FICO Decisions

New Features in DMN 1.2

Where we are, and where we're going

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Where we are

Status

- Version 1.2 submission postponed (again)
  - By 6 months
  - Submission deadline now December 2017
  - Assume v1.2 published early in 2018

- > 30 issues resolved in 8 ballots

- > 100 issues open

- v1.2, not 2.0:
  - "A Revision Task Force produces new, minor revisions to existing, formally published specifications.
  - "A RTF may make minor technical changes, but keep in mind that, in general, significant technical changes will require a new RFP."
    - *The OMG Hitchhiker's Guide, V7.8*

Catch-up: DMN 1.1

- New features
  - Decision services: notation, metamodel & execution semantics [11-45, 11-176]
  - Artifacts: Text annotations & Associations [11-99]
  - Extension capability [11-155]
  - Imported values for LiteralExpressions [11-73]
  - Simple expression added to S-FEEL to allow comparisons in DT cells [11-21]
  - Numerics allowed to be negative [11-13]

- Removed features
  - Decision tables lose completeness and consistency markers [11-32, 11-44]

Agreed for DMN 1.2

- New features
  - Annotation columns in decision tables [12-124]

Table name						
Hit policy	Input expression 1	Input expression 2	Output name		Annotations	
			Output 1	Output 2	Annotation 1	Annotation 2
	Input values	Input values	Output values	Output values		
Rule id 1						
Rule id 2						
Rule id 3						
Rule id 4						
Rule id 5						

Agreed for DMN 1.2

- New features
  - Annotation columns in decision tables [12-124]

- Removed features
  - Clarity on use of names:
    - Only element names are displayed, not (e.g.) labels [12-89]
    - Restrictions on use of names vs ids, namespaces, etc [12-94]

- Changes
  - Minor changes to semantics of arithmetic and list functions [12-24, 12-74, 12-78]
  - QNames specified; typeRefs are strings not Qnames [12-94]
  - Bug-fixes & tidy-ups [e.g. 12-55]

Where we're going

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Where we're going

- Exciting things to come in v1.2:
  - Diagram interchange [12-20]
  - Context-free grammar [12-42]
  - Invocable decision services [12-10]

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Diagram interchange, using OMG DI

(from Denis Gagné)

Meta-model

underlying computer-interpretable representation

Notation

Notational symbols and graphical representation

Standard

| Abstract Syntax | ← Reference | Concrete Syntax |

instance   instance

Your Work

| Model | ← Reference | Diagram |

→

Interchange Format

electronic file format that eases the safeguard and transfer of this data between different tools

- Diagrams can be considered as pictures of the model.
- Many diagrams (or pictures) of the same model are possible, each showing or hiding various aspects of the model details.

Diagram interchange, using OMG DI

- OMG DI requires all semantic elements to have IDs

- Hence changes already agreed:
  - Ids for context entries [12-134]
  - InformationRequirement, KnowledgeRequirement and AuthorityRequirement inherit from DMNElement, therefore have ids [12-101]

Context-free grammar

- Under discussion; current proposal is:
  - FEEL grammar to require singe quotes around names that contain spaces or operators
    - 'Alan Fish'
    - 'disposable income'
    - 'Profit and loss'
  - Names without spaces or operators MAY still be written without single quotes
    - AlanFish
    - disposableIncome
    - ProfitAndLoss
  - Single quotes in names MUST be escaped with a second single quote
    - 'Alan Fish''s disposable income'
  - A compound name may not start or end with a space. It may contain spaces but not 2 consecutive spaces or other whitespace characters

