Under the Buzz

Back to Basics in e-Business

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1. CommunityB2B White Paper: "E-Business: Current Technology Trends"

If you'd like a refreshing change from the gloom and doom that has beset the media during recent months, read CommunityB2B's white paper "eBusiness: Current Technology Trends". CommunityB2B, which bills itself as 'the Definitive Source for the eBusiness Technology and Solutions', conducted an online member survey regarding current solution investment trends during the month of May 2001. Survey results summarized in the white paper illustrate that B2B strategy – and e-business technologies - are on the agenda of most major businesses, involving key corporate executives at mid-market to large organizations with significant IT budgets. "As long as organizations do not rely on the 'quick fix' and are willing and able to fully implement and integrate B2B technologies, (they will be) critical to the core mission of most organizations in their quest to grow business cost-effectively." You will need to be a member of CommunityB2B to read this paper -- readers of *Under the Buzz* may join CommunityB2B at no cost at http://www.CommunityB2B.com.

2. Odds and Ends …. The HP-Compaq Deal, and Priceline's Turnaround

Nastiest quote of the week regarding the HP-Compaq deal: "This is like leaning two drunks against each other to get them to stand up straight." - from Lou Mazzuchelli, partner with Ridgewood Capital Management (S. Jose Mercury News, 09.05.01) …. While Paul Denninger, CEO of merger advisory firm Broadview Associates, commented in the same paper (09.09.01) on the market's worries that the acquisition combines two embattled companies in commodity industries led by unproven CEOs, saying: "That is why the market has not embraced the deal. They understand the cost cuts; they don't understand what happens after that." … In contrast, John Brennan, HP's VP for strategy, was quoted in the same

article as agreeing that the deal is "complicated for people to understand", and that seeing it as a combination of weakened commodity businesses ignores the diversity of the new company's businesses: a $20bn. printing and imaging business, a $30bn. access-device business (including PCs), a $23 bn. IT infrastructure business (including servers), and a $15 bn. services business. … In a different context, guest writer Clay Shirky, commenting on Priceline's second quarter profit announcement in a Wall Street Journal column in early August, argued forcefully that "Priceline didn't succeed until it decided to become a real business" (and not just "a business model taken public") … Shirky also expressed the view that "the Internet's most significant attribute is its relentless lowering of the cost of gathering and using information. This makes the internet fundamentally deflationary, and the only sure way to use this deflation to your advantage is to target someone else's high-margin business."

3. Collaborative Manufacturing: Enterprise Customers Describe their ROI

As part of my continuing series of articles on collaborative applications, I recently studied the success of one leading vendor (Agile Software) in engaging with three of its enterprise customers (**ADC, Dell Computer, and Sycamore**) to deploy online collaborative solutions aimed at solving critical business management problems. To augment the information and opinions I heard from these quarters, I also spoke with investment bank analyst Tim Klein, of investment bank Piper-Jaffray, for his perspective on Agile's success and future options.

Agile has become an early leader in providing *collaborative product manufacturing* software and services to the high-tech manufacturing industry, of which a key sub-category is something commonly termed engineering change order (ECO) management. One of the reasons for vendors like Agile to have singled out this application is that it addresses a process that is virtually broken in fast-moving, highly competitive industries – semi-conductors, computers and peripherals, mobile telephony, medical devices, and even areas of automotive - where the rate of engineering changes can be a significant bottleneck impacting the launch of new products, or leading to accumulation of obsolete inventory.

One of the key differentiators of collaborative applications versus conventional enterprise applications is that the collaboration that matters most is supposed to take place between trading partners. Therefore, I shall focus here not only on the experience of these customers in installing and deploying Agile's main product, *Agile Anywhere*, in their own organizations, but also on their strategies and success in extending the application outside their firewall, in this case, to their supplier community. Apart from assessing the direct payback that these customers achieve in terms of increased revenues or profits and/or reduced operating costs, I suggest here that the rate of supplier adoption and the payback achieved by them is a key metric in determining the attractiveness of adopting collaborative internet-based technologies. In order to convey as complete a storyline as possible, I have included direct quotes from each customer executive on these main topics:

a) Key reasons to adopt collaborative ECO management solutions
b) ROI – strategic *and* tactical results
c) Phasing in the internal and external deployments
d) Rate and success of supplier adoption
e) Suggestions to vendors on how to sell collaborative solutions in today's environment

