# Magic Quadrant for Business Process Management Suites

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Gartner has revised its BPMS Magic Quadrant to focus the analysis on product support for the use cases, rather than product features and functions. This change has altered our assessment of the relative strengths of the vendors since our 2007 Magic Quadrant.

#### WHAT YOU NEED TO KNOW

This document was revised on 24 February 2009. For more information, see the <u>corrections</u> page on gartner.com

Gartner's updated Magic Quadrant represents one of several tools clients can use to evaluate this market. The 2009 Magic Quadrant depicts the relative strengths of the top 22 vendors offering multiregional, cross-industry business process management suites (BPMSs) that interest Gartner clients and nonclients the most. These vendors account for most spending in the BPMS market. However, customers should also consider other vendors that did not meet our inclusion criteria, such as those specializing in industry-specific processes or in particular geographic locations.

The position of vendors in the 2009 BPMS Magic Quadrant has changed more than usual, because we have altered one of the key evaluation criteria from product capabilities to four use cases that the products support:

- Implementation of an industry- or company-specific process composition
- Support for a continuous process improvement mentality
- A business transformation initiative
- · Redesign for a process-based service-oriented architecture (SOA)

The original business process management (BPM) pure-play vendors have the longest history of model-driven process execution (as opposed to code-based execution), which Gartner thinks is the best way to enable business and IT professionals to manage and change processes collaboratively, especially in a volatile business environment. For this reason, many of these vendors have advanced to the Leaders quadrant in the BPMS Magic Quadrant.

However, most of the large middleware and software infrastructure vendors now recognize the importance of this shift to business professional empowerment in the process life cycle and are strengthening their BPMS products. SAP is included in this Magic Quadrant for the first time. Nevertheless, products from IBM, Oracle, Software AG, EMC, and SAP have not yet been proven to address all of the BPMS use cases – even in vision – with user experiences not as seamless and unified as the products from the smaller, best-of-breed providers. Sheer marketing and sales can't overcome this weakness.

Thus, clients should not conclude that products from all of the leaders are necessarily the best products in the market. In fact, the products from the niche players Polymita and

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Ultimus are architecturally more unified and, thus, deliver a stronger BPM user experience than those from IBM (a leader) and Oracle (a challenger), for example (see Figure 1). In other words, although Polymita and Ultimus have strong products, IBM and Oracle are stronger contenders overall in the market as we have defined it.

#### MAGIC QUADRANT

## Interpreting the 2009 Magic Quadrant Graphic

Our 2009 BPMS Magic Quadrant graphic reflects a change in our evaluation approach. Previously, we based our judgments about vendor strengths in this market on the functions of their products. For this Magic Quadrant, we based our judgments on support for our four BPM use cases (described below). This approach will better address our clients' BPM project and program requirements.

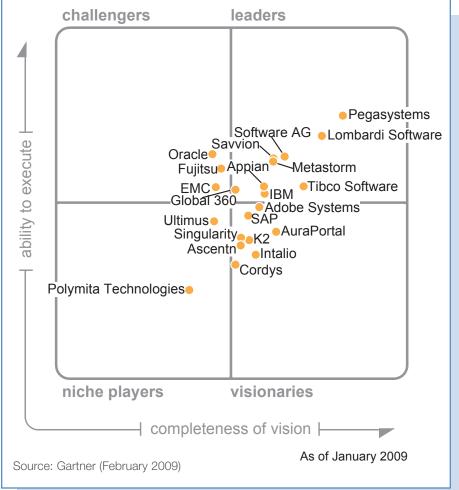
We considered more than 40 providers worldwide for our 2009 Magic Quadrant, of which 22 met the inclusion criteria (see below). Thus, the Magic Quadrant graphs the relative strength of the top vendors offering multiregional, cross-industry BPMSs that interest Gartner clients and nonclients the most. These vendors account for most of the spending in the BPMS market.

The number of leaders and the overall dot pattern reflect our purposeful inclusion of the top 22 vendors. All the dots representing the vendors have moved slightly downward since 2007, because we shifted our evaluation from BPMS functions to the RPMS's shift to address the four up

functions to the BPMS's ability to address the four use cases described below. Leaders address all four. Niche players excel at one or two only. Challengers and visionaries vary in the breadth and depth of support for the use cases.

Because we included the top 22 providers, the clustering of the dots may seem to indicate a maturing market and a lack of differentiation across providers. (Clients often mention that all these products "look alike.") Lack of differentiation often precedes market consolidation; however, this market has nuances that are not readily apparent from the graphic. For example, we have included a mix of .NET and Java products from all over the world. Small and midsize enterprises, especially outside the U.S., often

Figure 1. Magic Quadrant for Business Process Management Suites



prefer a Microsoft-centric solution and have radically different BPM requirements and priorities than large enterprises. Furthermore, Microsoft's mass-market approach sets buyers' expectations for pricing, sales channels and skills.

Outside the U.S., many small companies use indirect sales channels, including resellers, partners, consulting firms and system integrators. Thus, many small BPMS providers can gain a large customer base spreading across multiple geographic locations at a relatively low cost compared to the Java providers. In addition, Intalio's open-source product and SAP's NetWeaver BPM offer two more approaches to satisfying BPM requirements. Given all of these nuances, we encourage clients to read the entire Magic Quadrant report and call Gartner to discuss their specific needs further.

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Finally, clients should bear in mind that this is a market analysis, not simply a product analysis. Product evaluation is only one of many criteria applied. Therefore, do not conclude that products from all of the leaders are the best products in the market. In fact, products from niche players (as well as some of the visionary vendors) are architecturally more unified, thus delivering a stronger BPM user experience than those from IBM, Tibco, Software AG, EMC and Oracle.

#### **Market Overview**

Overall, 2008 marked a turning point for BPM as a discipline. Hundreds of interactions with enterprises lead us to conclude that they are scaling up their efforts to establish BPM as an enterprise program – not just apply its methods and technologies to one-off projects. A BPMS should support BPM throughout the business process life cycle. Key elements of the BPM discipline are:

- Optimizing the performance of end-to-end business processes that span functions, as well as processes that might extend beyond the enterprise to include partners, suppliers and customers
- Making the business process visible (and thus explicit) to business and IT constituents through business process modeling, monitoring and optimization
- Keeping the business process model in sync with process execution
- Empowering business users and analysts to manipulate a business process model to modify instances of the process
- Enabling rapid iteration of processes and underlying systems for continuous process improvement and optimization

Since 2000, the financial services industry (retail and investment banks, as well as insurance) has led the aggressive adoption of BPMS technology. Many leading financial service institutions are consolidating their project implementations into a more coordinated BPM program. BPM has mostly been embraced in service industries where human productivity and effectiveness are key to process performance.

Through 2008, many enterprises have implemented multiple projects and often use products from multiple vendors. Many clients have three or more BPMSs. During the current financial crisis, Gartner expects many of these enterprises to consolidate their BPM technologies in 2009, while expanding their efforts – that is, they will have fewer BPMS vendors, but will make more use of those they keep.

In 2008, one of the biggest changes in this market is the increase in the number of buyers looking to support continuous process improvement and drive business transformation with BPM. For example, in 2007, our anecdotal evidence found only two out of 10 Gartner clients expressed these requirements, compared with five out of 10 in 2008. Furthermore, in our 2008 primary research survey on BPM adoption, respondents said they expected the following benefits from BPM:

- Continuous process improvement 53%
- Transformational 10%
- Incremental gains 15%
- Substantial benefits 21%
- Don't know 1%

In the current economic crisis, BPM initiatives (and BPMS products) seem to be some of the few projects receiving funding.

BPMS vendors that have evolved from a BPM pure-play heritage continue to lead the market in capabilities and vision, but large middleware and software infrastructure vendors have greatly expanded their market presence. The vision of vendors such as Oracle and SAP aligns more closely with the business process platform (BPP) concept than the BPMS use cases. We expect that the use cases for a BPMS will evolve as application infrastructure and composition technologies continue to evolve into model-driven, integrated composition environments that support businesses' desire to formalize a BPP.

Microsoft is not represented, because it does not offer a BPMS; rather, Microsoft relies on partners to use its Windows Workflow Foundation technology and supplement Microsoft's application platform with BPM functionality. This analysis includes a number of strong Microsoft partners.

