

Mountainous Investment Transforms Enterprise Management Software Vendor

P.J. Jakovljevic - July 11, 2006

Event Summary

To say that the last several years were “interesting” times for doing business would be a huge understatement for **Deltek Systems**, Inc. And while it intends to stay true to its roots, the period ahead promises to be equally fascinating. Lately, owing to new ownership and leadership, there has been a sense of a new era at the privately held, Herndon, Virginia (US)-based principal provider of enterprise software and solutions for project-focused organizations.

After over two decades of stewardship and funding by its owners and founders, the deLaski father and son team, in mid-2005 Deltek announced that **New Mountain Partners II, L.P.** (sponsored and managed by **New Mountain Capital LLC**, a private equity firm based in New York) would make a majority capital investment in the company. Under the terms of the investment agreement, New Mountain would purchase 75 percent of Deltek’s shares, while the deLaski family and management shareholders would continue to own 25 percent. New Mountain Partners II, L.P. is New Mountain’s second fund, with \$1.55 billion (USD) in committed capital; Deltek was New Mountain’s second investment in this new fund. Interestingly, the Deltek move was the equity firm’s third investment in a Virginia-based company: in 2001, the firm made an investment in **Strayer Education Inc.** (NASDAQ: STRA), followed in 2003 by a majority control investment of Chantilly, Virginia (US)-based **Apptis**. New Mountain claims to invest for long-term capital appreciation through direct investment in growth equity transactions, leveraged acquisitions, and management buyouts. To that end, it focuses on niche, cash-flow-rich opportunities, as with other past investments such as **Overland Solutions** and **National Medical Health Card Systems**.

There have been no major changes in operations at Deltek as a result of the investment by New Mountain, nor there have been any staff reductions. Ken deLaski initially continued as Deltek’s chair and *chief executive officer* (CEO), and was joined on the board of directors by New Mountain managing directors Alok Singh and Michael Ajouz, as well as Steven Klinsky, New Mountain’s founder and CEO (who had previously co-founded **Goldman Sachs & Co. Leveraged Buyout Group**, and served as senior partner at **Forstmann Little & Co.**). Additional outside board appointees were to be named during the several months following the investment.

Soon after, in June 2005, Deltek named Kevin T. Parker as the company’s new CEO. According to Deltek, the appointment was made to bring “a new level of expertise to accelerate the company’s future growth and success” in the *enterprise resource planning* (ERP) marketplace. Ken deLaski, who co-founded Deltek in 1983, and who was CEO from 1996 until 2005, remained on as Deltek’s chairman until May 2006, when he retired from the board of directors. Today, Parker serves as chairman.

As for Parker’s history, he was appointed *senior vice president* (SVP) and *chief financial officer* (CFO) of PeopleSoft in 2000. Beginning in 2004, he was co-president and CFO, until the company’s acquisition by **Oracle** later that year. He had led efforts to increase **PeopleSoft**’s operating margin, and was actively involved in all facets of the business, including directing all shareholder communication and activity during Oracle’s eighteen-month hostile tender offer. The architect and driving force behind PeopleSoft’s innovative and protective *Customer Assurance Plan* (CAP), he also orchestrated PeopleSoft’s strategic acquisition of **JD Edwards** in 2003, which added 7,000 new customers and 6,000 new employees, making PeopleSoft the world’s second-largest enterprise software company at the time. Prior to joining PeopleSoft, Parker had held senior executive positions with **Aspect Communications**, a provider of contact center solutions and services, and **Fujitsu Computer Products of America**, a provider of data storage and imaging solutions.

Since its foundation, Deltek had been run as a successful business (albeit sometimes regarded as a family-run or “lifestyle” business). But in 2005 it decided that the time had come to embark on the next level of growth. To that end, Parker’s business philosophies—high levels of customer service, technology leadership, and employee teamwork—are in tune with its core values. But the idea behind the new recapitalization and new management was to address many drawbacks that came from the company’s traditionally lower profile. Already a recognized ERP leader for North American project-based businesses, Deltek is now looking to strengthen its global position in its target vertical in both the large enterprise and *small and medium business* (SMB) markets.

Nurturing What Works

Indeed, what has not changed much is the fact that Deltek remains a company with project DNA strands pervading all its products (either developed in-house, or acquired and maintained) and corporate culture, which has been helping it in terms of focus, and in terms of fending off generic enterprise applications providers (in spite of their typically larger size, higher global profiles, and market clout). In other words, having designed all its products with *project ID/No.* as the key field in all system database tables (as opposed to the order *ID/No.*, *account ID/No.*, or *item ID/No.* of traditional generic ERP systems), Deltek is a natural fit for several project-based market segments. Moreover, large generic ERP systems typically require serious customization and retrofitting to achieve the required functionality. Possibly less known and expected is also the fact that scalability is also what enables Deltek to compete successfully, even against the likes of Oracle and **SAP**, in larger deals, such as with organizations with 60,000 employees (the vendor is glad to demonstrate load test results upon inquiry).

Most ERP systems have been tailored for businesses handling physical products. In order to follow well-defined, often high-volume and repetitive production cycles and traditional *supply chain management* (SCM) principles, these systems typically do not have to (and thus cannot) provide an estimate of completion for accounting (in other words, there is no interim snapshot basis for revenue recognition, job costing, cost allocation, and so on). The same holds true for shipping processes, which typically do not allow a percentage of completion, and cannot be ongoing and specific; they are rather binary (either the process is completed, or it isn’t). Conversely, project-based businesses have to follow project lifecycles varying in length and complexity, and have to rely on a snapshot “estimate to complete” value for job costing, revenue recognition, and cost allocation. In a manner of speaking, project business is SCM “for people” (in terms of scheduling and resource management); the same “inventory” can be shared across multiple projects and processes. *Customer relationship management* (CRM) can also be viewed in this way, since project-based CRM solutions do not focus on call centers but rather on pipeline generation and opportunity and lead tracking.

Project-oriented organizations require the ability to perform many other project-specific business and accounting tasks, including tracking costs and profitability on a project-by-project basis; providing timely project information to managers and customers; and submitting accurate and detailed bills or invoices, often in compliance with complex industry-specific and regulatory requirements. Many project-oriented organizations provide products and services under government contracts, and project accounting for these organizations often requires the use of sophisticated methodologies for allocating and computing project costs and revenues. There are many different types of contracts used by government contractors (such as cost-plus, fixed price, time-and-material, and so on), and within each of those there are dozens of variations or more; each variation drives its own type of billing, revenue recognition, and requirements for reporting back to the customer. For more information, see **Project-oriented Software: Many Choices, Many Differences.**

For over twenty years, Deltek has been a recognized leader in providing systems (and built-in controls) for firms that do business with the US federal government. Its solutions provide capabilities that enable customers to maintain their accounting records in a manner approved by the *Defense Contract Audit Agency* (DCAA) and other governmental oversight sets of rules such as *federal accounting regulations* (FAR) and *cost account standards* (CAS). The US government requires its contractors to collect and allocate cost in certain ways. For example, according to DCAA rules, labor costs must be recorded daily. Also, a contractor is required to keep track of several contracts simultaneously, meet the rules for different types of contracts, and be consistent in accounting for a number of indirect costs. Thus, of 11,000 Deltek customers, over 2,100 are federal contractors, and they account for more than half of the vendors’ revenue. The remaining customers are from the commercial sector, which Deltek started to target quite a bit later in its existence.

With the new US emphasis on improving homeland security and on expanding anti-terrorism operations around the world, many of these firms have already experienced and will likely experience significantly greater demand for their services, along with rapid growth over the next several years. Due to an expected increase in defense and national security spending, US federal government contract spending and activity are also expected to increase in the next several years, but this will come at some additional costs for aspiring contractors. The government has increasingly been issuing cost-reimbursable contracts, which usually triggers dreaded DCAA audits (this is usually not the case with fixed-cost or time-and-material based contracts). While the government might be a generous customer, it is most certainly a demanding one, and its auditors insist on transparency and audit trails, so that they can trace a transaction from a source document (like a timesheet or an invoice from an end-supplier) all the way through to billing to the government. Aside from the fact that contractors have to supply a pile of documents about their business operations to customer agencies, government pre-award and post-award audits also cover a wide range of particular business practices, such as price checks and billing, use of subcontractors, time-sheet verifications, contract scope checks, financial statements, executive compensation reviews, compliance with the US Department of Labor's *Trade Adjustment Assistance* (TAA) program, and payment of industrial funding fees for US *General Services Administration* (GSA) schedule sales.