Decision services, reuse & composability

- DMN 1.1:
  - decisions to be called from outside the model using decision services
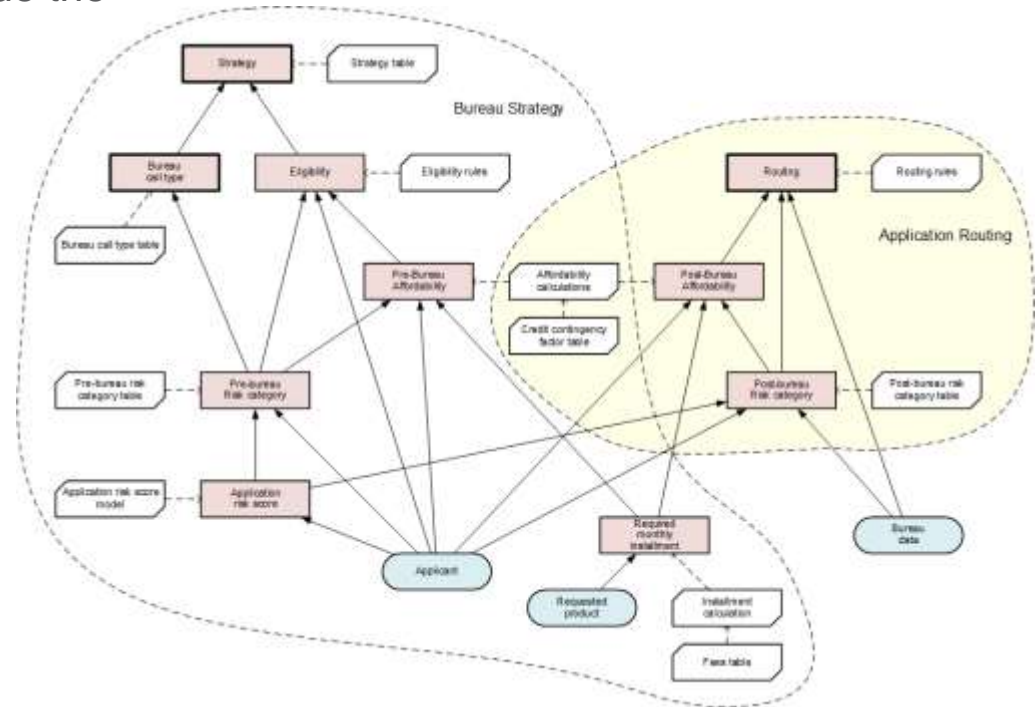
Decision services, reuse & composability

- DMN 1.1:
  - decisions to be called from outside the model using decision services
  - DS defined as overlay on DRD
  - Input data and input decisions become DS parameters
  - Output decisions become DS returned results
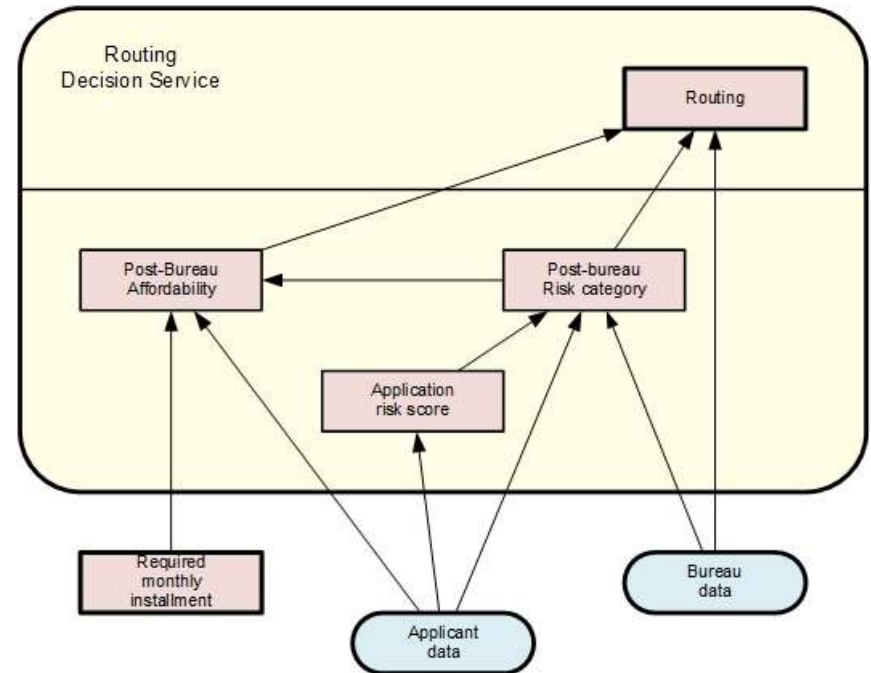
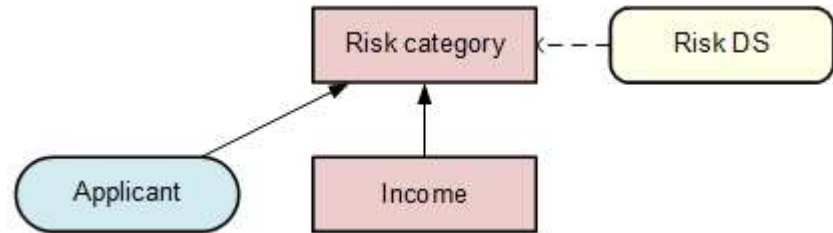# Decision services, reuse & composability