a) Key Reasons to Adopt Collaborative ECO Management Solutions

As you might expect, the reasons for each company having decided to adopt Agile's solution varied between long-term strategic competitive advantage and immediate business results. In the case of Dell Computer, Mike Pizinger, director of operations, stated that Dell's primary focus was to "get our house in order": Dell had a product data management system in place that was not performing satisfactorily, and needed to be able to transmit good data to suppliers. Failure to do so could manifest in wrong component supplies that could ultimately affect shipments to their customers, or cause costly operational issues internally. Because of this, in terms of deployment priorities, supplier adoption had to be a secondary focus for Dell. Though this may seem strange in a company as "virtualized"– and thus as heavily dependent on outsourced manufacturing – as Dell is, the company recognized the need to get its own house in order first, much as parents are urged to behave on airplanes ("please apply the oxygen masks to yourself first, in order to be sure of being in a position to assure the safety of your children"), before focusing on its key suppliers, whom it needed to treat "like Dell employees, rather than outsiders."

The case of Sycamore Networks was different because, being a recent startup, the company had no legacy systems. As John Dowling, Sycamore's VP of Operations, states: "Sycamore's virtual manufacturing model forced us to focus on collaborative work processes from day one, so we just knew we had to do something, especially because of the competitive environment we were in. We needed an easily usable collaborative tool, for two reasons. Firstly, not having a defined culture or processes in the company actually ended up causing us some problems, because the company had recruited people from many different production backgrounds, each with different ideas about systems and work processes. If we gave them a hard-to-use new system, we would have had a rebellion on our hands. Secondly, with respect to our suppliers, because many of the large contract manufacturing companies we deal with are a bit old hat in terms of the systems they inherited when they acquired older firms, we needed to provide them with something simple and usable." Gary Lenik, director of materials for ADC/Pairgain, described his company's reasons for adopting Agile Anywhere as follows: "Engineering change order management was always cumbersome, heavily manual, and costly. If you want to remove component A from the product and replace it with component B, you might find you already have six months' inventory of component A that you need to throw away. In 1996 we had a system in place that was lacking in both functionality and support. Agile came along at the right time. It allowed us to streamline our ECO process significantly."

Perhaps because the three customer executives quoted above are past the evaluation stage and deep into their respective deployments, you may note that they have not emphasized the strategic, compelling business drivers leading to their investment decisions. So, let's hear what Bryan Stolle, CEO of Agile, has seen across a number of customer situations. As reported in the May 2001 edition of *Under the Buzz* (http://www.chasmgroup.com/underthebuzz/ub_vol2_no5.pdf) Stolle says: "As the value chain has shifted from make to buy, companies are now incredibly dependent on outside suppliers. And, furthermore, these inter-enterprise work processes are all relatively new! Companies like our customers make an average of 1,600 changes a week to existing orders. If something doesn't get communicated, one or more bad things happen: (i) the inventory of wrong components or products goes up, (ii) you can't deliver, because you're not buying what you need, and (iii) the manufacturing or assembly process may have to be interrupted, which costs a fortune." As many industry assessments have stated, any one of these problems can result in millions of dollars in lost revenues and profits - especially when you consider that in industries such as mobile telephones, the vendors who are first to market generally garner up to 40% of the profits of that product before the "later-comers" have even got going. This set of factors adds up to a *compelling reason* for enterprise customers to buy this type of technology, and Agile's proven ability to deliver a solution to

this problem is what has garnered for the company a leadership position in certain high-tech market segments.

b) ROI – Strategic *and* Tactical Benefits

In this section I shall contrast strategic benefits impacting the long term against tactical or operational benefits aimed at producing a short-term payback. In tough times the latter tend to weigh more heavily in buying criteria, whereas in good times, strategic benefits get more play with customers, always assuming they are tangible. Speaking of which, the term "tangible" in this connection always leave me in some doubt; depending on one's definition, I believe that all payback, whether it bears fruit in the long or short term, should be measurable in some objective or commonly-agreed way. Thus all such benefits should be considered "tangible" and admissible in an objective ROI assessment.

In fact, I would argue that it is *always* better for ROI cases to be based on both strategic and tactical/operational payback. This balance makes for lower risk of frustration in the event that either one of the two results fall short of expectations. For example, if you set out to fix a broken process (far-reaching, or strategic, value), but don't actually fix the entire process, you may still have "won", if you achieve, say, a 30% or higher gain in productivity. Besides the anticipated benefits that may figure in customers' initial ROI projections, it is worth noting that in many cases there are *unintended consequences* that can actually count for more in the long run, thus strengthening the case for ongoing or increased deployment of the solution. You will hear more about this below.