#### Market Definition/Description

Our 2009 BPMS Magic Quadrant reflects a significant change in Gartner's approach to evaluating vendors and products to meet the needs of buyers. In previous versions, Gartner defined the market according to technical features and functions, such as process engines or modeling environments. As software infrastructure markets began to shift toward application infrastructure, we started to shift our Magic Quadrants to define markets based on use cases, rather than product categories.

For our 2009 update, we have shifted our focus to defining the BPMS market based on the top four use cases that BPMSs support. This focus better reflects an essential ingredient in the appeal of BPMS, namely, business professionals can see work in progress (via models) and manage and execute dynamic business processes without exclusive reliance on IT professionals to make desired changes to the process specification. Also, business professionals can collaborate with IT professionals more easily and consistently throughout the process improvement life cycle by using models to provide a shared language and, thus, improved understanding.

#### **Top Four BPM Use Cases**

At a macro level, the use case for a BPMS involves a buyer looking for technology to support its BPM project or program. In most cases, buyers want to create business-process abstraction layers for their applications and services (hosted on an application infrastructure). Gartner has observed four main use cases in BPMS buying behavior on which we base our definition of the 2009 BPMS market. (These are not mutually exclusive.)

#### Implementation of a Specific Process-Based Application

The business (supported by the IT organization) tends to buy a BPMS to improve business performance through broader and better coordination of a specific mission-critical process. This process is often unique to the industry or to the differentiation of the enterprise. As such, it is not commercially available. Furthermore, the business seeks a rapid implementation of the new application ideally built as an extension and unification of established applications and data. The end result is a composite application reflecting the end-to-end process view, not just an integration of data and transactions.

#### Support for a Continuous Process Improvement Mentality

In this situation, the business and IT organizations regularly collaborate on technology decisions to deliver management visibility and agility for key processes. The BPM program is led by the director of process improvement and a governance council or equivalent. The business process competency center offers the methodologies and services to support the execution of the BPM program. A BPMS is selected to provide a stable platform, with integrated services to use to deliver continuous process improvements.

#### Redesign for a Process-Based SOA

Here, the IT organization drives business enthusiasm for BPM to help prioritize IT's efforts to rationalize and modernize the application portfolio for SOA. The IT organization buys a BPMS as a model-driven environment that uses explicit process models to drive greater business involvement in decisions that prioritize its implementation of an SOA, while enabling process transparency and agility for business.

#### **Business Transformation Initiatives**

Senior business executives drive buying decisions in this use case. They want to make a "game changing" play by rethinking an entire business process. The ability to create shared process understanding across stakeholders (through modeling, analysis and simulation), synchronize execution with the model and support rapid innovation makes the BPMS approach highly attractive. These buyers highly value the enhanced collaboration between business and IT.

#### **Use Case Characteristics**

All four use cases exhibit most of the following characteristics.

#### **Business-Oriented Models**

The business professions want a view of the process that is tailored specifically to their level of comprehension and sensibility, and selectively avoids the complex technology that is more relevant to service orchestration.

#### **Unified Process**

The enterprise wants to overlay its application assets with a business-level representation of the end-to-end processes that these assets support. Business leaders especially want visibility into the end-to-end processes, not just the individual contributing resources. The enterprise needs to coordinate the human efforts, the business rules, the information flows and the automated tasks, as well as gain visibility into the interactions across these resources, to improve manageability.

#### **Exception Handling**

The enterprise wants to automate exception handling (a costly, manual effort) in conformity with the standard process. A rule engine in a BPMS abstracts the business policies that can be applied to exception conditions across multiple process contexts. In other words, the outcome of continuous improvement results in an environment without exceptions, or, at least, with far fewer exceptions.

#### **Industry-Specific Process**

The enterprise chooses a BPMS, rather than the more traditional hand-coded application approach, to automate a process that is unique to its industry or differentiates the enterprise within the industry. The process requires coordination of manual efforts,

system-automated tasks and information flows (often documents, forms, and other semi-structured or unstructured content).

#### **Prebuilt Content**

The enterprise seeks some prebuilt business process content (sometimes seen as a distillation of industry best practice) to incorporate into its model-driven composition environment and to accelerate its learning and implementation.

#### Management Control

The enterprise wants visibility into work in progress, insight into how specific in-flight transactions affect process performance indicators and, perhaps, the capability to adjust transactions for optimal outcomes. Adjustments range from changing the data for the business transaction to dynamically handling exceptions to changing the process, such as eliminating tasks, adding extra approval steps, redirecting the work item, skipping ahead or applying alternative business rules.

#### Process Dynamism/Agility

The enterprise buys a BPMS as a model-driven environment to help create and manage a process that is highly susceptible to change and disruption. These may be caused by internal or external factors, including changes in weather patterns, mergers and acquisitions, currency fluctuations, consumer preferences, trading-partner actions, competitive pricing, regulatory changes (especially in 2009 for financial services), geopolitical events and skill availability.

#### **Process Change**

The enterprise wants to support process designs that change often (four or more times a year). Change is driven by internal factors, such as a desire to innovate, a better understanding of the process and a continuous improvement method.

#### **Process Roles**

The roles and responsibilities of business and IT professionals in the process improvement life cycle are shifting toward greater involvement for business users. Business users want to be involved throughout the life cycle, not just during requirements gathering and at the end with user acceptance testing (see Note 1).

#### Note 1

#### Why Enterprises Adopt BPM

Enterprises adopt BPM because they anticipate frequent process changes. From our primary research survey, more than two-thirds of organizations using BPM do so because they expect to need to change business processes at least twice per year. By itself, this finding is unsurprising; processes do change from time to time; however, 18% of companies said they needed to change processes at least monthly, and 10% said processes changed weekly. Another theme that emerged from this data was the impact of unforeseen events on organizations – 16% of companies using BPM (or planning to do so) expected to need to alter processes ad hoc in response to some triggering event. It is not practical for IT professionals only to change processes daily or weekly.

#### Time Span

The enterprise wants to better coordinate long-running business transactions in which instances of the work often extend for hours, days or even months.

#### **Boundary Crossing**

The enterprise chooses a BPMS for business transactions that crosses multiple boundaries. This can include organizational boundaries, national boundaries (due to different taxes and regulations in different countries), boundaries between facilities, system boundaries and information boundaries.

BPM adoption has been strongest in the service industries (such as banking, insurance, telephone companies and other utilities), where the "product" is largely a commodity and in which higher customer value is created more through human interactions and expertise in servicing the customer than through the product itself. In comparison, past process management approaches were largely practiced in manufacturing industries where value lies with the product itself, rather than the servicing of the product. Notable past process management success stories have come from such manufacturers as General Electric, Intel, Motorola, Toyota, Ford Motor, Allied Signal, Cemex and Dell.

#### **BPM Drivers**

In the past, process management focused on efficiency, which is no longer sufficient to compete in today's global environment. Operational excellence also requires process agility; that is, the ability of a business to change its operations, and the way in which its people and systems work to adapt to continuous change. Addressing efficiency and agility simultaneously requires continuous process improvement. Processes also need to be transparent. Accelerated business cycles require management of operations in real time. Managing work by using after-the-fact reports is no longer good enough. Pressures for information transparency, accountability and compliance now require managers to monitor transactions more closely, to see them as they unfold. Business managers, employees and even external participants want to adjust work in progress, not just react to information about completed transactions.

A BPM program (versus a one-time process improvement project) enables the business to grow and transform in step with these changes. BPM disciplines empower business professionals to optimize process performance, even when operating conditions are more volatile. In this way, BPM is more about the coordination of resources and the interactions of those resources than automation and control. BPMSs are also starting to play a crucial role in outsourcing by delivering transparency and visibility across the provider and consumer of services.

#### **Description of BPMS**

BPMSs are the leading integrated composition environment to support BPM and enable continuous improvement. A BPMS is an integrated collection of software technologies that enables the control and management of business processes. Compared with other model-oriented development tools, such as integrated service environments and integrated development environments, a BPMS emphasizes business user involvement in the entire process improvement life cycle. As a discipline, BPM is about coordination, rather than control (via automation) over resources.

Beyond task automation, a BPMS coordinates human interactions and information flows in support of work tasks. People, information, systems and, increasingly, business policies are treated as equally important resources that affect the desired work outcome. This comprehensive approach to resources also distinguishes a BPMS from other emerging model-driven application infrastructure.

