

MARKET ANALYSIS

Worldwide IT Project and Portfolio Management 2005–2009 Forecast and 2004 Vendor Shares

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IDC OPINION

The IT project and portfolio management (ITPPM) market experienced growth of 16.7% to \$402.9 million in 2004. The growth of the ITPPM market was due to a variety of factors that came together additively. The increasing role and complexity of IT in the enterprise and the need to better align IT with business needs and corporate governance and regulatory requirements combined to give this market segment of the overall project and portfolio management (PPM) market growth. IDC has also seen the increased alignment of application life-cycle management (ALM) vendors with PPM through alliances and/or acquisitions, which began to have an impact in 2004 and will play a key role for market growth through 2009. The pervasive use of PPM tools in IT is overdue, so we are naturally encouraged by the \$50+ million increase in ITPPM revenue from \$345.2 million in 2003 to \$402.9 million in 2004. IDC forecasts strong continuing growth in the ITPPM segment during our five-year forecast period to revenue of \$808.1 million in 2009 for the following reasons:

- ☒ ITPPM is not yet in consistent use across organizations, even large ones. The strong value proposition of ITPPM now being espoused by large organizations and amplified by vendors will help drive a trickle down to small and medium-sized businesses (SMBs).
- ☒ The success of Mercury, Niku (now Computer Associates [CA]), and other established PPM vendors, including Primavera, PlanView, and others, has attracted the attention of the industry's largest vendors. Although Microsoft, Oracle, SAP, and especially IBM have begun to weigh in with ITPPM offerings and the larger IT life-cycle management (ITLM) story, the full market impact of these major vendors will occur later, during the 2006–2009 time frame.
- ☒ The portfolio and qualitative analysis capabilities of ITPPM benefits from the quantitative data available from core ITLM tools such as testing, requirements, and change management. But this requires a level of integration not yet available typically as well as linkages to and coordination with IT asset management (ITAM). Tighter integration across these areas will result in additional market growth in 2006–2009.

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IN THIS STUDY

This study marks the first time IDC has provided market size, forecast, and vendor shares for the worldwide ITPPM market.

This IDC study examines the ITPPM tools market for the period 2002–2009, with vendor revenue trends and market growth forecasts. Worldwide market size is provided for 2004, with trends from 2002. A vendor competitive analysis, with vendor revenue and market shares of the leading vendors, is provided for 2004. This study also provides profiles of leading vendors and identifies the characteristics that vendors will need to be successful in the future.

The vendor shares and competitive analysis contained herein represent a subset of the combined project management and product and portfolio management market. Vendor shares and forecasts for the overall project and portfolio management market can be found in *Worldwide Project and Portfolio Management Applications 2003 Vendor Shares* (IDC #31976, October 2004) and *Worldwide Project and Portfolio Management Software 2005–2009 Forecast* (IDC #33517, June 2005).

Methodology

See the Learn More section of this document for a description of the data collection and analysis methodology employed in this study.

In addition, please note the following:

- ☒ The information contained in this study was derived from the IDC Software Market Forecaster database as of May 31, 2005. Market size and forecast data for the overall project and portfolio market differs slightly from the data that was published on this market in June 2005 because of several updates made to IDC's Software Market Forecaster database.
- ☒ All numbers in this document may not be exact due to rounding.
- ☒ For more information on IDC's software definitions and methodology, see *IDC's Software Taxonomy, 2005* (IDC #32884, February 2005).

IT Project and Portfolio Management Market Definition

ITPPM software represents a competitive submarket of the larger project and portfolio management functional market.

Project and portfolio management applications are used for defining, estimating, tracking, and optimizing the tasks and resources required to plan and complete a project as well as to manage the portfolio of an enterprise's body of projects including "what if" analysis on proposed projects. PPM applications track resources (usually materials and labor) by project, analyze resource constraints and project timelines, and present schedule- and resource-based analytics. Where PPM offers project

accounting in its package versus as part of a financial applications package, the revenue associated with the sale of that package is attributed to PPM rather than financial applications. PPM solutions find their way into a wide variety of industries and business functions, from construction management to business/professional service automation, from large-scale product development projects that result in manufacturing processes to informal marketing campaigns. ITPPM represents a cross-industry usage of PPM technologies meant to augment the effectiveness of IT departments to enable more adaptive business approaches. While many IT departments used project management solutions since the 1970s on an informal basis, the Y2K fears of the late 1990s kicked-started more widespread use of PPM on a more formal, business-visible basis. In the early 2000s, the use of PPM by IT departments continued to grow due to the addition of portfolio management features, giving IT managers and CIOs better visibility into their operations, as well as into budgetary and resource utilization.

ITPPM tools facilitate joint business/IT planning. These products provide portfolio visibility into IT projects, programs, and resource allocations and costs in conjunction with expected business value to enable effective prioritization. Product functionality encompasses a suite of primary capabilities that include project, program, resource, portfolio, process, demand, workflow, and cost/budgetary management for IT. The ITPPM market includes software revenue from IT end-user organizations and consultancies/outsourcers that use ITPPM tools to manage the portfolio of IT projects and IT programs. These tools represent a subset of the overall product, project, and portfolio management tools market that IDC sizes and forecasts. The objectives of ITPPM tools are as follows:

- ☒ **Enablement of adaptive, complex IT/business decision making.** The increasing complexity of coordinating business and IT environments is adding dimensionality to potential projects as well as increasing the number of competing projects and programs that IT organizations must evaluate. At the same time, competitive pressures demand quick responses on the part of businesses that are highly dependent on IT software projects in order to be successful. The costs of lack of visibility into existing projects, programs, and resources and the lack of understanding of resource redeployment are visceral. ITPPM tools are designed to solve complex multidimensional problems and seek optimized solutions based on user-supplied data such as business needs with associated value and risk, tasks, policy, and rules.
- ☒ **Alignment of business goals and IT goals.** ITPPM tools, by virtue of the discovery and analysis process they enable, facilitate collaboration about and coalescing of objectives, policies, rules, and processes between IT and business staff. An important facet of this unification is information reconciliation, sharing, and alignment that is promoted by ITPPM tools. This also incorporates the ability to view project and program portfolios in the context of overall competitive goals. Understanding the IT portfolio balance between "lights on" projects, which make up the vast majority of IT initiatives, compared with riskier projects that facilitate expansion and transformation (key in highly dynamic markets) is a key benefit of the IT portfolio approach. This enables companies to cut waste and focus resources on areas of greatest organizational and competitive need.

