Business Rules Automation

Based on presentations by
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Overview

How would you like your IT organization to virtually eliminate programming backlogs, turn impact analyses around practically overnight, drastically shorten development time, keep pace with user demands, and strengthen ties between IT and the business? Now how would you like to do this without increasing your staff, with minimal retraining, and with the ability to replace departing individuals with entry-level people? Sounds too good to be true? At the November ISRC seminar Barbara von Halle of Knowledge Partners, Inc., and Bob Brown of Burlington Klopman Fabrics provided a mix of general principles and "in-the-trenches" insight from organizations that have done just that. The key is a Business Rules approach.

What is a Business Rules Approach?

What is a business rule? A business rule is a statement that influences how the business behaves or operates. For example, a company may define a preferred customer as someone who buys more than $10,000 of widgets per month. Based on their status as a preferred customer, this may entitle them to discounts, special offers on other products, or some other form of business-driven differentiated treatment. What is a business rules approach? At a high level, it is a means of influencing organizational behavior towards achieving common goals through the formalized application of a set of business-oriented rules that control the validation, computation, and presentation of data. The Business Rules approach provides a way of codifying these business rules in an integrated repository which can drive applications.

Benefits of Business Rules:

Because these rules are business-oriented, they are defined and owned by business people (i.e., the users), a fact which makes the business rules approach attractive to both the IT and user community. The users become an integral part of any application development effort, through their new-found accountability for the rules. The rules are kept in a single repository, providing a central point of definition and change. IT, meanwhile, can focus on data management and information presentation without trying to keep up with changes on the business side of the fence. The result for the users is an increase in their ability to manage change. They can shift quickly from changes in the ways of doing business (the business rules) to changes in the applications that support that business.

For the IT staff, the result of the business rules approach is reduced application size (the rules exist outside the application), minimized coding time (the rules are

maintained outside the application), and shortened development time (many rules have universal applicability, and thus do not have to be coded into each new application). Consider our rule about the preferred customer, if the user decides to change the trigger amount from $10,000 to $5,000, or to change the preferred customer benefits, the user goes to the rules repository and makes one change no matter how many applications use that rule. The individual applications simply refer to the rule when they run.

Business Rule Automation

Of course, the business rules approach is not as simplistic as the example outlined above. A central repository of rules is not of much value unless there is an automated method of capturing, accessing, executing, and maintaining them. There are a number of vendors who offer business rules tools, ranging from application engineering tools that extract business rules from legacy systems to tools that support the identification, acquisition, validation and integration of business rules. These tools help organizations to develop good rules. That is, rules which are atomic, precise and targeted at actions that directly support business objectives. They also assist in formulating good sets of rules. That is, rule repositories that are complete, minimal, consistent and determinable.

Regardless of which tool is selected, there is a learning curve involved for both users and IT personnel. Part of this involves a need to change the applications development culture to benefit from the rules approach. In part, it means recognizing that an application is never fully completed and that rules will constantly evolve. Still, many organizations are benefiting by adopting a business rules approach. A case in point is Burlington Klopman Fabrics.

A Case Example

Faced with a substantial outlay of IT resources to address the Year 2000 problem, Burlington Klopman decided to re-architect their IT structure. This decision was driven by the realization that it wasn't their business rules that were causing the problems, it was their legacy applications. By defining and structuring their data, and identifying, extracting, and replicating the business rules contained within their legacy systems, Burlington Klopman is well on the way to re-architecting and redeploying their legacy applications as part of the Year 2000 project. They are using automated tools to extract and replicate business rules embedded in their existing legacy systems. They then generate a new application based on a three tier architecture which includes a data model, a rules repository, and a presentation manager. Complete application generation can be achieved from the repository, and it provides a single point of definition and maintenance. Many applications can draw on a single rule.

The end result for Burlington Klopman is that they are now developing new applications faster than they can implement them. The business rules toolset they are

using is easy enough to master that they now only hire entry-level people to develop new applications, their IT backlog has disappeared, and they are positioned to rapidly respond to any future changes. The users like the concept because, in their eyes, IT is now focusing on what is important to the organization, namely the rules for running the business. What's more, the users can understand the concept behind business rules without any technological expertise. All in all, business rules provide a promising alternative approach for application development.

Closing Notes and Coming Attractions

We would like to thank Barbara Von Halle and Bob Brown for introducing us to the ideas behind the Business Rules approach. If you did not receive a handout from the session, contact us and we'll forward a copy to you.

The next ISRC seminar is scheduled for Thursday January 22nd at 8:30 in the Hilton Hotel on the UH Campus. We will be holding a roundtable session on Managing IT Services.

For Additional Information

Below is a short list of articles and web sites that may be of interest for those of you looking for more information on business rules automation.

Articles

Barnes, M. and Kelly, D. "Plat by the Rules", BYTE, June 1997.

Hurwitz, J. "When Rules Meet Development", DBMS, Jan. 1997.

Kara, D. "Rules-based Tools: Business Rule Specification is Job 1", Application Development Trends, Nov. 1996.

Seybold, P. "Start Your Business Rules Engine", Computerworld, Dec. 9, 1996.

Web sites

www.adtmag.com/pub/mar97/softeng.htm
www.guide.org/ap/apbrules.htm