BPMSs use explicit process models to coordinate the interactions among people, systems and information as equally important aspects of work. This model-driven approach loosely couples the physical resources used at execution time with the design of the process to increase flexibility. At runtime, the BPM engine acts as a "super workflow manager," coordinating the end-to-end processes, including all resources involved, human and machine, regardless of whether software resources are created in the BPMS's design environment or in other platforms. (Workflow is not synonymous with a BPMS.) Workflow is one of many runtime capabilities delivered in a BPMS.) The most appropriate processes for a BPMS exhibit these characteristics:

- Process outcomes depend on the coordination of multiple, dependent resources. The interaction patterns between the resources are not exclusively sequential and predictable.
   Interactions can also be undetermined and collaborative.
- Some critical aspects of the workflow are poorly understood.
  The BPMS helps uncover better workflows by making their
  execution visible and audited. Execution data history feeds into
  the next iteration of the design.
- The process depends on human collaboration to have an impact on outcomes (such as new-product designs, problem diagnosis and case-management-style problem domains).

#### **Required Capabilities**

BPMSs deliver short-term benefits (such as cost and time savings and compliance) and long-term advantages, including visibility into crossfunctional processes, agility to meet changing market and user needs, and even revenue growth. To deliver these benefits and to support the use cases listed above, BPMSs must have the following functions:

- Support the modeling and analysis of business processes, including all aspects of workflow: tasks, roles, decisions, approvals, reviews, escalations, collaborations, flows, rules, policies, forms and other documents, events, goals, objectives and scenarios.
- Support process change in the design and the execution of transactions, with auditing. (In "round-trip engineering," changes made to the model are reflected in the execution, and changes to the resources executing the work transactions are fed back into the model.)
- Coordinate any type of interaction pattern among users, system tasks and information resources, regardless of the location of these resources. Interaction patterns include human-to-human, system-to-system, human-to-system, human-to-content and content interdependencies.
- Enable participants to manipulate and manage structured and unstructured information within the process, not just as referenced attachments to their tasks.
- Support the definition, manipulation and management of business rules by business and IT users.
- Support user and group collaboration on work items in the process (in real time and offline). They should enable business and IT professionals to work together on process design, development, execution and enhancement.

- Support the monitoring, reporting, analysis and notification of activities and events that affect work, using data about completed and in-progress transactions (in real time and offline).
- Support process simulation and optimization of desired business outcomes by using real-time, historical and estimated data.
- Interoperate with external software assets, especially SOA Web services, and include these in the end-to-end process orchestration.
- Enable management of all process artifacts (models, process definitions, rule definitions, service definitions, executables and more) throughout the entire process life cycle (discover, define, model, simulate, deploy, execute, monitor, analyze and optimize) to facilitate reuse and change management.
- Include packaged business content, such as sample process models, rule sets, prebuilt user interfaces (UIs) and composite process frameworks. Packaged content can deliver as much as 80% of what the enterprise needs. Much of this content has been free, but vendors are increasingly charging fees for the more-sophisticated content.

#### Inclusion and Exclusion Criteria

Gartner included vendors in this Magic Quadrant if they met all of these criteria:

- The vendor's product fulfills all capabilities listed above.
- The vendor delivers these capabilities as general-purpose technology appropriate for any process and does not specialize solely in, for example, new-employee onboarding, call center cross-selling or industry-specific processes. The vendor markets and sells to the BPMS market, independent of any other lines of business.
- The vendor provides these functions in one suite. Some functions can be sourced from partners, although the BPMS vendor must be the single point of contact for customer support.
- The vendor must conduct business on two continents through a local, direct presence (local employees; not partners).
- The product interests Gartner clients, or Gartner analysts feel clients should take note of it. We use Dataquest market share, Gartner client inquiry data and Gartner BPM conference attendee questions as indicators of market interest.
- The product regularly competes against offerings from other vendors represented on the Magic Quadrant.
- The vendor must provide references that demonstrate industry and geographic diversity. At least one reference must have processes using the complete suite. The number of customers using the complete suite will be considered in the evaluation.

For each vendor, the product version evaluated is indicated. In the section that follows, we indicate vendors considered and our reason(s) for excluding them.

#### Vendors Considered, but Not Included

Some providers did not qualify for inclusion, even though they have strong, complete BPMSs that users should consider when their process management requirements (including future requirements) match these vendors' offerings. Below, we indicate some vendors we considered and our reasons for excluding them.

#### **Autonomy Cardiff**

This vendor provides a product built to better handle cognitive, nonroutine and dynamic aspects of work; therefore, it does not regularly compete in BPMS deals with other vendors on this Magic Quadrant.

#### BizAgi

This vendor has weak functionality in user and group collaboration, simulation and optimization, and content management. This vendor has not yet gained sufficient interest from Gartner clients worldwide, although it has a growing presence in Latin America. Most of its customers are in South America.

#### **Everest**

Everest's Aquima is not a general-purpose BPMS, but a specialized product for dynamic, customer-oriented processes in front and mid offices.

#### HandySoft

HandySoft's BizFlow is primarily sold through system integrators and other indirect channels as part of a solution, rather than sold direct to large enterprises as a general-purpose BPMS. As a result, HandySoft has not yet gained sufficient market awareness. Nevertheless, BizFlow does meet Gartner's definition of a complete BPMS and offers strong capabilities for streamlining nondeterministic processes, such as action tracking and correspondence management.

#### Pallas Athena

This vendor has a complete suite of BPM software tools. Although the company has not yet gained significant interest from Gartner clients to qualify for the Magic Quadrant, it does have more than 2,200 customers and covers the complete BPM life cycle, including modeling, execution, workflow, and process mining and case management. The company has a strong presence in the Netherlands, the U.K. and Germany, and it is gaining in other global markets.

#### **PNMsoft**

PNMsoft is a fast-growing, U.K.-headquartered provider of Microsoft-centric BPM technology. It has well-known customers and business partners in Europe; however, insufficient market presence in the U.S. kept it out of the top vendors competing.

#### Magic Software

Magic Software's iBolt technology is marketed as a composite application infrastructure, not a BPMS. In this context, Magic targets iBolt at enterprise application ecosystems to extend the scope and functions of the core application through data and process integration. When combined with the W4Global offering, the combined functions are closer to Gartner's definition of a BPMS.

#### **Banctec**

This vendor markets its BPMS, eFIRST Process, as a standalone product, but focuses more on delivering solutions, such as CenterVision, built on eFIRST Process. This provider focuses on financial services, healthcare, manufacturing, government, services and utilities.

#### Vitria

This vendor's new offering, M3O, is innovative, but too new to include in this research.

#### BEA

This vendor was acquired by Oracle in April 2008. The Oracle entry below reflects the products and capabilities it acquired through BEA.

#### **Newgen Technologies**

With a heritage in integrated document archive and retrieval systems, imaging, content management, and workflow, this vendor, which is based in India, has more than 725 customers in 35 countries. It is rapidly gaining clients in Africa, the Middle East, Central and Eastern Europe, the Asia/Pacific region and the U.S. What differentiates Newgen is its knowledge of industry best practices in a rapid-delivery model designed to provide an exact-fit solution, fully integrated to the specific needs of its customers. Nevertheless, Newgen has not yet gained sufficient interest for its BPMS from Gartner clients worldwide. We do not see it regularly competing in BPMS deals with other vendors on this Magic Quadrant.

#### Added: New Vendors in This Magic Quadrant

- Cordys
- K2
- Polymita Technologies
- SAP

### Dropped: Vendors No Longer in This Magic Quadrant

The Aptitude product does best in high-volume transaction processing, rather than BPM use cases. Thus, interest among our clients for Aptitude as a BPMS has been low. This product does not compete regularly with other vendors in this Magic Quadrant.

#### SunGard

Sungard (see Note 2) does not sell the Carnot engine for general-purpose BPMSs, but as part of the Infinity Process Platform, a software-as-a-service (SaaS) offering. This positioning makes the product more of a BPP and does not address the four use cases for BPMS. Gartner clients have low interest in Carnot as a BPMS, and it does not compete regularly in deals with other vendors on this Magic Quadrant.

#### Note 2 Disclaimer

Sungard is a portfolio company of Silver Lake Partners, a private investment firm that also owns a substantial, publicly disclosed interest in Gartner, Inc., and has two seats on Gartner's 11-member Board of Directors. Gartner research is produced independently by the Company's analysts, without the influence, review or approval of our investors, shareholders or directors. For further information on the independence and integrity of Gartner research, see "Guiding Principles on Independence and Objectivity" on our Web site (http://www.gartner.com/it/about/omb\_guide.jsp).

