July 30, 2007

BPMS Revenue To Reach $6.3 Billion By 2011

by Ken Vollmer and Colin Teubner
for Enterprise Architecture Professionals
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Increasing Business Needs And Demand For SOA Features Are Driving Demand

by Ken Vollmer and Colin Teubner

with Connie Moore, Eric G. Brown, Jamie Barnett, and Jacqueline Stone

EXECUTIVE SUMMARY

Business process management (BPM) license, services, and maintenance revenue from software vendors will grow from approximately $1.6 billion in 2006 to $6.3 billion by 2011. This growth is powered by enterprises seeking to improve the efficiency, effectiveness, and strategic value of key business processes that span a range of scenarios including human interactions, system and application integration, document processing, and complex decision making. Since our last BPM market forecast in early 2006, significant convergence has occurred between the integration-centric and human-centric segments of the business process management suite (BPMS) market. But enough differences persist to warrant discrete forecasts by segment. Enterprise architects and business process professionals should carefully match their organizations’ needs to the different market segments of BPMS tools, recognizing that more than one type of BPMS might be required to adequately cover the full range of their enterprise requirements.

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Related Research Documents

December 20, 2006

“Increase Business Agility With BPM Suites”
September 25, 2006

January 26, 2006
RESEARCH CATALYST

Clients selected this topic for Client Choice research.

BUSINESS PROCESS EMPHASIS AND SOA PROJECTS DRIVE BPM SUITES’ GROWTH

BPM suites are experiencing strong growth due to two primary factors. First, these products enable organizations to pursue continuous process improvement efforts more effectively than business process re-engineering efforts that were attempted in the 1990s. Second, they provide comprehensive service-oriented architecture (SOA) capability that supports more agile business technology (BT) organizations. Specifically:

- **BPMS products improve the effectiveness of continuous process improvement efforts.** Business process re-engineering (BPR) efforts of the 1990s suffered from several limitations, not least a lack of tools that directly supported each phase of the process life cycle. Today’s BPM efforts experience higher levels of success because the current versions of BPMS tools can link each phase of the process life cycle to an integrated set of modeling, code generation, execution, monitoring, and optimization capabilities. These tools also support more effective collaboration among business stakeholders, business analysts and architects, and IT architects and developers, resulting in fewer project disconnects and more effective information exchanges between key groups.

- **BPMS tools improve IT’s, and ultimately the business’s, agility.** BPM suites’ ability to comprehensively support SOA and model-driven development has given IT organizations a powerful way to respond to new business requirements much faster than in the past. Claims of development time savings in the range of 50% to 60% are common, with some validated reports going even higher. For example, a major European telecom provider has documented applications development savings in the 75% range.

These two factors provide a strong impetus for enterprises to implement BPM solutions, leading to robust projections for software growth for this sector over the next five years.

THE BPMS MARKET REMAINS DIVIDED . . . UNTIL 2008

The BPMS software market is highly complex, with vendors from multiple software categories offering solutions that focus primarily on either human-centric or integration-centric business processes. Although there has been some coalescence over the past two years — for example, TIBCO Software’s acquisition of Staffware, Metastorm’s acquisition of CommerceQuest, BEA Systems’ acquisition of Fuego, and, most recently, Software AG’s acquisition of webMethods as well as a few partnerships like the W4/Magic Software relationship — the two market segments have not yet fully converged. We anticipate that this will occur during 2008. The current Forrester Wave™ evaluation report provides guidance that will be most applicable for different process types (see Figure 1).
Current efforts by Active Endpoints, Adobe, BEA, IBM, Oracle, and SAP to push adoption of standards (e.g., WS-BPEL Extension For People and WS-Human Task) designed to bridge the gap between integration-centric and human-centric BPM will hasten the convergence of these two markets. But enterprise architects and business process professionals should plan on one to two years before these standards become a viable alternative within the leading BPM products on the market. Links between strategic and operational models will still be necessary to overcome the limitations of using languages intended for services orchestration to coordinate human tasks.

