# **Decision Analysis with Decision Table**

The *Decision Analysis with Decision Table* pattern creates an Activity that has an embedded Decision Table that can be used to express the decisions and outcomes (conclusions) for a complex business or technical decision under conditions of uncertainty.

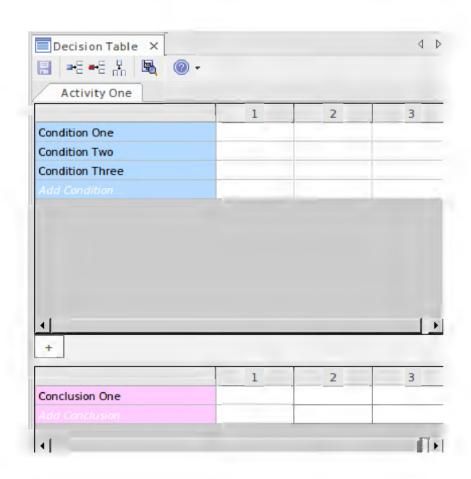


Figure 1. Shows a Decision Table that is used to model and visualize complex decisions.

# **Discussion**

The purpose of the pattern is to allow an analyst to model the structure of a decision using a diagram to model the Decision Nodes, Outcomes and Uncertainty Nodes. The

pattern provides a visualization of the decisions and is useful to facilitate discussions and workshops where the decisions are being debated or analyzed.

It is typically used early on in an initiative or at a strategic point when analysis of the organization, one of its divisions, a project or business endeavor is required. The items discovered can be linked to existing elements in a repository or these relationships can be added as the project evolves.

The following is a list of some things you may want to do when working with this pattern.

- · Change the name of the diagram to the suit the initiative.
- · Change the names of the conditions and the conclusions in the table to suit the initiative.
- · Create additional rows in the table as required.
- · Set Condition and Conclusion values as needed.
- Set the Hit Policy and Completeness options.

The following is a list of some of the next steps available when applying the pattern.

- · List allowable values for the conditions and the conclusions.
- · Create documentation directly from the model using the Document Generator creating a document that contains a diagram and the elements it contains.
- Create Trace relationships between elements in the diagram and other elements in the model including up-process elements such as goals and drivers and down-process elements such as Processes, Use Cases, Requirements and Components.

# Reference

The following help topics will assist you learn about how to work with this pattern.

Decision Modeling

Decision Table Editor

Decision Table Editor

**Decision Tree Diagram** 

**Decision Tree** 

**Decision Analysis** 

**Element Appearance** 

Business Analysis Body of Knowledge (BABOK)

**Traceability Tools** 

Documentation

The following are some of the tools that will be helpful when working with this pattern.

#### **Decision Table Editor**

The Decision Table Editor provides a convenient and intuitive way to record the way that decisions are made in an organization or industry. A number of conditions can be defined and columns can be added that contain values, one or more conclusions can be added with applicable columns where the decision value is entered. For more details see the Decision Table Editor help topic.

#### **Document Generator**

The Document Generator is a powerful facility in Enterprise Architect that allows a Database Engineer or other stakeholder to create high quality corporate or technical documentation directly from the model, suitable for internal or external audiences. For more details see the <a href="Documentation">Documentation</a> help topic or the more general topic on <a href="Model">Model</a> Publishing.

#### **Element Discussions**

The Element Discussion facility is a fully featured collaboration tool allowing modelers and model viewers and reviewers to communicate with each other directly inside the repository. Modelers using the full client or occasional viewers using WebEA can both post and reply to discussions and communicate and engage in chat. For more details see the Element Discussions help topic.

#### Specification View

The Specification View can be used as a way of working with any element type in a spreadsheet or word process view. It is particularly useful when there are a large number of elements as is typically the case when describing a system of any appreciable size. For more details see the <a href="Specification View">Specification View</a> help topic.

#### **Baseline Tool**

The Baseline Tool can capture a snapshot of a selected Package at a point in time and then at a later time the repository can be compared to this (or another baseline) for the purpose of determining what has changed. Any number of baselines can be created and labeled and there is a baseline comparison tool which displays the differences between the baseline and the model and allows the modeler to revert a change in the model to a baseline at a granular level. For more details see the Baseline Tool help topic.

### **Relationship Matrix**

The Relationship Matrix provides a spreadsheet like view of two groups of elements and the relationships that exist between them. It can be a used as a powerful analysis mechanism to visually indicate how elements are related to each other and to discover which elements are missing relationships. For more details see the <u>Relationship Matrix</u> help topic.

# **Traceability Window**

The Traceability Window automatically displays the relationships that exist between Use Cases and other model elements including up-process and down-process elements. The traceability tree view can be conveniently expanded to see deeper relationships and elements displayed in the window can be located in all diagrams in which they appear. For more details see the Traceability Window help topic.

# Alternate Images for Diagram Elements

Most standard elements allow an alternate image to be defined for an element that will be used in place of the graphical notation for the element either on a selected diagram or as a default on all diagrams. For more details see the <u>Using the Image Manager</u> help topic.

# Diagram Layout

The Diagram Layout tool allows you to layout an entire diagram, selected elements or sections of a diagram to make it more visually appealing or meaningful to a particular audience. There are a wide range of layout types to choose from and some types have filters that can be applied. For more details see the <u>Diagram Layout</u> help topic.

#### Pan and Zoom

The Pan and Zoom facility is one of the tools that can be used to navigate around a large diagram. Often the resolution of a diagram must be reduced to ensure it is wholly visible but by using the Pan and Zoom window you can leave the diagram at a readable

resolution and pan around to areas of interest zooming in when necessary. For more details see the Pan and Zoom help topic.

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