



Changing the rules of business

# Organizing Rule Discovery

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*10 AM PST, 1 PM EST*

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**ILOG Professional Services**

- What is Rule Discovery?
- Where are Rules found?
- Model, Model, Model!
- Finding the Decision Points in the models.
- Creating a Rule Discovery Roadmap.



- **Finding the Business Knowledge**
- **Structuring the Knowledge into English Language**
- **Applying analysis to the knowledge to form it into rules**
- **Documenting the rules, the rule sources, and the vocabulary used for the rules.**



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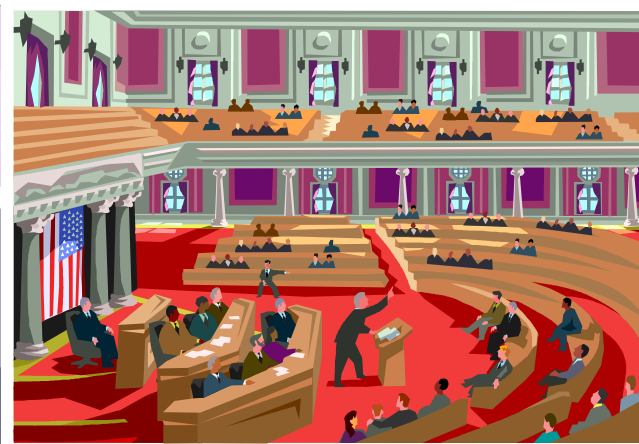


# Where are Rules Found?



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- People's Heads
- Personal Work Aids
- Corporate Documents and Artifacts
- Legislation and Policy Documents
- Legacy Code



## 1. Identify the decisions

- Each decision represents some group of rules

## 2. Identify where the rules for each decision are!

- For each decision, identify the source or sources

## 3. Determine the best method for extracting the rules

- They vary based on the source
- There may be multiple sources for a group of rules

## 4. Generate a Rule Discovery Roadmap

- A tool to organize rule discovery
- Steps later in this presentation

## 5. Document your rules!

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- ILOG is bullish on modeling
  - *Because it works!*
- Three major kinds of modeling
  - Structural Modeling
  - Functional Modeling
  - Process Modeling
- Best Practice is UML modeling
  - *But your corporate standard modeling works, too!*





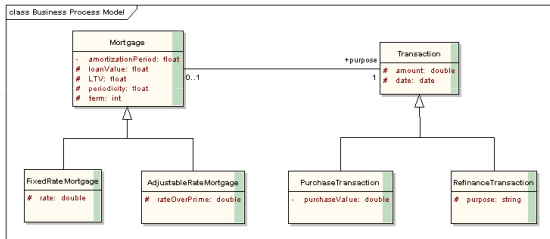
# Modeling, Modeling, Modeling



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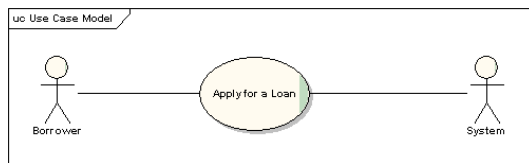
## ■ Structural modeling

- UML Class Diagram (or other Object Oriented Class Model).
- Usually supports discovery, but also a result of discovery (iterate)



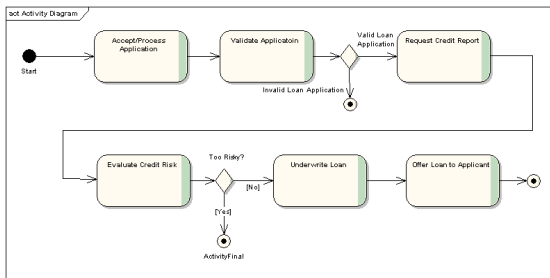
## ■ Functional modeling

- Use Cases/UML Use Case Diagram
- Text Requirements
- Scenarios, User Stories



## ■ Process modeling

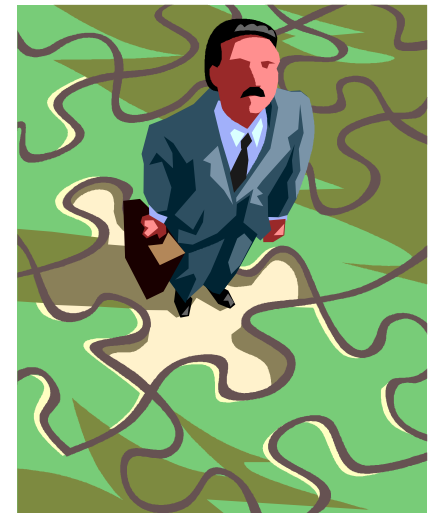
- UML Activity Diagrams
- Flowcharts
- Workflow diagrams



- What is Rule Discovery?
- Where are Rules found?
- Model, Model, Model!
- **Finding the Decision Points in the models.**
- Creating a Rule Discovery Roadmap.



