



Acumen Business

Agile Business Policies

After a long bumpy road the IT industry has put a lot of attention on quality assurance. Testing software components is still in the spotlights, meaning that it has still not been common practice. But the industry is heading in the right direction.

Besides better quality, we also have to adapt our business policies to a continuous moving market. These modifications on business policies have to be executed on very short times. Every delay means running your business process in market what does not exist anymore.

By the time IT projects are in the final stage, business requirements are already being modified. The traditional approach of business requirements, analysis, design, implementation and testing is too long for the current agile business policies.

One way to overcome this dilemma is to keep business policies maintainable by the business people. Deployed rule policies can automatically be integrated within the existing Business Process. Microsoft BizTalk and Windows Workflow Foundation provide such an environment.

Business policy changes can be modified and deployed without interrupting the

current business process, and with minimal involvement of the IT department.

Summarizing; putting the business rules in the hands of the business users has the following advantages:

- Shorter-time to market for continuous modifying market demands.
- Less interruptions of IT projects.
- Elimination of the knowledge acquisition step between business user and analyst.

Quality of a Rule Policy

In this new environment, where the rules are created and maintained outside the Business Process Automation, a new question arises: Who is going to QA the business policies? Who will test the modifications of the new business logic?

Testing business rule changes is not easy. It is difficult for the IT department. They don't have the detailed knowledge of the business intent. Even if they would be presented with the change of a single business rule, this would only assist limited white box testing.

Also when using an inference engine, the declarative nature of the inference engine requires that all rules have to be considered for white box testing. The



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modification of one rule can disable a group of rules, it might introduce a conflict with a different rule, or it might introduce execution loops. Although the modification of a business rule is easy, the testing of a rule based system is much more complex.

The good news is that with the latest tools from Acumen Business, rule anomalies will be discovered automatic.

Automatic Verification and Validation

Acumen business has developed algorithms to automatically discover rule anomalies in a set of rules. Once a rule policy has been created or modified, at any time the business expert can submit a policy for automatic testing.

The results are presented in rule conflict networks, making it easy for the business expert to understand where the problem occurs.

Figure 1; is an example of a detected contradiction. A contradiction among rules is detected when different rules execute by one or more common terms, and different assignments are made to a term.

Besides Contradiction, the Rule Manager discovers Redundancies, Tautologies, Incompleteness and Constraint exceptions. The discovery of these rule anomalies is called rule verification.

Rule Validation is about the business intent of the rule. Our rule validation component allows verifying the expected policy result against the inferred results of the engine. Our unique approach automatic completes test-data to reach a desired goal. These rule validation records can be stored inside the rule repository for regression testing.

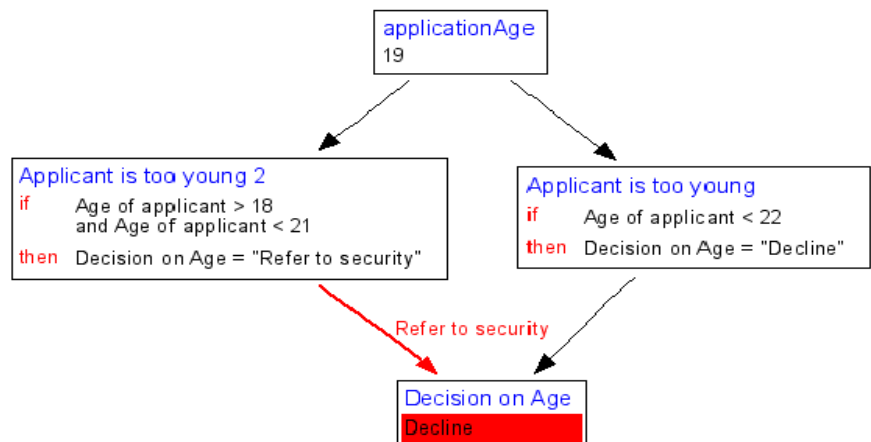


Figure 1; Detected contradiction for 'Decision on Age'