

EXCERPT

Worldwide Project-Based Enterprise Applications 2007-2010 Forecast: Evolution or Revolution? (Excerpt from IDC #208756)

Michael Fauscette

SO IN THIS EXCERPT

The content for this excerpt was taken directly from the IDC Market Analysis Report, *Worldwide Project-Based Enterprise Applications 2007-2010 Forecast: Evolution or Revolution?*, by Michael Fauscette (Doc #208756). All or part of the following sections are included in this excerpt: IDC Opinion, In This Study, Situation Overview, Future Outlook, and Essential Guidance. Also included are Table 1, 2, and 3.

IDC OPINION

This document presents IDC's first published market share study and first forecast for the worldwide project-based enterprise applications (EA) market. In 2006, the project-based EA market totaled \$1.18 billion in revenue. Key highlights contained in this study are:

- ☒ IDC estimates worldwide revenue for project-based EA to be approximately \$1.25 billion in 2007, representing an increase of 5.9% from 2006.
 - ☒ The project-based EA market is expected to increase to \$1.48 billion by the end of 2010, representing a 6.0% compound annual growth rate (CAGR) for the 2005–2010 forecast period.
 - ☒ IDC estimates the size of the addressable worldwide enterprise software market for project-based enterprise applications at \$16.3 billion in 2005 and projects it to grow to \$21.4 billion by 2010.
 - ☒ The project-based enterprise applications market has emerged as a separate macrovertical in the enterprise applications market.
 - ☒ The project-based EA market is showing strong growth as more customers move from traditional EA solutions to solutions that are specially designed to fit their business processes.
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IN THIS STUDY

This study examines the project-based EA market over the period 2005–2010, with leading vendors and a market forecast. A worldwide project-based EA market sizing is provided for 2005 and 2006. Also shown is a forecast for the project-based EA market for 2007–2010 and an estimate of the total addressable market for project-based EA solutions.

The market forecasts contained herein are the first to be produced by IDC for the worldwide project-based EA market.

SITUATION OVERVIEW

The Evolution of Enterprise Applications

The current mainstream enterprise applications and specifically enterprise resource planning (ERP) applications trace their roots to a class of applications called manufacturing resource planning (MRP). MRP, as the name implies, grew up around manufacturing operations and expanded throughout the enterprise over time to include everything from back-office functions like general ledger to customer management functions like field service. Enterprise applications today attempt to span the complete enterprise business process and are more and more verticalized to meet more of the specialized business processes in the respective vertical. The basic design principal that is common in all these systems though is the direct descendent of the MRP systems: The systems all support the process of making a product. This product-centric or product-based approach is most appropriate for the manufacturing vertical industries of course, but for many years was "customized" to meet the needs of adjacent verticals.

The product-based EA systems were acceptable in many industries, including some service-based industries (like financial services or healthcare), but in industries that do not have their business processes based on making products (even a service-based product), or project-oriented industries, the customization required to make the product-based EA system meet even the most basic business processes was very complex. From a customer's perspective, complex customizations have far-reaching negative consequences. These consequences include high implementation costs, lengthy implementations (longer time to value), higher maintenance costs, and difficult and expensive upgrades to newer versions of the products. If today the product-based EA systems meet 80–90% of the business requirements of a product-based and service-based enterprise "out of the box," they fall far short of that mark for a project-based business, many times meeting less than 50% of the business requirements.

So what are the differences between a product-based business and a project-based business that drives the very different system requirements? The differences start to emerge when the core of each type of business and the revenue source are examined. In a product-based business, the enterprise and business processes are focused around designing (customer requirements, product concept, engineering design, analysis, product data management, etc.), producing (procurement,

manufacturing bill of materials, engineering change orders, manufacture, supply chain planning and execution, etc.), selling (pipeline management, forecasting, customer information management, cross-sell/upsell, pricing, order entry, etc.), distributing (order management, billing, fulfillment, logistic and transportation, warehouse management, shipping, etc.), and maintaining/supporting (issue tracking, call center, field service, warranty, etc.) a product.

This basic product-based process model even maps adequately to service-based industries as well, but in a project-based business, the focus of the business processes is around proposal management (customer information management, opportunity management, estimating, contracts management, etc.), resource management (staffing, skills and talent management, utilization, hiring and onboarding, third-party resource management, etc.), project management (task execution, resource assignment, milestone management, etc.), time and expense, billing, and business analytics (managing to key metrics). The fundamental cores of the businesses are different and thus the systems that support them vary in the same way.