- ☒ **Support for IT governance.** Regulatory and board-mandated compliance requirements demand the ability to document and explain corporate actions. The role of ITPPM in decision making and optimization make it an ideal and necessary part of a comprehensive IT governance (ITG) solution. IT governance also encompasses coordination between the IT project portfolio and the IT asset portfolio (the systems and infrastructure in which and on which IT software will ultimately reside as well as the resulting application portfolio created when IT development projects are completed).
- ☒ **Managing outsourcing.** The need to better manage outsourced and offshore resources in conjunction with internal staff is a key driver for ITPPM. Resource and project management challenges alone are daunting in that context. In addition, with more specialized ALM vendors in this space, the ability to drive qualitative analysis based on quantitative metrics (e.g., testing and change management responsiveness) enables greater management visibility into experience levels and staff capabilities. This can improve decision making on the part of IT management with regard to internal and external sourcing.

ITPPM tools are a key aspect of an overall IT life-cycle management solution. ITLM encompasses all IT activities that are associated with the decision making, development (requirements, planning, development, change management and testing, deployment, and maintenance), and operation (monitoring and management) of IT assets. Coordination of PPM with AD life-cycle tools enables users to leverage quantitative data locked up in testing and change management to make qualitative assessments about project and program success. It also enables the proactive prioritization of highly constrained internal and outsourced resources. Consequently, ITPPM is key in supporting the decision making and oversight that enables an organization to make the right, most adaptive choices regarding the development of IT assets.

SITUATION OVERVIEW

The Impetus for IT Project and Portfolio Management

An upsurge in the need to manage groups of related projects as "programs" (beginning with Y2K) as well as the need to more tightly manage highly distributed resources and development environments led to the evolution of combined suites of project portfolio management tools for IT use. These incorporated project, program, resource, portfolio, and process management, typically, and enterprise PM vendors dominated the space initially by expanding out their capabilities beyond PM to include portfolio management. The market has shifted and become more complex over the past three years, bringing in an eclectic mix of competitors to target this arena, from ALM to niche portfolio management vendors to ERP vendors. In addition, some vendors in the "professional service automation" (PSA) market with particularly strong resource management features turned toward ITPPM when the PSA market lost its footing in the early 2000s and/or have been acquired (e.g., Evolve by Primavera 1Q03 and Changepoint by Compuware 2Q04).

The IT user segment became early adopters in the portfolio management market. Already prepped to use better practices as a result of existing AD life-cycle approaches, the IT slice of this arena has been readier to incorporate a project portfolio strategy. This trend was also a direct result of highly constrained internal resources for IT and pressure from outsourcing to both improve internal approaches and better manage the combined internal and offshored resource pools. Regulatory compliance pressures also supported this push toward ITPPM (with program management needs) and helped provide funding and executive buy-in. In addition, the following events have led to market growth for ITPPM:

- ☒ The mushrooming complexity of today's infrastructure-centric application development, making it far more difficult to optimize development and maintenance with automated tools
- ☒ Intense competitive pressure in a global market leading to the requirement of business management to better align IT with the needs of the organization and to formalize planning and analysis activities
- ☒ Recent regulatory changes that emphasize compliance and auditing that have a direct impact on IT departments
- ☒ The need for metrics and assessment that can directly benefit from quantitative data available in application life-cycle management (testing, software change management, effective requirements mapping to prioritization strategies, etc.) as well as the need to better prioritize highly constrained human and other resources for IT projects and programs

User demands have been met with a swift response from vendors. In the span of just two short years, most of the leaders in the application life-cycle management market have rushed to provide an ITPPM solution. Mercury's acquisition of Kintana in August 2003 signaled the start of this trend. Subsequent acquisitions included Compuware's purchase of ChangePoint, IBM's purchase of SystemCorp in October 2004 and focus on extending initial product capabilities, CA's purchase of Niku in June 2005, and Borland's purchase of Legadero in October 2005. Microsoft's new Visual Studio Team System, announced for general availability in November 2005, will also move more in this direction as it closely aligns Microsoft Project with its life-cycle tools and strengthens alliances with portfolio management vendors. Also, Microsoft plans to extend the PPM capabilities of Microsoft Project through its acquisition of software technology assets from niche portfolio management vendor UMT in December, 2005 (see *Microsoft Stepping Up to Portfolio Management with UMT, Stepping Out with its PPM Strategy*, IDC #34714, forthcoming). We expect Microsoft to leverage these acquired portfolio management capabilities with MS Project in an ALM context with the release of Orcas — the next update of VSTS — targeted for 2007. These efforts represent a major commitment from leading ALM vendors to fill an obvious gap in their overall ITLM suite.

Additional vendors in the space are targeting ITPPM as part of their overall strategy (ERP, niche portfolio management, and established PPM vendors). As was stated earlier, established enterprise project management players have largely dominated ITPPM so far, and account for 4 of the top 5 ITPPM vendors for revenue share

(Microsoft, CA/Niku, Primavera, and Planview). This is in part due to the end-user emphasis that has been placed in the past on project capabilities as part of IT portfolio management and in part because several of these vendors came earlier to the market and built up their suite of capabilities sooner. However, Mercury's speedy trajectory forward in the space of two to three years indicates an ability for nimble players to dominate fairly quickly. Also, project management is becoming increasingly commoditized (although still a key capability) with regards to IT portfolio management.

Therefore, we expect others in the space to begin to dominate as well with related, differentiating capabilities. SAP has squarely targeted ITPPM with xRPM, and its established base of users falls into the ITPPM arena. Although SAP is pressing forward into related PPM areas such as portfolio management for products and ideas (see *Worldwide Project and Portfolio Management Software 2005–2009 Forecast* IDC #33517, June 2005), ITPPM remains a key area for SAP as well. Oracle shipped portfolio management capabilities earlier this year and has ITPPM as a focus for point of entry as it also extends its reach beyond ITPPM. With Oracle's purchase of PeopleSoft last year, Oracle acquired the most mature ERP solution for ITPPM along with significant staff experience as well. Lawson shipped ITPPM solutions early and has a small enclave of support. We expect to see more activity and base presence from Oracle and SAP in the ITPPM arena during the forecast period, even as they push their strategies forward into other areas of core competence for additional PPM segments.

Niche IT portfolio management vendors continue to contribute significantly to market and product evolution. Vendors such as ProSight and UMT (with technology now owned by Microsoft) push the envelope with regards to IT portfolio management capabilities and a "top down" approach. Through bundling and reselling Microsoft Project, these and other vendors with strong portfolio management and basic project and resource management capabilities have created their own basic "suites" for ITPPM (like Pacific Edge). Business Engine has established an effective methodology for ITPPM deployments and financial management, and the majority of its users are in ITPPM currently. Proha/Artemis retains ITPPM as a focus (30% of deployments) but is supplementing ITPPM with a verticalized approach in other areas as well (such as pharmaceuticals). Increasingly, we expect to see a hybridization for vendors in the ITPPM arena that will expand to target the broader PPM and product portfolio management over time as areas of strong growth (see *Product, Project, and Portfolio Management: Convergence Is the 3PM Game*, IDC #34392, November 2005).

