

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

# Lecture 11

Strategic Alignment, Activity and Workflow  
Modeling, and Business Rules

# Introduction

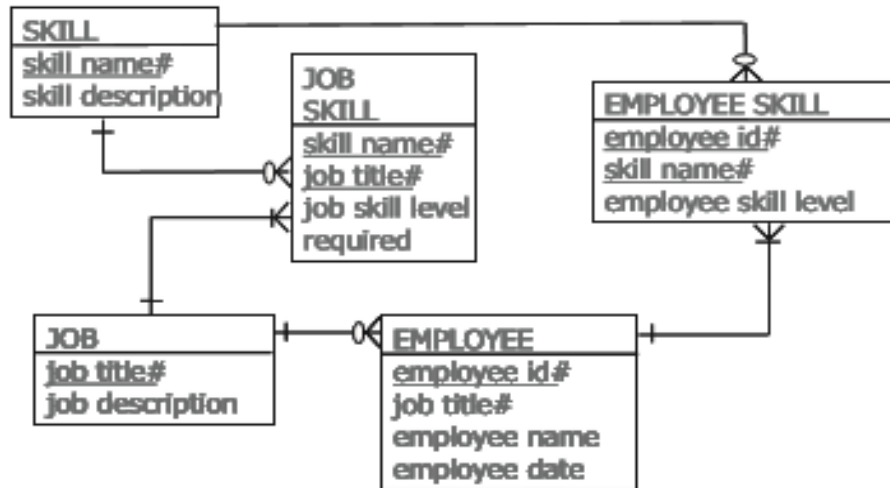
- ✘ How workflow models can be derived using data maps and activity maps

# Workflow Modeling

- ⌘ A workflow model is the sequential series of tasks and decision that make up a business process.
- ⌘ How project work and helps them streamline and optimize it for best result and efficiency.

# Using data Maps for Workflow Modeling

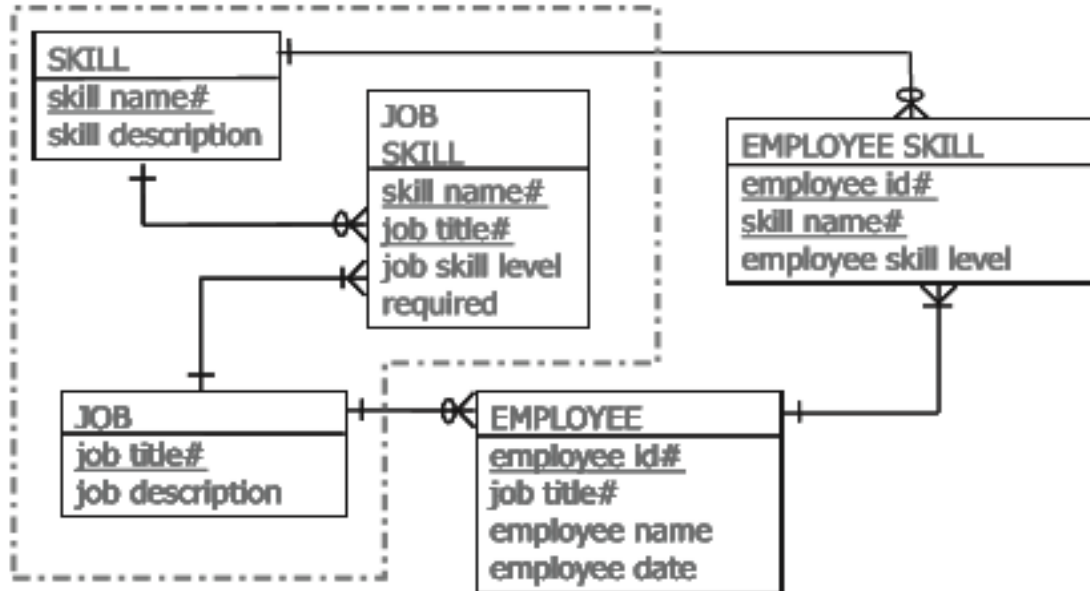
- we can use data maps and activity models to derive workflow models. This is a very simple data map, but it will serve our purpose to derive a workflow model.
- We will use the entity dependency analysis method to identify activities in the data map and derive subproject clusters and then a project map, as discussed in the following paragraphs and associated figures



