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Podcast: Software as a Service

Speakers: publisher of CIO Magazine, Gary Beach; Accenture's chief technology architect, Paul Daugherty;

Interviewer: Hello, I'm Gary Beach, publisher of CIO Magazine. Welcome to our podcast series where Accenture's IT experts share insights on how to use technology strategically to achieve high performance. Today we have Paul Daugherty with us. Paul is Accenture's chief technology architect, carrying the responsibility for understanding and shaping the trends of the overall

architecture of IT systems at Accenture. Paul, thanks for joining us today to share your perspective on the evolving software market and, in particular, the emerging concept of software as a service.

Paul Daugherty: Thanks, Gary. I am happy to be here. This is a very interesting and important topic for a lot of our clients and something we're thinking about a lot so, we're happy to share some of our thoughts.

Interviewer: In terms of my conversations with your customers and CIOs in general, it's front and center in

their minds, so let's get right to it. Let's talk about the trends you see in the software as a service market. What comes front and center when you're talking to those customers, Paul?

Paul Daugherty: Sure. First of all, just in terms of definition and where we think this is headed: in my opinion, if you look at the current and evolving IT market, we need to ask ourselves if owning software is the way of the past and becomes obsolete as you follow the trends. When you look at software as a service, it offers an alternative to the usual and traditional way of looking at software. Traditionally, one buys software, licenses

it and installs it. Then the company is responsible for supporting it, including implementing things like the technical and functional upgrades when necessary. Software as a service is really a completely different model, and one that's becoming very appealing in the market to many of our clients. Instead of the "off-premise" model—people who want to use an application don't buy it, they "rent" the application as necessary from a software as a service vendor and use it as long as they need to. It's really more of a "pay-as-you-go" model.

The trend that we see this being very consistent with is a trend in the market around the cloud-based computing models that Amazon, Google and others are starting to introduce, where you source the capability you need from the overall enterprise computing cloud and software is just the extension of the model that we've seen others introduce in this cloud-based area.

Interviewer: Paul, that sounds interesting, but folks that I'm talking to are sometimes seeing it as a bit hard to achieve. So the question is how realistic is all this talk about software as a service for businesses and governments, I know that's part of your client base?

Paul Daugherty: Changes like this that are a big shift don't happen overnight, but there are a number of factors that convince me that software as a service is becoming a real option. If you look at the analyst firms as an example, Gartner has published a hype curve on software as a service, that if you look at the areas of business or functionality that they're evaluating from a software as a service perspective, they're evaluating capabilities being very mature in the two-to-five-year horizon. So there's been the real trend in this space as well.

The key element, I think, is the realization is that IT must be delivered in a way that makes it more useful to the business; the old days when IT was exotic and business had to accommodate itself to IT are gone. That's one of the key drivers behind this change to software as a service. The customers want the software on their

own terms, and the technological developments that support this kind of on-demand software as a service model are also there.

The other thing I'd say in terms of where the market is and how realistic it is, is that there's a lot of growth on the market. Most projections that have looked at the market would tell you the software as a service model have about a 1 percent share or smaller percentage share of the market. But we're seeing very rapid growth in the software as a service market share. On the order of 20 percent annual growth overall and very much more rapid growth in the order of 65 percent annual growth in software as a service licensing models in areas like CRM which have been at it a little bit longer. So we're seeing the numbers in the market show us a real trend and uptake as well.

Interviewer: You mentioned how customers want software as a service and you referenced technological developments that will support it are also there. You are the chief technology architect at Accenture, what are some of those technological developments that you see out there that would facilitate this business model?

Paul Daugherty: It's a good question. There are a number of trends encouraging the move towards software as a service. One of the trends is a new way of looking at IT, a new architectural viewpoint. The industry-wide standards are moving up from lower level technology up the stack so that we see industry-wide standards like XML and JSON and BPEL (Business Process Execution Language) achieving a lot more penetration and a lot more acceptance in the market. That is bringing about a much higher level of interoperability based on business services being able to integrate, rather than the lower-level application interfaces that we had to deal with in the past.

That is all leading to the trend we all hear a lot about around service-oriented architecture, certainly been a lot about it

in the market. The real shift here is the focus from IT—where one buys the application and needs to tie things together at a pretty low level to do things for the business. It really shifts from that kind of model to a shift where we are focusing on the needs of the business and how we assemble the right sort of services using some of these higher level standards, so it can support the needs of the business in terms like supply chain and CRM and such, and looking at business process standardization, those types of levels rather than the lower levels of technology. The advancing standardization is the standardization moving up the stack is one important trend.