Here's an example of how a tight vertical fit works compared to generic solutions: In *aerospace and defense* (A&D) project manufacturing, there is a requirement for automated collection of detailed cost information for standard *National Aeronautics and Space Administration* (NASA) monthly and quarterly contractor financial management reports (NASA 533M and 533Q). While generic accounting solutions would require manual compilation and reporting, or custom programming, the flagship **Deltek Costpoint** industry-specific solution comes up with native support for these complex NASA reporting requirements. Likewise, in government contracting, the value-added *general and administrative* (G&A) allocation requirement is often fulfilled by generic solutions via pesky and dangerously insecure spreadsheets and manual inputs of calculations (with no audit trail or centralized control), whereas Deltek Costpoint and **Deltek GCS Premier** feature configurable allocation options that are automated in the job cost process, and that are highly integrated across financial and project reporting. For more information, see **Project-Oriented Versus Generic GL-Oriented ERP/Accounting Systems**.

To use a medical analogy, Deltek can call itself a specialist, whereas most other solutions are general practitioners. For general accounting or ERP products— numerous as they are—to emulate Deltek's out-of-the-box functionality, it usually takes an enormous amount of customization. Specialized project-oriented products provide compliance-ready solutions, and less time and money spent on implementation should equal better value. Thus, Deltek clients typically talk about a reasonably low *total cost of ownership* (TCO), high *return on investment* (ROI), and *ease of deployment* (EOD). To meet these specific project-based needs, Deltek has built its products from the ground up since day one, starting with DCAA compliance. To meet these stringent government contract requirements, in 1985 Deltek introduced its former flagship DOS- and Cobol-based product, **System1**, which was one of the first government contracting solutions (GCS). Deltek next released GCS Premier in February 2000 as the successor to System1, delivering a **Microsoft Windows**-based accounting solution designed for small-to-medium government contractors. Deltek's founders managed the company with great success by also expanding client focus into the commercial sector during the late 1980s. In 1991, Deltek reached its thousandth customer on System1, at which time its revenue was about \$15 million (USD), and the company began to configure its software for larger customers.

To that end, in 1995, Deltek released Costpoint, a more comprehensive ERP application for large or complex firms. This application took advantage of the previous ten years of project accounting experience. Also in 1995, Deltek released **ET Enterprise** (now named **Deltek Time Collection**), an automated timekeeping and collection system. By the time Kenneth deLaski took over as CEO in 1996, Deltek's revenue had grown to more than \$30 million (USD), and the company had more than 300 employees. For more information on the company's genesis, see **Deltek Remains the Master of Its Selected Few Domains**.

Furthermore, the company's profitability (with over twenty consecutive profitable years) and growth (except for a flat period from 2002 to 2003, which spared hardly any player) remain untarnished. Deltek started as a supplier of accounting systems to the federal government suppliers and contractors, but has evolved into a specialist provider of project-based back- and front-office systems, primarily to such sectors as *architectural, engineering, and construction* (A/E/C) industries; professional services firms; government contractors; project manufacturers; and program-based non-profit organizations. Fueled by new product introductions, ERP market consolidation, and federal spending growth, in 2004 Deltek's software bookings grew by 23 percent, with over 500 new customers, and total revenues of \$123 million (USD). Early in 2006, Deltek announced record-breaking total revenues exceeding \$150 million (USD) for its fiscal and calendar year 2005, which was a 25 percent

increase over the year before. License and professional services revenues both recorded increases in excess of 25 percent when compared to 2004, and this was the second consecutive year that Deltek's growth had exceeded 20 percent. In the next part of this series, we'll take a look at how some key acquisitions have given even more cause for optimism.

Changes for the Better

What has changed, however, stems from 2005 being a landmark year marked by the expansion of a seasoned executive team, along with the advent of financial backing by **New Mountain Capital** (sponsor and manager of New Mountain Partners). In 2005, Deltek's management team welcomed new executive leaders, whose extensive expertise and strategic vision are expected to prime the company for continued growth. In addition to Parker, seasoned industry leaders Jim Reagan and Bill Clark joined in *executive vice president* (EVP) capacities, and also serve as *chief financial officer* (CFO) and *chief marketing officer* (CMO), respectively. Carolyn Parent also joined Deltek as new EVP of worldwide sales. Carolyn Parent also joined Deltek as new EVP of worldwide sales. From 2006 onwards, Deltek plans to further its momentum by continuing to enhance a winning product portfolio and by expanding into new project-oriented vertical and international markets.

Deltek recognizes that most organizations run their enterprises by using a sort of closed-loop, corrective action process, which consists of disjointed "predict," "measure," and "control" phases. While some product-based businesses may already have software solutions for creating a closed-loop process, most still need solutions to replace manual workarounds, and Deltek has embarked on a mission to garner a one-stop-shopping portfolio.

Accordingly, in March 2006, to enhance these development prospects, Deltek announced the acquisition of **Welcom**, a Houston, Texas (US)-based provider of such solutions, which allows Deltek to immediately provide important *earned value management* (EVM) capabilities to its broad government contracting customer base, and also to deliver comprehensive *project portfolio management* (PPM) solutions for many other project-focused organizations worldwide. The acquisition has also added more than 250 Fortune 1000 companies (including marquee names such as **General Dynamics** and **BAE Systems**) to Deltek's existing base of clients. Founded in 1983 (like its later parent, coincidentally), Welcom has been developing and selling project management tools to upper-end customers for whom complex project management is a critical business requirement. Its client list includes major manufacturers in the *aerospace and defense* (A&D), transportation, telecommunications, and *architectural, engineering, and construction* (A/E/C) industries, and its established presence in the European, Asian, and Australian markets should also create additional channels for Deltek to continue its much-needed expansion outside the US. In addition to cross-selling opportunities in the near future, the acquisition eliminates Deltek's need to interface with the likes of **Microsoft Project**, **Meridian**, or **Primavera**, and allows it to keep a bigger share of the customer wallet to itself.

Welcom products, including the **Cobra** EVM and **Open Plan** PPM products, will continue to be developed, licensed, maintained, and supported by Deltek. While they will continue to be sold as standalone products (owing to interfaces with some *enterprise resource planning* (ERP) systems like **SAP** or former **Baan** [now SSA Global LN]), these products will integrate important portfolio analysis, risk management, cost and earned value management, and project collaboration functionality with Deltek's enterprise management solutions. The Open Plan product is a feature-rich, multiproject resource and cost modeling and reporting tool, which includes many tools for mid-level and top-level managers for displaying project status and cost with a traffic light metaphor (green, yellow, red). A project manager can use the professional version of the tool to schedule multiple projects simultaneously, whereas later versions will include an e-mail adviser which will enable mail messages to be sent based on alert conditions.

In general, PPM entails a strategy for management of a portfolio of related or interdependent projects, with the intent of limiting redundant work efforts, and optimizing decision-making and resource skills across projects. The idea is to take a holistic view of projects and their relationships, and to focus on the potential for project benefits to be controlled across the enterprise. Such applications are used for automating and optimizing the initiating, planning, scheduling, allocation, monitoring, and measuring of the activities and resources required to complete projects. Portfolio management capabilities enable the tracking of an aggregate of projects, products, programs, and initiatives, in order to oversee resource profiling and allocation, which in turn are useful tools for making ongoing investment and prioritization decisions, and for tracking risks as part of an overall portfolio.

PPM tools are high-end, multiproject management tools which help organizations to manage the scope, time, and cost of discrete sets of related people-based processes (projects) on an individual and portfolio basis, with integrated time reporting, executive information reporting, and project accounting interfaces. In the greater scheme of things, PPM can include the breadth of horizontal and vertical solutions, such as construction management, facilities management, *professional service automation* (PSA), aspects of information technology (IT) governance solutions, and so on—all developed around the idea of successful project completion and delivery as the business *raison d'être*. For more information, see *Project Portfolio Management for Service Organizations: Bridging the Gap between Project Management and Operations*.