**Integration-Centric BPM: Focus On High Performance And Complex Integration**

Integration-centric BPM has a strong focus on:

- **Interactions between packaged, custom, and external apps and the people who use them.** Typically these products automate system-intensive processes like trade reconciliation in brokerages, supply chain management among manufacturers, and integration of largely automated business applications across functional silos within a wide range of industries. These types of processes require substantial integration among applications within and outside the enterprise to process millions of transactions per day. Although these BPM tools provide workflow for human involvement, most integration-centric BPM implementations start with the premise that human interaction should be minimized and exceptions must be literally exceptions rather than the norm, and the workflow capabilities are not rich work environments for information workers.
• **A robust integration server at the core that orchestrates interactions between applications.** Access to custom applications occurs via a provided adapter SDK that supports the creation of adapters for internally built systems. Access to packaged applications can be achieved via standard adapters provided by BPM vendors. These products also contain embedded enterprise service bus (ESB) features that support comprehensive SOA capability.

Forrester published an evaluation of the 13 leading integration-centric BPM products in December 2006. The leading providers in this group are webMethods, TIBCO, IBM, BEA, Oracle, Sun Microsystems, and Software AG.

**Human-Centric BPM: Enabling Flexible People-Intensive Work**

Because they originated in the standalone workflow market, human-centric BPM products focus on:

• **Interactions between several people or between people and systems.** These systems might be packaged or custom apps, or even content and collaboration systems. The BPM products are traditionally strongest in workflow features and user interaction, and focus more on allowing business users, business analysts, and business architects (rather than developers) to participate in process design and change.

• **Some, but an increasing amount of, integration.** Whereas all human-centric BPM products can easily read information from a database into a process, or call Web services as part of a process, support for events processing and more complicated integration varies among vendors. Depending on the amount of system integration a process needs, a human-centric suite might fit best atop an integration-suite, handling human interactions and relying on the integration-centric BPM product to handle system integration and system-to-system interactions.

• **Non-traditional business processes that are more ad hoc.** Not content to automate structured human processes, BPM vendors in the human-centric arena are moving into areas not traditionally thought of as business processes. New tools and features of existing BPM suites support ad-hoc, unstructured human work with process engines; work that today is executed in emails and spreadsheets and is untraceable will have an audit log and support management visibility into work across many unstructured processes. HandySoft, for one, has enabled users to dynamically create process work using its new OfficeEngine product.

• **Document-intensive processes (for a subset of vendors).** Within the human-centric category, a subset of vendors is focused specifically on document-intensive processes, tying their BPM tools tightly to document management or document imaging functionality. These vendors include the usual enterprise content management vendors like EMC, IBM FileNet, and Open Text as well as document and imaging specialists like Adobe, Cardiff, and Hyland Software. Although some of these suites have sufficiently broad functionality to be used for many
processes, in general, these vendors sell specifically to customers with processes that require expertise in content management. Many of these enterprises end up using a separate, more broadly based BPM suite for business processes that do not need such strong document support.

Forrester published a Forrester Wave evaluation of the 12 leading human-centric BPM products in January 2006. The leaders in the Forrester Wave were Appian, Lombardi Software, Pegasystems, Savvion, and TIBCO Software. A Forrester Wave of the eight leading document-centric BPM products will be published in August 2007.

THE BPM MARKET WILL REACH $6.3 BILLION BY 2011

The overall size of the BPM market (based on software license and service and maintenance revenue from BPM product vendors) reached approximately $1.6 billion in 2006, 56% going to integration-centric vendors and 44% to the human-centric vendors. That’s roughly $918 million for the integration-centric segment and $731 million for the human-centric segment.

Forrester expects the BPM market to reach $6.37 billion by 2011 (see Figure 2). Business and IT demand for tools that support a stronger focus on business process improvement will drive much of the new growth, with IT-oriented SOA implementations adding significantly to higher sales of BPM software. The specific trends and their relative impacts are also shown (see Figure 3).

The strong rate of BPMS growth can be attributed to increasing business demand and support for SOA initiatives, but a deeper look reveals that a considerable number of individual issues have an impact the overall BPMS market. Some of these began to affect the market in 2006 and will continue to influence BPMS spending for several more years. Other drivers did not kick in until 2007 or 2008.

