

Serena Taps Cognizant to Speed Enterprise Software Re-implementation

Business Situation

In March 2004, Serena Software, Inc. was at a crossroads. The good news was that the purveyor of application lifecycle management software had recently acquired a UK-based competitor in the application management space to turbocharge global growth. The move would enable Serena to diversify its revenue stream with mid-tier and entry-level customers, which complemented its focus on the high-end of the market. The not-so-good-news was that the company it inherited ran on a decade-old version of SAP's R/3 enterprise resource planning (ERP) software that was no longer supported and hence

Serena estimates that the project will save the company approximately \$700,000 in license and maintenance costs over five years.

costly to maintain, difficult to use and liable to generate unreliable reports. Serena, meanwhile, had its own enterprise software issues. The 27-year-old software vendor managed its business using a well-known business software suite developed for smaller enterprises. This software had served the vendor's needs well early on but lacked the functional depth and breadth needed to manage the much larger and increasingly global enterprise that Serena had become following the acquisition. Moving the combined companies backbone was appealing but fraught with

challenges. For instance, the acquired company was in the process of replacing R/3 with software from a competing ERP software vendor. But its R/3 instance suffered from benign neglect as management opted to take a "run and maintain" approach with the software while moving forward with its migration plan.

Moreover, R/3 Version 4.5 lacked modern functionality, which meant it required continuous customization to keep pace with business needs. A lack of precise documentation made the software expensive to maintain. Also, the software needed to be right-sized, as the instance was deployed to accommodate a \$1 billion company with 5,000 employees and 60 developers. Even with the acquisition, the combined entity's revenues were approximately \$300 million. This made the software expensive to license and added unnecessarily to the maintenance burden.

After more than a year's worth of internal debate and discussions with trusted third parties, Serena's management decided to move forward with plans to run the combined company on SAP R/3 environment. The main reasons were that Serena's incumbent enterprise software vendor couldn't offer the functional capabilities to accommodate its expanded post-acquisition business needs, and Serena's management was uncomfortable changing enterprise software vendors along the lines that the



acquired company had initiated. “There were few options,” recalls Carina Ferrel, Serena’s vice president of IT. “We knew we had a beast, but at the same time, we thought we had more leverage with SAP, and SAP was motivated to move us to the new SAP technology stack.”

The challenge was getting there!

The Challenge


To run SAP’s up-to-date version of R/3, Release 5.0, Serena had to first upgrade from release 4.5B to 4.7 -- at least that’s what its existing third-party IT services partner said when the project was first discussed in late 2005. The expense of doing two upgrades was “mind-boggling,” Ferrel notes, pointing to the high cost of SAP software licensing fees and third-party implementation charges. Moreover, the external vendor couldn’t explain to Ferrel’s satisfaction why the dual upgrade was both technically and functionally necessary.

Luckily for Ferrel, another third-party IT services vendor was already doing business with Serena, but on a much smaller scale. Cognizant, a global IT services provider based in Teaneck, N.J., was working with Serena’s R&D organization on a number of projects. Cognizant was looking to expand its partnership with Serena and became aware of the SAP modernization project. The Cognizant team connected Ferrel with experts from its SAP practice who were working on a similar project with another software vendor, Autodesk, Inc., the desktop design

software leader in San Rafael, CA. After an initial chat, Ferrel realized that Cognizant had a better feel for the technical challenges of an ERP upgrade project of this scope -- more so than Serena’s incumbent vendor, which would be getting on-the-job training with this engagement. But first Ferrel wanted to make sure her instincts were right. Cognizant offered to do an SAP application portfolio assessment, the cost of which would be included in the price of the project if Serena selected Cognizant over the incumbent vendor and others bidding for the work. “I thought, ‘That’s cool -- a fair deal,’” Ferrel recalls. She took up Cognizant on its offer.

Ferrel then gave Cognizant full access to Serena’s ERP instance. The Cognizant team first spent two weeks talking to Serena’s IT organization and line-of-business leaders to understand the environment. From there, Cognizant ran a number of reports to fully capture the strengths and weakness of Serena’s ERP application portfolio. During the fourth week, the Cognizant team delivered its assessment. The presentation, Ferrel recalls, was just five or six slides long, but the findings “were jaw dropping,” she says.