Over time, product-based EA vendors attempted to address these product shortcomings by developing add-on applications for the project-based verticals. These applications attempted to address the process shortfalls in the product-based systems. Unfortunately, many of these add-on applications do not address the end-to-end process flow that maps to an effective business process; they often come off feeling like a "workaround" rather than an integrated solution.

The Project-Based Enterprise

In the late 1990s, a class of system (and vendor) emerged called professional services automation (PSA). At the core of these systems was the concept that the business processes should support the execution of a project-based business. Vendors in this market came at the solution to these business issues from two different directions. On the one hand, vendors that had developed solutions for internal IT project management (IT PM) or project management specialty solutions realized that there was a market need for a solution for businesses that delivered services to external customers. The IT PM/PM vendors attempted to modify their existing solutions to include coverage for externally facing project-based businesses. Vendors with this approach included companies like Changepoint and Primavera.

The other approach taken by some vendors was to build a PSA solution from the ground up to meet the requirements of consulting/service delivery businesses. In many cases, these solutions were designed to integrate to product-based EA systems to provide functions like back-office financial management, accounting, and procurement. Companies that took this approach included vendors like Evolve and Niku. All of these vendors, pure-play and those that grew out of IT PM, focused on the delivery of professional services but not on the other types of project-based enterprises (architecture, engineering services, construction services, etc.). There were also vendors that build niche products that solve (or attempt to solve) one single business process in the service delivery chain, most often around project planning and execution. Microsoft, for example, became the de facto standard in project management software with its MS Project product line. Deltek, a company founded in

1983, provided core project-based management systems. Many of the product-based EA vendors, including PeopleSoft, Oracle, SAP, and JD Edwards, also developed add-on PSA modules.

In the turmoil and change of the early 2000s, the PSA market, like most of the rest of the software industry, went through a change cycle. It seemed as though the PSA market by itself was not large enough to sustain the number of vendors that had emerged, so there was a period of consolidation that included Primavera's acquisition of Evolve, Compuware's acquisition of Changepoint, and CA's acquisition of Niku. In addition, license delivery models were changing and software as a service (SaaS) on-demand models emerged from PSA vendors like OpenAir and QuickArrow.

Beyond PSA

The PSA market is a subsegment of a much larger market that includes project-based businesses in several verticals. While the details of their businesses differ by vertical, there is a common thread around the project-based/services nature of their business models. These verticals include:

- Professional services
- IT services
- Public sector and government contracting
- Contract/project manufacturing
- Architecture and engineering
- Aerospace and defense
- Nonprofit/not for profit

Beyond the need to successfully manage projects, these industries need full enterprise application suites that provide an end-to-end business process based on projects as the final deliverable to customers versus the product-based nature of most EA suites. Customization of a product-based EA suite to meet critical business requirements is not an attractive proposition and is becoming an unpopular approach to solving business needs. More and more project-based enterprises are choosing to implement solutions that are purpose built for their business model. Project-based businesses unique requirements include:

- Resource optimization.** Project-based enterprises are by their nature resource centric. Business efficiency is driven by ensuring the "right" resource is available at the proper time and conversely that all resources are utilized to near capacity. The proper skills must be matched with each project task and project schedule. The ability to forecast demand based on the project pipeline is business critical and a significant factor both in ensuring profitability and in developing repeat business. Project-based businesses must attract, retain, and develop the human capital to meet (but not exceed) demand.
- Project portfolio optimization.** To effectively forecast and manage a project-based business, managers need visibility into more than the details of a single project. They must manage pipeline, resources, and materials across all active

and future projects. This visibility provides access to key performance indicators (KPIs) across the companies' entire business in real time, which in turn provides the information to make sound business decisions.

- Profit optimization.** Profitability in a project-based business is highly dependent on the intersection of several factors. Optimizing resources (reducing "bench" time, having the correct resource available, etc.) is a piece of the puzzle, but there are other factors that interact to impact profits. Collecting and managing intellectual property can make project delivery more repeatable, which in turn can increase profit. Focusing sales teams on developing business opportunities that play to bench strength can also deliver increased profitability.

- Optimizing issue resolution.** Logging, tracking, and resolving key project issues as well as communicating that information to clients are an important part of maintaining a good, ongoing relationship with clients. Generating repeat business with existing clients is often a key to increasing profitability. Customer satisfaction is often demonstrated in repeat engagements. New customer acquisition costs are much higher than developing ongoing business in existing clients.

