COMP 5524:
Workflow Management and Collaborative Systems

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Department of Computing

The Hong Kong Polytechnic University

COMP 5524

- ➢ Lecture Schedule:
  - Monday (EF 312, 18:30-20:30 Hrs)
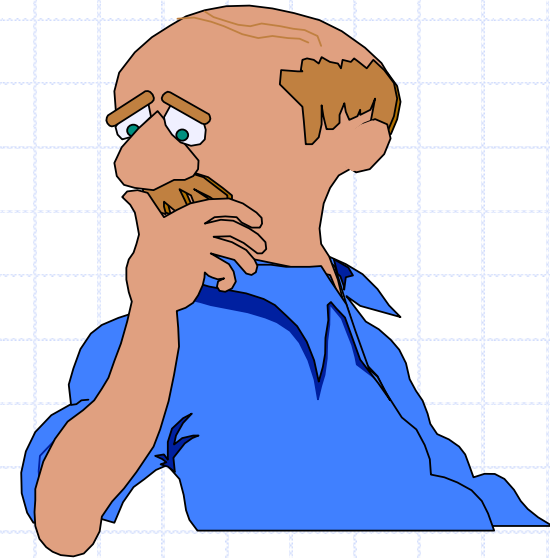
- ➢ Course Material → Accessible from *WebCT*
  - Lecture Slides, Videos'
  - Assignments, Solutions
  - Online References, Articles, and Links
  - Course Website:
    http://www.comp.polyu.edu.hk/~csajaykr/teaching/comp5524/2012/comp5524.htm

- ➢ Teaching Assistance:
  - Chun-Wei Tan
  - Email: cscwtan@comp.polyu.edu.hk, Ph: 4901

About Me

- Research
  - Computer Vision, Pattern Recognition
  - Biometrics, Industrial Inspection

- Department of Computing

- Office: PQ 835

- Email: WebCT Email (no spam filtering)

- Office hours: by appointment via email

Course Outline

➢ **Objectives**

- Understand the Design and Development of collaborative Systems → Streamline Organizational Business Processes

- Industry Standard → BPMN, WfMC workflow reference model, XML consortiums formed in various industry

- Business Process Re-engineering, Balanced Scoreboard Framework, Process Lifecycle, Process Modeling and Analysis, System Integration through EAI and XML technology, Document Management, CA/PKI Infrastructure

➢ Indicative Textbooks

- Rashid N. Khan, Business Process Management: A Practical Guide, Meghan-Kiffer Press, 2004.
- Dave Chaffey, Groupware, Workflow and Intranets: Re-engineering the Enterprise with Collaborative Software, Digital Press, 1998.

Course Material

- ➢ **Lecture Material**
  - Copies of slides provided weekly on class website
  - Slides are only an aide memory, … …
  - Attend Lectures
    - Lectures gives you detailed point-wise meaning
    - Slides may change
  - Roughly follow keyword syllabus
  - Only selected subset of topics from recommended textbooks
  - Enriched with material from further sources (Journals/Articles)

- ➢ Course Format
  - Lectures, Discussions
  - Lab tutorials for hands-on experience
  - Case analysis
  - Presentations on specific topics

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What do I learn in this course?

- Become better informed users, customers and/or professionals in the application and use of groupware systems

- Develop a thorough knowledge of improving business performance through office automation & workflow applications

- How to use workflow/webflow automation to
  - Improve operations
  - Create and automate new services (save $$$)
  - Increase customer intimacy
  - Promote competitive advantage