Serena learned that from a technical standpoint, it could move to 5.0 from 4.5B without a hardware upgrade (although additional hardware was installed later to improve performance). The software vendor also learned that all of the ABAB objects in the environment that had been modified were properly deployed. The assessment also reaffirmed what Serena

Project Drilldown: 	
Who	Serena Software, Inc., an 800-person, 27-year-old privately held provider of application lifecycle management software, based in San Mateo, CA.
What	Large-scale consolidation and standardization of its SAP® application portfolio that saved the company a minimum of \$700,000 and was performed in approximately half the amount of time of competing proposals.
Where	Project delivered via Cognizant’s unique on-site/offshore model called Two-in-a-Box.
How	Cognizant’s Transform while Perform™ proprietary framework was used to quickly and cost-effectively help Serena move from SAP R/3 Version 4.5b to 5.0. This framework enabled Serena to adopt a standard ERP platform that was less expensive to operate and maintain, freeing up resources to invest in new applications.
When	April through November 2006
Why	Decade-old, unsupported ERP environment was in need of a functionality and usability overhaul to meet the increasing and more sophisticated demands of a software business that was growing both organically and through acquisition. The old SAP software was not only expensive to run (due to high maintenance and licensing fees), but it also contained dirty master data that generated unreliable reports and reinforced convoluted business processes.

already knew: Its implementation process was not up to snuff, either with industry best practices or SAP's standards. This was preventing the company's IT staff from optimizing R/3 to meet its growing business needs and, perhaps more importantly, was also causing unnecessary maintenance expense.

Cognizant also uncovered an over-abundance of modified objects -- approximately 1,700 in total. The sad part of this was that the company was using less than 200 of them. Moreover, prior to Cognizant's assessment, no one in IT knew how many modified objects there were because Serena's systems documentation was incomplete.

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"We all rolled our eyes when we heard the findings," Ferrel notes with disdain. "Our initial reaction was that our system was so complex, and lacking proper documentation, that we could never fix it."

Cognizant was the only vendor that recommended Serena move directly to 5.0 and skip 4.7. The fact that Cognizant was working on a similar project for Autodesk gave the recommendation additional credibility, Ferrel says. The Cognizant team said an R/3 re-implementation -- although more challenging from a technical and project management perspective -- would enable Serena to more cost-effectively generate faster and more tangible business benefits.

Serena decided that the accelerated upgrade path would be worth the risk. For one, it would enable the company to fix broken business processes that were exacerbated post-acquisition with a more modern and functionally rich ERP backbone. Also, Cognizant's single upgrade would, in one fell-swoop, eliminate the operational challenges of proliferating dirty master data -- for example, 82 different company codes and 300,000 master customer records when only 25,000 were actively used -- that supported convoluted business processes. Cognizant also identified standard features and reports within 5.0 that could be used in the reimplementation, which reduced to 127 the number of objects that had to be brought over from 4.5B. It was insights like these that convinced Serena that Cognizant could help it improve key business processes, such as its error-prone order

entry and pricing applications. The company also thought Cognizant could help bridge the information gap of historical fiscal year differences between the two recently combined entities.

Moreover, Cognizant demonstrated that it truly understood Serena's business-IT challenges. "The meeting with Cognizant lasted 1.5 hours, and it was a no-brainer," Ferrel says. "The CFO and I were impressed with the assessment results presented. I looked at him and said, 'This is amazing; it took someone who doesn't know us that well 3.5 weeks to tell us exactly what we have been asking for the last two years,'" she says. "No one had been able to express this with such clarity to that point."

The decision was soon made to hire Cognizant to re-implement R/3 Version 5.0. The hard work would commence, albeit at an accelerated pace. Because Serena wanted to move as quickly as possible, it requested that Cognizant complete the project in an aggressive timeline -- seven months. The chase was on!

The Solution

The project began in earnest in April 2006. Processes such as data clean-up, Unicode implementation and re-implementation of R/3 5.0 were treated as one project. Using its Transform while Perform™ (TwP) methodology, the Cognizant team took inventory of all the project requirements for the first two weeks by meeting with key Serena stakeholders. TwP's goal: deliver to Serena a modern ERP backbone that meets today's business needs and anticipates tomorrow's, while saving the software vendor significant maintenance costs and freeing resources (people and money) to focus on more innovative extensions of its new R/3 environment.

With IT budgets flat or trending up slightly during the last few years, Cognizant has developed a new framework to help clients get the most from their expenditures

The team then spent nine weeks putting together a project blueprint for moving data and implementing all functional modules within R/3 5.0. Systems design and implementation commenced toward the tail end of the blueprint process and continued for 11 weeks. During that

“This project gave us the opportunity to start with a clean slate and leave chaos behind with a new system,” Mills acknowledges.

time, ERP modules for finance, materials management, sales and distribution, and human resources were deployed simultaneously for Serena’s Americas, EMEA and Asia Pacific (minus Japan) regions. Interfaces were concurrently built for interoperability with Serena’s existing software base, such as Taxware, CBI (a homegrown data mart), UPS and non-UPS shipping software, HR online (another homegrown environment) and the company’s intranet environment. Standard SAP reports were also built into the system to eliminate the ad hoc approach that had in the past delivered unreliable results due to conflicting master data. From there, master data was cleaned and converted to 5.0 formats, and existing transaction data was moved to the new system.