# Using data Maps for Workflow Modeling

- ⌘ Figure uses dashed-dotted line to highlight the first end-point entity: JOB SKILL.
- ⌘ We can see this is an intersecting entity ,formed by the decomposition of the many-to-many association that otherwise would exist between SKILL and JOB.
- ⌘ It represents the activity that is called Job Skill Management in this example.
- ⌘ Using entity dependency analysis with the highlighted data map subset.
- ⌘ we can derive the following project plan for implementation of this activity as a subproject cluster. This cluster is also called Job Skill Management.
- ⌘ . Using entity dependency analysis , there are two cluster that exist:
  - 1.. JOB SKILL MANAGEMENT
  - 2... EMPLOYEE SKILL MANAGEMENT

# Using data Maps for Workflow Modeling

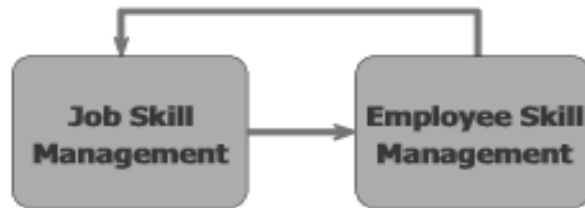


# Derivation of Activity Models from data Maps\project maps

- ⌘ The project map derived from the data map gives us insight into the possible relationship that also exists between the two activities represented by these subprojects.
- ⌘ This makes sense, because a Job Skill Management activity determines skills needed for a job, where as an Employee Skill Management activity indicates employees with required skills.
- ⌘ The output from the Job Skill Management activity is a list of required skills. This provides input to the Employee Skill Management activity. The project map therefore is a starting point to develop activity maps.

# Derivation of Activity Models from data Maps\project maps

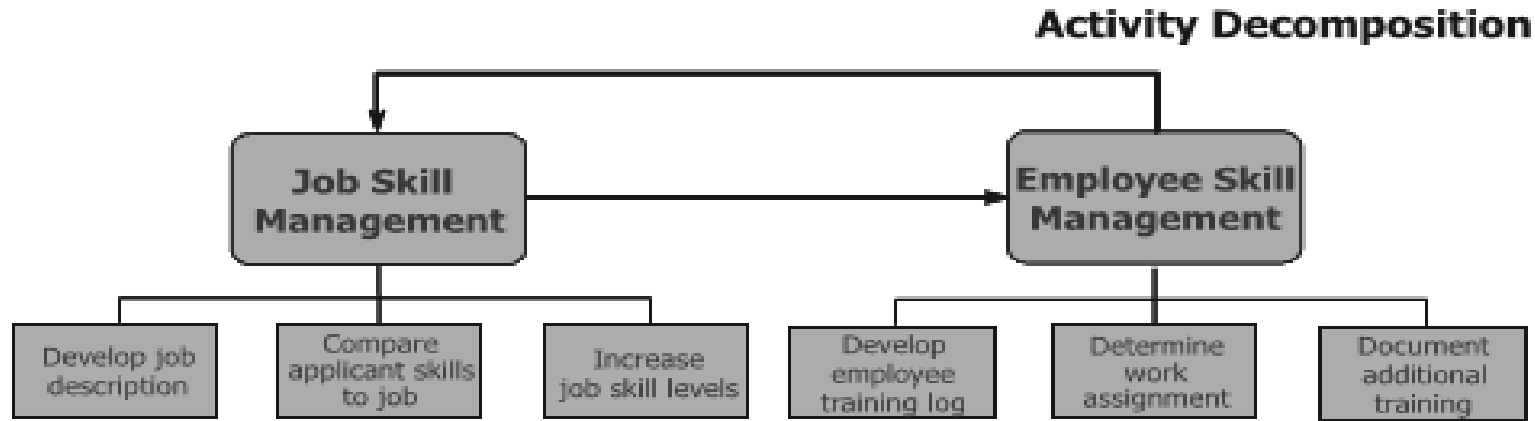
- ✘ The data map in figure suggests that an employee who does not have required skills for one job may instead be assigned to another job. The result is an embryonic activity map with a feedback loop



- ✘ Using activity modeling as described , sub activities can now be defined for these two activities.
- ✘ Job Skill Management requires three tasks as sub activities: Develop job description, Compare applicant skills to job, and Increase job skill levels.