A second factor that I point out is that IT infrastructure and software are commoditizing. The fundamental computing platforms that we're developing on are stable, network protocols are standardized. Buying the right application isn't the competitive advantage that it used to be and our clients are increasingly looking at how they can reduce complexity. We increasingly hear our clients talking in terms like "what is good enough?" because "good enough" is good enough for my business. I don't need the best and the most customized alternative. The trend toward commoditization that companies like Microsoft, Google and Amazon are driving is also pushing us in this direction. The competitive advantage is turning out to be what the business does with IT rather than the IT itself in many cases.

So building on these trends, we see a new generation of workers and companies that expects to be able to customize and build their applications from parts, from services, much in the same way that many people who are getting comfortable in the Web 2.0 world are able to develop "mash ups" that allow them to customize their own Web pages, their own screens, their own applications. I think it's much the same paradigm, where the services available thought software as a service model can be combined together by the business

much as “mash up” can be constructed by a user with web support through individual computing needs.

Interviewer: Paul, thanks for that response. Listeners could be saying to themselves so it's possible and customers want it. But, what's the value proposition that the service providers are offering to customers these days?

Paul Daugherty: The idea of software as a service has been around for a while, and the industry has tried different business models. What's interesting is the way in which the value proposition has changed now with some of the developments we've talked about. One of the big changes I think is in the kind of value that can be offered and the way the offerings can be customized.

Formerly, in order to obtain the benefits of scale, clients received the vanilla common offering via software as a service. Any customization that was made to the service was about as expensive as if it was being hosted on the premise. So you did not really see the synergy in the value of the model as people expected. Now, with advances like service-oriented architecture that we spoke about a few minutes ago, customization is affordable because it does not involve change to the application but only in the way in which the application is assembled to meet the needs of the business. You see that in the way that the software as a services companies are constructing their offerings. For example, you have companies like Salesforce.com, who are shifting from specific functional offerings to offering a platform with their Apex Application platform that allows the users to customize the offerings to suit the needs of the enterprise.

This approach also means that where small- to medium-sized enterprises are forced to buy the same software that was architected to support the very large businesses it might have been perceived to be inflexible and such, but they can really customize it to meet their own needs. Likewise, the larger companies can afford to make some of the customizations that they need to support

the unique characteristics of their business.

All of this starts to change the dynamics in the software industry. One of the big changes we see is the shift to a subscription, pay-as-you-go model means that software as a service suppliers need to build long-term relationships with customers. They no longer have to make a sale to meet a quarterly quota, but they have to maintain the relationship with the customer to keep the customer on board with the service. What we hear from our customers, those that have committed to the software as a service models, is that they like that model as it much better aligns their interests with the interests of the vendor, because the vendor is much more interested in the long term client satisfaction, client relationships and adapting their offering to the customer needs. Much more a win-win situation, so to speak.

Another change that we see is the way in which the software supports the business needs of the user. Upgrades are part of the subscription cost and the subscription model means that total cost of ownership is more aligned to the business's goals, and again built in to the ongoing subscription costs of the software rather than being a large periodic, out of pocket cost that the business faces and that is much better aligned with the needs of the business.

Interviewer: Paul, let's think of a listener who is thinking of going down the path of software-as-a-service. At Accenture you see a swath of customers all around the world every business day. What are some of the barriers that you see in the adoption of software as a service business model?

Paul Daugherty: There are some common ones that we see come up every time so we can just highlight some of the things that we tend to hear. One of these and the first one that always comes up is data privacy. A concern that if I'm using a shared offering that other customers are subscribing to, how do I know that my data really is private, that I can sign

up for the privacy obligations that are incumbent on me as an enterprise etc. So data privacy is one real concern that we see out there.

There are also some other technical barriers that we see. One, is the challenge of getting the infrastructure right for software as a service—getting the software configured correctly and all the other elements that make integration so difficult: things like single sign-on across my on premise applications and my software as a service application and getting the software as a service elements integrated with the other applications in my enterprise architecture. Certainly a lot of questions come up in those areas.

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Another prediction is that software as a service will be taken up more by small-to-medium enterprises. In conclusion, I need to emphasize that software as a service will not be the only way that software will be used. Hybrid models will be the order of the day, with on-premise software tending to supply any functionality that is truly differentiating, with the standardized core business and data processing handled via the software as a service model. However, it remains to be seen how package vendors embrace

and provide software as a service. We have seen first announcements of leading software vendors in the media. So the key wild card is how they evolve with their approach to software as a service.

Interviewer: Paul, thanks for your time today.