John Dowling points out a critical motivation for Sycamore to have adopted collaborative systems right from day one, speaking more to a big-picture payback than a tactical one: in essence he claims that, by implementing a collaborative manufacturing approach with its contract manufacturing suppliers, Sycamore has been able to launch four products with an average development cycle of nine months, due to its strong virtual manufacturing strategy. Instead of comparing this with industry averages, Dowling just points out that, if Sycamore had not been able to do this, it would simply not have been able to compete for the business in each case against the likes of Lucent and Nortel. Thus it was much more than a mere question of financial ROI for Sycamore; it was a basic survival strategy in their ultra-competitive market. As he further notes, "you need to make sure you can sell what you make, rather than producing already-obsolete products". Overall, in financial ROI terms, the results were divided between manpower savings ("today, the thousand or so ECOs per month that we need to apply are administered today by one clerk instead if ten."), dramatically reduced ECO processing costs at the contract manufacturer, and a dramatic reduction in excess or obsolete inventory resulting from online ECO management with the key suppliers.

Mike Pizinger's version of the results achieved by Dell is as follows: at the big-picture level, he states that "Dell's goal is to be the favorite customer of its vendors, and the Agile deployment focused on 37 of their top 50 suppliers, thus facilitating Dell's ability to gain the cooperation of each vendor when it most needs it." In terms of hard benefits, he cites a 40% reduction in cycle time to apply change orders. Important "unanticipated" benefits include the fact that today internal users and supplier personnel tend to proactively keep data more up to date in the PDM system, where previously they only updated the PDM system enough to get the business done. Finally, Pizinger cites "spectacular results" in terms of user satisfaction, regarding the speed of online ECO transactions, the accuracy of the information, and the ease of use of the Agile system.

Gary Lenik points out the critical problem faced by the high-tech industry: "Every company in our industry is sitting on too much inventory. Agile allows you to minimize inventory and reduce obsolescence, as well as manage change in an outsourced environment. "Like most companies, ADC used to require 40-60 days for each complete ECO cycle. Now the average cycle is just 3-5 days, and we are able to cut our changes in to the *next* production run of a given product. So the real answer is to cut the overall cycle time and deliver on-time to your customers." But the far-reaching benefits, in Lenik's view, can outweigh the hard financial ones. "You can't put a price tag on the serendipitous benefits you discover when you see, not only engineers, but managers using the system to get reports on where certain components are used, and purchasing agents finding where certain components are used within ADC's various product lines – this is fingertip information for every function in the organization." In contrast, as Lenik remembers, the tangible results that were foreseen in the company's ROI study performed in 1996-98 focused on a relatively more pedestrian motivation: the anticipated time savings from adopting Agile Anywhere versus the former system (Consensus). He points out that without Agile, ADC would need 20%-50% more people to cope with the cumbersome system they used to have in place.

c) Phasing in the Internal and External Deployments

The experiences of all three customers was uniform in this regard: in every case, the implementation of Agile Anywhere is described as simple; the system is easy to use, and the support and services provided by Agile are satisfactory. The main lesson to be learned here is that in today's environment, internet-based solutions MUST be significantly easier to install and use than classic client-server or even desktop applications. Of course, each organization has its own workflows and idiosyncracies to deal with, so the system needs to be flexible as well. Nonetheless, each organization recognized at the outset that they needed to achieve internal traction amongst a small group of key users, before attempting to convince their suppliers to adopt the solution.

Mike Pizinger spoke about Dell's pragmatic deployment strategy: "For us, it was important to get something up and running, on a quick 'n' dirty basis. We decided to communicate early and often with their end-users, in order to defuse any concerns about adverse impact on their existing workflow. Being realistic in statements to users, and consulting them on a frequent basis, seemed to create a calming, non-adversarial atmosphere." As a result, Dell's deployment was "incredibly successful" and, he says, other companies describe it as "world-class". Gary Lenik, who says he is "tired of hearing software vendors promise that you can buy their software without having to invest time and energy in modifying your existing systems", affirms that "you don't have to change a thing in your processes to use Agile productively." This is no small praise, considering the relative trauma that many companies experience when implementing the average ERP or CRM application. John Dowling's opinion was that "Agile doesn't need much IS support; we got it up and running in 24 hours." Furthermore, he described a constantly changing set of requirements in Sycamore's ERP systems for multi-plant, multi-currency ledgers, saying that with Agile, Sycamore has been able to adapt to each of three new business systems recently without any major problems.