While EVM has long been a US *Department of Defense* (DoD) requirement for defense manufacturers, it is becoming increasingly more common with commercial, non-defense, project-based manufacturing sectors. In fact, there are indications that many US federal organizations besides DoD (such as the *Department of Transportation* [DoT] and the *National Aeronautics and Space Administration* [NASA]) have been lowering the project value threshold which mandates the use of EVM reporting (from \$50 million [USD] to \$5 million [USD]). In 2005, the US Office of Management and Budget stated its intention to enforce EVM in IT projects at federal agencies, including compliance with American National Standards Institute/Electronics Industries Alliance (ANSI/EIA) standard 748. While defense agencies have been applying this standard for some time, the US Civilian Agency Acquisition Council and the US Defense Acquisition Regulations Council have proposed a revision to federal accounting regulations (FAR) to standardize use of EVM across the government.

These moves stem from the buyers' needs for assurances that they are using a contractor who can deliver; on the contractor side, these enterprises certainly will not stay in business if they can't deliver as required. Thus, EVM compliance may give both parties a measure of confidence that project goals can be met. However, the use of EVM is a major shift from the traditional project accounting practice of merely (and occasionally) ensuring that actual costs are in line with the estimated cost, and few companies outside the defense arena have sufficient knowledge and maturity to use it. By introducing the dimension of time (in addition to cost and performance elements, all integrated within the project scope of work), EVM attempts to prevent project cost increases, which are often due to scheduling problems, by highlighting the need to identify problems before they are past the point of no return, whence considerable delay and cost result.

Consequently, all project participants need to learn of variances immediately. They do not have the luxury of waiting until, say, the end of the month, to discover that a project is in jeopardy. To that end, an EVM solution must show variance to the estimate at completion (EAC) (although there is an overwhelming number of similar indicators) of a project as soon as a significant change occurs. In other words, EVM concretizes project progress so that one can look at project evolution and compare how much has been spent to how much should have been spent. Thus, EVM is good at exposing the fact that a contracting company does not have a good project plan, or that it has a good plan but may be unable to follow it. Again, although the private sector might benefit from harnessing EVM systems (both for improving competitive advantage and for internal risk management), implementation requires significant education and familiarity with the concepts, along with dozens of formulas, and key performance indicators (KPIs) and their meanings. Additionally, implementation requires everyone to start reporting their time and achievements, every day, by hour, against a set of activities—all of which is a major change management issue. For more information on the qualities and operating characteristics of EVM (some of which are described in ANSI 748), see *Federal Contract Management and Vendors' Readiness*.

In October 2005 the company also acquired competing financial management software firm Wind2, thereby increasing its customer base to 11,000 firms, and furthering its dominance in a number of key vertical markets. Both firms shared a focus on A/E/C companies (as well as government contractors, IT services firms, and management consultants), and have thus often directly competed in these markets in the past. The acquisition has allowed Deltek to strengthen its leadership role in the professional services market, while adding approximately \$10 million (USD) in revenues. In fact, of Deltek's record 25 percent revenue growth in 2005, 2 percent was attributed to the Wind2 acquisition alone. In addition, this acquisition added more than 3,000 customers to Deltek's former base of 8,000 clients, including such marquee names as **Custom Research, Inc.**, **Apex Environmental, Inc.**, and **MCW Consultants, Ltd.** Deltek has also welcomed Wind2's over eighty employees from five locations, including a training facility in Fort Collins, Colorado (US), and four branch offices throughout the US and Canada.

Today, Deltek clients represent more than 81 percent of the 500 largest revenue-generating A/E/C firms in the US, as ranked by **Engineering News Record** (ENR) in 2005. Furthermore, nearly 65 percent of the largest federal government contractors are Deltek clients, as ranked by Washington Technology. Of Deltek's total install base, the A/E/C clients represent about 60 percent; government contracting represents about 20 percent; professional

services or management consulting represent about 8 percent; and nonprofit organizations, IT services (or *systems integration* [SI]), and project manufacturing organizations contribute a few percentage points each.

Deltek has a history of successful and astute acquisitions in the space, starting with the 1998 acquisition of Harper & Shuman, Inc., formerly a renowned provider of accounting software to A/E/C firms. This acquisition, which included the Advantage and CFMS product lines, in addition to adding 2,800 firms to Deltek's install base, was a major step in supporting Deltek's strategy of providing comprehensive business solutions to firms in the A/E/C industries.

In early 2000, Deltek unveiled its vision and launched its initiative to become the vendor of choice in the then emerging market for PSA software. To that end, Deltek acquired **A/E Management Services, Inc.**, including the **RFP GenTrak** product line, which was a marketing, proposal, and opportunity tracking automation system for A/E/C companies. In late 2000, Deltek acquired **Semaphore, Inc.**, a major developer and distributor of advanced financial and project management software and services for over 2,000 A/E/C companies and other professional services firms. That acquisition doubled Deltek's market share of the A/E/C industry, and gave it a 72 percent share of the firms listed in ENR's top 500 design firms.

Back to the Future?

As with the aforementioned acquisitions, Deltek pledges to continue to support and maintain all Welcom and Wind2 products, including **Cobra, Open Plan, WelcomHome, WelcomPortfolio**, WelcomRisk, Wind2 Award, and Wind2 FMS (the financial management system renamed as **Deltek FMS**), a modular, **Microsoft Office**-compatible product which complements Deltek's broad product line of project-based solutions for professional services firms of all sizes. These solutions include **Deltek Vision**, Deltek GCS Premier, and Deltek Costpoint.

Providing a good example of how Deltek manages acquired products is its acquisition of Harper & Shuman in the late 1990s, which was in line with its aim to penetrate the A/E/C market. At the time, Harper & Shuman was the market leader with its premier product Advantage, which had been introduced in 1997 as one of the first Y2K-compliant products in the market segment. Several years later, Deltek is still selling, maintaining, enhancing, and supporting the Advantage product line, and a similar strategy is envisioned for the Deltek FMS product, whose clients should now have more choices because they can look at other Deltek products, including Vision, which is both technologically advanced (it is Web services-based) and functionally advanced. While FMS concentrates mainly on project accounting and some product management capabilities, Vision adds resource planning, project management, client relationship management, proposal automation, document management, and so on.

However, Deltek also pledges not to force any clients to move in the direction of adopting new products if they are comfortable where they are, and they pledge to grant support for the FMS product. At the same time, the vendor has been adding the FMS features that are currently missing in Vision (such as a strong collections module), and it has already begun to train a subset of the development group acquired with Wind2 on the Vision architecture. Additionally, it has been looking at designing a data conversion utility that will convert FMS data into Vision for those clients who are interested in making that move, given that Deltek FMS is a Microsoft Windows-based product with a client/server architecture, and not Web-based.

It might be useful to clarify the fact that Deltek currently offers a plethora of products, which range from legacy systems to modern applications, from offerings for the lower-end of the market to systems for large enterprises, and from best-of-breed point solutions to more complete product suites. Looking horizontally across the range, its project-focused portfolio of solutions offers a number of modules:

- ERP modules (such as project-based accounting, financials, materials management, *human resources* [HR], and payroll management), used by 10,000 customers
- *customer relationship management* (CRM) modules (such as business development tools, sales force automation [SFA], client relationship management, and proposal automation), used by 1,800 customers

- *human capital management* (HCM) modules (such as time collection and expense management, resource and project planning, employee self-service), used by 1,200 customers
- *business performance management* (BPM) modules (for example, balanced scorecards, forecasting, and planning tools), used by 1,900 clients

The BPM and HCM tools have recently received notable enhancements, including pre-packaged performance-based data marts; a new reporting tool for Deltek Costpoint that leverages **Cognos ReportNet**; and pre-built reports, analytics, and scorecards for project-based businesses on the BPM side. The BPM suite is the further evolution of the former **Deltek Enterprise Planner product** suite, the result of Deltek's partnership with **Adaytum Software** (now part of Cognos), which was announced in late 1999.

On the HCM side, functionality has been enhanced to embrace broader employee-facing requirements, such as time entry, expense reporting, employee benefit management, and project management, as well as support for mobile workforces, including the use of *personal digital assistants* (PDAs), offline clients, and wireless clients. To that end, the Deltek Time Collection, mentioned earlier, is a Web-based employee timekeeping solution for driving labor, payroll, job costing, and billing functions, by project. Featuring Web-based, zero-client technology, it is a time management application aimed at eliminating paper-handling processes and redundant data entry, and has reportedly been used by more than half a million users worldwide. Although sold well as a standalone application in virtually all Deltek industries of focus, the product is part of the Deltek Enterprise application suite, and fully integrates to the major back-office application, Deltek Costpoint. The product provides increased management visibility and control of projects and operations, by tracking daily labor activity and historical data. This gives supervisors, project managers, and executives access to pertinent information in a timely manner, preventing costly project overruns and reducing billing time, in addition to enabling federal contractors to comply with government auditing regulations. Not only does it interface with all Deltek products, but it also interfaces with enterprise applications from SAP, **Oracle** (including former PeopleSoft and JD Edwards), **Automatic Data Processing (ADP)**, **PayAmerica**, and **Microsoft Dynamics SL** (formerly **Microsoft Solomon**). In fact, recently this standalone product has been one of the best selling products within the Deltek family, and a major contributor to the vendor's growing top line.