Four weeks were then devoted to final preparation of the data and systems logic. Another four weeks was used for testing and support, as Serena ran its old 4.5B and 5.0 systems concurrently for a short period to make sure the new system performed well, was reliable and delivered the benefits promised. The cutover to the new system came on November 6, 2006.

Cognizant used its Two-in-a-Box methodology to manage the project. Under this approach, Cognizant embedded senior business-IT experts with Serena’s team. A Cognizant client partner worked with Serena’s senior leaders to truly understand the client’s business and IT needs and communicated with developers on-site and off-site to ensure seamless delivery. For this project, seven dedicated Cognizant employees spent time at Serena’s facilities, with several offshore ABAB programmers assisting at varying times, notes Robert Mills, manager of SAP & data integrations. Serena devoted two business analysts to assist with the implementation of each ERP module, plus Mills, who played the role of project manager.

Mills applauds Cognizant’s Two-in-a-Box methodology: “It’s a beautiful thing,” he says, noting that the approach prevents a breakdown in communication that could result from the 12.5-hour time zone difference that separates Serena’s headquarters in San Mateo, CA, from Cognizant’s delivery facility in Bangalore, India, where much of the R/3 data conversion and sys-

tems development work was performed. “One benefit of this was as our on-site personnel moved on, we got new people who took the opportunity to make sure knowledge was being properly transferred, both internally and with the offshore personnel,” Mills observes.

Like any IT project, this one had its challenges. For instance, Serena did not communicate to the Cognizant team that it needed to move old transaction data onto 5.0, since it would be accessed from a legacy system. However, this was quickly resolved. “Cognizant stepped up as a partner where the project came up short and helped us overcome this,” Mills maintains.

While it was necessary to complete the project in seven months given Serena’s business process challenges, such a tight deadline isn’t highly recommended, Mills says. To meet the compressed timeframe, both Serena’s internal team and Cognizant staffers rolled up their sleeves and worked beyond their usual 40-hour-plus work weeks. “We made it to the end and not only survived, but it was successful,” Mills marvels. “We burned candles at both ends -- we’re talking about a heck of a team.”

Cognizant, he says, did a great job presenting the requirements upfront and making sure the “C-suite” knew what Serena was getting into. “This helped us get strong executive buy-in,” Mills notes. The monthly steering committee meetings, which Cognizant recommended as part of the process, “kept the rest of the leadership team -- from the CFO and director of finance, through the VP of IT and me -- on top of change control and other corporate governance issues,” he says.

An R/3 re-implementation enabled Serena to more cost-effectively generate faster and more tangible business benefits.

The Benefits

Clearly, this project was motivated by cost savings realized by moving to a modern and standardized ERP backbone that was more maintainable and easier to use. It was also predicated on the role that clean master data would have in eliminating process inefficiencies, while elevating Serena’s ability to achieve competitive advantage.

Clean master data has removed the clutter that

undermined Serena's operational efficiency.

Here's a before-and-after look at what the data-cleansing exercise yielded (Fig. A):

A Cleansing Experience

Parameters	Before	After
Company Codes (Legal Entities across 17 countries)	82	27
Chart of Accounts	13	1
Currencies	12	12
Functional Areas	8	6
Posting Period Variants	63	4
Document Types	106	48
GL Accounts	8088	< 500
Vendor Account Groups	78	4
Vendor Records	20000	< 5000
Customer Records	300000	25000
Terms of Payment	111	40
Cost Centers	2283	< 300
Profit Centers	2248	< 300

Fig. A

On the cost savings front, Ferrel estimates that the project will save the company approximately \$700,000 in license and maintenance costs over five years. The new system offers deeper functionality, better performance, and improved data accuracy and integrity, which supports more streamlined and effective business processes. "For literally the same cost, the business value of the new system is enormous," Ferrel says, likening the old system to paying rent vs. taking out a mortgage on a house that will pay cost-of-living and quality-of-life dividends. "We now have a platform that will last 10 years -- one that has already helped us reach the low-hanging fruit of much-needed business process improvements."

Key benefits include:

- Migrating from highly customized processes to SAP's Best Practice standards has created a more manageable and higher performing environment. For example, Serena's Asset module, which was 99% customized, is now 99% standardized, making it easier to maintain and extend.
- Standardized Customer Site Identification numbers are now used throughout the

installation, which makes user training faster and much easier. For instance, the new IDs provide linkages downstream to help users, regardless of their location, understand relationships with large, global customers, Ferrel explains.

