

Decision Modeling Language

The Acappella Approach

Acappella Software has created Decision Modeling Language (DML) as a methodological extension of our Telamon Platform™. The *Telamon* technology captures role based expertise, and then converts it into a web-based application that supports decision making practices.

DML takes any sophisticated business workflow and converts it into a series of evaluations, analyses, and/or decision making tasks. Having identified these “Decision Objects”, the next task is to delineate the characteristics of the decision activity, and to make clear the nature of the data and information flow between Decision Objects. When these decisions are deployed, they have the capability to communicate with each other. In that way, decisions and results from one task become information for the next task in the business process chain of events.

The Acappella technology and DML are therefore the tools used to shape knowledge, information, and data into a business process. DML has been utilized to assist in understanding and delineating the business requirements of our customers.

About Decision Objects

Decision Objects are the components of a business process. Each of these components identifies an appropriate context for an decision, evaluation, or analysis in which decision-makers provide information as well as appropriate judgments, decisions and actions with respect to the activity in which they are engaged.

The purpose behind a Decision Object, then, is to reduce the process to a set of manageable tasks by establishing a business context within which knowledge workers and decision makers establish the appropriate information, judgments, decisions and actions for their piece of the project.

Decision Objects are comprised of two software entities inside the *Telamon* Platform. The first entity is the project – the raw material comprised of topics, questions, and the prototype documents that are the “design side” of the Decision Object.

The second entity is the *Telamon* application – the web-based software application that is formulated from the project (raw material). The application guides the knowledge worker through a series of questions related to the business task. Answers to questions are saved to a database. Moreover, where appropriate, the application supports the business workflow by producing documents and alerts.

Both the raw material and the answers in the database combine to form a “knowledge base” for each Decision Object. Knowledge bases communicate with each other, sharing data and information across the various layers. It is the dynamic exchange of information between knowledge workers and Decision Objects, and among the Decision Objects themselves, that drives the business process and establishes its unique functionality.

Decision Object Characteristics Overview

Characteristic Categories

Each Decision Object is analyzed for six categories of characteristics:

- ❑ *Descriptive characteristics* such as name and purpose.
- ❑ *Subject characteristics* refer to the subject matter of the Decision.
- ❑ *Decision characteristics* refer to the decision act itself, i.e., the action of answering questions about the subject matter.
- ❑ *Structured Content characteristics* refer to the organization of the decision content which should reflect a best practice approach to decision conduct.
- ❑ *Question characteristics* identify specific questions to be asked and answered.
- ❑ *Artifact characteristics* identify links, alerts and narratives to be generated.

Descriptive Characteristics

- ❑ *Name*: Name of DO.
- ❑ *Purpose*: A brief description of the DO.
- ❑ *Description*: Longer discussion of the DO.
- ❑ *Notes*: Items of note regarding the DO.

Subject Characteristics

- ❑ *Subject Type*: The subject matter of the decision, i.e., what or who is the focus of the decision.
- ❑ *Subject Origination*: Subject automatically derived from another data source or manually initiated, i.e., added by a user?
- ❑ *Subject Origination Source*: If derived, what is the data source?
- ❑ *Subject Maintenance*: How are additional subjects added? Automatically derived from external data source or manually originated, i.e., added by a user?
- ❑ *Subject Maintenance Source*: If derived, what is the data source?
- ❑ *Subject Maintenance Timing*: How often is subject list scheduled for updating when data source is automated?

Decision Practice Characteristics

- ❑ *Decision Makers*: The user audience that conducts the Decisions.
- ❑ *Frequency of Practice*: How often is a decision of the subject conducted? One time, on schedule, or as required.
- ❑ *Decision Environment*: Is the decision open (with table of contents in full view) or structured, i.e., the user is guided from topic to topic, or the user may switch between the two styles.
- ❑ *Decision Shelf-Life*: Effective time that decision remains valid and modifiable until it is automatically locked against editing so it is maintained in the historical record as is and is then only accessible in browse mode. A one-day shelf-life is considered immediate/short.
- ❑ *Decision Boundary*: The factor that uniquely distinguishes decisions from each other. There are currently two recognized boundaries for decision: Time or Time by Decision Maker. Time means each new decision is unique. Time by Decision Maker indicates that a group of decisions, by different role or expert, could be considered a single decision.

Structured Content Characteristics

- ❑ *Structured Content Organization and Topics*: How is the content organized and what are the categories of questions to be used in information development.
- ❑ *Structured Content Origination*: Is the structured content automatically derived from an external data source or designed, i.e., subject matter experts providing the structured content. Or some combination of the two?
- ❑ *Structured Content Origination Source*: If automated, what is the data source?
- ❑ *Structured Content Maintenance*: Expanded by design, i.e., by subject matter experts, or automatically updated? Or both?
- ❑ *Structured Content Maintenance Source*: If derived, what is the data source?

- ❑ *Structured Content Maintenance Timing*: How often is the structured content automatically updated?

Question Characteristics

- ❑ *Decision Points*: What are the key questions to be asked and answered within the decision?
- ❑ *Integration Requirements*: Exchange of data with external data sources.

Artifact Characteristics

- ❑ *Alerts*: What notices are sent under what conditions?
- ❑ *Documents*: What documents are to be generated?
- ❑ *Hyperlinks*: Directly open other Decision Objects (with rights to open).

The Dependence on Intellectual Capital

Our customers' business processes -- how information is realized, passed along, and used -- is central to the Acappella Software methodology. As a result, decisions are made about what intellectual capital to input, what business approach to take, what workflow to mimic, and what business philosophy to reflect within the *Telamon* solution.

As an example, to achieve of the kinds of strategic input being sought for an insurance underwriting solution: 'Questions' are the tools for developing the facts for underwriting decision-making and coverage eligibility. 'Alerts' incorporate red flag concerns (e.g., litigation trends), status updates (e.g., aggregation penetration), action notices (e.g., new exclusionary language), and authority requirements (e.g., supervisory sign-off).

The *Telamon* application is an intelligent software solution that gathers, stores, communicates and uses the right information at the right time. With this capability, the goals, objectives, outcomes, and benefits of a decision process are attainable.