![Figure 2 Forecast: Worldwide Business Process Management Market Growth, 2006 To 2011](source: Forrester Research, Inc.)
Figure 3 Yearly Trends Drive Incremental BPM Growth

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Source: Forrester Research, Inc.
2006 Trends Driving Market Growth

Four key trends that started in 2006 continue to have an impact on the BPM market:

- **Numerous compliance mandates.** SOX, Basel II, HIPAA, and other regulatory mandates will drive demand for both integration-centric and human-centric BPM software by an additional 2% per year over the forecast period. BPM solutions are particularly well suited to support compliance mandates by controlling the execution of business processes, insulating them from potential tampering, and providing extensive audit trails for monitoring purposes.

- **Increasing composite/dynamic business apps adoption.** Many organizations began to experiment with BPM tools to support composite apps (or dynamic business apps, as Forrester refers to them) for development in 2006. This activity has become more widespread during 2007 and will reach mainstream status by 2008. Increasing composite/dynamic business apps adoption will drive incremental growth rates of 5% to 10% per year over the forecast period.

- **“A la carte” BPM pricing.** Integration-centric BPM vendors have sold individual BPM suite components for some time, but their human-centric BPM counterparts have not. By bundling their suites, the human-centric vendors have kept BPM entry prices artificially high, putting the technology out of reach for many organizations. Starting in 2006, the human-centric BPM vendors began to follow their integration-centric peers by selling individual components, thus lowering the barrier to initial adoption of their products. This trend will continue to drive incremental growth for the human-centric BPM vendors by an additional 1% to 2% per year over the forecast period.

- **Migration from templates to frameworks and packaged apps.** Industry templates have been available from BPM providers for several years, but their uptake has been limited because of the limited functionality they provided. This situation began to change in 2006 with BPMS vendors providing more sophisticated and more complete industry functionality. The most popular areas for BPM-enabled packaged applications will continue to be in the healthcare, telco, manufacturing, financial, and supply chain sectors, resulting in additional growth rates of 2.5% to 5% during the forecast period.

- **SOA “uplift”.** During late 2006, BPMS vendors began to feel the impact of SOA initiatives on the BPM market as BPM and SOA became inextricably intertwined as a result of pressure on IT for increased ability in all their efforts including processes that involve BPM. In fact, conversations with BPM vendors indicate this to be a major new factor affecting overall BPMS sales. We believe this factor will drive additional growth on the order of 3% to 5% per year during the forecast period for integration-centric BPM vendors and 2% to 3% per year for human-centric BPM vendors.

2007 Trends Affecting Market Growth

The first two of three new factors that began to influence BPM sales in 2006-2007 originally appeared in our 2006 Market Overview report; the third is more recent:
• **Large vendors invest in market awareness.** All vendors will benefit from the increased visibility and credibility that will result from large vendors like IBM, Microsoft, Oracle, and SAP putting more marketing dollars into evangelizing the BPM space. We believe this will increase BPM revenues by 1% to 2% per year for integration-centric BPM and 2% to 3% per year for human-centric BPM for the duration of the forecast period.

• **Business intelligence (BI) vendors’ impact.** BI vendors entering the BPM market via key acquisitions or partnerships will drive slightly increased revenues (on the order of 0.5% per year) for the human-centric BPM segment starting in 2007. Integration-centric BPM vendors’ sales will not be significantly affected by this trend.

• **The drive for process consistency across business units.** As enterprises begin reaping the rewards of BPM efforts in individual lines of business, these efforts will be expanded to other business units, resulting in additional BPM sales. This will culminate in enterprises looking for consistency across a single process that occurs many times in a large, decentralized organization. This trend is a major driver of increasing the benefits from BPM, and will boost growth by 1% to 3% per year over the forecast period for both major categories of BPM.

2008 Trends Fueling Additional Growth

Three more trends identified in our last market overview will continue to play out over the forecast period:

• **Business process owners become pervasive.** Some visionary organizations have already assigned owners for cross-functional processes. Others are still considering this move. Even so, the full impact of this long-term business trend will not be felt until early 2008. As it occurs, this shift will push revenues for both human- and integration-centric vendors from 1.5% in 2008 to 5% in 2011.