Given the eclectic and dynamic nature of this market and diverse product strengths and capabilities, user decision making must be based on areas of greatest challenge and leverage core vendor strengths (resource, portfolio, project, financial, or HR planning, for instance).

The IT Project and Portfolio Management Market in 2004

The ITPPM market observed strong growth in 2004. The ITPPM market reached \$402.9 million in 2004, which represents a 16.7% growth over revenue of \$345.2 million in 2003. The growth in 2004 is particularly impressive for two reasons. First,

we often see a lull in revenue growth during a period of acquisitions as the acquiring company addresses restructuring, integration, and rebranding challenges. Second, Microsoft accounts for a 40% share of the market but is not a growth leader. If Microsoft is factored out of the equation, the remainder of the market actually grows nearly 27% in 2004.

Performance of Leading Vendors in 2004

Table 1 displays 2003–2004 worldwide revenue and 2004 growth and market share for vendors in the ITPPM market. Microsoft easily emerges as the market leader, a consequence of its ubiquity in the overall project management market (40%+ share of the \$2.1 billion PPM market in 2004), which has led to IT project portfolio management usage as well. Microsoft's modest showing in ITPPM compared with overall revenue for Microsoft is due to the fact that only IT project portfolio–related revenue associated with Microsoft's Project Server and Enterprise Project Management SKUs qualifies for ITPPM inclusion. Microsoft's 2004 ITPPM revenue of \$159.1 million results in a 39.5% market share, which is largely the result of its market dominance overall rather than a focused, targeted approach to building up key product capability for IT portfolio management. (We expect additional focus from Microsoft in this arena during 2006–2007, with its acquisition and incorporation of UMT's sophisticated portfolio management technology.)

TABLE 1

Worldwide IT Project and Portfolio Management Revenue by Vendor, 2003–2004 (\$M)

	2003	2004	2004 Share (%)	2003-2004 Growth (%)
Microsoft Corp.	153.3	159.1	39.5	3.7
Mercury Interactive Corp.	22.1	40.7	10.1	83.6
Computer Associates/Niku	20.6	31.1	7.7	50.5
Primavera Systems Inc.	18.4	23.9	5.9	30.3
Planview	21.0	23.8	5.9	13.3
Compuware Corp.	17.2	17.9	4.5	4.1
IBM	14.0	15.0	3.7	7.4
Business Engine Corp.	11.0	11.0	2.7	0.0
SAP AG	7.6	10.8	2.7	42.0
Proha PLC	7.2	7.6	1.9	5.8
Pacific Edge	5.0	7.0	1.7	39.7
Oracle	2.8	4.1	1.0	45.8
ProSight	3.5	4.0	1.0	14.3
United Management Technologies	1.0	1.7	0.4	70.0
Lawson Software	1.0	1.1	0.3	10.1
Subtotal Vendors	305.8	358.7	89.0	17.3
Other Vendors	39.4	44.2	11.0	12.2
Total	345.2	402.9	100.0	16.7

Source: IDC, December 2005

Mercury Interactive is notable for its second-place showing, with revenue of \$40.7 million representing 83.6% growth over its ITPPM revenue of \$22.1 million in 2003. Mercury, with its acquisition of Kintana in 2003, was the first ALM vendor to invest in the ITPPM arena. Mercury has executed extremely well with its Business Technology Optimization (BTO) initiative and its repositioning of the Kintana products as Mercury's IT Governance Suite. Indeed, recent product updates with BTO Enterprise from Mercury 4Q05 build and further evolve core product capabilities across the entire product portfolio for Mercury, including tighter integration with existing Mercury's testing, application performance management, change management, and application portfolio management products.

Niku, recently acquired by Computer Associates (the acquisition closed September 2005), had finally found its stride after refocusing its market positioning on ITPPM in 2003. Revenue of ITPPM software license and maintenance revenue surged 50.5% from \$20.6 million in 2003 to \$31.1 million in 2004. Niku's Clarity is a key building block of CA's Business Service Optimization (BSO) initiative. BSO is chartered to address IT governance and will deliver new products that build on CA's asset portfolio and infrastructure management products that include UniCenter. This is a differentiating position for CA if it executes well on integration and messaging. Prior to its ABT acquisition, Niku was highly Professional Services Automation (PSA) software focused. A combined product set incorporating a suite of capabilities for ITPPM shipped with Niku 6 and began to have more widespread use in 2002 but finally achieved momentum with Clarity in the 2004–2005 time frame to squarely address IT governance.

Primavera resides in fourth place in the ITPPM market, with 2004 revenue of \$23.9 million. Primavera's long tenure in PPM gives the vendor credibility in ITPPM, and the vendor posted strong growth of 30.3% in 2004. Primavera has been a fixture of the enterprise project management market for more than two decades, with applications that support 16 vertical industries. Primavera's comprehensive PPM solutions address the majority of ITPPM needs that can be addressed, especially those that are large scale and require hundreds or thousands of projects to be analyzed on an ongoing basis.

For a more detailed discussion of the product strategies of the top 4 vendors, see the Appendix of this document.

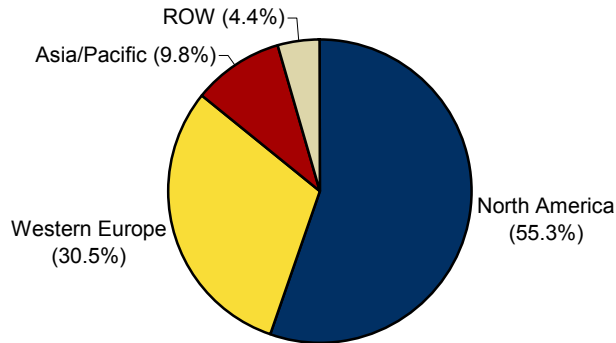
Performance by Geographic Region in 2004

Figure 1 shows the 2004 geographic distribution of revenue for the ITPPM market. North America accounts for 55.3% of the ITPPM market, with revenue of \$222.9 million.

Western Europe weighs in with 2004 revenue of \$122.7 million and a market share of 30.5%, followed by Asia/Pacific with revenue of \$39.5 million (9.8% share) and the rest of the world (ROW) with revenue of \$17.8 million (4.4% share). This is due in part to better support and distribution channels for the majority of strong PPM vendors domestically in the United States and in part to additional pressures (which are also driving growth in this market) for compliance and outsourcing and offshoring.

