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**

```
Place Order  Make Payment  Collect Coffee
\rightarrow \rightarrow \rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
\rightarrow
```
• **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 in a (i.e. what is intended to happen)
- Is managed by

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

**Process Definition**
- (a representation of what is intended to happen)
- Composed of

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

**Process Instances**
- (a representation of what is actually happening)
- Include one or more

**Activity Instances**
- During execution are represented by
  - Work Items
    - (tasks allocated to a workflow participant)
  - Invoked Applications
    - (computer tools/applications used to support an activity)

**SOURCE: WFMC**

25 Sep 2012
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

Lectures
Monday       1 - 2    CG05
Thursday     2 - 3    CG04

Labs
None

Tutorials
Monday       2 - 3    CG05 as required
End-of-Semester Mark

\[ \frac{35}{17} \text{Assignments} \quad 50\% \\
\frac{35}{17} \text{Exam} \quad 50\% \\
\]

Assignments

\[ \frac{35}{17} \text{Essay in form of a research paper & presentation} \\
\frac{35}{17} \text{Details to be announced} \]
Information

See my web page at:
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.


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