• **BPM vendor consolidation reduces risk.** The inevitable market consolidation will lead to fewer, larger human-centric BPM vendors. These larger vendors will appeal to organizations that were previously reluctant to enter into a strategic relationship with smaller, riskier vendors. Consolidation will eliminate another (small) constraint on BPM market growth, resulting in an estimated additional 1% growth per year for the human-centric vendors.

• **ECM vendors make inroads.** As ECM vendors expand their BPM functionality, the improved products will attract more enterprises concerned with document-intensive processes. But the ECM vendors will find the market opportunity limited as a growing number of enterprises seek to convert from paper-based processes to e-forms-based processes, essentially skipping the shift to document imaging as a transition technology. As this conversion continues, pure-play BPM vendors that excel at people-intensive processes will have a shot at traditional document-intensive opportunities. The impact on human-centric market growth will be small, on the order of 0.5% per year in 2008, growing to 2.5% in 2011.
RECOMMENDATIONS

SELECT BPM TOOLS THAT PROVIDE THE FULL RANGE OF ENTERPRISE NEEDS

Enterprise architects and business process professionals should collaborate on a strategy that will provide for the full range of the enterprise’s BPM needs, covering both integration-centric and human-centric functionality. Remember that BPM products provide two main benefits. First and foremost is the ability to effectively support business process improvement efforts. But the secondary benefit, increasing IT agility using model-driven development, will be just as important in the long run.

- **Match BPM solution(s) to process type.** Some BPM solutions are uniquely capable of supporting requirements for a particular process type. For example, ECM vendors are in a much stronger position than other types of BPM vendors to support document-centric processes. At the same time, most ECM vendor offerings are not optimized to support people-intensive and decision-intensive processes. To the greatest extent possible, organizations must match BPM solution(s) to the type of process (integration, people, document, decision) in question.

- **Address BPM needs at the enterprise level.** Many BPM selection processes are driven by individual business units. In large, multi-divisional enterprises, this usually leads to a mélange of products from a grab bag of vendors, some tactical and others strategic to business, some from large infrastructure players and others from under-resourced start-ups with few customers. Although organizations will likely need two BPM solutions — one for human-centric and another for integration-centric processes — avoid a potpourri environment with multiple solutions deployed to support a single process type. Business process professionals and enterprise architects must work together to ensure that requirements are met with the fewest number of BPM products.

- **Don’t forget about important issues like economic viability and global reach.** Vendor evaluations tend to focus on product details while overlooking issues that could be crucial to forming a long-term partnership that benefits all parties. Vendor viability and global reach are two issues that should influence choice of vendor and could give an advantage to larger BPM providers that can support global enterprises. Many BPM vendors have limited global reach, and typically offer thin to no support outside North America.

- **Consider BPM as an SOA starting point.** Most BPM vendors provide extensive support for Web services and SOA related standards, and most IC-BPMS vendors also provide SOA registry/repository capability. Consequently, they represent a viable alternative for implementing an SOA framework.
SUPPLEMENTAL MATERIAL

Online Resource

The underlying spreadsheet detailing the forecast in Figure 2 is available online.

Companies Interviewed For This Document

Adobe                              Magic Software
Appian                             Metastorm
Axway                             Microsoft
BEA Systems                          Oracle
Cordys Software                        Pegasystems
FileNet                           SAP
Fuego                                     Savvion
Fujitsu                         Sterling Commerce
Global 360                          Sun Microsystems
GXS                                         Sybase
HandySoft                             TIBCO Software
IBM                                 Ultimus
InterSystems                          Vitria Technology,
Inovis                                 webMethods
Lombardi Software                      W4

ENDNOTES

1 Forrester CEO George Colony has been evangelizing the benefits of IT organizations taking on a stronger business focus and moving from IT to Business Technology (BT). For details, see the August 18, 2006, "My View: IT To BT" report and see the May 7, 2007, "Business Technology Defined" report.


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