FIGURE 1

Worldwide IT Project and Portfolio Management Revenue by Region, 2004



Total = \$402.9M

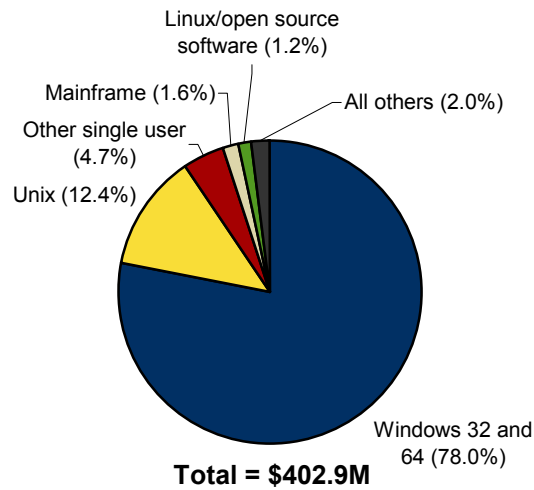
Source: IDC, December 2005

Performance by Operating Environment in 2004

Figure 2 shows that Windows 32 and 64 accounted for \$314.5 million in ITPPM revenue in 2004, for a 78.0% market share. Unix, with revenue of \$49.9 million and a 12.4% market share, emerges as the next operating environment of choice. Other single-user environments accounted for revenue of \$18.9 million and a 4.7% share. Mainframes, historically the focal point for PPM activities, account for just \$6.6 million of ITPPM revenue, which equates to a market share of 1.6%. Despite the relative appeal of Unix, Linux has yet to make much of an inroad into ITPPM, with revenue of just \$5.0 million and a share of 1.2%.

FIGURE 2

Worldwide IT Project and Portfolio Management Revenue by Operating Environment, 2004



Source: IDC, December 2005

Market Characteristics in the Future

IT life-cycle management is finally coming of age. The recent addition of ITPPM into the ITLM mix is welcome and frankly long overdue. Lack of coordination across the ALM tool suites with effective PPM has negatively impacted users for years. However, this doesn't mean that all of the heavy lifting needed to address ITLM requirements is now done. The core high-level constructs necessary to build a relatively complete ITLM system include:

- ☒ **ITPPM capabilities.** ITPPM is key due to its ability to provide proactive, adaptive decision making for the overall IT project and program portfolio, including a system of record and focal point for which projects are addressed by IT. In addition to project, process, and program management, this includes effective resource, demand management, costing, portfolio prioritization, and management and workflow. ITPPM primarily provides adaptive, proactive decision making and oversight for software development life cycle (SDLC) related to new software development and customization and/or maintenance of existing software assets.

- ☒ **Application development.** The classic software development life cycle is addressed here and consists of requirements, modeling, development, testing, and deployment. Core repositories and systems that support the life cycle for application development and maintenance include software configuration management (SCM) systems, automated software quality (ASQ) systems, and related tools and a build management system (BMS).

- ☒ **Application management.** When new applications are moved into production, their association with other applications and system resources becomes acutely important. Application monitoring and change management systems provide operational oversight of deployed applications. In addition, application portfolio management enables an analytic framework for creating application inventories in the asset portfolio and managing and prioritizing them. This enables future project planning that incorporates an understanding of existing applications to avoid redundant projects and leverage existing application assets.

- ☒ **Linkages to asset portfolio management.** Although nascent currently, we are seeing the evolution of linkages between ITPPM and IT asset portfolio management tools (see *Establishing IT Governance and IT Portfolio Management For Business Adaptability* (IDC #34670, December 2005). Software resulting from IT projects will ultimately run on assets (systems, infrastructure, etc.) existing within the IT asset portfolio. They will belong to the application portfolio that sits within the asset portfolio, yet early coordination between IT developers and operational staff is typically poor or practically nonexistent in the ALM process. Coordination across ITPPM and asset portfolio management tools enables visibility into the dependencies and costs across both portfolios, enabling cost savings on the part of businesses and facilitating better up-front planning. Most major ITPPM vendors have announced strategies or are in the process of establishing an approach that coordinates ITPPM with IT asset management. In addition to better coordination to meet service level agreements, another benefit will be the ability to better prioritize defects and determine when complex change requests actually need to become full-fledged projects. (Defects are often addressed haphazardly, which is costly in a variety of ways.) This does not mean that ITPPM becomes ITAM; it merely means that coordination across both areas is an important next step in the evolution of the market. (Most Global 2000 organizations are too immature from a process perspective to begin adopting this approach as yet.) IT governance incorporates an approach and tools that enable coordination across the IT and asset portfolios.

FUTURE OUTLOOK

Forecast and Assumptions

The ITPPM market is undergoing rapid growth, and we expect this growth to continue for the next several years before this market approaches full potential given the intense focus on ITPPM being expressed by Microsoft, CA, and IBM, and ongoing commitments from others. Achieving highly optimized, consistent, and reliable decision making for new IT activities as well as maintaining existing IT application assets demands ever more advanced ITPPM products and services. The key assumptions underlying the ITPPM forecast are presented in Table 2.

TABLE 2

Key Forecast Assumptions for the Worldwide IT Project and Portfolio Management Market, 2005–2009

Market Force	IDC Assumption	Impact	Accelerator/ Inhibitor/ Neutral	Certainty of Assumption
Macroeconomics				
Economy	Worldwide economies will peak as the recovery runs its course.	High. The economy is now a positive influence on IT spending. Spending on ITPPM is increasing as a result of compliance with regulations and an increasing need to manage IT as a business.	↑	★★★★☆
Corporate profile	In 2005, profits will be lower than 15% but still positive. Profit growth, though lower than in 2004, is expected to be positive, especially for the United States. Much of the early growth was from cost cutting, but more is now coming from added revenue.	Moderate. IT spending will continue to increase as individual company profits improve and begin to flow back into the company. Applications (such as PPM) that potentially generate top-line and expense-saving benefits are likely to receive fair consideration for any augmented IT spending.	↑	★★★★☆
Compliance	Attention to compliance will drive marginal new demand.	Moderate. Compliance regulations may begin to have an effect on software spending in 2005 and beyond. ITPPM is a key approach to addressing compliance automation.	↑	★★★★★
Technology/service developments				
Software complexity	Complexity will increase.	High. Companies will need to make new investments in tools to cope with the complexity crisis.	↔	★★★★☆
Linux and OSS	Open source will gain share.	Low. This change will primarily provide some ITPPM capabilities at lower price points. However, the uptake of open source products for business-critical applications is low due to uncertainty regarding their potential longevity and support.	↔	★★★★★

TABLE 2

Key Forecast Assumptions for the Worldwide IT Project and Portfolio Management Market, 2005–2009