A Wealth of Offerings

Even though it was run for over two decades as a family business (at least, this was sometimes the public perception), **Deltek Systems, Inc.** has become North America's principal provider of enterprise software and solutions for project-focused organizations. In mid-2005, Deltek announced that **New Mountain Partners II, L.P.** would make a majority capital investment in the company. This move, while certainly enhancing Deltek's prospects in terms of strengthening its global position, should not deflect attention from its already impressive offering.

Deltek uses a wealth of standalone and bundled modules to target the following core markets:

- professional services firms (including the *architectural, engineering, and construction* [A/E/C] "sweet spot," both domestically and internationally)
- complex project-focused enterprises and large federal contractors in *aerospace and defense* (A&D), nonprofit organizations, *information technology* (IT) services, and systems integration and management consulting industries, both domestically and internationally
- small to medium project-focused domestic businesses and federal contractors in the government services industry

In a simplified manner, Deltek's vertical markets can be separated by both government and commercial business. On the government side, it scales from small government contractors up to very large contractors with billions in annual revenue. On the commercial side (which includes A/E/C and professional services firms such as management consultancies), it also scales up, from firms under fifty employees, up to the largest A/E/C firms in the world.

In fact, Deltek has recently benefited from penetrating the professional services market: the use of project-oriented and professional service business application software systems is expanding as a result of a number of economic trends. These applications go hand in hand with one another, since service organizations have traditionally used project accounting more than product manufacturing firms, due to the need to customize their services for each client and to properly allocate the associated revenues and costs. As the North American shift continues from a manufacturing-based economy to a service-based economy, the market for project-oriented organizations is expanding too. Furthermore, the trend towards outsourcing an increasing range of activities broadens the market for project-oriented organizations, as both customers and vendors need to track the costs associated with their projects.

Understandably, professional services firms that provide consulting, know-how, or other types of billable services (rather than tangible physical products), need to track billable hours and other intangibles. Also, a typical professional services business will often also have fewer fixed assets; but it must keep close track of staff billable hours to remain competitive. The true value of the business is actually determined by the quality of intangible assets, such as the staff roster (including the aggregate expertise roster), and the client list. For some time now, *professional service automation* (PSA) applications have tried to fill a gap that traditional enterprise systems such as *enterprise resource planning* (ERP) and *customer relationship management* (CRM) have failed to address. Again, that's to say that ERP vendors have traditionally built products that collect data and generate reports on widgets rather than people, whereas CRM vendor have provided solutions that help automate the process of selling these widgets and subsequent customer service interactions. PSA applications, conversely, provide information about staff members (consultants), tapping near real-time data from the sales pipeline, the project teams, and finance, and in the process enable professional services firms to improve productivity, efficiency, and profitability. Deltek is one of a few enterprise applications vendors that have largely managed to bridge this gap (see *Enterprise Resource Planning for Services, and Professional Services Automation: Where Do You Draw the Line?*).

Deltek Vision

The main product for this market is **Deltek Vision**, a “young” solution (compared to many sibling products, and in terms of modernity) that was designed from the ground up for professional services firms, enabling them to attain an up-to-date 360-degree view of people, projects, clients, resources, and business in action. The product, which was initially released in late 2002, reached a landmark 1,000 customers in early 2006. Using Web-based technology, Deltek Vision provides client relationship management, proposal automation, project management, resource management, project and financial accounting, *time and expense* (T&E) capture, billing, purchasing, multicurrency, multicompany, and performance management functionality in a single solution. Project-focused organizations and professional services firms around the world have apparently been deploying Vision, since it offers an exceptional business fit for such firms in a wide range of vertical markets, including A/E/C, accounting, consulting and planning, IT services, software, and integration. The product's Web services-based n-tier architecture is scalable, and its open foundation allows for reasonably rapid deployment as stand-alone modules or a broader tightly integrated solution.

Developed in close collaboration with some of Deltek's high-profile professional services clients, Deltek Vision aims at solving the business challenges of professional services firms, such as winning repeat business, improving project performance, and maximizing project margins. Contrary to the typical detrimental practice of detaching initial customer interactions from subsequent project management and delivery, this unified solution serves as a single source of project-related data, which can be used to track performance, make strategic business decisions, and measure individual project performance. To that end, accessing a client record in Deltek Vision from the **CRM & Proposals** module will, for example, also list the client's employees and former employers via a hyperlink, enabling users to keep tabs on industry movement and team turnover.

Another example of how a tight vertical fit works compared to generic solutions, in the construction segment, is the requirement of cost-plus contract accounting (one of a variety of methods for pricing and billing project work). A cost-plus project has a different set of requirements from a fixed-price contract, since in the first case, a services company wants to maximize billable hours, while in the latter case, the goal is to minimize them. While “bolt-on” features exist for generic solutions designed solely for fixed-price contracts, Deltek Vision uses the percentage of completion method for subcontract progress payment requests, including variable rate retention for *work in place* (WIP) and stored materials. In the architecture vertical, project planning requirements are traditionally handled

via disparate spreadsheets for project planning, whereas Deltek's project planning is integrated with accounting, and supports multilevel *work breakdown structure* (WBS), and revenue and profit forecasting. Finally, in the engineering segment, the ability to automate the proposal process as a key CRM component is vital; traditional product-based CRM systems have no qualification-based proposal automation capabilities, whereas Deltek Vision features project-oriented CRM capabilities, which intrinsically include proposal automation.

Deltek Vision is a Microsoft .NET-based platform for the commercial professional services market. With its support for Web-native *hypertext markup language* (HTML), *dynamic HTML* (DHTML), and Java Script on the *user interface* (UI) tier; **Microsoft SQL Server** as database; and the **Actuate** reporting server, the product features extensible integration architecture that enables collaboration and mobile extensions through Web services. For these reasons, the goal is for Deltek Vision to become the company's primary offering to professional services firms, and will be targeted at existing **Deltek Advantage**, **Deltek FMS** and **Deltek Sema4** customers, as well as at new customers in all types of professional services industries.

In mid-2005, Deltek announced the release of **Deltek Vision 3**, which provided significant upgrades and enhancements for increasing productivity and workflow, including Deltek's new **Microsoft .NET**-based VisionXtend platform. This technology enables real-time, transparent connections via Web Services and *extensible markup language* (XML) across multiple platforms and applications, allowing professional services firms to integrate and streamline key business processes in order to achieve performance and compliance management, as well as a collaborative view of firm-wide operations. Other significant enhancements in Vision 3 include a new workflow engine, a screen designer, audit trail reporting, a purchasing module, and document management capabilities providing secure Web-based collaboration for users to share, upload, review, and edit documents, regardless of location. In addition, Vision 3 introduced improved international (multicurrency and multicompany) functionality. For more information on the product release, see *Niche Software at Its Best*.

Early in 2006, Deltek and AppForge, the provider of enterprise multiplatform mobile and wireless application development solutions, announced a partnership that will eventually enable Deltek to deliver mobile applications via Deltek Vision across any major mobile *operating system* (OS) and device. Through this partnership, Deltek plans to deploy mobile applications to more than 450 devices across **PocketPC**, **Symbian**, and **Palm** OS platforms (with the addition of the **BlackBerry** OS in the second part of 2006) via AppForge's Crossfire product. This should allow users to choose from a wide range of mobile platforms and devices, while significantly reducing development time and resources. With AppForge, developers can write an application once, and deploy it to most major mobile and wireless devices, PDAs, smartphones, and industrial devices, using **Microsoft C# .NET 2003**, **Visual Basic .NET 2003**, and **Visual Basic 6.0**. This should save businesses time and money by eliminating the need to rewrite an application for a new or next-generation device or OS. Mobile applications for timekeeping and expense management have been available since mid-2006 as part of **Deltek Vision 4.0**, and future releases will include other functions such as CRM, and alerts and approvals for requisitions, purchasing, and resource planning.