d) Rate and Success of Supplier Adoption

As I have mentioned before, adoption by a primary customer's customers or suppliers is a first real test of the appeal of a true collaborative solution for its power in helping both sides to achieve benefits simultaneously from the new system. This is, after all, the promise of collaborative applications. The clear impression I received from each customer executive

was that they have focused mainly on getting a small group of key suppliers to adopt the system initially, and have witnessed accelerating demand from later adopters, as well as rapidly increasing deployments in the existing supplier organizations that adopted early on.

Gary Lenik stated that all of ADC's contract manufacturers are now using Agile: "Suppliers love us because they can 'get an instant notification of our intent to change a product component, and they can respond immediately, so they no longer need to go through the telephone, fax or email, and this helps them manage their requirements all the way up the supply chain to their own suppliers." Mike Pizinger emphasized that, while collaboration with trading partners was not Dell's primary objective in investing in Agile Anywhere, and consequently supplier adoption was addressed secondly, "thirty-seven of our top fifty suppliers are now on-line, and Dell is their favorite customer because we have the cleanest data and processes to work with."

But things were not always this way. Pizinger of Dell recalls that at one time connecting suppliers to Agile Anywhere was cumbersome, and Agile had to fix it with a module first deployed in February of 2001. Besides this technical issue, at the beginning, the general response of suppliers to the news that they would be increasingly required to use an on-line ECO system was one of ennui, as in "oh-oh, one more hoop to jump through in order to do business with Dell!" He continues: "Now they recognize that they may actually be benefiting more than Dell does. And, the laggards among them began to realize that it might be a disadvantage to not have the same real-time access to product information that their competitors now have. Furthermore, the ability to go into the Agile system to enter an ECR makes them feel much more a part of the overall community. Now, instead of saying 'OK, we'll have five seats' of the software, many of them are after us for fifty seats. So, as part of phase III of our deployment we now have overwhelming demand from suppliers to adopt the Agile solution, and we are hooking up many new ones every month."

Sycamore's experience in bringing suppliers on stream reflects the same early caution, followed by strong adoption. According to Dowling, "Early on, everything looked difficult to our suppliers. They were accustomed to having to pay $250k or more for each tie-in with legacy systems to access their customer's firewall, and they were concerned about letting outsiders in to areas of their data base. But there is minimal support overhead for installing Agile, so we save as much as $250k per large-supplier hook-up, compared to the old days."

e) Suggestions to vendors on how to sell collaborative solutions in today's climate

When asked for their suggestions on how B2B enterprise software vendors should conduct their business in order to success in today's challenging environment, John Dowling prioritized these three factors: (a) a strong value proposition, (b) a relevant white paper describing how the solution addresses the compelling business problems it aims to solve, and (c) a compelling ROI. Nothing surprising here, though it is not clear to me how many software vendors really understand how to translate these customer requirements into value-adding contributions that shorten their sell cycles. Here's Gary Lenik's opinion about how ADC would evaluate an Agile-like proposition today: "If we were doing this over, we would probably have to produce a tighter ROI case than the one we prepared in 1996, but I would probably argue that we would need Agile more now than when we were making more money, because speed and accuracy to market are more crucial than ever."

My interpretation of this need to "tighten" the ROI is that software vendors need to conduct credible and thorough site audits aimed at obtaining estimates of anticipated results by interviewing several executives and professionals in the target customer's organization, as a

qualifying step before even considering forecasting a possible sale (see article on Site Audits in the August 2001 *Under the Buzz* at http://www.chasmgroup.com/underthebuzz/ub_vol2_no8.pdf). Lenik would also urge vendors to call attention to benefits that may appear somewhat "serendipitous" at the outset but that, based on earlier customer experiences, may be quite feasible.

Mike Pizinger expressed the following point of view: "We built our business case based on a clear sense of *approximate probable impact* (by definition difficult to quantify and locate exactly), then we adopted a quick 'n' dirty approach to deployment. We were extremely self-critical and tried to be as realistic as possible in setting and delivering on expectations, especially as far as our users, then our suppliers, were concerned." If this sounds a little vague, I suggest you bear in mind that (a) Dell is well known to be a visionary adopter, willing to go with its gut feel on high risk-reward IT investments, and (b) in today's climate I would be amazed if their approach were not somewhat "tighter" in terms of estimated ROI prior to approving the investment.

