

Web 2.0, On Demand and SOA Reshaping Software Industry

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Software 2006: A Critical Industry Event

Software 2006, hosted by MR Rangaswami with The Sand Hill Group drew over 2000 registrants and has grown in stature to be the largest 'vendor neutral' gathering of software industry executives and customers worldwide while providing solid insights into emerging software industry trends. Keynote presentations included Ray Lane of Kleiner Perkins (former COO of Oracle), Shai Agassi of SAP, Mark Bregman of Symantec, Dave DeWalt of EMC, Prof. C.K. Prahalad of the University of Michigan and Thomas Kurian with Oracle.

Software Opportunities Still Abound

The conference validated our conviction that the software industry continues to present attractive growth opportunities in emerging segments such as On Demand (Salesforce.com) and Open Source (Red Hat) and established segments like Enterprise Applications where incumbents such as SAP, Oracle and Microsoft are investing to bring out next generation web services based platforms that should drive product cycles and serve as broader catalysts for IT spending.

Key themes emerging from the conference:

- 1) Pundits call for software to outpace IT spending between 2006-08.
- 2) Enterprise applications increasingly look like Google and Salesforce.com.
- 3) Service Oriented Architecture, the next big platform shift and catalyst for consolidation playing into SAP, Oracle and Microsoft hands.
- 4) 'On Demand' is very much in demand

"Barbell" Innovation Trends Favor Giants, Startups

Innovation remains a key focus for vendors – there was much focus on how new SOA architectures will allow users to better control IT development, rather than the other way around. Ray Lane sees consumer trends (Web 2.0) driving enterprise development. Mark Bregman highlighted the innovation dilemmas of large companies. CK Prahalad see innovation coming from emerging markets where cost necessities will drive new technologies that will ultimately benefit developed countries as well.

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ML Analysts Kash Rangan and Ed Maguire weigh in with thoughts from the Sand Hill Group's Software 2006 conference.

Key Themes from Software 2006

Software expected to outpace IT spending through 2008

A survey of 100 CIO's conducted by McKinsey and Sand Hill Group and discussed at the conference concluded that software spending is likely to accelerate between 2006 and 2008. Specifically, the percentage of IT budgets going to software on an average is projected to increase from 30% in 2006 to 35% in 2008, which represents meaningful relative acceleration. Admittedly, the Merrill Lynch survey of 100 CIO's in North America conducted in January 2006 portrayed a dose of caution with close to 57% of respondents indicating flat to down software spending in 2006. While the ML survey was more focused on 2006 spending, the survey discussed at the conference is more forward looking into 2006-08 timeframe.

Why the surge in confidence?

Business confidence appears to have shifted more towards positive sentiment lately. Cash flows and cash levels are at record levels for large corporations. Most IT investments from the bubble are close to being depreciated from balance sheets and corporations finally have an incentive to spend instead of letting margins expand following depreciation runoff and then face tough decisions on investments down the line. Another McKinsey CIO survey published in January 2006 survey bolsters this belief. Depreciation and Amortization accounts for 34% of IT budgets in 2006, up from 30% in 2005. Imagine the flexibility opened up even with a few percentage points of depreciation coming off. Our own anecdotal observations thus far in the year point to relatively strong spending for enterprise software. Finally, the major ERP platform upgrades from SAP (BPP), Oracle (Fusion) and Microsoft (Dynamics and Vista) scheduled to hit the market between 2006-08 are perhaps being factored into Enterprise Spending plans.

Enterprise applications increasingly look like Google and Salesforce.com.

Why should enterprise applications look dreary and so back office and not look more interesting like Google and Salesforce.com in that they are more fun to use? The term Web 2.0 refers to the web in its present incarnation which is richer and more interactive than its predecessor of the nineties, thanks to developments such as AJAX, Myspace, blogs, podcasts, Wikis, etc. However, the impact of Web 2.0 technologies has been restricted to the consumer world. Most of corporate IT has been still focused on upgrading ERP systems, strengthening security, adding capacity to serve up databases and applications. In other words, for the most part more of the same from the nineties. Web 2.0 technologies provide the ability to build more interaction, context and customization into current business applications.