- DMN 1.2:
 - DS & BKM become types of "invocable thing"

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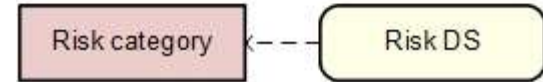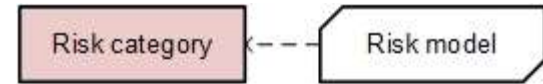
Decision services, reuse & composability

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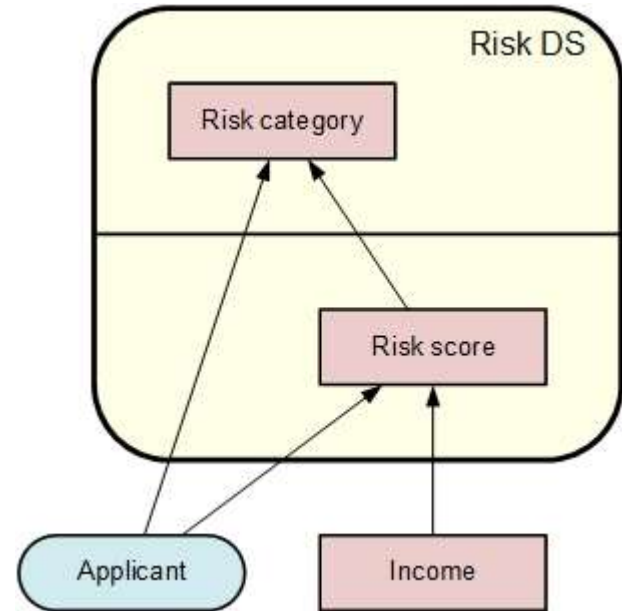
Decision services, reuse & composability

- DMN 1.2:
    - DS & BKM become types of "invocable thing"
    - DS defined as an overlay, as before
    - DS may be invoked by decision
        - parameter values provided by calling decision
        - e.g. from its required ID & decisions