In March 2006, Deltek announced the release of **Deltek Vision Small Business**, a preconfigured, out-of-the-box business solution that delivers Deltek functionality to small businesses. The product features a solid combination of core modules from Deltek Vision, such as CRM, proposal automation, project management, resource management, project and financial accounting, and performance management functionality. The solution is the result of Deltek's vast experience, combined with the recent acquisition of **Wind2**, which provided the vendor with a deeper understanding of the requirements of a small professional firm. With its core functionality and low-cost special pricing (an affordable start-up fee), the product offers a wide array of convenient options, including new hosting services, an out-of-the box configuration of critical core accounting, billing and time keeping functionality, licensing options, and a new self-paced training program called **Vision Fast Start Implementation** that should help reduce implementation time, and ultimately lower the *total cost of ownership* (TCO). The solution is also available through Deltek's expanding reseller network throughout the world.

Finally, as a result of increasing requirements for Deltek's analytics capabilities, and given Deltek's quest to capture new markets, the vendor has lately been exploring data visualization technology (analyzing historical data from similar projects to improve project profitability presents a different problem from optimizing current staff deployments). These tools of this technology originate from scientific applications, and are now being merged with statistical analysis software, with the goal of replacing reports and tables with powerful, eye-catching images that convey important statistical messages to even the casual user. To that end, through a partnership with **Panopticon**, Deltek has been embedding this technology into Deltek Vision 4 to allow a firm-wide view of the health and performance of project portfolios to executives, project managers, and other users.

Most recently, in mid-2006, Deltek announced the release of Deltek Vision 4, which, for the first time, integrates planning, tracking and project administration features with innovative functionality such as visualization and mobile access, to create a solution that streamlines all facets of the project-based business. It is available as a complete enterprise-class suite, or as a preconfigured solution designed to meet the needs of smaller firms. Visualization is a powerful management tool that empowers businesses to take control of their data and quickly turn it into actionable information. A mission-critical technology in the financial services marketplace for many years, Deltek has harnessed the power of visualization for the project-focused organization with the release of Deltek Vision 4, enabling engineering and architecture firms, IT services companies, and management consulting firms to instantly discover trends and opportunities across their entire project portfolio. Visualization provides a simple display that depicts mission-critical information about a firm's entire business—including project performance, status, trends, and risks—using color and shapes to alert viewers of any performance issues at a glance, and allowing them to focus on the most critical issues.

Deltek Vision 4 also introduces a new Mobile Applications Suite, significantly enhancing capabilities that allow field workers to collect and provide their project data more simply than ever before. For the first time, project managers and consultants can work offline or from their wireless personal digital assistants (PDAs) and smart phones, contributing to project reports and entering critical information (including time and expense data) when they are not connected to the network. Businesses can now streamline field reporting without requiring large hardware investments.

Deltek Costpoint (Deltek Enterprise)

The Deltek market which comes second in terms of strength consists of complex project-focused businesses and large federal contractors in A&D; nonprofit organizations; IT services; *systems integration* (SI); and management consulting industries, both domestically and internationally. For this market (Deltek's "sweet spot"), the vendor offers **Deltek Costpoint**, an integrated back-office or ERP solution. In late 2005, Deltek announced the release of **Deltek Costpoint Smart Business Applications** (also known as **Costpoint web**), a Web-based interface for Costpoint, which aims at increasing collaboration and productivity while providing the built-in project accounting functionality that currently nearly 1,000 Deltek Costpoint clients (mostly organizations having annual revenues in excess of \$50 million [USD]) rely on. Other significant product features include enhanced reporting functions, a user-friendly "zero-client" interface, and improved navigation tools that increase ease of use.

Deltek began development of Deltek Costpoint in 1992, and commercially released the product in June 1995. While the **Deltek Costpoint 4** and **Deltek Costpoint 5** releases have traditional client/server architecture (meaning that there is no application server in the architecture, and that reporting is embedded in the client/server runtime), the upcoming **Deltek Costpoint 6** release (expected sometime in 2007) is to be almost completely developed with Java architecture to feature native Web functionality, using Deltek Costpoint 5 as the basis for functionality. The vendor is using the *Enterprise JavaBeans* (EJB) application programming interface for Costpoint web, in conjunction with the **WebLogic Application Server** technology developed by **BEA Systems, Inc.** Deltek selected the BEA WebLogic Application Server technology because it supports the wide variety of server and database platforms used by Deltek clients, as well as UNIX, Microsoft Windows NT, and Linux. WebLogic also provides automatic load balance and automatic failover capabilities to minimize interruptions and server downtime.

Deltek Costpoint web is an elegant intermediate solution (between Costpoint 5 and 6), and is a result of Deltek's initial "staggered release" approach, in which selected Web-based applications would be delivered in segments. The release of the initial set of Web-based applications, which includes a number of input screens relating to key business practices such as project and employee setup, and vendor and payables processing, should enable users to configure the application and Web servers: once the initial setup is complete, users can update the application server at any time with the latest software enhancements or program corrections. However, the Deltek approach has since changed, and the vendor is now in the midst of holistically developing the Web-based version of Deltek Costpoint through a technology partner. During development, it became apparent that a better alternative to fully Web-enabling Deltek Costpoint was to Web-develop the entire software in one instance, using **Mphasis** as the on-site and offshore development partner. Deltek Costpoint 6 will be a scaleable *Java 2 Enterprise Edition* (J2EE)-based platform of "industrial strength," capable of supporting even organizations with over a billion dollars in revenues. The product is already standardized for integration with other technologies, and has the flexibility

to support multiple OS platforms, with support for Web-native HTML, DHTML, Java Script, or rich client on the UI tier; Microsoft SQL Server or **Oracle** as databases; and the Actuate reporting server.

Deltek GCS Premier

The last of the three major product lines, **Deltek GCS Premier**, is targeted to small and medium project-focused businesses and contractors in the government services industry, and since its initial release in 2000 has reportedly contracted more than 1,200 clients, making it the leading government-compliant cost accounting and project and financial management solution designed specifically for *small and medium businesses* (SMBs). The product is optimized for compliance with US Defense Contract Audit Agency (DCAA) requirements, and is much easier to deploy than its two bigger siblings (Costpoint and Vision); not only is it built specifically for government contractors, but it is also a fully integrated system with a single-data source. GCS Premier's UI tightly integrates with its process-oriented design, while its pull-down menus are workflow-like in their functionality, and provide an intuitive capability that makes it easy for users to learn the application by navigating from process to process. However, the product's Microsoft Windows-based architecture is not the most modern or open, since it only uses a rich/fat client on the UI tier, a non-relational database, and a purpose-built reporting layer. Otherwise, Deltek GCS Premier, in addition to its Windows-based interface, features flexible, component-based software construction, achieved with Microsoft Visual Basic 6.0 and ActiveX controls. The solution was designed specifically to ensure that Deltek's System1 legacy customers could easily migrate to GCS without the necessity of data conversion, while preserving System1's critical processing programs, complex reports, and other time-tested legacy programs.

To put things in another perspective: of the three major products, Deltek Costpoint is the broadest, currently covering the realms of financials and accounting, *human resources* (HR) and payroll, material management, CRM, T&E, resource planning, and *business performance management* (BPM). In addition to its proprietary architecture and domestic (US-only) focus, Deltek GCS Premier eschews resource planning and material management capabilities, and has no need for *project portfolio management* (PPM) functionality down the track. On the other hand, Deltek Vision logically has no need for featuring material management capabilities, given its services industries target.

The two flagship products, Deltek Vision and Deltek Costpoint are the main offering for new customers in the respective professional services and project-based sectors, and possibly the migration path for most existing customers on legacy products—of course at the customers' own pace. For these products, Deltek has outlined the architectural foundations, which are based on the two primary standards-based (and partly platform-neutral) technologies: Microsoft .NET, and J2EE (for more information, see *Understand J2EE and .NET Environments Before You Choose*).