#### Captaris

This vendor positioned its technology as workflow, rather than enabling BPM. It also primarily sold its product as an embedded engine under a partner's solution. As a result, insufficient market presence and client interest kept it out of the top 25 vendors competing. The company was recently acquired by Open Text.

#### **Evaluation Criteria**

#### **Ability to Execute**

Vendors must deliver strong capabilities in all the functional areas listed above to achieve long-term leadership in the BPMS market. We also heavily weighted sales execution and pricing, key measures of market reach and commercial viability. As major software vendors enter this market, the smaller, private, best-of-breed vendors must establish a strong market share to maintain their leadership. Marketing execution, along with sales execution, creates "mind share"; thus, we have weighted these criteria heavily.

Viability remains an important criterion for buyers. However, standards and runtime interoperability with software infrastructure products, such as application servers and portals, increase buyers' comfort with smaller, best-of-breed BPMS suppliers. Thus, we weighted this criterion as "standard." Market responsiveness and track record is also weighted as "standard"; all vendors ship multiple releases or versions in a year. BPMS enables nontechnical people to play key roles in process improvement, so we heavily weighted the customer experience criterion (see Note 3), which encompasses business-user friendliness, a single-product experience and customer support. Finally, the operations criterion reflects our evaluation of the management team and how well the company works with partners and customers (see Table 1).

#### **Completeness of Vision**

Completeness of vision in the BPMS market considers the same types of criteria we use to rate a vendor's ability to execute, but with an eye on the future. Vendors have already begun to pursue multiple growth paths, such as BPMS, BPP, BPMS-powered SaaS and business process outsourcing (BPO) models, but we evaluated their completeness of vision by how their products and services meet the BPMS use cases

Table 1. Ability to Execute Evaluation Criteria

| Evaluation Criteria  | Weighting |
|--|-----------|
| Product/Service  | High      |
| Overall Viability (Business Unit, Financial, Strategy, Organization) | Standard  |
| Sales Execution/Pricing  | High      |
| Market Responsiveness and Track Record                               | Standard  |
| Marketing Execution  | High      |
| Customer Experience  | High      |
| Operations   | Low       |
| Source: Gartner  |           |

## Note 3 Customer Experience Criterion

In this criterion, we also reflect our evaluation of the overall users' experience of the process improvement life cycle in a continuous improvement mentality. We considered products in terms of the experience of various roles, including authors and composers, developers, business process analysts, business process architects and even process participants.

described above. Nevertheless, with so many vendors competing, a vendor's plan for enhancing the product and for meeting the needs of new roles continues to be an important selection criterion.

Purchasing decisions are typically split between business and IT professionals; a particular business process improvement project drives the collaboration between the IT organization and the business to find a solution. We reduced the weighting of the market and sales strategies, because these criteria must support the vendors' understanding of the market; otherwise, their message and value proposition will not resonate with buyers.

Because there are so many competitors, we heavily weighted product strategy as the criterion that most reflects the vendor's vision for R&D. We asked whether the vendor will develop additional features itself, by using open-source technology, partnering or acquiring capabilities. A vendor's product strategy also affects customer experience. In the business model criterion, we considered whether the vendor is funded adequately and staffed with individuals who we believe can execute the product vision.

We de-emphasized support for industry-specific needs to focus on the general-purpose software infrastructure technologies in a BPMS. Nevertheless, because there are few standards that relate to process templates and frameworks, vendors have an opportunity to distinguish themselves and to deliver more value to customers in this area. With standards gaining popularity, including Business Process Modeling Notation (BPMN), XPDL, BPEL, Business Process Definition Metamodel and Web services for remote portlets, we also rated innovation as extremely important for long-term differentiation. Finally, BPMS adoption is strongest in North America, although Europe, Australia, South America and Central America are also growing, so we weighted geographic strategy as "standard" (see Table 2).

#### Leaders

Leaders offer products and services that best enable all of the use cases and have customer references for each. These vendors relentlessly focus on increasing the participation of business roles in process improvement efforts by enabling explicit, model-driven approaches, rather than traditional coding. Leaders' products and services especially focus on business process analysts working alongside process owners to transform processes. They enable the

Table 2. Completeness of Vision Evaluation Criteria

| Evaluation Criteria         | Weighting |
|-----------------------------|-----------|
| Market Understanding        | High      |
| Marketing Strategy          | Standard  |
| Sales Strategy              | Standard  |
| Offering (Product) Strategy | High      |
| Business Model              | Standard  |
| Vertical/Industry Strategy  | Low       |
| Innovation                  | High      |
| Geographic Strategy         | Standard  |
| Source: Gartner             |           |

highest level of collaboration among business and IT professionals, from the design and modeling phase through execution and optimization. Except for IBM and Software AG, leaders come to this market with products that have evolved from BPM pure-play tools. (Tibco entered this market via its acquisition of Staffware's BPM pure-play product several years ago.)

The leaders' products support an iterative process improvement method in which the artifacts (outputs) of each phase move seamlessly into the next. Products from vendors with a BPM pure-play heritage (such as Pegasystems, Lombardi, Savvion and Metastorm) still come closest to delivering automated, model-driven, round-trip behavior and thus the most fluid user experience. Because the model is visible and executable, processes can be flexible without sacrificing management control.

In addition, as a group, leaders exhibit superior sales and marketing execution. Many leaders exhibit strong innovation in their products, business models, and consulting and educational services. Many of these vendors have introduced new SaaS offerings and BPO alliances, and are developing their partner ecosystems to support a BPP. We anticipate that these vendors will continue to be leaders through 2011, as interest in BPMS continues to grow, companies expand investments in continuous process improvement and formalize their BPP.

Metastorm and Global 360 are the only Microsoft-centric BPMS providers in the Leaders quadrant. Microsoft loyalists prioritize their requirements for BPM a bit differently than users that focus on Java Platform, Enterprise Edition tools. In particular, the ability to integrate with Microsoft Office SharePoint Server and Microsoft Office is increasingly a key evaluation criterion. Furthermore, the difference in the underlying component model makes for varying implementation experiences. Unlike other Microsoft-centric BPMS providers in this Magic Quadrant, Metastorm's strategy is to acquire technologies and services that broaden its offerings; enable it to sell beyond traditional, midmarket, Microsoft-loyalist enterprises; and compete more effectively in large, global enterprises.

In May 2008, Global 360 replaced its temporary leadership with a new team, which is shifting its strategy from growth by acquisition to organic growth. The updated strategy and product road map emphasize providing access to the right functions and the use of personas in the process improvement life cycle. The resulting user experience and interaction model is unprecedented among .NET BPMS providers.

#### Challengers

The challengers are all strong companies that have undergone major changes in their organizations or products since our last Magic Quadrant. With these changes behind them, they are poised for growth. Fujitsu has recently reorganized its operations outside Japan to improve synergies among its hardware, software and service organizations. Oracle acquired BEA and adjusted its own BPMS product road map. (Acquisitions typically take a year to resolve the integration of people, products, services and customers). Oracle has begun to deliver on its plans to integrate the AquaLogic Business Process Management Suite (ALBPMS) with its own BPM technologies. EMC had to integrate the disparate architectures of its acquired BPM technologies. Its TaskSpace features a Web 2.0 UI that provides integrated access to many (although not yet all) process artifacts and capabilities.

Fujitsu, Oracle and EMC offer products that address this market and contribute to their vision for other markets too. Fujitsu's and Oracle's BPMS vision reflects BPM's adoption of SOA and service-oriented development of applications. Oracle's vision goes further to embrace the BPP concept and service-oriented business applications. Thus, Oracle and Fujitsu often appear on buyers' shortlists, especially when the IT organization wants to establish a technology standard for SOA-enabled BPM. However, these vendors sometimes lose to a best-of-breed market leader, especially when a business buyer is involved in the selection, and the organization highly values the paradigm shift mentioned previously.

EMC approaches this market primarily by cross-selling and upselling its enterprise content management (ECM) and EMC Data Manager customers with its BPMS. With its heritage of a leading data management and ECM product, EMC has developed its BPMS to support case-management-style work (a complex style of process) better than many others. However, EMC references are largely still doing document-centric workflow, rather than applying BPM disciplines to the above usage scenarios.