Market Force	IDC Assumption	Impact	Accelerator/ Inhibitor/ Neutral	Certainty of Assumption
Venture and investment capital	Venture funding will increase, but funding amounts will remain small.	Low. While funding is occurring in the ITPPM market, the market is already gaining maturity, with the larger vendors now seeking to establish a significant market presence either through development or acquisition. While the many facets of the ITPPM market will offer many niches to exploit, the larger leading vendors will look to gain control over the market through standards and an increased infrastructural approach to ITPPM.	↔	★★★★☆☆
Labor supply				
Productivity management	The search for productivity improvements will continue.	Moderate. This will impact increasing software revenue growth in custom development and start-ups. Increased focus on process improvement will translate to increased spend on application life-cycle management tools including ITPPM. Inhibitors within this category include opposition to process, organizational, and cultural change as well as pushback against accountability and boundaries around access to resources (political issues).	↑	★★★★☆☆
Offshoring	Offshoring will increase.	Moderate. Increased offshoring of application development will lead to increased spend on ITPPM to ensure proper oversight of geographically distributed projects.	↑	★★★★☆☆

TABLE 2

Key Forecast Assumptions for the Worldwide IT Project and Portfolio Management Market, 2005–2009

Market Force	IDC Assumption	Impact	Accelerator/ Inhibitor/ Neutral	Certainty of Assumption
Market characteristics				
Service oriented architecture (SOA)	Spending on platforms compliant with SOA standards will increase.	Low. ITPPM functionality will need to achieve a higher level of "institutionalization" before it is ready to proceed down the SOA path. As the architecture of ITPPM becomes more infrastructurally centric, the opportunity to release modules as services will increase.	↔	★★★★☆
Application verticalization	There will be demand for clear and unique software vendor product differentiation, faster implementation, and more relevant out-of-the-box solutions.	Moderate. The core features of ITPPM are largely horizontal. As these features become part of the PPM infrastructure, it will be easier and more effective to build domain-specific feature sets on top of this infrastructure.	↑	★★★★☆
Consumption				
Buying sentiment	IT buyers will continue to be inhibited by uncertainty.	High. These trends are already factored into our forecast. However, the ITPPM promise of better IT manageability is a strong driver that is now overcoming buyer ambivalence.	↑	★★★★☆

Legend: ★☆☆☆☆ very low, ★★☆☆☆ low, ★★★☆☆ moderate, ★★★★☆ high, ★★★★★ very high
 Source: IDC, October 2005

The IT Project and Portfolio Management Market Forecast, 2004–2009

Worldwide

The worldwide ITPPM market is expected to experience continuing growth with a compound annual growth rate over the forecast period of 14.9%. This continuing growth is due to the fact that virtually all of the leading vendors have just begun to address the needs of the ITPPM market (see the Appendix for leading vendor/product discussions). Therefore we expect a significant amount of new functionality to be delivered over the next two years by all of the leaders. At the same time, established software leaders such as Microsoft and IBM are ramping up their ITPPM efforts, and all of the leading ITPPM vendors will be targeting the broader area of IT governance.

Other major players such as SAP and Oracle will continue an existing ITPPM commitment during that timeframe, thereby combining to bring a high level of confidence to our forecast.

Growth in 2005 falls to 15.6% due primarily to the downward pricing pressure that accompanies overheated markets. Growth levels off for a time in 2006 and 2007 at 15.3% as existing vendors in the market grab all the low-hanging accounts. The increasing maturity of the market conspires to push growth down to 14.3% in 2008 and 14.2% in 2009, but this downward trend is constrained by Microsoft's increasing ITPPM presence and growth late in the forecast period. The result is ITPPM revenue of \$808.1 million at the end of 2009. The CAGR for the 2004–2009 forecast period is 14.9%, very strong growth given IDC's forecast for overall worldwide software revenue growth.

TABLE 3

Worldwide IT Project and Portfolio Management Revenue by Region and Operating Environment, 2004–2009 (\$M)

	2004	2005	2006	2007	2008	2009	2004 Worldwide Share (%)	2004-2009 CAGR (%)	2009 Worldwide Share (%)
Geographic region									
North America	222.9	258.6	299.0	345.9	396.8	454.5	55.3	15.3	56.2
Western Europe	122.7	139.6	158.8	180.5	203.6	229.7	30.5	13.4	28.4
Asia/Pacific	39.5	45.7	52.6	60.5	69.1	79.0	9.8	14.9	9.8
ROW	17.8	21.9	26.6	32.0	38.2	45.0	4.4	20.3	5.6
Total	402.9	465.8	537.0	619.0	707.7	808.1	100.0	14.9	100.0
Operating environment									
Windows 32 and 64	314.5	363.5	420.6	480.7	557.4	634.3	78.0	15.1	78.5
Unix	49.9	57.2	61.4	68.1	73.1	80.8	12.4	10.1	10.0
Other single user	18.9	18.9	19.0	14.1	6.0	1.0	4.7	-44.1	0.1
Mainframe	6.6	6.1	6.1	5.7	6.1	6.3	1.6	-0.9	0.8
Linux/open source software	5.0	12.3	22.6	43.3	57.8	78.4	1.2	73.2	9.7
OS/400	3.9	4.0	3.5	3.6	3.6	3.6	1.0	-1.5	0.4
Platform independent	2.4	2.7	2.4	2.4	2.5	2.7	0.6	2.2	0.3
Other multiuser	1.7	1.2	1.2	1.3	1.1	1.0	0.4	-9.7	0.1
Total	402.9	465.8	537.0	619.0	707.7	808.1	100.0	14.9	100.0
Growth (%)	16.7	15.6	15.3	15.3	14.3	14.2			

Note: See Table 2 for key forecast assumptions.

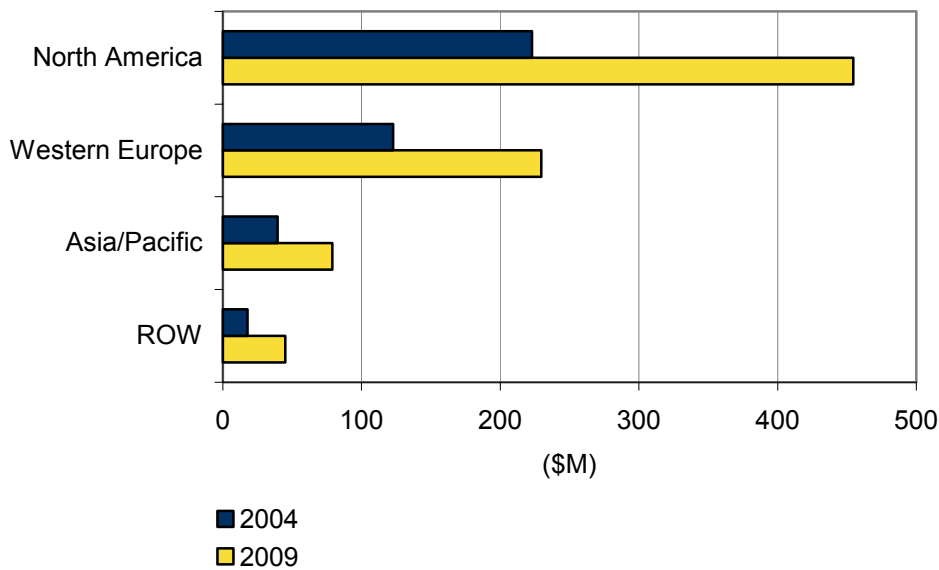
Source: IDC, December 2005

By Geographic Region

The worldwide ITPPM market shows no material geographic changes over the forecast period. North America and ROW each pick up about 1 percentage point share over the forecast period at the expense of Western Europe, while Asia/Pacific remains constant. However, it is important to recognize that with a CAGR of 14.9%, every region is growing rapidly. Figure 3 documents these findings (also refer back to Table 3).