Despite some inevitable differences, both platforms embrace the service-oriented architecture (SOA) design philosophy that promotes internal benefits of code reuse, interoperability, and data integration (see *Understanding SOA, Web Services, BPM, and BPEL*). To that end, the vendor has adopted pervasive XML use, and created a prototype to describe licensing requirements for open source modules based on the semantic standards of *Web Ontology Language* (OWL) and the *Resource Description Framework* (RDF). SOA is also promoting the external (client tier) benefits of extensibility as standards are increasingly adopted, since XML-defined UIs allow for portlet use of pieces in a service model framework. Also, use of XML is pervasive in describing public schemas for key data. The ultimate benefits for business should include loosely coupled development schemas (which can be converted to multiple UIs), a foundation for active workflow engines, and open integration and extension of applications around business processes.

Some Standalone Notables

Other standalone products worth mentioning here stem from a key growth strategy for Deltek, post-2000, which is to provide additional front-office software applications to its vast back-office install base. Initially, the centerpiece of its front office strategy was the **Deltek CRM & Proposals** product, which is available as a standalone product, or via integration with Deltek Vision. Introduced in late 2000 (and currently at the 1,500 customer mark), this product provides the sales, marketing, and business development tools needed by professional services firms

to produce rewarding proposals; win more business; and increase client satisfaction and retention (by tracking opportunities, historical data, and contact, employee, and project information).

Within its marketing and proposal automation product, Deltek supports an emerging CRM derivative known as client relationship management, which should help firms (such as accounting practices, law offices, and other professional service companies, as well as technical services and project-based organizations) track client relationships in a more sophisticated manner than (for example) referral or word-of-mouth, which were appropriate during the start-up phase. In other words, professional services organizations trade exclusively in intellectual capital, since rather than focusing on the manufacture, sale, and distribution of physical products, they sell their knowledge and domain expertise. Thus, they require different tools to manage the business development process and to differentiate themselves from their competition (see *Professional Services Are Catching Up with CRM*). In a project-based business, there are no dedicated remote sales teams chasing and securing new business, since most senior partners and project managers bring in their own business and look after their own client portfolio.

As the consumer Internet storefront ordering approach or traditional sales calls are quite inappropriate in this context, the critical element of the client relationship process is the development of proposals for securing new business. Trying to recall the details of relevant past jobs and who worked on them can be a nightmare (as is trying to gather documents that are stored in different places by different people). To that end, Deltek's proposal management system allows a contractor to organize projects by various categories (such as people, projects, designs, and expertise), so that the appropriate information (for example, resumes and document boilerplates) is easily retrieved when new proposals are prepared. Users can then track the progress of a proposal, share the information with other team members, review similar proposals, and analyze awarded jobs. The product offers both government and customized commercial proposal generators.

Leveraging the blueprint of Deltek CRM & Proposals, **Deltek GovWin** is a fairly new product (with about fifty customers since its release in 2004), which addresses the business development requirements of federal contractors. Featuring a Web-based UI, it aims at better management of the opportunity pipeline by generating performance metrics and enabling the "capture" process. It also aims at creating structure to formalize business development lifecycle, and at improving the ability for coordination between multiple business units, to eliminate redundancies.

Deltek GovWin includes a preconfigured database (a Web-based central repository where companies can enter, store, and access detailed client- and contract-related data) and tools that are tailored to government contractors so that no additional customization is required. Among the preconfigured data that it can track are competitive assessments, post-award debriefings, and team reviews. The system also handles contract specifications, such as contract values, modifications, performance information, and locations, as well as employee information, including affiliations, memberships, and clearances. GovWin can also act as a knowledge base for future opportunities, by tracking firm qualifications and personnel experience, approved text for consistent messaging, win-loss ratios, and updates on past and ongoing contract activities. Prospective users in many sectors increasingly demand embedded domain expertise in their applications, and federal contractor applications would be a case in point, since a significant portion of the bid evaluation process in this sector is focused on relevant past performance.

The above section could accurately contrast against the five major product areas Deltek specializes in (ERP, CRM, *human capital management* [HCM], BPM, and PPM), and Deltek's entire product portfolio can be viewed entirely through this lens. There have been numerous examples of companies that turn to stand-alone solutions to fix their broken processes.

Challenges and Opportunities

Thanks to its internal developments and acquisitions, Deltek currently boasts more than 11,000 customers worldwide, and 1,000 employees in 14 locations in the US, Canada, and the UK. The vendor has long since established its strategy with respect to its large installed customer base:

- to maintain and strengthen relationships with the existing customers by providing ongoing support services;

- to derive additional revenues by migrating clients to more advanced products within its product line, licensing add-on application software products, and offering its customers additional consulting and training services; and
- to target existing customers for front-office add-on solutions such as **Deltek CRM & Proposals, Deltek Time Collection, Deltek Employee Expense, Deltek GovWin, Deltek BPM, and Deltek Employee Self-Service.**

However, based on strong recent execution, tried-and-true alliances, and its “trusted specialist” and niche leadership auras in targeted project-oriented vertical markets, as well as its new management and infusion of capital, Deltek has recently been working to harness its indisputable differentiators, in order to move into new markets and position itself for continued growth. Since its inception, the company’s product line has expanded from applications for managing core back-office processes, to front-office and e-business processes for professional services and other project-based companies, many of which provide products and services beyond the realm of federal government contracts. However, room for expansion remains, in certain areas. But these opportunities (although some of them may be low-hanging-apple easy pickings), will also present the upbeat vendor with challenges, if only because of the difficulties involved in sailing uncharted territories.

Geographic expansion into Canada, the UK, and Australia seems the most feasible option in the short term, given that they are English-speaking regions, and also given Deltek’s ongoing effort to incrementally internationalize its product portfolio beyond the **Costpoint, Vision, and T&E** products. One should keep in mind, however, that in many Deltek markets, particularly in the federal government sector, its customers are inherently focused on the US, and will likely remain so. Therefore, multicompany and multilanguage features have only recently been introduced within the **Costpoint 5** release (and **Vision 3** release), which has likely meant many missed opportunities in the past—and possibly in the future while these immature features gain some traction. Despite some international clients (including pharmaceutical company **Kendle International** [Germany] and General Dynamics [Saudi Arabia]), Deltek has thus far achieved an only limited presence in international markets, which is a weakness compared to the global capabilities of competitors such as **Oracle, SAP, Microsoft, Epicor Software, and Exact Software** (see *Global Software Aspirations*).

Deltek’s international business strategy is being energetically refocused, from opportunistically targeting potential user organizations, to marketing and selling its solutions through value-added reseller (VAR) channels. For one thing, it always helps to have an expert third party certify the best practices and value proposition of the enterprise solution, especially for those that require, even for occasional users, a thorough education with respect to concepts and lingo (as is the case with regulatory and reporting compliance in many project-based businesses). For another thing, VARs might be more savvy about meeting the integration or customization requirements of certain customers; as a rule, in certain industries and regions (such as the Asia Pacific), software vendors have to side with local resellers and integrators, or else face an insurmountable cultural and financial barrier to market entry. Furthermore, although Deltek’s reputation for high quality service and support, and its ability to work directly with customers, along with its ability to provide reasonably rapid implementations, have all constituted competitive advantages to date, its primarily direct sales approach might not be the most appropriate for the lower end of the mid-market. VARs understand professional services prospective customers, simply because they are in the same type of business as their prospects, and in this context, the likes of Microsoft, Epicor, Exact, and **Sage Software** have an undeniable advantage. For more information, see *The Cha(lle)nging World of Value-Added Resellers*.

Despite having 600 international customers in 25 countries, Deltek has yet to show that its strategy and technology can consistently “travel abroad,” especially to Europe, where it has to sow many more seeds than it has, if it is to fulfill its global ambitions. There is certainly no debate about the company’s current lack of significant international presence, since a significantly smaller portion of its total revenues comes from sales outside North America. This is despite the fact that the company launched its international push nearly a decade ago, with the establishment of a direct UK presence; but there, it has had limited success. This kind of profile flies in the face of the accepted economics of the packaged software market, whereby a vendor of Deltek’s size should have at least a third of revenues flowing from outside its domestic market. The vendor admits to not having put previous focus in international expansion, as instead its focus was on the US. Now, it believes itself ready to expand strategically, and for 2006 and beyond this expansion has become a key priority for Deltek and the executive team. The vendor now has leadership and executives with the proven international experience to map a much stronger international strategy. Also, Welcom’s portfolio adds complex international capabilities to its *earned value management* (EVM) and *project portfolio management* (PPM) suites. Government mandates for

EVM (that is, mandates for the *Department of Defense* [DoD], the *Department of Energy* [DoE], and *National Aeronautics and Space Administration* (NASA) in the US, and similar mandates for the UK's Ministry of Defense [MoD]) make this additional functionality a critical addition to Deltek's portfolio, given its client base as well as its goal of international expansion.

