Workflows and workflow engines are commonly used to automate processes and structure human collaboration. They can also be used in early-warning systems. The advantages of workflows are:
- **Comprehensibility**: Non-IT personnel can follow the flow of information.
- **Logging & Auditing**: Standard mechanism to provide auditable execution histories.
- **Monitoring**: Running workflows can be inspected and their status can be monitored.

**Implementation**

**Decision Tables**

Decision Tables are a tabular representation of a set of if-then rules. They first became popular in the 1960s and since then proved to be an easy-to-use representation for complex rule sets.

Nowadays, few developers are familiar with them or they have forgotten about this simple but powerful technique. Though, recent studies showed that they are still the best representation with regard to comprehensibility and ease of use.

We integrate decision tables into workflows in order to allow end-users to adapt the behaviour of the system.

**Web-based Workflow Console**

Implementation is achieved using Activiti, a modern open-source BPMN 2.0 workflow engine. The tool suite includes, among others, a graphical workflow editor and a web-based console.

**Workflows**

Flexible Early Warning Systems with Workflows and Decision Tables