Products from vendors in the Challengers quadrant do not offer the same ease of use nor accessibility of functions for less-technical roles as those from the leaders. Generally, these products are weaker than those of the leaders for supporting continuous process improvement, and business and IT user collaboration throughout the process life cycle.

#### **Visionaries**

In general, visionaries are innovators. This quadrant has changed the most from 2007. We included SAP and Sourcecode Technology Holdings (K2) this year, largely because of the high interest we see among our clients. Both bring a unique vision to this market. SAP's NetWeaver BPM is the latest addition to the NetWeaver applications infrastructure platform. Like Oracle, SAPs vision encompasses BPM and SOA in support of a BPP. However, SAP also recognizes the need for resource coordination beyond business services and end-to-end visibility for business professionals.

The Sourcecode (K2) vision recognizes a need for business and IT professionals to come together in new ways to succeed in BPM. Its vision reflects the wide range of process maturity seen in the market, extending from enabling basic workflow through dynamic processes. K2's Blackpearl is a major architectural advancement from its earlier product. Sourcecode (K2) has aggressively gained market share around the world by delivering deep integration; exploiting the growing popularity of Microsoft technologies, such as SharePoint and Office; and using indirect sales channels. Adobe's visionary status comes from its focus on enriching customer experiences and enhancing collaboration in unstructured business processes. For processes that benefit from high-fidelity graphics and content presentation and manipulation, Adobe's product is superior to others in this Magic Quadrant.

Singularity, Auraportal and Ascentn have executed well in 2008 and expanded their market presence, while continuing to innovate. Singularity has the best approach for case management processes among the .NET providers. Auraportal has introduced a number of innovative new features, such as Dynamic Activated Divisions, process dictionaries, active guests and secure rooms. Ascentn continues its focus on transforming traditional programming-intensive tasks into model-driven aspects for process composition. For example, it has extended Agileparts to data services, which enables business users to set up business activity monitoring (BAM), key performance indicators, reporting and analysis, business intelligence (BI), and governance, regulatory and compliance functions as part of process modeling and dramatically reduces IT efforts.

Intalio, the only open-source-based BPMS vendor in the market, brings a unique business model to the BPMS market. By using open-source technologies, Intalio's business model is less capital-intensive than the other small, private companies in this Magic Quadrant. Furthermore, Intalio uses the open-source community and Web-based technologies for marketing and promoting its products and concepts. It also has innovative licensing and pricing models (a commercial open-source license for an annual subscription). In the current economy, Intalio is enjoying increased interest in its business model.

Cordys is also new to our Magic Quadrant. Well-known thought leader Jon Pyke (founder of Staffware and of the Workflow Management Coalition) joined Cordys in 2007 and seeks to differentiate Cordys by the concept of the Business Operations Platform. Cordys has some unique features in its product, such as organizational models, business calendars, repository views and access, and support for master data management (MDM). In addition, Cordys has launched The Process Factory, a multitenant SaaS offering.

#### **Niche Players**

Polymita entered the Magic Quadrant this year. A small BPMS provider with strong reference customers in Europe (mostly Spain), Polymita has recently expanded its presence in Latin America. Polymita's innovative ideas include providing MDM capabilities to enable dynamic data modeling and rapid implementations.

In our 2007 Magic Quadrant, Ultimus had just introduced v.8, a major architectural advancement. The timing of that release put Ultimus into the Visionary quadrant at that time. Since then, the company's new leadership has shifted focus from the product to improving operations and aligning all of its capabilities, such as training and professional services, behind the vision for v.8. As a result, Ultimus has new, online interactive training, new marketing messages and positioning, new pricing models, some internal restructuring and renewed focus on the U.S. market. Meanwhile, however, the market has not stood still. Thus, Ultimus moved to the Niche Players quadrant this year. Its product is largely sold through system integrators or as part of a consulting engagement. Most customers use it mainly for human workflow (Ultimus's heritage) or rely on solution partners to custom build a solution. Thus, for this analysis, we found that v.8 is not yet field-proven for the more advanced use cases.

#### **Vendor Strengths and Cautions**

#### **Adobe Systems**

This analysis pertains to Adobe Livecycle ES v.8.2. Strengths

- The product is highly appealing, with visually rich integration of documents, rich Internet applications (RIAs), unstructured content in the context of a business process, and rule-based customized security and personalization.
- Adobe has a clear, distinct vision to provide tools and services to manage transparent, agile processes that deliver engaging customer experiences.
- Customer reference checks indicate that Adobe has significantly strengthened its enterprise support services during the past 12 to 18 months.
- UI designers are able to author a UI only once, capture it as an XML document, and have it automatically rendered in a variety of formats (PDF, RIA and HTML).
- Livecycle ES integration with Adobe AIR and the use of PDF enables process participants to work online or offline.

#### Cautions

- Although Adobe has strengthened its focus on its enterprise business and on the Livecycle product family, market awareness of Adobe as a BPMS vendor remains low.
- Given Adobe's presence in the forms market, customers often view LiveCycle ES as a good product for forms-based workflow and do not pursue continuous process improvement initiatives.
- Although members of the Adobe Enterprise Developer program can build and test business processes using Adobe Livecycle ES Developer Express cloud capabilities, Adobe does not yet offer a runtime version of Adobe LiveCycle ES in the cloud.
- Customers looking to deploy Adobe LiveCycle ES in internal IT shared service centers, and partners looking for a SaaS platform provider, should be aware that Adobe LiveCycle ES does not support a full multitenant architecture.

#### **Appian**

These comments refer to Appian Enterprise v.5.7. **Strengths** 

- Appian Enterprise 5.7 is one of the most user-friendly products in this market and enables business users to take control of almost every aspect of a BPMS offering.
- Appian Enterprise is one of few BPM products that provides a 100% thin-client architecture for design time and runtime. Its tightly integrated environment provides a seamless user experience for each component. With this unique architecture, Appian has a complete BPM SaaS offering, Appian Anywhere.
- Appian has identified the strength of a repository-based enterprise architecture (EA) tool beyond the simple transfer of process models, and, therefore, it has embarked on a deep relationship with MEGA, one of the leaders in the business process analysis (BPA) market.

#### Cautions

- Appian's aggressive growth strategy leading this year to a 300% increase in Europe, the Middle East and Africa – will put pressure on the organization to deliver on this strategy, and could result in some locations having limited partner support.
- Although it is one of the first vendors to offer a BPMS through SaaS, few customers have adopted this approach.

#### **Ascentn**

This analysis pertains to AgilePoint BPMS 4.5. **Strengths** 

- Ascentn AgilePoint is a true model-driven, .NET BPMS and a
  metadata-driven, IT-asset-abstraction framework. It enables the
  support of dynamic processes throughout the entire Microsoft
  software stack, including BizTalk Server, SharePoint Server,
  Windows Workflow Foundation, Microsoft Office and Visual
  Studio. The metadata-driven, IT asset-abstraction framework
  can be used to process-enable system activities into AgileParts
  and dynamic human activities called AgileWorks. Agile Parts
  and AgileWorks can be assembled and configured at the
  process layer to create directly executable processes.
- AgilePoint's modeler is Visio; it is the actual .NET composition environment, not simply BPMN stencils that are converted. This approach builds on the business user's experience and comfort with this tool.
- Ascentn is a preferred partner in the Microsoft Business
  Process Alliance program, which entitles Ascentn to direct
  Microsoft R&D, marketing and sales support. Its close
  relationship is contributing to significant product growth.
- The architecture is open and clean. The relationship with Microsoft means that new technologies from Microsoft are easily exploited and integrated (such as the WCF and .NET frameworks). The architecture contributes to a highly productive development experience.
- Customer references demonstrate an unusual level of BPM sophistication for Microsoft-centric enterprises; they use Ascentn with mission-critical processes and broad deployments.

#### Cautions

- As a small company, Ascentn concentrates its resources on core product functions. Functions beyond core capabilities, such as governance over process assets and simulation and optimization, are weak. Customers may also need to supplement AgilePoint with a third-party rule engine.
- Ascentn has a small Professional Service team; it relies more on service providers for solution delivery, consulting and BPM transformation services.
- Ascentn has not yet developed an ecosystem of partners, nor a community of users to foster the creation of reusable business service content based on AgilePoint.

