Items include one or more Work Items Invoked Applications.

Course Objectives

- Examine the main concepts of Business Process Management and Business Process Re-design.
- Examine techniques for modelling Business Processes.
- Examine the environmental conditions and the enabling technologies.
- Compare BPR with other management techniques.

Course Structure

Lectures
- Introduction - scope, objectives.
- Workflow Modelling (understanding current WF/ designing new WF).
- Introduction to Business Process Redesign.
- Business Process Re-engineering.
- National-Cultural Issues in BPM.
- Successful Re-engineering Projects.
- Socio-Technical Systems.
- Workflow Tools/Workflow Management.
- WF Management in Practice: Petri-Nets.
- Business Process Modelling.
**Timetable**

<table>
<thead>
<tr>
<th>Lectures</th>
<th>Monday</th>
<th>1 - 2 CG05</th>
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</thead>
<tbody>
<tr>
<td>Labs</td>
<td>None</td>
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<tr>
<td>Tutorials</td>
<td>Monday</td>
<td>2 - 3 CG05 as required</td>
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</tbody>
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**End-of-Semester Mark**

- Assignments 50%
- Exam 50%

**Assignments**

- Essay in form of a research paper & presentation
- Details to be announced

**Information**

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

Research Papers/Lecture Notes 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.

Sharp, Alec & McDermott, Patrick Workflow Modelling Artech House.


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