# Derivation of Activity Models from data Maps\project maps

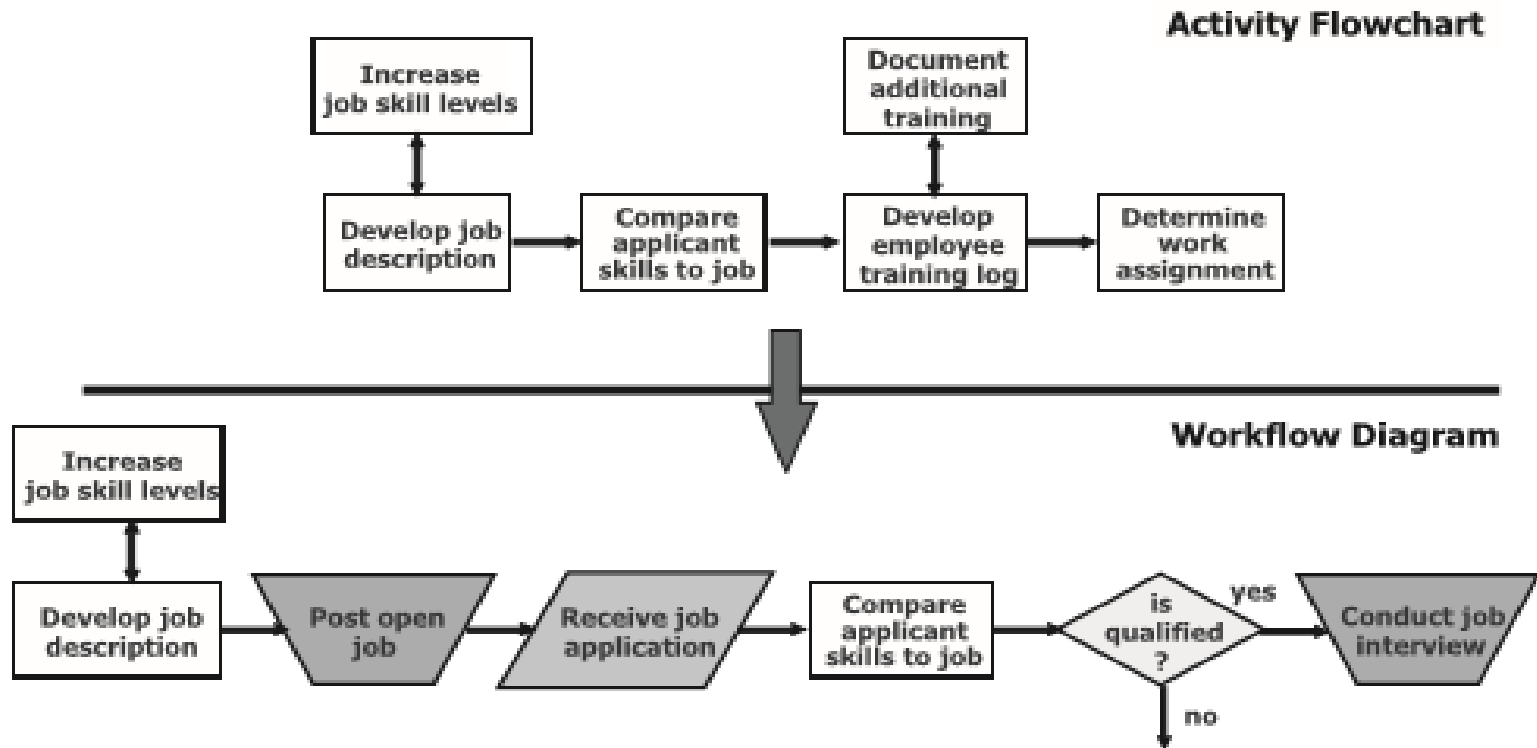


- Similarly, Employee Skill Management has three tasks as sub activities: Develop employee training log, Determine work assignment, and Document additional training.
- Figure 2 shows these activities and their sub activities in a decomposition diagram that shows the activity hierarchy.

# Derivation of a Workflow Model from Activity Maps

- Now start to define a workflow model from the activity decomposition hierarchy in Figure, which illustrates an activity flowchart in the bottom part of the figure that has been derived from the activity decomposition hierarchy diagram above it.
- This flowchart is a transitional activity hierarchy diagram that illustrates a potential process sequence for execution of the various tasks in the activity. Decomposition diagram does not consider external tasks that may also have to be carried out during execution.
- When the external tasks are added to the transitional activity flowchart. The result is now a workflow diagram.

# Derivation of a Workflow Model from Activity Maps



# Derivation of a Workflow Model from Activity Maps

- ✘ the external tasks Post open job and Receive job application.
- ✘ When applicant skills are compared to required job skills, a decision is made for any qualified applicants to carry out the external task of Conduct job interview.