The company will also have to support and nurture its relationship with existing overseas clients in markets such as Europe, the Middle East, India, Australia and New Zealand, the Philippines, and South Africa, where it needs a local partner that can offer responsive customer support and knowledge about relevant laws and tax regulations. But the challenges of international expansion go far beyond product localization, which alone is an overwhelming challenge. Deltek will also have to invest sizeable financial, time, and human resources in order to prospect and identify an optimal internationalization roadmap, and then find, ally with, and manage appropriate channel partners (including during the typical fits and starts of the ramp-up phase). Additionally, the vendor will have to finance the necessary marketing and product and *independent software vendor* (ISV) technology alliance campaigns, which need to be well-attuned to the regions it decides to target, while ensuring that its own presence expands where applicable and without conflicts.

Bundled with the international channel push is the need to significantly expand its previously skimpy marketing budget (and mindset), which is of a strategic nature. This concept is opposed to Deltek's previous industry-specific targeted marketing (and word-of-mouth tactics within the Washington, DC [US] "beltway"). This is all necessary if the vendor is going to enhance its brand name and value proposition (the concept of selected project-based industries and their exacting needs) towards a greater, more global scale of presence and recognition. In addition to more purposeful and encompassing multichannel lead generation activities (see *The Web-enabled Sales Process*), alignment of the vendor message with alliances and a channel will require a sizable budget for more comprehensive marketing activities. Steps in the right direction include a whopping increase in the 2006 marketing budget over 2005 (so as to accommodate some 2006 events, including strategic hires in the marketing department, the re-branding effort, record user conference attendance, and so forth), and increased and planned growth in the direct sales force. However, the associated costs of hiring the right personnel, as well as a related increase in the marketing budget, will have to be handled carefully in order not to displease New Mountain, which might see its payback from Deltek coming at a slower pace than initially envisioned. This is certainly not the case now, since the company's business plan remains and has remained consistent and on track, and the progress has thus far been "above plan."

Tackling Earned Value Management and Project Portfolio Management

With new finances, Deltek certainly plans to continue its quest to build complete project solutions, from award to audit, via both internal development and acquisitions. As for future developments of **Deltek Enterprise** (Deltek Costpoint), in addition to ongoing Web enablement of key business processes, and delivery of control and reporting documentation related to the US Sarbanes-Oxley Act (SOX), major new "order winning" capabilities will include EVM and PPM. For more on achieving SOX compliance, see *Using Business Intelligence Infrastructure to Ensure Compliancy with the Sarbanes-Oxley Act* and *Joining the Sarbanes-Oxley Bandwagon*; Meeting the Needs of Small and Medium Businesses. While EVM is meant to be added to both Deltek Costpoint and GCS Premier (but not to Deltek Vision, which already has the capability), PPM modules such as portfolio management, risk management, project scheduling, project analytics, and so on, are currently planned for Costpoint, although the intent, strategy, and actual product set allows for integration to any back-office solution.

More Opportunities and Challenges While the Deltek strategy to shore up its current install base and to target new related markets has been sound to date, one should never discount fierce competition as a factor, given that the market for enterprise application software has become highly competitive and dynamic. Deltek products are targeted toward a wide range of project-oriented organizations, and the competition varies depending on customer size, industry, and specific system requirements.

For larger implementations of enterprise-wide products, the principal competitors include Oracle (including former **PeopleSoft** and **JD Edwards**), **Lawson Software**, **CODA**, **Unit 4 Agresso**, and, inevitably, SAP. For smaller implementations of enterprise-wide products, competitors include **Microsoft Business Solutions** (especially when augmented by partner solutions for Microsoft Dynamics SL and **Microsoft Dynamics GP** [formerly **Microsoft Great Plains**]), **Intuit**, **MYOB**, Exact, Epicor, and Sage. Although many of the above vendors have

not really competed regularly with Deltek so far, this will not necessarily be the case in the future, given Deltek's expansion aspirations.

There are also many other players which offer industry-specific products, such as (in the *architectural, engineering, and construction* [A/E/C] sector) **Constructware**, **BST Consultants**, and **Axiom**, with some nifty features such as an electronic stopwatch for time collection, spread among several projects; and built-in warning systems when project is over budget (although Deltek Vision has this functionality, which will be released in version 4.1) or when the firm is going to overpay a subcontractor. Furthermore, Deltek Time Collection competes with electronic timekeeping systems offered by vendors such as **Kronos**, **ADP**, **Ceridian**, and **Kaba Benzing**. Its newly acquired Welcom applications face competition from such well-known companies as Microsoft Project, Primavera, **Business Engines**, **Dekker**, **C/S Solutions**, **Artemis**, **Mantix**, **Integrated Management Concepts (IMC)**, and so on.

As the nonprofit sector requires automated allocation to support multiple funding sources under one project for billing and revenue recognition (which is traditionally done via manual calculations or custom programming within generic accounting solutions), Deltek has long supported multiple-source funding capabilities. The vendor has a nonprofit accounting product coming out later in 2006, which will target grant-based, or (as designated in the US) "A-133" nonprofit organizations. This product will be an affordable grant-based financial management system for small to medium nonprofit firms, which is a fairly sizable market in the US, contested by leaders like **Blackbaud**, Sage, **Serenic Corporation**, Intuit, Microsoft, **Kintera**, **ASP eTapestry**, and so on (see *Nonprofits and Public Sector: The Latest Hot Market*). While these leaders dominate the nonprofit market in a broader context—and no one is going after A-133s in any significant way at this time—this might change down the track. Point solutions like **Deltek GovWin** and **CRM & Proposals** might find their match in comparable solutions from providers like **Adonix Inc.**, **Map ROI Systems Inc.**, **Input Inc.**, and others. Numerous project organizations have gotten used to manual "workarounds," and might still prefer the best-of-breed solutions they have in place—which might just be enough to represent a barrier for Deltek's all-encompassing offering.

Some of these competitors still have significantly greater financial, technical, marketing, and other resources than Deltek, not to mention a higher profile and recognition on a worldwide basis. Since they have begun to experience a deceleration in their core upper-market business, and have thus refocused their marketing and sales efforts towards the upper-middle market where Deltek actively markets its products, one should expect them to implement increasingly aggressive pricing programs. Furthermore, certain competitors, particularly Microsoft, SAP, Oracle, and Lawson, have well-established relationships with many Deltek customers (both current and prospective), and with major accounting and consulting firms which might have an incentive to recommend such competitors over Deltek. All these vendors, while possibly inferior regarding project-oriented, government-compliant, or service industries focus, will influence some purchase decisions by offering more comprehensive horizontal product portfolios and by touting a superior global presence and greater multinational product capabilities, which are still hurdles for Deltek. Still, comparisons to competitors need to be weighed with the understanding that no matter how large these competitors are, that they do not have the specific industry focus and staff experience that Deltek does. Despite industry consolidation, Deltek remains a vendor that provides total solutions for project-oriented companies. There are really no competitors in the same space; either they are point solutions that compete in certain areas, or larger, non-project oriented vendors trying to tunnel down into this space.

But also, while Costpoint has long been very competitive with other major enterprise resource planning (ERP) systems with respect to features and capabilities for project-oriented businesses, the market has lately become more focused not only on the need for Web-based applications, but also on the need for intuitive role- and process-based user experiences (see *Easy ERP: A Challenge to Conventional Thinking and Portals: Necessary But Not Self-sufficient*). The lack of a fully Web-enabled system might for some time have hindered Deltek's potential growth objectives, and so the vendor has lately increased activity with respect to the Web-based development of Deltek Costpoint. Deltek believes that the realities of the market do not support the approach that the "best" solution is the one that is fully Web-based, based on the vast feedback from its customers. Deltek has chosen instead to build to the realities of the market and its customers, and the recent product developments reflect that pragmatic approach.

While the Web-enabled version is a great boost, the vendor needs to catch up with regard to developing portal-based solutions and user empowerment, especially in light of SAP's **Mendocino** and Microsoft's **People-Ready** recent initiatives (see *Major Vendors Adapting to User Requirements*). Each role in a service organization has a unique e-project perspective. For instance, while project managers often need full control (including the ability to

change project projections), rank-and-file staff typically only need to be able to record billable project hours, and accounting needs only enough access to build the company cash flows from aggregate project data. However, all these constituencies increasingly want to accomplish these tasks from their familiar **Microsoft Excel** and **Outlook** workspaces, without the need to switch between office productivity solutions and the underlying enterprise applications. Deltek is developing a portal-based strategy, which was one of the reasons for the Welcom acquisition. Furthermore, Deltek Vision supports this type of Outlook integration, and the vendor will be releasing Excel-based interactive billing in the 5.0 product release.