- Understand key industry standards and models

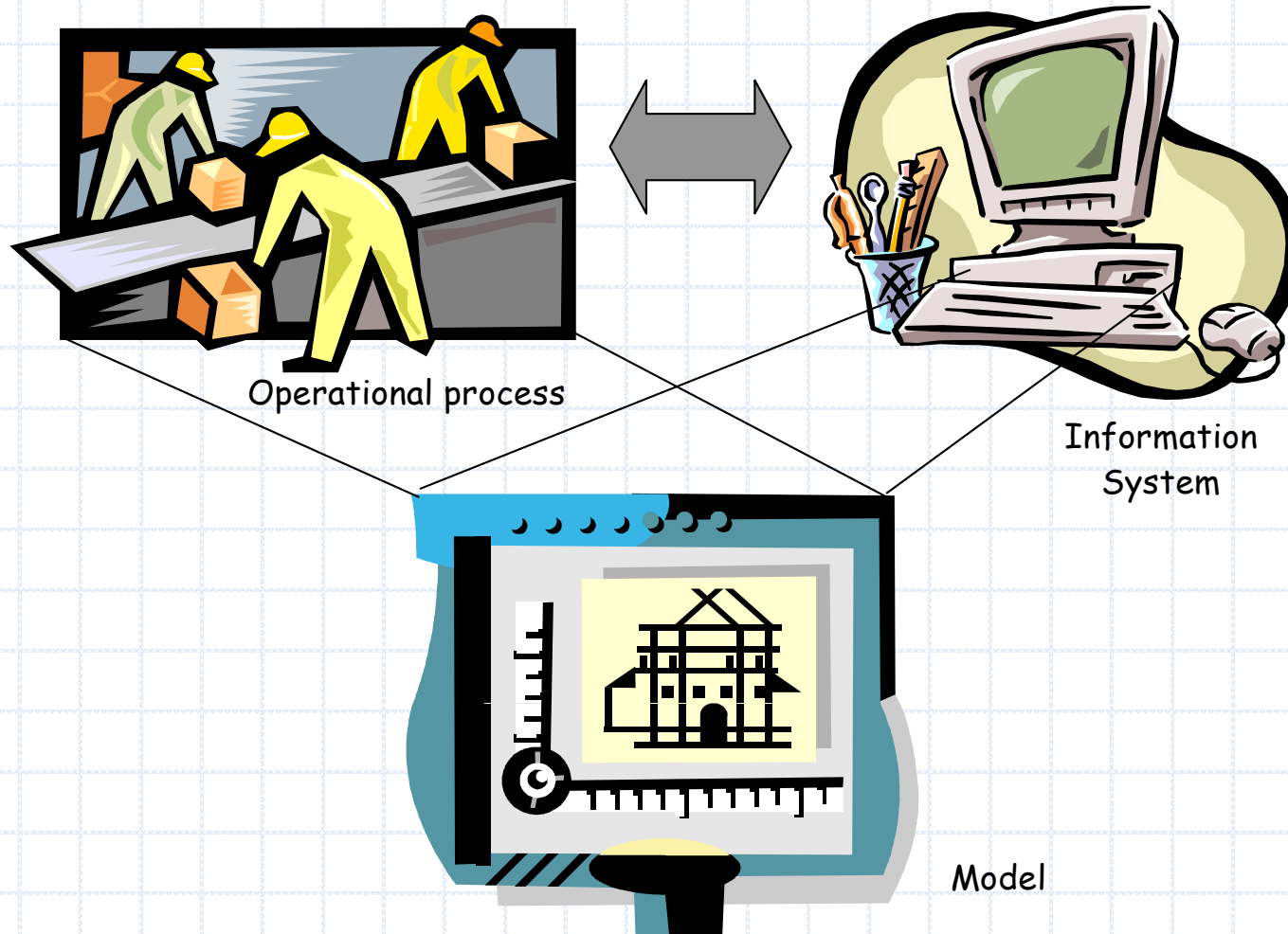- Deepen critical-thinking and problem-solving skills

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Why Workflow Management?