FIGURE 3

Worldwide IT Project and Portfolio Management Revenue by Region, 2004 and 2009



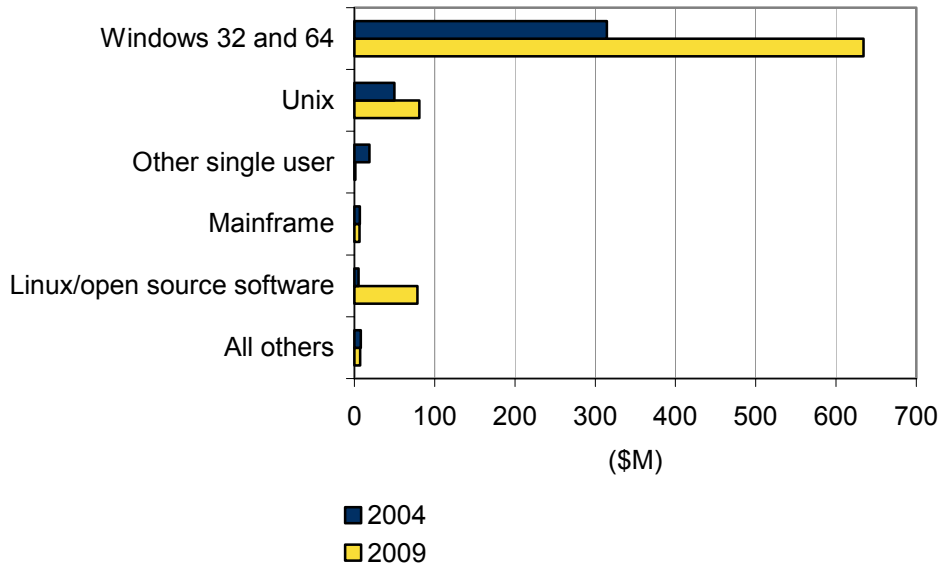
Source: IDC, December 2005

By Operating Environment

The worldwide ITPPM forecast by operating environment contains several interesting findings as shown in Figure 4 (also refer back to Table 3). The first is that Windows 32 and 64, with a market share that essentially stays constant, remain the established leader by far in this market. Windows 32 and 64 market share in 2004 is 78.0% and is 78.5% in 2009. Microsoft Project on Windows is the behemoth presence for project management overall, which obviously impacts these numbers. The other significant finding is that Linux grows strongly at the expense of Unix and rivals Unix by the end of the forecast period. Linux revenue grows at a CAGR of 73.2%, increasing share from 1.2% in 2004 to 9.7% in 2009. Correspondingly, the Unix CAGR is 10.1% (which is less than the market average of 14.7%) resulting in a loss of share from 12.4% in 2004 to 10.0% in 2009. Consequently, by 2009, Unix and Linux are effectively equal in share, with revenue at \$80.8 million and \$78.4 million, respectively.

FIGURE 4

Worldwide IT Project and Portfolio Management Revenue by Operating Environment, 2004 and 2009



Source: IDC, December 2005

ESSENTIAL GUIDANCE

IT's increasing role and stature within the enterprise is a catalyst for much of the evolution the IT PPM market is experiencing. Some of the more recent evolutionary changes revolve around architecture, process, and infrastructure. ITPPM falls within the process category because of the order it can bring to the complexity associated with managing IT projects and decision making for IT portfolios. External factors related to compliance and IT governance are also shaping the recent demand for ITPPM.

IT Project and Portfolio Management Challenges

There is no doubt that project and portfolio management when practiced carefully provide a framework for understanding IT issues and fostering sound decision making in coordination with the business — ideally. The challenge in getting the most out of ITPPM tools is to engage in a comprehensive discovery process that enables the identification and capture of key organizational data, rules, policy, and objectives and criteria for prioritization. Yet the greatest barriers to adoption for ITPPM are the cultural barriers. Global 2000 organizations can purchase the best technology, but getting staff to change their behavior and adopt tools that may wrest resource control

from them and make them more accountable to management is problematic. Even where teams are highly motivated to make the change, it is hard to shift processes. Combining technology with effective organizational strategies (such as combined IT/business program management offices) and appropriate processes and establishing evangelism by upper management and grassroots marketing and incentives through successful piloting are also key. In addition to incorporating effective process and organizational strategies, challenges for vendors include integration across ALM and ITPPM and other related product sets.

Ambiguity is the enemy of sound ITPPM; a core challenge involves extracting the semantics for business policy related to risk, value, business expectations, and business granularity. While we expect ITPPM tools to become more adept at easing the process of capturing and codifying business policy and workflow capabilities are already strong from some vendors, there will always be a configuration exercise for using these tools that is left to the user. Internal politics and polarization are significant barriers in this context as well. Despite these challenges, the technology is well proven and increasingly necessary as IT organizations with highly constrained resources grow larger and must proactively address increasingly competitive markets, complex sourcing, and development technologies and other pressures.

Conclusions

Demand should remain strong for ITPPM tools throughout our forecast period, and there is further, strong market and product evolution that will occur as larger vendors such as Microsoft, Oracle, SAP, Mercury, CA, Compuware, and IBM deliver more complete ITLM solutions. Smaller vendors will continue to play a key role in product and market innovation, and differentiated ITPPM solutions will come into play in that context and as further consolidation occurs with additional acquisitions during the 2006–2009 time frame.

LEARN MORE

Related Research

- ☒ *Establishing IT Governance and IT Portfolio Management For Business Adaptability* (IDC #34670, December 2005)
- ☒ *Microsoft Stepping Up to Portfolio Management with UMT, Stepping Out with its PPM Strategy*, (IDC #34714, December 2005)
- ☒ *Product, Project, and Portfolio Management: Convergence Is the 3PM Game* (IDC #34392, November 2005)
- ☒ *Mercury CEO, CFO, and General Counsel Resign: Customer Impact and Analysis* (IDC #34371, November 2005)
- ☒ *CA Acquires Niku in IT Governance Play* (IDC #33589, June 2005)

- ☒ *Worldwide Project and Portfolio Management Software 2005–2009 Forecast* (IDC #33517, June 2005)
 - ☒ *IT Life-Cycle Management: Will a Platform Emerge?* (IDC #33377, May 2005)
 - ☒ *IBM Acquires Project Portfolio Management Vendor SystemCorp* (IDC #32433, December 2004)
 - ☒ *Worldwide Project and Portfolio Management Applications 2003 Vendor Shares* (IDC #31976, October 2004)
-

Methodology

The IDC Software Research Group (SRG) market sizing and forecasts are presented in terms of "packaged software revenue." Packaged software is defined as programs or codesets of any type commercially available through sale, lease, or rental, or as a service. Packaged software revenue typically includes fees for initial and continued right-to-use packaged software licenses. These fees may include, as part of the license contract, access to product support and/or other services that are inseparable from the right-to-use license fee structure, or this support may be priced separately as software maintenance. Upgrades may be included in the continuing right of use or may be priced separately.