- Decision Points are places where the model requires a decision
- Finding them varies with what kind of model you have
- Functional and Process models contain structures that can represent decisions
- Structural models require more analysis
- Use all the models you have!

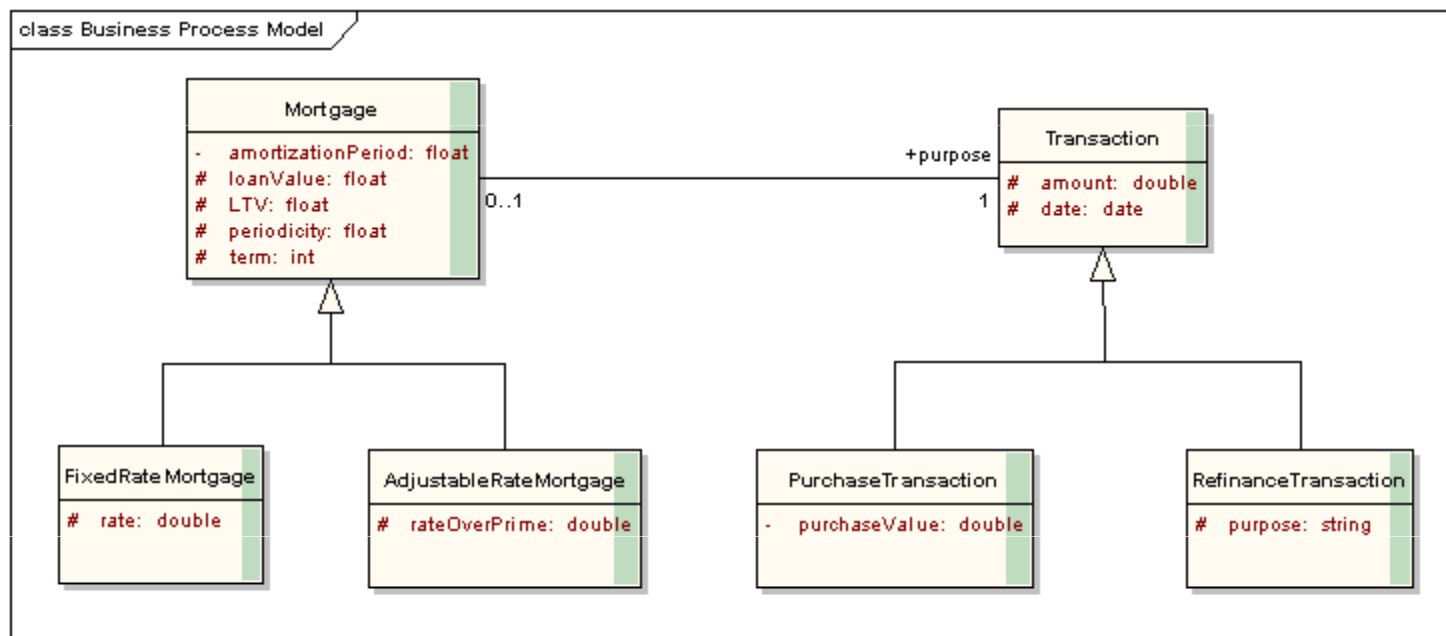


# Finding decision points in structural models



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- Which classes or attributes change?
- How many inputs to the changes?
- How often does the change occur?
- Where is the change a result of a decision?



- Which use cases/scenarios represent decisions?
  - At what steps in the use case is a decision made?
- Which requirements are decision rich?
- Which steps/cases/requirements represent significant complexity?
- Which steps/cases/requirements are most subject to change?