An example is the ability to get an alert on an inventory manager's cell phone or Blackberry pager when a particular product goes out of stock and new procurement or production schedules have to be initiated from the same device. Or the ability to do a customized business search within the context of my job that provides more relevant results than generic consumer oriented results. A key premise here is the increasing percentage of 'tacit' knowledge workers (McKinsey and Co.) in advanced countries like US and Europe versus transaction-oriented workers as manufacturing jobs increasingly move overseas. Tacit workers require more collaboration-friendly and content-aware applications that can be accessed through mobile devices and enable quicker and better decisions. The implication

is that large enterprise companies like SAP and Oracle have to make their applications as easy to use as Google and Salesforce.com by large populations of business users that sit on 'on the fringe', have a higher threshold for usability and do not have the bandwidth to be trained like the core group of users of these applications.

Service Oriented Architecture, the next big platform shift a catalyst for consolidation plays into SAP, Oracle and Microsoft's hands.

Service Oriented Architecture (SOA), Enterprise Services Architecture (ESA) and web services have been long espoused by enterprise software companies as catalysts for a makeover of present-day platforms towards a true web based architecture. Infrastructure companies like Microsoft, BEA, Tibco, Webmethods and IBM have emphasized web services for sometime. However, the movement towards web services had gotten more serious as the applications companies such as SAP and Oracle started articulating platform upgrade strategy. Infrastructure companies have a good web services story to tell but the market never came to fruition 100%. Here is why: Enterprises have built custom applications with infrastructure companies' offerings. But, you need packaged applications companies to add credibility and critical mass to web services. Enterprises have committed a lot of critical business logic to ERP/CRM systems and have to get leverage from these concentrated investments. The business logic sitting in these applications is key to unlocking the true value in web services.

The tenet behind the platform upgrade stories is that the current infrastructure that sits beneath SAP, Oracle and Microsoft enterprise applications needs to be upgraded so these applications can be modularized and exposed as 'services' through standard interfaces. In theory, that will enable customers to more easily configure and tailor these applications to the unique needs of business customers using visual 'drag, drop and execute' tools. In the past, this was accomplished by hiring expensive programmers who had to tweak the underlying software code, which took time. The latter consumed inordinate amounts of sparse IT budget dollars and limited the uptake of applications. The added twist to the work that is being done by SAP, Oracle and Microsoft with BPP, Fusion and Dynamics, respectively, is that these companies are remaking their suites into apps and platforms. A customer should be able to use their packaged apps' functionality and/or extend the platform by leveraging business process modeling toolsets and the modularized service registry to create custom functionality on the fly. So, SAP, Oracle and Microsoft (we still have to see what IBM is going to do here) get a larger share of the customer wallet by selling you an integrated but standards-based stack, which is basically our 'Stack Wars' thesis. Pure play infrastructure companies like BEA and Tibco will have to seek market opportunities in verticals where packaged applications and ERP mentality is not prevalent such as Telco, Financials, etc. where custom applications dominate.

Platforms such as SAP BPP, Oracle Fusion and Microsoft Dynamics will likely drive a round of consolidation. This is because smaller independent software vendors (ISV's) will be faced with the decision of whether to build on top of SAP, Oracle and Microsoft or to build their own platforms. Clearly customers don't want too many competing platforms. An analogy is the database market, which had about 10 competitors in the mid-90's, and then consolidated into the current three-horse race between Oracle, IBM and Microsoft. These companies simply out-invested smaller competitors through sheer development scale. By the same token, the applications market could consolidate into fewer players. The top two

companies in the enterprise applications market – SAP and Oracle – currently have a market share of only 30-35%. By comparison, the top two database players – Oracle and IBM – now command a market share of 65-70%. There are some smaller ISV's that we expect to be exceptions to this scale-driven consolidation, mainly those which operate in vertical niches and mid-market ERP, where companies like Infor are seeing continued success.