Packaged software revenue *excludes* service revenue derived from training, consulting, and system integration that is separate (or unbundled) from the right-to-use license but *includes* the implicit value of software included in a service that offers software functionality by a different pricing scheme (e.g., the implicit or stated value of software included in an application service provider's [ASP's] or other hosted software arrangement). It is the total packaged software revenue that is further allocated to markets, geographic areas, and operating environments.

IDC's industry analysts have been measuring and forecasting IT markets for more than 30 years. IDC's software industry analysts have been delivering analysis and prognostications for packaged software markets for more than 25 years.

The market forecast and analysis methodology incorporates information from five different but interrelated sources, as follows:

- ☒ **Reported and observed trends and financial activity.** This study incorporates reported and observed trends and financial activity in 2004 as of the end of April 2005, including reported revenue data for public companies trading on North American stock exchanges (CY 1Q04–4Q04 in nearly all cases).
- ☒ **IDC's Software Census interviews.** IDC interviews all significant market participants to determine product revenue, revenue demographics, pricing, and other relevant information.

- ☒ **Product briefings, press releases, and other publicly available information.** IDC's software analysts around the world meet with hundreds of software vendors each year. These briefings provide an opportunity to review current and future business and product strategies, revenue, shipments, customer bases, target markets, and other key product and competitive information.
- ☒ **Vendor financial statements and related filings.** Although many software vendors are privately held and choose to limit financial disclosures, information from publicly held companies provides a significant benchmark for assessing informal market estimates from private companies. IDC also builds detailed information related to private companies through in-depth analyst relationships and maintains an extensive library of financial and corporate information focused on the IT industry. We further maintain detailed revenue by product area models on more than 1,000 worldwide vendors.
- ☒ **IDC demand-side research.** This includes thousands of interviews with business users of software solutions annually and provides a powerful fifth perspective for assessing competitive performance and market dynamics. IDC's user strategy databases offer a compelling and consistent time-series view of industry trends and developments. Direct conversations with technology buyers provide an invaluable complement to the broader survey-based results.

Ultimately, the data presented in this study represents IDC's best estimates based on the above data sources as well as reported and observed activity by vendors and further modeling of data that we believe to be true to fill in any information gaps.

Appendix: Vendor Profiles

The vendors profiled in this section have been selected for discussion because of their leadership position in the ITPPM market as well as the PPM market. However, our discussion of these vendors is only with respect to their ITPPM products.

Microsoft

Microsoft, the leader in project management, is now also the market leader in the ITPPM space. Based on its product usage even as a small percentage of total PPM revenue for Microsoft Project, Microsoft captures 39.5% of the 2004 ITPPM market, with growth over 2003 of 3.7%. This is due, in large part, to Microsoft's sheer ubiquity in the PM market overall, which has led users to adopt Microsoft Project for ITPPM, although this has not been a strong focus for Microsoft product functionality or development so far. We expect this to change with Microsoft's acquisition of technology from niche portfolio management vendor UMT in December 2005. However, this forecast encompasses revenue from 2004 moving into 2005. Microsoft Project Standard 2003 is the pervasive desktop project management tool. Microsoft Project Professional and Microsoft Project Server are evolving enterprise products with excellent project management, rudimentary portfolio analysis currently, and resource and financial planning, and Microsoft Project is a well-known and long-standing project management tool that Microsoft has evolved to incorporate initial features to support ITPPM.

The Microsoft Office EPM Solution incorporates Project Professional 2003, Project Server 2003, and Project Web Access to provide project and resource management features for ITPPM, with basic portfolio management support via Portfolio Analyzer and Portfolio Modeler (and integration to other ITPPM vendors). The strength of Project 2003 stems from two characteristics. First, it is an established product with a wide following that is based on a dominant platform. Second, it integrates to other well-established, pervasive MS products — MSOffice and Outlook — with which users are both familiar and comfortable. Microsoft's strategy for Microsoft Project is tightly aligned with Office, and other areas will be increasingly leveraged as well during 2006–2009. In addition, Microsoft Project has an extensible architecture that allows integration with other line-of-business systems and partners. All other vendors/competitors in the ITPPM integrate with Microsoft Project. A key differentiator for Microsoft in this area — as in many areas — is its position as a platform to which other vendors integrate and on which others build. This enables a much broader and richer market for ITPPM than would otherwise be possible and contributes to Microsoft's position as a presence leader, even though Microsoft's functional strength and depth and architecture are still evolving for portfolio and enterprise resource management and some other areas. Microsoft is investing heavily in its upcoming 2006 release of Microsoft Project, and we expect to see significant evolution functionally and architecturally. Incorporation of capabilities acquired with UMT will evolve during 2006–2007 but must also incorporate a more complex, sophisticated consultative approach to enable successful adoption by Global 2000 users.

Microsoft Project Professional 2003 offers initial, basic capabilities for monitoring and measuring performance to enable a project portfolio to be managed. Microsoft has not been aggressive in pursuing ITPPM best-of-breed functionality and it will be evolving capabilities in future releases to improve a variety of areas, including resource and portfolio management. IDC expects the addition of further updates and enhancements to the EPM solution to strengthen its ITPPM capabilities. Integration between Microsoft Project and Visual Studio Team System (VSTS) due in 2H05 presages a comprehensive application life-cycle management approach for Microsoft that will include ITPPM over time (2007–2009).

Mercury Interactive

Mercury Interactive, experiencing a record growth rate in 2004 of 83.6% in its IT governance business, is now the second-ranking vendor in ITPPM. Mercury's share of the 2004 ITPPM market is 10.1% based on software revenue of \$40.7 million. Mercury entered the ITPPM market with its acquisition of Kintana in the second half of 2003.

While the cost of entry into ITPPM for Mercury was high, the combination of targeted ITPPM functionality and Mercury's ability to respond quickly and execute well in high-growth markets early in their life cycle was once again a recipe for success. Mercury already has a solid ITPPM offering it can continue to enhance with more sophisticated features. Mercury raised the bar first for the concept of incorporating ITG as part of an integrated life-cycle approach and has extended the concept to application portfolio management. Mercury has highly leveraged its dominance in the testing arena and strength in related markets to invest in ITPPM.