Decision services, reuse & composability

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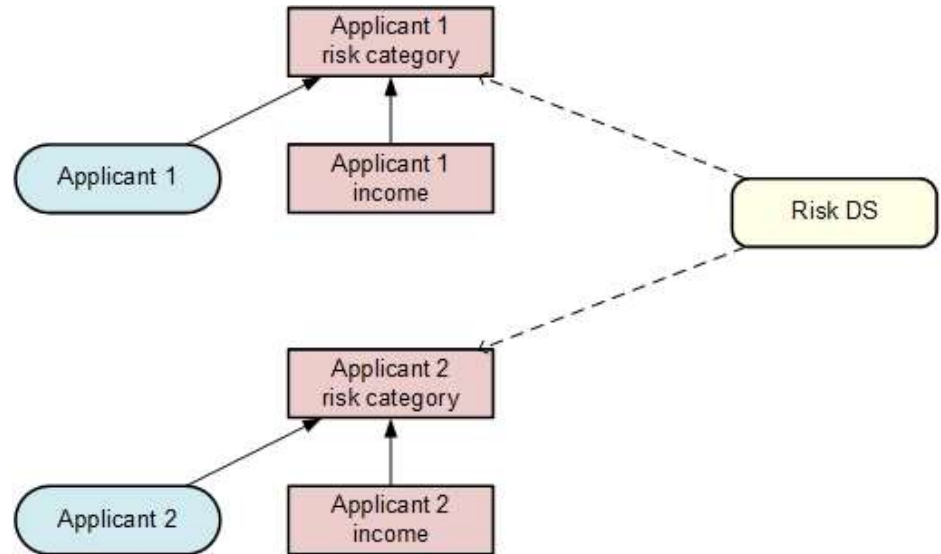
Decision services, reuse & composability

- DMN 1.2:
  - DS & BKM become types of "invocable thing"
  - DS defined as an overlay, as before
  - DS may now be invoked by decision
  - Reuse now possible within DRD
  - Possible to draw invoked DS closed o open
    - e.g. opened "in place" to combine DS invocation and DS definition
    - but this raises interesting issues...
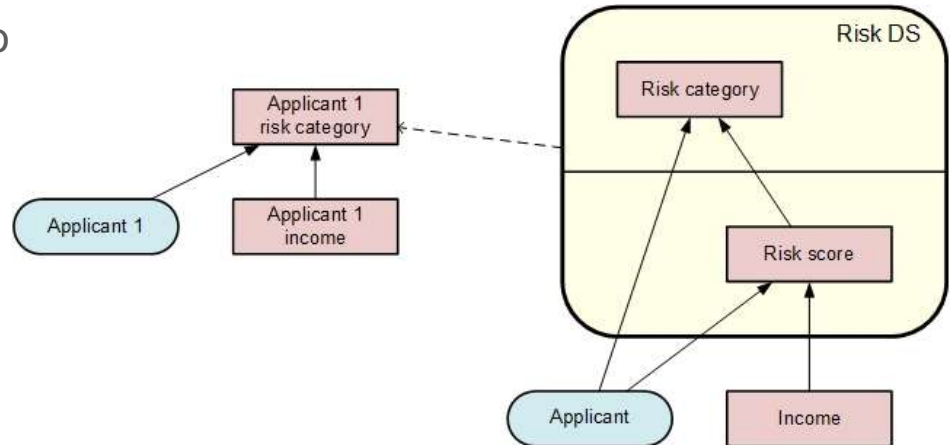
Decision services, reuse & composability