'On Demand' very much in demand

We were impressed with the size of breakout sessions for On Demand presentations at the conference. Salesforce.com, Rightnow and Netsuite have become poster children for the On Demand segment. While the industry pundits often ponder if the On Demand model will really work in the enterprise or not given the more complex integration and security considerations, we think the real opportunity is in the small and medium business market, where according to IDC estimates we have over 55 million businesses worldwide with less than 100 employees (small) and 1.2 million businesses with less than 1000 employees (medium). Salesforce.com's business model got positive rave reviews by panelists who also pointed out the company's close attention to evolving customer requirements through periodic refinements as opposed to the more typical 'big bang ERP upgrades'.

Ray Lane argued how complex it would be for a traditional software companies like SAP and Oracle to really change their business models to be akin to Salesforce.com. What can we say? It's hard to argue with someone who was #2 executive at a \$10 billion revenue company. However, we do differ with a view held by constituents on Wall Street that traditional software companies like SAP, Oracle and Microsoft will be forced to change their business models to 'On Demand' subscription models. We don't find merit to that argument. Why? Large enterprises are not capital and cash constrained such that they are requiring a pay as you go model. Most savvy CIO's and CFO's perform financial calculations to figure out savings and return on investment (ROI). As long as a software project yields acceptable ROI, it should not matter how it is being financed (upfront or term), all else being equal. Projects that are truly done over multiple phases and years probably fit the subscription model better.

Symantec Addresses the Innovator's Dilemma

Symantec's Mark Bregman offered a view into the company's new product development process, echoing themes from Clayton Christanson's "The Innovator's Dilemma". Software leadership typically arises from innovation - those companies that develop prominence from their market innovations are often constrained from creating disruptive new products by the need to satisfy existing customer demands.

Key Role for M&A - To a Point

Symantec has identified a "New Product Chasm" that evolves as existing products demand simultaneous multi-language releases, platforms etc. M&A provides a means to let the marketplace filter out unsuccessful ideas. While there is appeal to let VCs invest in small companies, the truth is that only a minority of acquisitions are breakout success. However, over-reliance on M&A risks atrophy for internal innovation.

The "Skunk Works"

Symantec maintains an advanced concepts group which is similar to an internal idea incubator for first generation products. The company uses this approach to

seed new markets with products that may have limited availability, may not be localized, or may not be delivered through traditional sales channels. This approach is similar to that taken by large vendors such as Cisco and allows the company to maintain a portfolio of internal “startups”.

A recent outcome of this approach is Symantec’s Database Security and Audit offering, which addresses challenges that database encryption and access management do not control violations by authorized users. The approach is to monitor patterns of usage for anomalies. Had Symantec developed the product through traditional channels it would have taken 2-3 years. In this case the advanced team identified 10 customers and deployed the product, which the company is now looking to extend.

Change as Punctuated Equilibrium

Bregman highlighted how progress in technology tends to occur in discrete steps, punctuated by phase shifts. The mainframe era saw many internal steps of evolution until something happened to drive a phase transition to Client/Server era. A similar pattern followed the changes leading to the Internet Era. Beyond these incremental steps, disruptive innovations come from thinking outside the box. For leading companies, taking care of customers can cause firms to miss out on innovation for broader phase transitions — this is the crux of the innovators dilemma. Bregman believes there is another phase shift pending but need to innovate to be ahead of the next paradigm.

Staying Ahead of the Next Paradigm Shift

For Symantec, the company has realized that its core competency is to protect. In the Internet era the focus was protecting tangible assets, PCs, servers etc. The focus is shifting to information — and in the future the company needs to protect infrastructure, information and interactions. The vision for “Security 2.0” as we heard articulated by CEO John Thompson at the RSA Conference in February is to establish trust between parties. Security 2.0 will expand beyond protecting the infrastructure and information to protecting relationships – hence there will need to be new ecosystems and partnerships. The challenge for SYMC is supporting the old paradigm with the ability to lead in the new.

Veritas Merger as Disruptive Innovation

In our view, Symantec’s Veritas merger represents a disruptive innovation in itself — while the need for combined products is still in the future, the company has had to take a hit to its valuation and work through the disruptive aspects of a large merger in order to be positioned to meet the next wave of technology and market challenges. In this light, the Veritas merger appears a prescient (albeit painful near-term) move. While the ultimate success will not be known for years, the company’s willingness to make a disruptive could prove more successful than current sentiment might imply.