Mercury's ITPPM offering forms the core of its IT governance suite, and IT governance has become an important growth area for Mercury on which it has executed extremely well. Garnering the focus of business and IT decision makers is a key strength for Mercury's ITG, which includes excellent workflow, demand management, and process management with an intuitive product. Potential projects are ranked and rated on a variety of project aspects such as projected ROI and net present value or more qualitative criteria such as business value or technology risk. Portfolio management gets real-time updates on project information and "keep the lights on" activities from Mercury's IT transaction system. Qualitative and quantitative data is also available across projects to enable equitable project comparisons within the portfolio. As Mercury evolves to strengthen current positioning, we are seeing additional improvements in areas such as advanced scheduling and automated portfolio management. One of the benefits of integrating ALM data with qualitative analysis is that it helps provide quantitative information points for metrics as well. Moving beyond portfolio management, Mercury is also addressing another adjunct area to ITPPM: application management (via its Appilog acquisition). Application portfolio management enables visibility into current application assets across silos and systems. This can be useful in providing management with a more complete picture of existing software assets and can aid in determining sunset or replacement decisions on existing software. It also can inform better decision making about the current project portfolio by reducing redundancies, for instance.

In early October 2005, Mercury launched BTO Enterprise, the culmination of a significant product development focus to expand capabilities (incorporating additional change and life-cycle management and updates across major product lines including ITG). This release also integrates its suite of tools for BTO and application management (some originally obtained through acquisition such as Appilog, Kintana, etc.) with its base suite of original products in testing and application performance management. This release significantly strengthened product capabilities for ITG as well as other areas, with the potential to sustain Mercury well as it moves through and beyond recent corporate challenges, upheaval, and transitions (see *Mercury CEO, CFO, and General Counsel Resign: Customer Impact and Analysis*, IDC #34371, November 2005).

Mercury has a synergistic, well-organized suite of products of which portfolio management and application management are a part. Overall, Mercury is extremely competitive in the ITPPM market, and we expect it to continue as a dominant player.

Niku (Computer Associates)

Niku was newly acquired by Computer Associates in 2Q05. Niku revenue of \$31.1 million garnered Niku 7.7% market share. Niku also experienced a high growth rate of 50.5% in 2004, demonstrating that those vendors that focus on ITPPM with strong core functionality have strong appeal. CA has housed Niku and its Clarity product as part of its Business Services Optimization (BSO) division. CA's goal is to enable Global 2000 organizations to run IT as a business service, with portfolio dashboard analytics and granular visibility into data that is typically locked up in disparate asset and project portfolio management systems. Niku's Clarity excels in the IT project portfolio management suite arena, and CA's UniCenter leads the market for asset portfolio management. This combination is salient, potentially, for CA's intent to focus

on optimizing management across the operational asset and IT project portfolios. CA has executed well so far in product integration and following timelines for coordinated product strategy and is in the process of ramping up development, sales, and consulting staff for the Niku division significantly. The acquisition of Niku by Computer Associates strengthens CA's competitive position in the market overall and implicitly in the ALM market, where it competed formerly on the strength of its mainframe and distributed SCM products (Endevor and Harvest) and modeling tools and where competitors, especially IBM, have significantly expanded their ALM product lines in the past two years. Although CA has shifted away from its previous focus on ALM under CEO John Swainson, change management remains squarely within the BSO business unit that lodges ITPPM. ("Change management" in this context will encompass Harvest and Endevor as well as system changes with UniCenter.)

This puts some pressure on others such as SERENA, which does not yet have an ITPPM solution of its own. Mercury and Compuware lose their "big company" advantage over Niku in ITPPM sales.

The greatest barrier for CA and Niku in this highly competitive market will be execution, in terms of both integrating and selling combined, complex product sets across this broad sphere, and enabling effective process and organizational best practices to facilitate adoption by divisions within Global 2000 companies that tend to communicate poorly (if at all). The handoff between IT development teams managing projects and operations groups managing assets (including systems, infrastructure, application portfolio, etc.) is usually problematic. And a key driver for businesses seeking IT governance is enabling business input and management insight across the asset and project portfolios. We already see initial product field integration that links CA's Service Desk product and CA's software change management solution (Harvest) to Niku's Clarity. User requests or issues raised through the Service Desk can be created as projects in Niku, and integration is targeted to ship year-end 2005. In addition, CA's initial messaging about entry into the space was somewhat unfocused. Excellent product positioning and marketing are key elements, and CA has already significantly improved its execution here at recent user conferences.

Other differentiators include CA-Niku's Open Workbench project management tool, which is an open source alternative that provides a functionally limited starting part into user sites where the cost of entry for PM is prohibitive. CA has a wealth of features and functions to enable organizations to take control of IT projects and processes to better meet strategic goals. CA's Niku acquisition positions it well from a technology perspective to address both asset and portfolio management, but it must overcome execution challenges and evolve appropriate process and organizational approaches. With the strength of its other products available to integrate with Niku, look to CA to offer an ITPPM solution that integrates vertically and horizontally for ITPPM and ITG.

Primavera Systems

Primavera resides in fourth place in the ITPPM market. Like most other market leaders in this space, Primavera experienced significant revenue growth in 2004; its revenue growth was 30.3%, resulting in revenue of \$23.9 million. Primavera has been a project and portfolio management vendor for more than 20 years, and that

experience is evident in its product offerings. Primavera products are comprehensive and scale to accommodate large-scale enterprise deployments. Oriented to providing industry-specific project and portfolio management solutions, Primavera enables organizations to take control of their projects, effectively manage risk, reduce costs, and increase the percentage of projects brought to successful completion.

Primavera has a very good track record with a large stable of enterprise deployments (5,000+ users) and also delivers distinct solutions tailored to the PPM needs of vertical markets. To ensure geographic coverage as a smaller private company, Primavera has partnered well with local, regional distributors (particularly in the Asia/Pacific region).

In its current product release shipped earlier this year, Primavera combines the Evolve product that it acquired two years ago (with strong resource management and strong portfolio management and processes) with what was the TeamPlay product (with strong project and program management capabilities). The goal in this context is to enable users to focus on the greatest areas of challenge with one interface across product capabilities. Since the Evolve acquisition, Primavera was challenged to pull together a combined product strategy but appears to have largely resolved those issues with this release. Primavera continues to improve its user interface and address more flexible pricing models.

In addition to depth across the ITPPM core capabilities, Primavera enables features such as risk assessment, performance metrics and measurement, and improved team and company collaboration. These features provide a means for companies to standardize their processes and procedures across the enterprise. With a solidly established product and a range of robust features Primavera is positioned to stay with the leaders in ITPPM.

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