#### **AuraPortal**

These comments pertain to AuraPortal BPMS v.3.1. **Strengths** 

- AuraPortal keeps delivering an example of next-generation BPMS. The company understands that BPMS products need to be oriented toward business users.
- In its newest release, AuraPortal has introduced innovative functions, such as Dynamically Activated Divisions, that support the combination of runtime creation and control of tasks, casehandling features and ad hoc task management.
- AuraPortal BPMS features model-driven execution (models can be executed immediately, without the need to program any code) based on a process dictionary, and is completely Web-based.

#### Cautions

- AuraPortal is preparing to enter new geographies (North America and Eastern Europe) and will have to execute a strong partner strategy.
- An increase of 130% in its customer base requires a strong management strategy and a bigger, more-experienced management team.
- Most of the reference cases are Spanish-speaking customers (in Spain and Latin America); we expect some changes in 2009, if the vendor can deliver on its growth strategy.

#### Cordys

This analysis pertains to Cordys Business Operations Platform v.4. **Strengths** 

- Cordys has a strong product, despite its being new, with a modular architecture and some unique features: organization models, business calendars, repository views and access, and support for MDM.
- The Process Factory is a hosted, multitenancy, SaaS offering targeting small and midsize businesses and Web developers that want to develop simpler workflows, rather than full process management systems. Cordys relies on partners to host it.

 Cordys has strong market understanding and product vision for a business-oriented, operational platform for managing processes in real time.

#### Cautions

- As a new competitor in this market, Cordys has few references using its complete BPMS and few customers outside of Europe.
- Uls throughout the product are functional, but basic in look and feel; they affect intuitiveness and ease of use, especially for lesstechnical roles. Generated Uls are also average in look and feel.
- Cordys must attract independent software vendors (ISVs) to the platform.

#### **EMC**

This analysis pertains to EMC BPMS v.6.5 Service Pack 1. Strengths

- EMC has done a good job integrating the pieces of its BPMS via Taskspace, a Web 2.0 UI that enables business professionals to more easily manage dynamic processes.
- EMC is one of the few BPMSs that supports casemanagement-style processes well.
- EMC has many system integrators and consulting firms as partners.

- In a crowded market, awareness of EMC as a BPMS competitor is low, relative to others in this Magic Quadrant.
- References with which we spoke did not use all of EMC's BPMS components to support BPM initiatives. Many EMC customers exploit EMC's BPMS as a document workflow technology, rather than exploiting its full BPMS functions.
- Some of EMC's sales force and partners are less trained on best practices for implementing BPM than on ECM and workflow. Buyers need to be clear about their needs and assess consultants for BPM methodology and BPMS implementation experience.
- Support for the process improvement life cycle is not seamless, which affects collaboration between roles. For example, modelers and developers use different tools and, thus, do not work on the same copy of the model simultaneously. They "share" a process model by creating new versions each time it is checked out of the repository. The environment then automatically reconciles the copies. Similarly, there is no graphical, step-through mode for business roles to experience a prototype of the solution; rather, there is a graphical debugger appropriate for technical roles. Taskspace is addressing these issues by providing a composite solution perspective and access to runtime artifacts.

#### **Fujitsu**

This analysis pertains to Fujitsu Interstage BPM 10.0. **Strengths** 

- The vendor's Automated Process Discovery (APD) Services program helps clients identify critical process paths across established systems and helps pinpoint where to start with new BPM projects.
- Fujitsu has recently undertaken a global restructuring. The new reorganization is producing more synergies between Fujitsu software and service organizations across regions, and provides a more unified engagement experience for multinational customers.
- Fujitsu is ramping up its BPM practice in its professional service organizations.
- Fujitsu Interstage BPM is a multitenant SaaS platform that can be used for private cloud services or as a platform for external SaaS or cloud offerings.
- Fujitsu Interstage BPM provides solid support for BPM roles across the business process life cycle and a scalable software infrastructure and composition environment for organizations looking to move to SOA.

#### Cautions

- APD is a consulting service, rather than a product. Fujitsu will introduce APD as a product in June 2009.
- Fujitsu Interstage BPMS implementations have typically been led by IT professionals, and projects initially focus on process integration and later evolve to address continuous process improvement.
- Fujitsu continues to expand its Interstage BPMS alliances with larger consultants and system integrators. Customers may find it difficult to obtain Interstage BPMS expertise from midtier or boutique consultancies that do smaller, bottom-up BPM projects.

#### Global 360

This analysis pertains to Process360 v.9.5.1, with Insight360 v.2.1.0. Strengths

- A common-process metamodel is shared across Global 360's simple, business-oriented process modeling and its technicalmodeling environment. This metamodel enables full roundtripping, although it is manual.
- With Insight360, Global 360 extends optimization to the problem of broader workforce optimization. External application events and data may be captured via a service interface, imported through an XLS or CSV file, or extracted from a database, and loaded into Insight's cubes. The cubes can be mined to understand the implied process and the process performance metrics. The system can make recommendations for optimization of resources.
- Global 360 is one of the few vendors whose BPMS supports case-management-style processes well.
- The new vision and strategy for enhancing business professionals' experience throughout the process life cycle is strong, well-researched and innovative. It will be productized in later 2009.

 Legacy business in EDM and ECM, and a buyout two years ago, means Global 360 is financially stronger than many other BPMS vendors.

#### Cautions

- Global 360's process intelligence, case management and process optimization requires a higher level of process management maturity than is typical of the Microsoft buyer.
   Most small and midsize BPMS buyers are looking for graphical-workflow modeling and execution, rather than sophisticated process analysis or optimization.
- Collaboration across business and IT roles in the life cycle is weak. For example, models are passed back and forth, because of different modelers for different roles, and Insight360's repository is separate from Process360.
- Underlying technologies do not have a uniform architecture. Parts
  of it are proprietary and, in places, legacy technology. This lack
  of uniformity contributes to a suboptimal BPM experience. Global
  360's plans to unify and advance the technologies will require
  customers to keep up with interim steps to gain the benefits.

#### **IBM**

This analysis is based on IBM BPMS v.6.1.2. The two foundational offerings under this moniker are the WebSphere Dynamic Process Edition and the FileNet Active Content Edition. We considered the combined functionality.

#### Strengths

- IBM has marshaled all its resources including Global Services, university outreach, industry expertise and its partner ecosystem – to accelerate user adoption of BPM as a management discipline.
- IBM's Smarter SOA campaign benefits its BPMS by showing how SOA and BPM work better together.
- IBM's broad and strong technologies enable BPM to help users advance their SOAs and evolve toward a BPP model.
- IBM has a vision for exposing process artifacts and data more directly to business professionals. Its role-based business space UIs expose configurable widgets to directly manipulate lowerlevel assets.
- IBM has built an impressive software and IT service ecosystem for its SOA Foundation and has established notable market awareness of its SOA and BPM capabilities.

- IBM doesn't have one BPMS product; rather, it fulfills its BPM strategy through federated interoperability across two basic offerings augmented by extended offerings. IBM has made significant progress with integration across the two basic offerings, but has not yet achieved full integration.
- The broader software division's acquisition strategy will continue to augment IBM's BPMS vision and product road map. Customers will need to monitor the integration of new technologies.

- Individual products in the suite have strong and rich functionality. However, in combination, the permutations of configuration possibilities are overwhelming. Customers usually require help from a service provider.
- WebSphere Dynamic BPMS edition has few references.

#### Intalio

These comments pertain to Intalio Enterprise Edition v.5.2.1. **Strengths** 

- In the current harsh economic climate, open source is gaining more attention. Intalio has a unique business model that uses open-source content, licensing and community marketing.
- The intelligent use of an open-source business model, combined with the adoption of industry standards, has resulted in more than 50,000 companies downloading Intalio BPMS Community Edition.
- Tight integration with other open-source vendors such as Alfresco (content management) and recent acquisitions extend the reach of Intalio in this market.

#### Cautions

- Advanced features for business rule engines, BAM and ECM are only available in the commercial Enterprise Edition.
- Companies that start using Intalio Community Edition should be prepared to invest in training, because Intalio does not offer consulting services, and consulting alliance partners are more focused on services involving the Commercial Edition.
- Commercial, next-generation products that are easier and faster to implement are entering the BPMS market. Thus, the advantage of starting with a free, limited version to discover the use of functions and features is rapidly diminishing.

#### K2

These comments pertain to K2 Blackpearl.

