



## Business Rules Engines: Renewed Interest, Better Options

### Integration & Development Strategies, Application Delivery Strategies

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**After several years of little or no significant growth, interest in business rules engines (BREs) among Global 2000 (G2000) organizations (particularly financial services/insurance but also airlines, telco, and manufacturing/logistics) has increased during the past 12-18 months as firms consider improving the agility and consistency of corporate decision making.**

Even as IT organizations (ITOs) and business sponsors (rightfully) scrutinize IT spending more closely, we recommend continued focus and increased levels of spending on initiatives that help organizations better define, implement, and modify business processes and the business applications that support them. Agility is central to sustainable competitive differentiation. This is particularly true in deregulating markets where service delivery and responsiveness typically outweigh product differentiation as determinants of success (e.g., financial services, insurance, airlines, telco). To help enable improved corporate agility, ITOs must consider both technical agility (rapidly modifying application logic to meet changing business requirements) and business process agility (cost-effectively modifying business processes as customer requirements, expectations, and government regulations change).

Business rules engine technology has remained overly complex for most G2000 ITOs, specifically the process of defining, managing, and instantiating business rules within broader, distributed, and host-based systems. As a result, during the past four to five years, the BRE vendor landscape has remained relatively stagnant with existing players (e.g., CA, Fair Isaac, ILOG, Magic, USoft, Versata) experiencing limited (and, in some cases, negative) growth or increased penetration within G2000 organizations (see ADS Deltas 857, 861, and 1054).

However, during the past 12 months, we have seen an increased interest, understanding, and ultimately demand for BREs from commercial ITOs. The primary drivers for this include the following:

- Convergence of rules technology and integration solutions (e.g., enterprise application integration [EAI], process automation/workflow)
- Increased spending on IT projects aimed at improving business performance management (BPM), including improved decision support via externalizing formally embedded business rules

As the demand for business rules engines has steadily increased, so have the number of viable options for corporate IT initiatives. Although BRE technology will continue to be leveraged within application development projects, we believe the majority of growth in this market will come indirectly via the inclusion of BRE technology (often as OEM components or by technology partnerships) within related solutions — particularly vertical-specific applications — and more horizontally focused analytic, ERP, CRM, and SCM applications. Through 2004/05, the need for improved application and business agility — coupled with improved productivity of BREs themselves — will drive the expanded use of rules-based technology within business process automation solutions delivered as part of combined application server/EAI solutions or software stacks (see ADS Deltas 962 and 963). In addition to supporting BRE technology as part of broader solutions, by 2005/06, we expect the majority of application development organizations to have begun (if not completed) the process of rewriting applications originally built using proprietary or homegrown rules engines to leverage performance and integration benefits as well as vendor support provided by commercial BRE solutions.

***META Trend: Java 2 Enterprise Edition (J2EE) and Windows .Net application servers will be key business application infrastructure platforms through 2007. In addition, most new business applications (whether bought or built) will be assembled from components based on or integrated with J2EE or .Net application servers. Application server vendors will differentiate (and attempt to lock in users) via enhancements such as product, process, or industry-specific Web services, portal frameworks, business-process execution engines, and development and management tools.***

### **BRE Demand Drivers: What Has Changed?**

BRE vendors have been reasonably successful in incorporating their products into broader platforms via technology partnerships. Examples include ESI/Formula with Popkin Software in the BPM space, Corticon with Staffware and Fair Isaac/Blaze with Intalio in the process automation/workflow space, ILOG with FileNet and Vitria (among others), Versata with IBM, etc. These partnerships have led to far broader distribution, credibility, and ultimately usage of BRE technology within G2000 organizations.

BRE vendors have also had success expanding their value propositions and moving away from a technology-led sales process. Examples include ILOG with its focus on optimized business process planning (see ADS 1163) and Pegasystems with its focus on case management, particularly in credit card/financial services.

Business rules-focused consulting and services organizations have begun to achieve an increased presence and profile within the BRE market (including partnerships with BRE vendors). Examples include Business Rules Solutions, Inastrol, Knowledge Partners, and KnowGravity — all of which provide methodologies for identifying, documenting, and implementing business rules within strategic systems.

The continued maturation of software stacks from major platform vendors (e.g., BEA, IBM, Microsoft, Oracle, Sun) and enterprise application vendors (e.g., SAP, PeopleSoft) — along with adoption of Web services standards and support for service-oriented architectures (see ADS Deltas 1244, 1245, and 1246) — has highlighted the need for better defined and managed business process automation/workflow (see Delta 2340). BRE technology is a core part of most of these solutions.

### **Improved Supply Leads to Heightened Demand**

Previously mentioned market drivers aside, ITO demand for BRE technology would not have increased nor would it remain sustainable without productivity improvements within the BRE solutions themselves. During the past 12-18 months, existing players (e.g., CA with CleverPath Aion, Fair Isaac with Blaze, ILOG, Pegasystems, Versata) have all improved their core platforms in areas like rules definition and management.

Well-established vendors (e.g., ESI/Formula, Sapiens) with stronger presence in other markets (e.g., ESI/Formula in workforce management, Sapiens in services and mainframe-centric application development via ObjectPool) have sharpened their focus and increased their visibility in this space, particularly at the enterprise level. For instance, Sapiens has begun a major push to expand its presence in the BRE market with its eMerge platform (or, more specifically, the Business Integrity Server component within eMerge).

Newer players (e.g., Corticon, Resolution EBS, RulesPower, YASU) have all entered the market with a strong focus on productivity and simplified rules definition/management. Resolution's Centrifuge, for instance, supports a data-centric rapid application development environment that incorporates a business rules-based approach to developing (and managing) business logic independent of system code. The challenge for these newer players is to execute in a crowded, confused market space where more mature BRE-focused tools vendors with somewhat similar solutions (e.g., Magic, USoft, Versata) have all struggled. Although productive and scalable technology is necessary to compete, succeeding in this space will require strong, high-profile partnerships, particularly in specific vertical markets where BRE technology can provide a foundation for agile, more easily modified solutions.

### **Bottom Line**

**IT organizations must understand both BRE market dynamics and vendor positioning to take advantage of the increased choice within this market, as there remain significant differences between solutions in terms of applicability for commercial IT projects.**

***Business Impact: Targeting IT spending at initiatives that help improve corporate agility and increase operational efficiency are crucial for enabling a sustainable, competitive differentiator.***