- Process models are the easiest for finding decision points

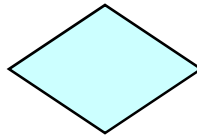
- Look for “decision verbs”

- Determine
    - Calculate
    - Validate
    - Evaluate

- Look for decision diamonds

in flowcharts

and activity diagrams



- List your decision points, so you can develop a “Rule Discovery Roadmap”

- What is Rule Discovery?
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# What is a Rule Discovery Roadmap?



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- Roadmap is a structure that helps you organize rule discovery – figure out how to gather your business knowledge for rules
- Details available from Agile Business Rule Development
  - <http://www.ilog.com/brms/media/ABRD/>



# Rule Discovery Roadmap



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<i>Decision Point Name</i>	<i>Description</i>	<i>Rule Owner - SME</i>
Source for rule		
<i>Roadmap</i>		
Discovery Session	<dates>	
Main Actor	<ul style="list-style-type: none"> <li>- Facilitator:</li> <li>- Invitees:</li> </ul>	
Deliverables	<ul style="list-style-type: none"> <li>&lt;isis document&gt;</li> <li>&lt;rule project in rule studio&gt;</li> </ul>	
Expected Target Date to end Discovery		

- Do a roadmap for EACH decision point
  - Make sure each decision point is thoroughly covered
  - You may need to break decisions down into sub decisions
  - Identify sources and owners
    - Document *and name* the sources
  - Gather non-human sources – specify the documents
  - Schedule discovery sessions with human sources

# Rule Discovery Roadmap



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<i>Decision Point Name</i>	<i>Description</i>	<i>Rule Owner - SME</i>
Evaluate Credit Risk	Decide on the level of credit risk of this application	Polly C. Manager
Source for rule	Existing Credit Risk evaluation Sheets. Credit Risk Manual (Old) Jim Smith (SME), Polly C. Manager	
<i>Roadmap</i>		
Discovery Session	<dates>	
Main Actor	<ul style="list-style-type: none"> <li>- Facilitator:</li> <li>- Invitees:</li> </ul>	
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Expected Target Date to end Discovery		

- Discovery methods vary by the type of model
  - Use Cases – identify user stories within the use cases, then identify rules that define the user stories
  - Activity Diagrams/Business processes – identify the decisions represented, then the rules
  - Workflow – identify rule enriched tasks, then the rules
  - Structural models – identify how objects/data are created, changed, and the rules associated with this
- You might at this point know what kind of rules you are gathering!

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Evaluate Credit Risk	Decide on the level of credit risk of this application	Polly C. Manager
Source for rule	Existing Credit Risk evaluation Sheets. Credit Risk Manual (Old) Jim Smith (SME), Polly C. Manager	Evaluation Rules Constraint Rules
<i>Roadmap</i>		
Discovery Session	<dates>	
Main Actor	<ul style="list-style-type: none"> <li>- Facilitator:</li> <li>- Invitees:</li> </ul>	
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Expected Target Date to end Discovery		

# Complete the planning



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- Identify facilitator, invitees for discovery interviews and workshops
- Identify the documents/code that needs to be reviewed
- Identify the deliverables that will be generated from the interview, workshop or review
  - And any validation process
- Identify a target date to end discovery
- Identify a process for resolving conflicts

# Rule Discovery Roadmap



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<i>Decision Point Name</i>	<i>Description</i>	<i>Rule Owner - SME</i>
Evaluate Credit Risk	Decide on the level of credit risk of this application	Polly C. Manager
Source for rule	Existing Credit Risk evaluation Sheets. Credit Risk Manual (Old) Jim Smith (SME), Polly C. Manager	Calculation Rules Constraint Rules
<b>Roadmap</b>		
Discovery Session	9/30/2008 – Constraint Discovery Session, Polly C. Manager 10/2/2008 – Calculation Discovery Session, Jim Smith, using Risk Evaluation Sheets	
Main Actor	<ul style="list-style-type: none"> <li>- Facilitator: Julie Holm</li> <li>- Invitees: Polly C. Manager, Jim Smith, Bill Coder, IT. Note: Bill will bring Calculation Constraint Program code.</li> </ul>	
Deliverables	Rule Template Document – Constraint task. Rule Project in Rule Studio	
Expected Target Date to end Discovery	October 12, 2008	

# Questions & Answers



*Thank You !*