#### Strengths

- K2 Blackpearl is built 100% on the Windows Workflow Foundation framework and delivers deep integration with Office Communication Server.
- Sourcecode (K2)'s product unit strategy enables customers to supplement their Microsoft technology and skill investments with a low-cost workflow technology, incrementally advance their BPM maturity and exploit the full capabilities of Blackpearl.
- This company understands the Microsoft developer mentality and priorities. K2 Blackpearl's authoring environments keep things easy (such as Smartobjects for integrating and reusing external data and Visio drawing migration); they are role-based and graphical.
- The Sourcecode (K2) ecosystem of more than 200 partners and 6,000 K2 Underground members provide a significant community of K2 Blackpearl expertise and knowledge sharing.
- Blackpearl comes with many process pattern templates for coordinating popular workflows across Microsoft Office, SharePoint, Infopath, SQL Server, SAP and Microsoft CRM.

#### Cautions

- Sourcecode (K2)'s product development strategy purposely reflects its dependency on Microsoft technologies, rather than development of their own, comparable capabilities in certain areas. The newness of this version of K2 Blackpearl combined with Sourcecode (K2)'s development strategy means that some buyers will find K2 Blackpearl somewhat lacking in features as a complete BPMS. In particular, buyers with demanding needs in such areas as dashboards, simulation, optimization and rules should consider Sourcecode (K2) partners that specialize in these areas.
- Few references with whom we spoke yet use K2 Blackpearl for sophisticated, cross-functional BPM projects with a large scope and scale. The largest percentage of implementations with which we have spoken over the past year are midsize enterprises doing content workflow with SharePoint and Office.
- K2 Blackpearl enables rapid modeling, assembly and management of business-process-based applications. At this point, this product supports IT roles better than business roles. Its authoring tools and resulting process solutions are predominantly supported by Microsoft developers (not process analysts and architects), who view K2 Blackpearl as a simpler, more-productive approach to exploiting core Microsoft infrastructure technologies.

#### Lombardi Software

This analysis pertains to Lombardi Teamworks 6.2. **Strengths** 

- Lombardi has keen insights into the functions required by each user role involved in the business process life cycle. Lombardi consistently produces highly intuitive software that addresses each role's perspective, while providing an integrated round-trip user experience.
- Because Teamworks is easy for business analysts to use, it is well-suited to continuous process improvement programs where empowering business users or business analysts is key.
- The business process executes from the process model, thereby simplifying dynamic changes to in-flight business processes at runtime and preventing design-time artifacts from getting out-of-sync with implementation artifacts.
- Lombardi customer references are among the most advanced in BPM maturity. They demonstrate broad adoption of BPM across an organization that yield transformative business results.
- Blueprint appeals to business managers and strategic planners who seek a tool for high-level process diagramming and knowledge capture. It complements the Teamworks process models and is available via low-cost SaaS.

- Customers with smaller deal sizes may find it challenging to command Lombardi's attention.
- Lombardi's support for case management processes is not as strong as some of its competitors.

- Lombardi Teamworks does not offer multitenant SaaS, which some ISVs may need for highly scalable cloud services or enterprises may want for private cloud services.
- Lombardi does not invest in process templates or frameworks or recruit partners to build solution accelerators. These factors may be an obstacle for organizations looking for specific process-based applications.

#### Metastorm

This analysis pertains to Metastorm BPM v.7.6. **Strengths** 

- Customer experiences in 2008 have been excellent.
- Ease of use of the product by nontechnical people is strong.
- Metastorm has a strong heritage in providing BPM software based on Microsoft technologies and is a leading Microsoft Business Process Alliance partner.
- Metastorm's go-to-market strategy is to offer best-of-breed EA, business process architecture, and BPM technology that can be implemented as stand-alone solutions or integrated components. With these three pillars of technology, the company aims to help organizations unify or link strategies, analyses and process executions.

#### Cautions

- Metastorm has combined software for EA, BPA and BPM, and many customers license Metastorm's software or make buying decisions based on this broader offering. Nevertheless, most customers have not yet engaged in single projects that span all areas. Consequently, Metastorm will need to continue to develop integration and reuse that encourages customers to accelerate implementation of the full platform.
- Some users have reported support problems outside the U.S.
   Metastorm has developed a global presence through regional
   resellers to sell its BPMS and targeted solutions. Users should
   understand the scope of the solutions they buy from a reseller and
   the path to further licensing options to ensure expectations are met.
- Some customers report difficulties in negotiating pricing and contracts. It may take longer than anticipated to determine the appropriate licensing configuration.

#### **Oracle**

This analysis pertains to Oracle BPM Suite 10gR3. Strengths

- The center of Oracle's BPM Suite 10gR3 is BEA's ALBPMS v.6.1. The business analyst experience and round-tripping within the ALBPM elements (now called Oracle BPM) of the product are solid.
- Oracle BPM Suite 10gR3 includes BEA ALBPMS and additional BEA and Oracle components, but costs less than BEA ALBPMS.
- At some point, Oracle plans to enable business analysts to monitor and change process flows in application integration architecture applications via Oracle BPM Suite.

#### Cautions

- Oracle BPM Suite 10gR3 has multiple, redundant, loosely integrated design time and runtime tools. Thus, customers that use the non-BEA components in 10gR3 will find that the discipline of BPM is not easily enforceable across the process life cycle; executables can be changed independently of the model, thus breaking round-trip synchronization. This gap places more of the burden of process governance on the user via manual procedures and policies.
- Oracle BPM Suite 10gR3 contains few additional functions for BEA ALBPM users. Although Oracle BPM Suite 11g is intended to provide additional, more-unified capabilities, BEA ALBPM users will need to upgrade to 10gR3 first, then move to11g.
- The transition from Oracle BPM Suite 10gR3 to 11g is a major product revision. Customers should be aware that this may involve the migration of some solution assets and is not just a straightforward upgrade.

#### **Pegasystems**

This analysis is based on PRPC v.5.5. **Strengths** 

- Pegasystems' primary strength remains its unified object architecture that structures all process artifacts, including processes, policies and Uls. This architecture enables Pegasystems to deliver a declarative modeling composition environment that improves the ability of the BPMS to change and adapt to new business needs.
- Pegasystems' SmartBPM Suite's new capabilities support agility, including using the BPM system itself to capture business objectives, accelerate deployment, manage projects, automate testing, provide self-tuning optimization and improve integration directly into clients' Web environments.
- In 2008, the company introduced a cloud-enabled "platform as a service" to help organizations set up centers of excellence and ease adoption of BPM initiatives across departments, subsidiaries, lines of business, outsourced work units and trading partners.
- Pegasystems has significant experience running federated BPM systems at its large clients and has aggressively added capabilities for disparate organizations to scale and federate their BPM implementations. These capabilities include a new, enterprisewide BPM registry and repository, and tools to coordinate BPM projects across the enterprise, export to industry-standard BI data warehouses and optimize multinode systems.
- The company continues to add to its library of prebuilt, industry-specific frameworks for composite applications, which give customers a base layer, including common industry standards and best practices. It also reports a doubling of its customer service business based on its CRM framework and facilities for automating multichannel services.

#### Cautions

 Pegasystems does not yet have an OEM or value-added reseller (VAR) channel and largely relies on direct sales and strategic consulting partners.

- Pegasystems' declarative composition environment is new to most users, which will require help learning to take advantage of it. Customers that do not follow the methodology of iterative development and business user engagement will lose out on the benefits these new approaches can bring.
- The vendor's sales presence is biased toward North America and Europe and has not focused on growing its presence in the Asia/Pacific region or South America; thus, it is missing opportunities to grow globally.

#### **Polymita Technologies**

This analysis pertains to Polymita Business Suite v.4.0. **Strengths** 

- Polymita is a Spanish vendor that features model-driven development with a strong emphasis on MDM to create a single view of data and processes. This approach enables business users to make changes to processes and master data on running processes.
- Polymita shows the shortest implementation times in the BPMS market.
- Polymita has one of the strongest support capabilities for case management as a BPMS use case among the Javabased offerings.

#### Cautions

- As a small vendor in a tough global economy, Polymita will be significantly challenged to gain global market share.
- As a small company, Polymita will go through organizational challenges to deliver on its growth strategy. International growth will be its primary challenge in 2009.
- Polymita has a small installed base, and its references are predominantly in Spanish and Latin American organizations.