Bryan Stolle's opinion, expressed during a recent conference keynote, is that the buying criteria in enterprises today are a function of the change of emphasis from visibility and continuity of supply to reduction in cost of goods sold, doing more with less. Here is his list:

- Make sure your solution addresses a mission-critical problem
- Establish a *direct and clear correlation* between problem and proposed solution
- Ensure a fast deployment of a full scale solution (i.e., not just a phase I pilot)
- Provide the lowest possible entry cost, and minimal risk to your customers
- Deliver rapid ROI – i.e., in weeks not months

Regarding this last bullet point, it is worth noting that Agile conducts its own site audit process called SVA (for "Strategic Value Assessment"), which focuses on six different types of measurable outcome for the ECO application:

- Strategic benefits: Time-to-market / time-to-volume / customer service
- Tactical benefits: Costs of failure / labor efficiencies / obsolescence costs

In view of the foregoing testimony, you would expect that a company like Agile would have no obstacle in its path to continued success. Nonetheless, in recent months the company has been afflicted by the same malaise as many other software vendors. In fact, Agile has failed to meet earnings forecasts for two quarters in a row. How come?

I consulted Tim Klein, senior analyst with Piper Jaffray and co-author of the much-read "B2B Analyst" weekly email newsletter, based on the commentary published in the August 17 issue (vol. 2, nbr. 33). Echoing his written comments, Klein stated that Agile has the advantages of a low average selling price and a tangible ROI for its customers, counter-weighed by a tough vertical market at present. This last comment is a reference to the acute problems that the high-tech sector has experienced in recent months, resulting in considerable pressure on Agile to switch some of its market focus to automotive, industrial, medical device manufacturers, among others. Klein's impression is that Agile is being careful in choosing its new verticals, while also working on broadening its product footprint into other collaborative applications, such as direct procurement (via its soon-to-be released *Buyer* product), collaborative product forecasting and replenishment (CPFR), and other related categories. Greg Schott, Agile's sr. VP of marketing and business development, recognizes that corporations are "asking a lot tougher questions", and that "every vendor has to sharpen the pencil" in order to be make its numbers these days. Indeed, Agile has a

goal of becoming the "keeper" of product "DNA", much as Siebel has attacked customer DNA. Though ambitious, this goal will be achievable, in my view, only if the company makes some aggressive and well-timed moves in the near future to enlarge its product and market footprint, as Klein urges.

The main danger, as I see it, is that the company may over-react under pressure from Wall Street and others and enter new target markets without making sure that it has (a) identified a real target customer in each segment, (b) understood their compelling reason to buy, (c) put together a complete solution, and (d) worked with the right partners, among other factors. It can be near-fatal to make too many assumptions with respect to one's ability to apply the lessons of one target-market success to the challenges of penetrating new target markets, as has been demonstrated in past experiences of other companies, including SGI, Apple, Sybase, Documentum, and many others. Furthermore, Agile must now find a way to forge strong relationships with suitable systems integrators, a not-inconsiderable task considering the inherent differences between the service skills required for inter-company process management and application integration, as opposed to the internal ERP or CRM projects that many of them have become accustomed to dealing with.

Go-to-Market Strategy Lessons for Enterprise Software Vendors

Despite the still-immature adoption of these collaborative applications among most companies, I think there are many positive lessons for enterprise software companies to draw from Agile's experiences so far in its voyage across the chasm:

a) Pick a specific problem-solving application (e.g. ECO management) among the various capabilities of your core technology, and focus on exploiting it to the maximum;
b) Identify a departmental manager (operations or materials managers) in a specific, *addressable* target market segment (medium to large high-tech companies with significant dependence on contract manufacturing);
c) Focus on a broken process as the major compelling reason to buy (excessive inventory and obsolescence in a highly-competitive, fast-moving industry pressured by rigorous time-to-volume demands and by high operating costs);
d) Set out single-mindedly to provide the complete solution to this problem (including solution-focused white papers, detailed customer references, site audits and ROI models, easy-to-install and -use software, consulting services for implementation and project management, and rapid-response customer support);
e) Execute the strategy in a disciplined fashion in order to achieve dominant segment share, which provides permission to enter new target segments.

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