Maintenance – Software’s Strategic Asset

We attended a presentation focused on how software companies can better preserve and cultivate their maintenance revenue streams. Maintenance is typically software vendors’ highest margin offering and represents a critical customer touch point — yet many vendors fail to expend effort ensure customers renew their contracts. By contrast, software companies spend millions of dollars acquiring customers, but in light of industry average renewal rates they see 15% of customers “walk out the back door”.

Value of maintenance gaining focus

Increasingly maintenance is gaining scrutiny – both in M&A (witness Oracle's acquisitions of PeopleSoft and Siebel) and with the increasing number of private equity firms taking software companies private (such as WebTrends, Geac, Serena, FrontRange, MDSI) – and private equity typically values the maintenance stream. According to Alex Shlusky of Vector Capital, from the standpoint of private equity maintenance is downside protection – it is where software profits are hidden. In general, licenses are not that profitable, all the profits come from the maintenance over time. One large software vendor indicated losses on every new license sale.

Maintenance Has a Disproportionate Impact on Profits

From a profitability standpoint there is an enormous difference between an 85% and 95% renewal rate, with 85% below what is necessary to keep a stable maintenance stream. One of the biggest paybacks companies can do is invest in messaging the value proposition of the maintenance stream within the company. For best practices, companies need processes in the maintenance stream. Often customer data is spread among many different fields — vendors need to cleanse data and set up dedicated maintenance teams.

Outsourcing Renewals a New Approach

One of the most intriguing business models we have encountered comes from ServiceSource, a private firm with roughly 150 employees based in San Francisco. The company operates telesales teams on behalf of software and hardware companies and shares a portion (commonly 15%) of all renewals. ServiceSource typically sets up teams dedicated to a particular vendor, and compensation comes solely from the shared benefits model. The approach has been so successful that some vendors have outsourced all of their maintenance renewals to the firm.

Innovation from the Bottom of the Pyramid

Some of the most intriguing comments we heard at the conference came from Professor C.K. Prahalad of the University of Michigan, who contrasted the relatively slow population growth in developed countries with the 80% of the world's population that lives in the developing world. Prahalad believes that necessity will drive innovation to serve these markets with lower cost, disruptive technologies that will ultimately filter to the developed world as well.

For instance, the growth of cellular networks in developing markets has meant that certain regions have bypassed wireline service entirely in favor of newer low cost technology. Price points need to be low, and businesses need to start with affordable price minus profits to challenge costs. Often price points need to be 1/50 or 1/100 the cost to work in emerging markets. Prahalad believes the 5 billion people from developing regions can be the next engine of global growth – and with the emergence of lower cost technology and Internet connectivity there is increasing opportunity to extend opportunities to broader populations which will have an overall positive impact on global growth.

M&A from the perspective of acquirers

We attended a panel on M&A from the perspective of acquirers that included representatives from Oracle, Symantec and EMC. In general acquisitions are based on predefined strategy – for example the Symantec/Veritas merger came from a predefined strategy, for many years Symantec had looked at Veritas but at the time the Veritas market cap was bigger. Overall the large companies prefer

cash instead of stock except for large deals. Valuation remains a “black art” with acquirers using DCFs, comparables, multiple to revenues. Regardless, there are a lot of factors impacting value. For a deal to be a success, both sides have to be a little bit unhappy.

Spreading the wealth more difficult but critical for retention

One challenging trend is that in more deals rank and file employees are increasingly left out of the equation with options and payouts. For software companies, they are not primarily buying a going business – they are buying the people behind it. Increasingly Symantec is finding situations where key top talent will not be happy – and this creates a pain point with investors, employees and the companies. Increasingly there will be a carve out where the company will rely on the target CEO to designate beneficiaries.

Code Scans Critical

Oracle raised a key point regarding ensuring acquired code is fully proprietary. As a result companies should perform a source code scan every year. It is an easy shortcut for developers to incorporate code from other programs (such as open source sites) that can cause problems later. In particular, vendors need to ensure there is no open source contamination as the GPL (General Public License) has severe license implications in terms of contamination – any code that is touched by Open Source code under GPL must also necessarily become Open Source.

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