#### Savvion

This analysis reflects Savvion BusinessManager 7.5. **Strengths** 

- Savvion BusinessManager 7.5 is one of the most-mature BPMS products. Its ability to handle high-volume workflows, requiring tight coordination of people and systems, has contributed to Savvion's growing success in the BPO market, in addition to direct sales to enterprises.
- This product has an open, multitiered, service-oriented and standards-based architecture, with well-documented application programming interfaces. Thus, it is easy to integrate with software infrastructures and application development tools, as well as to embed for partners.
- Visualization of many process aspects is innovative and easy to use for business professionals. Examples include its modeler, design time repository, dashboards and reports, and a new graphic for analysis of process execution paths.
- Business Expert supports real-time analysis of in-flight processes and dynamically suggests changes to process

conditions and rules to keep running processes optimal. It has strong reporting capabilities. Users can dynamically add new process performance metrics in the runtime environment to gain insight into current execution data.

#### Cautions

- Savvion's current release reflects the tactical needs of a
  few of its best customers more than its own, market-driven
  innovations. Two examples (which we find inconsistent with
  the requirements of this market) are a new tabular method of
  data entry for process activities and new support for project
  management (which is somewhat competitive with Microsoft
  Project). Customers should watch for developments that evolve
  in directions inconsistent with mainstream market demand.
- Beyond the U.S., Savvion serves its customers primarily through indirect sales channels, partners and resellers. (Savvion has a small direct presence in Europe and a larger direct and indirect presence in India.)
- As Savvion expands its sales through more indirect channels, such as system integrators and consulting partners, business process outsourcers, and OEM relationships, enterprises should watch for any impact to support and product release plans from resources being spread too thin.

#### SAP

This analysis pertains to SAP NetWeaver BPM and SAP NetWeaver BRM, which are part of SAP's NetWeaver Composition Environment 7.1 Enhancement Package 1.

#### Strengths

- Excellent integration with SAP's Enterprise services repository makes it easy to exploit services and create before, after and between workflows.
- NetWeaver BPM enables process experts to work directly with business leaders to extend SAP applications with explicit workflows that cross SAP and non-SAP applications.
- Scenario models provide high-level, contextual business views to complement BPMN process flow models.
- Integration with NetWeaver CE provides one environment to support the new, composition-driven life cycle (including the process layer, Ul layer, service layer and rules). This setup supports collaboration across multiple roles throughout the life cycle.

- SAP has focused on core BPM capabilities for its initial release.
   Clients will find its features to be weak in some areas (such as reporting and dashboards, group collaboration, UI support and content integration), compared with best-of-breed products.
   (However its integration with SAP NetWeaver Business Rules is stronger than that of many other vendors.)
- Only WebDynpro clients are supported initially, and only online Adobe forms are integrated in WebDynpro. SAP will deliver Visual Composer integration in 2009.

- The initial release doesn't support business roles as effectively as it supports developer roles (because of its focus on Eclipse, BPMN and graphical debug).
- As with other NetWeaver components, the bigger the customer's commitment to SAP, the more attractive this tool. It will always work better with SAP assets than non-SAP assets.

#### **Singularity**

These comments pertain to Singularity Process Platform v.3.7. **Strengths** 

- Long experience in the process management world has given this U.K. player a sound understanding of the BPMS market and led Singularity to progressive ideas in this market.
- Singularity offers complete functions, but differs from other vendors through its strong focus on knowledge-centric process support. This focus has resulted in the most-complete solution for case management in the BPMS market – for example, support for case modeling, case relationships and predictive analysis on cases.
- Singularity's business model is strong; the company supports partners in telecommunications, capital markets and government, as well as a generic BPM channel complemented by the market-specific Process Accelerators.
- Singularity offers a unique implementation method involving different teams at the customer site that compete within the organization for the best solution.

#### Cautions

- Knowledge worker processes and case management require special skills and an appropriate approach to implementing the product's advanced features. These skills are not widespread in the market.
- Singularity is expanding into several other global regions and has grown its staff from 190 to 240 people. Managing and supporting the growth model set forward will be its biggest challenge in 2009.

#### Software AG

This analysis pertains to Software AG's webMethods BPMS 7.1.1. Strengths

- Software AG has a clear opportunity with CentraSite to tie the business service repository to its BPM strategy to change BPMS into a governance mission.
- A broad breadth of technology and a loyal customer base provide a community in which new BPMS features can be deployed while experimenting with more-radical cloud-based options.

 The webMethods BPMS offers an integrated business user experience, balanced support for multiple interaction types, and well-integrated, attractive simulation capabilities. It also provides SOA governance through a Universal Description, Discovery and Integration federation service link to CentraSite Governance Edition.

#### Cautions

- Software AG lacks a well-developed ecosystem for IT service and application developments partner around industry-specific BPM solutions or templates.
- The company has had difficulty articulating its value proposition and industry-specific, go-to-market strategy for BPM. The company needs a clear-cut, efficient strategy to compete with larger BPM vendors, such as Oracle and IBM.
- The UI Designer is not appropriate for business analysts.
   Rather, UI design remains largely a programmer responsibility.
   The product supports JSR168 portlets, JavaServer faces and Ajax only as UI styles.

#### Tibco Software

This analysis pertains to Tibco iProcess v.11. **Strengths** 

- iProcess Suite uses an event-driven architecture, with a strong, wizard-driven BAM layer to enable deep process insight.
- There is good support for many open standards, including XSLT, XPDL, BPEL and BPMN. Artifacts are saved as XPDL and enable easier translation from BPMN to runtime BPEL and interoperability with other BPM tools, such as IDS Scheer.
- Tibco has a strong vision of "Dynamic BPM" as products move forward.

- A sophisticated product and high price prevent Tibco from appealing to less-mature buyers and smaller organizations.
- The company is continually mentioned as a buyout candidate, with few legitimate buyers left. However, acquisition poses a minor risk, because this rumor has been around for years without action. Even in the case of an acquisition, the technology stack is likely to remain intact.
- There is little support for complex content interactions, such as case-management-style workflows.

#### **Ultimus**

This analysis pertains to Ultimus Adaptive BPMS v.8.1. **Strengths** 

- Ultimus BPM Suite 8.1 offers particularly strong humanworkflow technology that is conducive to change and decreasing time to deployment, as well as a work management platform that can readily handle exceptions.
- Ultimus has expanded its human-interaction capabilities with a "Human Services Bus" – an advanced way of parallel working on process instances from different flows. It has been built on its 3-D XML data storage concept.
- BPM Suite 8.1 has been localized into 16 languages, sold directly in 16 countries and offered in 80 other countries through partners and VARs.
- Ultimus has gradually developed a flexible pricing model that starts with pricing by process and is later tailored to actual user licenses in a tiered model.

#### Cautions

- In 2008, we saw implementations focused primarily on departmental solutions on top of ERP solutions or routing of forms for human approvals and reviews. Most of these implementations are workflow-like, rather than reflecting BPM disciplines and methods.
- In 2009, Ultimus will launch a "lite" version of its Adaptive BPMS Suite, which will focus explicitly on workflow, and will reinforce its reputation as a pure workflow vendor.

#### **Vendors Added or Dropped**

We review and adjust our inclusion criteria for Magic Quadrants and MarketScopes as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant or MarketScope may change over time. A vendor appearing in a Magic Quadrant or MarketScope one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. This may be a reflection of a change in the market and, therefore, changed evaluation criteria, or a change of focus by a vendor.

#### Acronym Key and Glossary Terms

**ALBPMS** AquaLogic Business Process

Management Suite

APD Automated Process Discovery

**BAM** business activity monitoring

BI business intelligence

BPA business process analysis

**BPM** business process management

BPMS Business Process Modeling Notation business process management suite

BPO business process outsourcing business process platform

**EA** enterprise architecture

enterprise content management
ISV Independent software vendor
MDM master data management
RIA rich Internet application

SaaS software-as-a-service

SOA service-oriented architecture

**UI** user interface

VAR value-added reseller

#### **Evaluation Criteria Definitions**

#### **Ability to Execute**

**Product/Service:** Core goods and services offered by the vendor that compete in/serve the defined market. This includes current product/service capabilities, quality, feature sets and skills, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability (Business Unit, Financial, Strategy, Organization): Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

**Sales Execution/Pricing:** The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness and Track Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word-of-mouth and sales activities.

**Customer Experience:** Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

**Operations:** The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

#### Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the Web site, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services, and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

**Vertical/Industry Strategy:** The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

**Innovation:** Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

**Geographic Strategy:** The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.