- The scrubbing of Customer Master Data has improved Serena's ability to analyze its customer base. For example, using D&B data, the company de-duped customer information, which helped it better understand the hierarchy of subsidiary relationships.
- Numerous features were coded into the new system to improve usability and ensure greater data accuracy and report reliability. For instance, logic was built in to validate and control data inquiries and prevent users from getting confused by incorrect calculations and erroneous report results.
- Moreover, the new system automates currency exchange rate loading, which prevents errors. The Order Entry pricing function was also redesigned to accommodate pre-set discounts, which ensure accurate order entry. This, in turn, improves business data for analysis.

"Users now have a deeper understanding and comprehensive sense of the results ... when they run a report, they know what the data is and where it is coming from," Ferrel says. "There's an understanding that what is taking place under the hood -- invoking a screen and doing data entry -- brings expected results. It's not like it was in the past when users would put in anything to see what they would get. Error statements wouldn't tell them what was wrong. We now have a complete and comprehensive data set that returns accurate and predictable results."

As a result, Serena is reaping incredible process improvements. For instance, the clean-up of master data enables Serena to accelerate its revenue recognition process. "After executing the command to run revenue recognition for North America, it used to take 2.5 hours; it now takes 30 minutes," Mills notes.

Proposals from outside vendors, including Serena's incumbent IT service provider, would have taken Serena nearly double the seven months required to migrate to 5.0. The time sav-

ings is helping Serena more quickly demonstrate the business value of its new R/3 system inside and outside the company. Importantly, SAP is now the system of record.

In sum, the new system is giving Serena the visibility into operations it needs to make real business decisions.

Futures

While Cognizant maintains the new system, it is looking for ways to help Serena continuously improve its operational efficiencies, while eyeing more innovative uses of R/3 to extend Serena's stature in the highly competitive applications lifecycle management business. Some of the technologies under consideration include:

- SAP's Web portal (to add employee self-service HR applications, thus eliminating homegrown HR apps).
- XI software for building tighter applications interoperability with non-SAP applications.
- SAP's Business Warehouse, a hardware / software product for building blazingly fast data warehouses.

Meanwhile, Cognizant continues to implement additional R/3 5.0 capabilities for Serena, such as new layout functionality, and is rolling out the software for users in Japan to take full advantage of Unicode. There is also functionality within R/3 5.0 that Serena is not yet taking advantage of (payroll processing, for example) that Ferrel would like to move forward with -- sooner rather than later. "There were so many initia-

tives put on hold because of the acquisition for a good two years," she says. "I wish we had an unlimited amount of money and time, because the idea of standardizing on SAP and fully recognizing the value it brings is very motivating and positive."

Cognizant is the vendor of choice for future SAP application software projects, according to Ferrel and Mills. "There's a level of trust and a support model that is obviously working," Ferrel says.

If hindsight is 20/20 vision, one thing stands out to Ferrel: Usually at a project's end, both the third-party and internal IT staffers want nothing to do with each other. But in this case, she says, team members from Cognizant and Serena created a sound working relationship and are looking forward to continuing to do business together. "Many times, IT people are ticked off and want nothing to do with the IT services company after a project is completed and claim the third party did a lousy job," she points out. "This project was a very different experience from my perspective. There was no finger-pointing or patronizing. I really felt I could trust the Cognizant organization when all was said and done."

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About Cognizant

Cognizant (NASDAQ: CTSI) is a leading provider of global IT and business process outsourcing services. Cognizant's more than 45,000 employees have a single-minded passion to collaborate with clients and leverage information technology to make their businesses stronger. With global delivery centers in Asia, Europe and North America, we combine a proven onsite/offshore delivery model, infused with a distinct culture of customer satisfaction. A member of the NASDAQ-100 Index and the S&P 500 Index, Cognizant is ranked among the top information technology companies in BusinessWeek's Hot Growth Companies.

For more information on how to drive your business results with Cognizant, contact us at inquiry@cognizant.com or visit our website at: www.cognizant.com.



Cognizant
Passion for building stronger businesses

World Headquarters

500 Frank W. Burr Blvd.
Teaneck, NJ 07666 USA
Phone: +1 201 801 0233
Fax: +1 201 801 0243
Toll Free: +1 888 937 3277
Email: inquiry@cognizant.com

European Headquarters

Haymarket House
28-29 Haymarket
London SW1Y 4SP UK
Phone: +44 (0) 20 7321 4888
Fax: +44 (0) 20 7321 4890
Email: infouk@cognizant.com

India Operations Headquarters

#5/535, Old Mahabalipuram Road
Okkiyam Pettai, Thoraipakkam
Chennai, 600 096 India
Phone: +91 (0) 44 4209 6000
Fax: +91 (0) 44 4209 6060
Email: sdcc@chn.cognizant.com