The essential modules that make up a complete project-based EA solution include:

Financial management:

- General ledger
- Accounts payable
- Accounts receivable
- Fixed assets
- Cash management
- Budgeting and forecasting
- Purchasing
- Auditing and compliance

Human capital management:

- Recruitment
- Skills (talent) management
- Time and expense
- Scheduling
- Benefits

- Payroll
- Project management:
 - Forecasting
 - Project planning
 - Task management
 - Schedule management
 - Project accounting
 - Portfolio management
 - Risk management
 - Change management
 - Issue management
 - Earned value management
 - Collaboration
- Opportunity management:
 - Lead management
 - Proposal (price modeling, estimating and bid) management
 - Contract management
- Analytics:
 - Project dashboards
 - KPIs (utilization, average bill rates, revenue per head, etc.)

The project-based EA solutions available on the market today tend to fall into three categories:

- Project-based EA suites (cross-vertical or available with multiple vertical variants)
- Single vertical suites (PSA solutions, for example)
- Project management

Table 1 contains a listing of some of the leading project-based EA vendors and the three broader solution segments: multivertical project-based EA suites, single vertical project-based EA suites, and specialty project-based EA products (project management).

TABLE 1

Top Project-Based Enterprise Applications Vendors

| | Multivertical Project-Based EA Suite | Single Vertical Project-Based EA Suite | Specialty Project-Based EA Product |
|------------------|---|---|---------------------------------------|
| Agresso | X | | |
| CA | | X | |
| Deltek | X | | X |
| eProject | | | X |
| Meridian Systems | | X | |
| Microsoft | | X | X |
| OpenAir | | X | |
| Oracle | | X | |
| Planview | | X | |
| Primavera | | X | X |
| QuickArrow | | X | |
| SAP | | X | |

Source: IDC, September 2007

FUTURE OUTLOOK**Forecast**

Table 2 contains actual revenue for 2005 and 2006 and forecasts for 2007–2010 for the worldwide project-based EA market. The revenue includes software license and maintenance revenue. In addition, the revenue is broken out by three regions: Americas; Europe, the Middle East, and Africa (EMEA); and Asia/Pacific.

The revenue shown in Table 2 represents sales of specialty project-based EA solutions to that market. In addition, there is another group of customers that fit into the project-based macroindustry vertical but have utilized a customized product-based EA solution to meet business needs. These customers represent the target or addressable market for the project-EA vendors. The potential revenue (license and maintenance) associated with this macrovertical is shown in Table 3.

TABLE 2

Worldwide Project-Based Enterprise Resource Planning Revenue by Region, 2005–2010 (\$M)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2005–2010 CAGR (%) |
|--------------|-------|-------|-------|-------|-------|-------|--------------------|
| Americas | 633 | 670 | 710 | 753 | 798 | 846 | 6.0 |
| EMEA | 344 | 365 | 386 | 409 | 434 | 460 | 6.0 |
| Asia/Pacific | 133 | 141 | 149 | 158 | 168 | 178 | 6.0 |
| Total | 1,111 | 1,176 | 1,246 | 1,320 | 1,400 | 1,485 | 6.0 |

Source: IDC, September 2007

TABLE 3

Worldwide Addressable Enterprise Software Revenue for Project-Based Enterprise Applications by Region, 2005–2010 (\$M)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2005–2010 CAGR (%) |
|--------------|--------|--------|--------|--------|--------|--------|--------------------|
| Americas | 9,808 | 10,353 | 10,954 | 11,532 | 12,103 | 12,790 | 5.5 |
| Asia/Pacific | 1,589 | 1,717 | 1,824 | 1,925 | 2,026 | 2,183 | 6.6 |
| EMEA | 4,907 | 5,199 | 5,508 | 5,795 | 6,072 | 6,431 | 5.6 |
| Total | 16,304 | 17,269 | 18,286 | 19,252 | 20,201 | 21,405 | 5.6 |

Notes:

2007–2010 values are IDC estimates.

Source: IDC, September 2007

ESSENTIAL GUIDANCE

IDC offers the following essential guidance to vendors offering project-based EA solutions and others that plan to address this market:

- Current PSA vendors have a significant market opportunity available by increasing their solution footprint to include the other microverticals in the project-based EA market. This is especially true for the pure-play on-demand PSA vendors in the midmarket as there are few if any on-demand solutions available for the broader project-based EA market.
- As this market continues to become aware of the purpose-built applications available to them versus the product-based solutions of the past, this market has

the potential of outpacing projected growth as the project-based EA vendors acquire market share in the addressable market. This has the potential of becoming a fast-growth space but will likely also be hotly contested.

- ☒ Product-based EA products/vendors stand to continue to lose market share as the project-based EA vendors gain visibility and weight. To stall this migration, these vendors will have to offer true project-based EA solutions through either acquisition or aggressive development programs. In addition, the migration paths for their customers, from the product-based to the project-based solution, must be clear.

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