Also, some prospects, especially from the commercial sector, may find Deltek's products too rigid and training-intensive, given that these products have had to abide by rigid regulatory requirements, and thus embed many features not required by commercial sector prospects. For example, while projects must be tracked and billed separately, and while services companies often need to run forecasts and what-if project scenarios (and to modify renegotiated total costs as a project evolves), they do not necessarily want to be encumbered with an additional set of stringent audit requirements for government contractors, which is Deltek's area of expertise. Some existing customers, especially of older Deltek products, might say that the system requires several rigid steps to create a purchase order, for example, or that it has only limited workflow and e-mail notification, meaning that it is still not possible to attach important documents in the database for other users to see and analyze via drill-downs. A notable exception would be Vision, which has extensive workflow capabilities and does not feature rigid regulatory requirements.

There might also be opportunity and need for Deltek to explore *software as a service* (SaaS) deployment opportunities for some applications. Pioneers in this regard are **eProject** and **OpenAir** in the project management arena, and a slew of competitors in the *time and expense* (T&E) sector. The ability to offer both on-demand and on-premise software in a near real-time synchronization mode is possibly the best overall solution to optimizing user access to applications. Deltek's readiness for this undertaking, however, remains to be seen. For more information on SaaS, see *Software as a Service Is Gaining Ground*.

Thus, Deltek faces the challenge of continued investment in redeveloping legacy systems or acquiring new vertically-astute technologies, while holding back on operating costs. This brings us to the burden of still outstanding *research and development* (R&D) work, which may prompt some observers to categorize Deltek's touted generous investment in R&D as making a virtue out of necessity. However, Deltek strongly believes that its specialization and focus equal "a price to be paid" in R&D, and that its R&D expenditure is not out of line with other top software vendors in the industry. This might even be considered impressive against a backdrop of supporting many products for up to twenty years and more since commercial release. It does not cost a lot of money to run these legacy systems and keep customers on them. That being the case, the vendor does not see the compelling need to move these customers off legacy solutions .

The picture becomes still more complex due to the fact that Deltek incorporates certain application software licensed from third parties into its software products (although most vendors, if not all, incorporate third party tools). In addition to attempting more market visibility and noise in its new target segments (as opposed to a largely word-of-mouth principle in the past), Deltek will have to further clarify its remaining hodgepodge of disparate technologies and solutions. Although it has grouped its offering within the three major branded groups of products, Deltek's offering still resembles an exotic and troublesome restaurant menu, where one has trouble guessing what goes well with what, and so on. Room for synergistic integration of staff members remains too, since some product specialists, while indisputably knowledgeable about their realm (timekeeping, say), do not necessarily have "big picture" knowledge of the entire Deltek portfolio. A mitigating fact is that certain products, such as FMS, Advantage, and Sema4 are no longer sold. Also, while one could argue that it would be "easier" for Deltek to have fewer offerings, after carefully reviewing and understanding the needs of the market, Deltek believes that its three flagship platforms offer the right mix.

For some prospective customers in the A&D sector, and similar complex *engineer-to-order* (ETO) manufacturing and field service industries, Deltek lacks integrated *product data management* (PDM) and field service or *maintenance, repair, and overhaul* (MRO) capabilities, making it an incomplete solution (although the vendor claims it is a strategic decision not to tackle some capabilities internally), at a disadvantage with respect to several ETO-oriented ERP systems such as SAP, Oracle, **IFS**, **Cincom Systems**, **Relevant Business Systems** (now part of **Intuitive Manufacturing Systems**), **Encompix** (now part of **Made2Manage Systems**), **Infor Visual**, **ESS Finesse**, and so on. All this is despite strong project management and accounting functionality, and partnership with **RSS Solutions** for *advanced planning and scheduling* (APS) capabilities. Only time will tell how

well Deltek will partner with appropriate ISVs, or how well it will acquire solutions, in order to fill its ETO gaps (see *ERP Systems and the ETO Manufacturing Market and MRO and Spare Parts Management Considerations*).

As for the A/E/C segment, in many situations Deltek needs to integrate its products with existing *computer-aided design* (CAD) products, and to bridge the information divide between business systems, production systems, and support systems such as plotters, printers, scanners. The aforementioned **VisionXtend** platform is certainly impressive: it includes a *Web Services application programming interface* (API) and workflow engine, which allows firms to extend the application beyond its original boundaries to interface with other applications within their firewall as well as with information sources outside the firm (thus creating a virtual ecosystem of information). But in order to become a prominent service-oriented architecture (SOA) and composite applications player in the long term, Deltek will have to take best advantage of a number of longstanding and high-profile alliances on the infrastructure side. Such strategic ISV partnerships will require relationship management, mutual commitment, and technical resources, which Deltek previously invested on a limited and opportunistic basis. To be fair, the vendor already has strategic alliances with vendors such as **Sepialine** and **Newforma**, which integrate CAD, project collaboration, and cost control systems with Deltek Vision.

Ultimately, while no one will dispute the benefit of having a \$1.5 billion (USD) backing rather than a shoestring budget, Deltek will have to expand judiciously, to avoid losing its roots and ties with the market and customers that have helped it thrive over two decades. The vendor will have to balance its “trusted advisor” image with increased activity on several fronts (product expansion, distribution and technology alliances, and so on), so that it does not become perceived as yet another mighty vendor in pursuit of building an empire at the expense of its relationship with its install base. Deltek will be expending the marketing effort required to ensure that all its customers, prospects, and partners fully understand the value proposition of its evolving products. It will also continue to invest further in technology to ensure that integration, migration paths, and Web-enablement are available across all product lines.

User Recommendations

Indisputably, Deltek remains an enterprise applications vendor of choice for project-based businesses, and with its recent capital infusion and product deliveries, it has taken critical steps towards creating even more value for its customers. Existing Deltek customers should evaluate the latest EVM and PPM product additions and modernizations as valuable potential additions to their existing back-office applications, of course bearing in mind the resulting integration effort. Some project-based professional service companies that need tools for business development, for tracking billable hours, or for producing project what-if projections, might find this portfolio valuable in terms of both cost savings and increased efficiency. Also, certain Deltek products like Deltek CRM & Proposals, Deltek Employee Expense, or Deltek Time Collection, may be attractive standalone solutions with best-of-breed features.

Prospective customers of basically any size should look at Deltek if they are within the following project- and service-based industries: government contractors, A/E/C, management consulting, IT services and system integrators, *aerospace and defense* (A&D), and grant-based R&D; or nonprofit, project manufacturing, and accounting organizations considering business applications (both Web-based and client/server network dependent). Given that Deltek offers “different strokes” for different folks, many factors will determine the suitability of certain Deltek products.

However, these companies should bear in mind the Deltek product roadmap, and might benefit from considering competitive offerings. This is especially true for companies looking for holistic and broader extended ERP functionality. Those requiring a particular industry focus (outside Deltek’s proven “sweet spot” of project-driven, professional and technical services, and construction markets) may benefit from evaluating other products at this stage. Large companies with complex physical supply chains and business process requirements such as complex *product lifecycle management* (PLM), strategic sourcing, plant maintenance, and call center or field service, should consider enterprise applications vendors with products and channels better suited to those needs. It should be noted, though, that Deltek has many satisfied clients outside their sweet spot, albeit with products that coexist with other applications.

As seen earlier, Deltek products are built on proprietary elements, as well as industry-standard components. As industry standards have evolved, the vendor has begun to redesign products to incorporate new industry

standards. Thus, users of its older product versions should approach Deltek and inquire about the required effort to upgrade to a product that is browser-based, that provides connectivity to wireless devices, that is fully *Java 2 Enterprise Edition (J2EE)*-based or .NET based, and that uses *extensible markup language (XML)*-enabled interfaces (only some of the major enhancements). Despite a plausible product roadmap and the company's bolstered viability, any organization evaluating a Deltek product should keep itself informed, and consider existing functionality only, while making sure that what they buy today will keep abreast of technological developments tomorrow.