

The Silver Bullet of Business Rules Management Systems

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Both the business rule and software development industry are entering an exciting new era of business agility, accelerated deployment, and enterprise-wide optimization. Business rule vendors are now reporting business application development cost reductions of 50 percent and greater (several projects are reporting 90 percent). There is a growing appreciation of the value of business rules as independent statements of reusable business logic across the enterprise. Business rules are key enablers of the service-oriented architecture (SOA) and a critical component for enterprise SOA (ESOA). The business rules approach is creating a sea of change in how corporations will build and maintain their core business systems. This change arises from the performance, cost, and ease-of-use of the best business rule management systems.

The perennial promise of a “silver bullet” to kill the “werewolf” of business complexity has mutated through many epoch-changing technologies. We have all heard of the great breakthroughs that were supposed to occur as a result of so many different tools and techniques. Yet, the majority of projects are still failing. This leads to poor business performance because we are not developing business software as quickly as needed in this global market frenzy.

Originally in 1984, Fred Brooks divided business complexity into essential – the business part – and accidental – the technical part. Basically, essential business complexities are the required business details, their conditions, and multiple inter-relationships. These are simply the inherent nature of the business “beast.” The accidental or technical complexity, such as tools and techniques, can be fundamentally changed. In technology, we have lived through many dynamic upgrades and even “paradigms” including structured programming; first to fifth generation languages (5GLs); computer-aided software engineering (CASE); development environments; client-server; objects; components; and now services in an SOA.

So, what actually is new about business rule management systems (BRMS)? Why do they actually come closest to fulfilling this elusive goal of being an authentic “silver bullet”?

Because they address both essential business and accidental complexity in new, practical, and powerful ways, the new wave of BRMS tools is truly historical. Business logic is the heart of IT. In the past, business logic has been buried in code. Now you can model the business logic and place it in a repository where it is visible, explicit, centralized, and easy to understand and modify.

The initial logical way is to define or “harvest” business rules; there are clear, step-by-step methodologies that show you how. There are excellent consulting firms headed by Ron Ross, Barbara von Halle, Larry Goldberg, and Rolando Hernandez. Tom Debevoise and Ken Orr provide training in integrating business rules to business process management (BPM). There are many other outstanding thought leaders and consulting firms in the bubbling BPM/BRMS industry that all analysts predict will grow significantly in the next few years. William Ulrich, for example, is doing advanced work in business architecture and legacy modernization. Important gatherings include the International and European Business Rule Forums and BrainStorm’s BPM, Forrester, Gartner, IDC, and BTQ conferences.

In addition, the appreciation of enterprise architecture also is growing because of similar advances in understanding, methodology, and tools. Legally required comprehensive, transparent financial compliance controls also drive enterprise architecture. IBM is acquiring TeleLogic’s pioneering System Architect enterprise architecture tool. The central role of business architecture in enterprise architecture – that includes BPM and BRM and its alignment with the organization

and the technical architecture – reinforces both the tactical and strategic significance of BPM and BRM systems. There is an emerging emphasis on the high value of visualization consisting of real blueprints for enterprise architecture and exclusive graphics for modeling and testing business rules in BRMS tools such as Visual Rules. By enhancing our ability to understand and manipulate the difficult detail, while providing coherent and advanced quality control, this new class of pictorial and panoramic BRMS interfaces directly addresses business complexity.

In addition to the necessary logical methodology, new physical BRMS tools are simple, sequential, and concretely cost-effective. They address the needs of the overwhelming majority of common business applications. These new tools eclipse the perception that BRMS tools are difficult to learn, expensive, complex, difficult to maintain, poor performers, only for AI/expert systems, not appropriate for tactical applications, cumbersome code generators, and mostly geared for developers.

Visual Rules, for example, is an amazingly intuitive graphical tool that a business user can easily learn within a week. After on-site training, including the collaboration with the technical staff, the business user will know how to model, simulate, and test their business logic and then generate programs and Web services just by pressing the save button. For years now, Forrester's John Rymer has been analyzing and promoting the business-user focus and awesome potential of these tools, which also includes Corticon, EasyRule, Fair Isaac, InRule, RuleBurst, and others. Gartner has provided a business rule evaluation checklist that includes the BRMS company's vertical application templates – another important business development accelerator. IDC published a study in Europe that found that the ROI of using BRMS tools was actually greater than anticipated.

The goal of these BRMS tools is to allow the business user to work independently of the programmer, both in defining and in testing the business logic; but, just as importantly, in easily and quickly changing the business rules. The traditional, tedious, lengthy, and costly translation of business requirements to code written by programmers who speak a different language and are, themselves, consumed by technical intricacies is minimized to tool and data model and access setups. Indeed, in many cases it has been enlightened developers who have introduced this business user-centric development tools to the company. The result is that code generation is clear, complete, robust, and traceable. The clean delineation of tasks promotes greater project accountability, teamwork, and morale. There also is a great multiplier for enterprise business collaboration as different subject domain experts can communicate more effectively because of easy-to-use graphics to identify cross-functional optimizations, including cross-sell and up-sell opportunities and illustrated, tangible decision management. The practicality and feasibility of the corporate integration and reusability imperatives has now matured from telescopic vision statements to Google-like, richly featured roadmaps.

In summary, after 50 years of industry experience, the state of business and IT in 2007 is:

- A majority of projects are failing (schedules, features, budgets, etc.)
- There is a huge backlog of systems that urgently need to be developed
- Most IT budgets are based on maintenance
- Real-time processing, straight-through-processing (STP), and hot deployments (immediate changes during production without shutting down) have mostly not been implemented
- Most folks are suffering from severe information overload.

In short, not only the business agility, but the basic business, itself, is constrained by current process and IT limitations. And yet, there is a solution; there is a way to fundamentally address the business complexity. The relentless innovation of our young industry has not only created our global Information Age, but has now developed the enterprise and business methodology and BRMS tools to cost-effectively accelerate its important evolution.

Author

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