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    - Should we distinguish between "opened" DS and DS "definitions"?
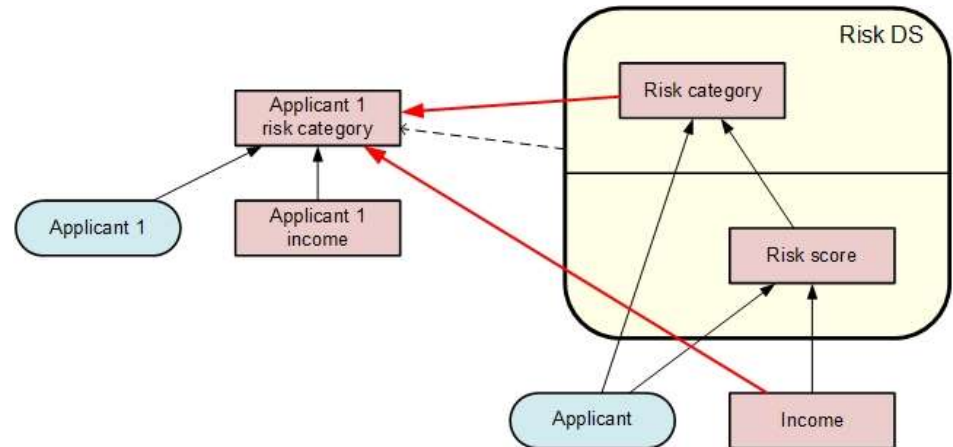
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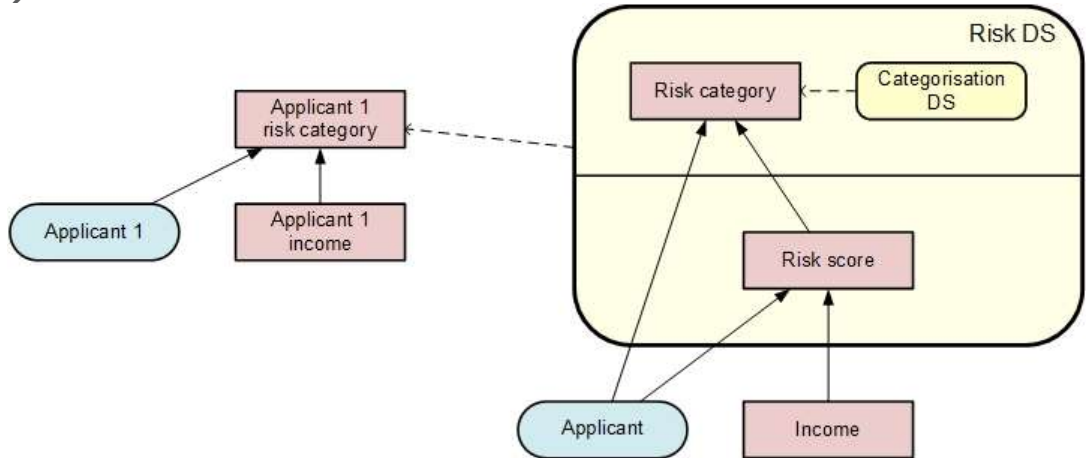
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  - Should we distinguish between "opened" DS and DS "definitions"?
  - How are "closed" DSs notated?
  - What are the implications of composition?
  - Should we allow recursion?

How to get involved

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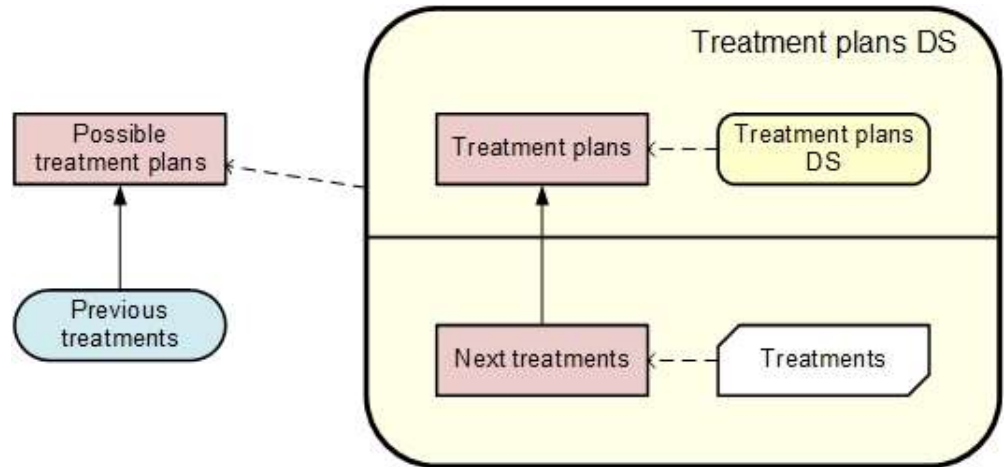
How to get involved

- Review existing open issues
  - http://issues.omg.org/issues/lists/dmn-rtf

- Report a new bug or issue
  - http://www.omg.org/report_issue.htm

- Contribute to discussion tomorrow
  - "What you Like and What you Do Not Like in DMN"

Thank You

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