- *Better, Cheaper faster businesses*

- Improved efficiency $\rightarrow$ mostly through automation of business processes

- Improved customer service $\rightarrow$ through consistency in the processes

- Improved process control $\rightarrow$ helps management and improves overall quality of the outcomes

- Flexibility $\rightarrow$ software control over processes enables their re-design in line with changing business needs

- Business process improvement $\rightarrow$ through focus on business processes
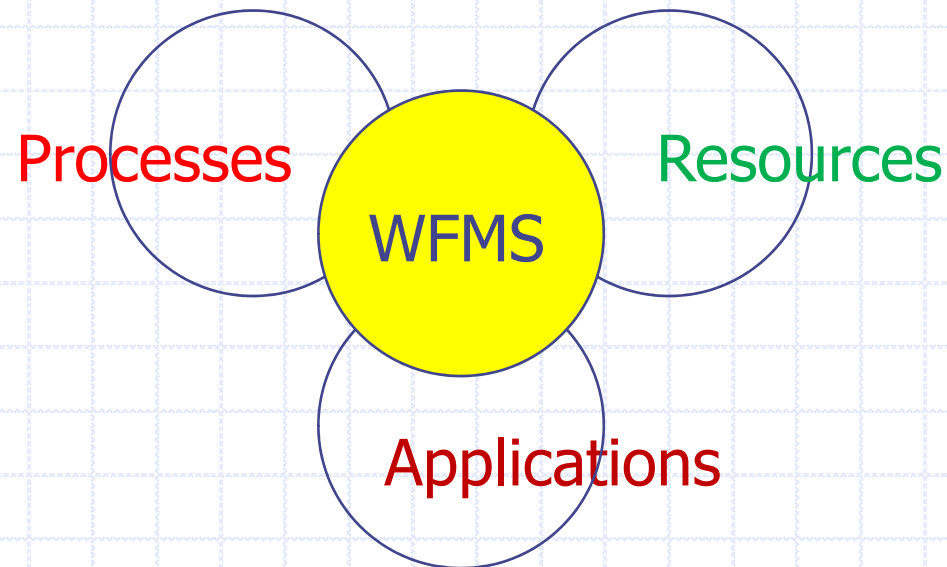
Must understand and benefit from new realities

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> Focus of this Course → Models

Operational process

Information System

Model

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➢ ## Workflow Management

Processes — WFMS — Resources

Applications

- ■ Separation of processes, resources and applications
- ■ Focus → Logistics of work processes
  - ◆ Not on the contents of individual tasks
- ■ **It is not sufficient to just understand the workflow models**
  - ◆ *You have to be able to design them yourself → Hands-on-experience*

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➢ Focus of this Course → Models

Lecture Format

- ➢ Slides and transparencies
- ➢ Illustrative examples
  - Supplement the slides and transparencies

- ➢ Lectures
  - Come regularly
  - It is your responsibility to catch up your missed lectures with your friends

- ➢ Assignments
  - Tutorials
  - Important exercises to supplement the lectures
  - More rigorous problems to consolidate your knowledge

Tentative Schedule

- Introduction (1 week)

- Workflow Modelling (2 weeks)

- Workflow Management (2 weeks)

- Workflow Analysis/Design/Practices (1 week)

- Groupware Systems/Functions (1 week)

- Balanced Scorecard Framework (2 weeks)

- B2B Integration (1 week)

- Introduction to XML (2 weeks)

- Public Key Infrastructure (2 weeks)

Assessment

Continuous Assessment

- 45%
- Two Assignments
  - Assignment # 1: Individual Assignment, *Released: 07 February*
    Deadline for Submission: 26 February
  - Assignment # 2: *Group Assignment, Released: 27 February*
    Submission Deadline: March 25
    Requires Class Presentation

Examination

- 55%
- No make up examination
- Will cover material in assigned readings
- Material included in the lecture, closed-note and closed-book

Thou Shall Not Cheat

➤ Do not cheat

➤ I encourage you to discuss your assignments with your friends
  - Put everything in your own words

➤ But no copying
  - It is NOT a shame of not knowing how to do
  - Copying causes damage to your integrity and respect
  - Copying is stealing intellectual property
  - TAs will catch cheaters

➤ What if you are caught copying?
  - Both the copier and the <u>originator</u> get 0
  - 2nd time: Both get 0 *and* one full downgrade
  - Caught 3rd time: FAIL
  - If it is minor or major, an automatic FAIL

WARNING

WARNING

It is not sufficient to understand the workflow models
You should be able to design them yourself !

WARNING

WARNING

**Start early with the lab practice sessions and assignments
You really need the time !!**