Enterprise Architecture Faces Vast Promise -- or Lost Opportunity

Transcript of a sponsored podcast on the potential of enterprise architecture, resistance in the business community, and finding common ground.

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Dana Gardner: Hi. This is Dana Gardner, Principal Analyst at Interarbor Solutions, and you're listening to BriefingsDirect. Today, we present a sponsored podcast discussion, coming to you from The Open Group's Security Practitioners Conference in Boston, the week of July 19, 2010.

We've assembled a panel to delve into the advancing role and powerful potential for enterprise architecture (EA). The need for EA seems to be more pressing than ever, yet efforts to professionalize EA do not necessarily lead to increased credibility and adoption, at least not yet.

We'll examine the shift of IT from mysterious art to more engineered science and how enterprise architects face the unique opportunity to usher in the concept of business architecture and increased business agility.

The economy's grip on budgets and the fast changing sourcing models like cloud computing are pointing to a reckoning for EA of now defining a vast new promise for IT business alignment improvement or, conversely, a potentially lost and costly opportunity.

Please join me in better understanding the dynamic role of EA by welcoming our guests. We are here with Jeanne Ross, Director and Principal Research Scientist at the MIT Center for Information Systems Research. Welcome to BriefingsDirect.

Jeanne Ross: Thank you. It's nice to be here.

Gardner: We are also here with Dave Hornford. He is an architecture practice principal at Integritas Solutions, as well as the Chairman of The Open Group Architecture Forum. Welcome Dave.

Dave Hornford: Thank you. It's good to be here.

Gardner: We're also here with Len Fehskens. He is the Vice President for Skills and Capabilities at The Open Group. Welcome, Len.

Len Fehskens: Hi, Dana. Glad to be here.

Gardner: Let me start with looking at this inflection point or opportunity. Many have discussed here at the conference that there's a lot to be done and gained by proper EA. But, the stakes are high, because not all of these organizations seem to be rallying around this concept. So, why are the stakes high and why haven't people gravitated to EA?

Ross: The stakes are high, because organizations are becoming more digital out of necessity. It's a more digital economy. Thus, IT is more strategic. I think people see that, but outside of people who have already embraced architecture, there is some reluctance to think that the way we get more value from IT is basically by taming it, by establishing a vision and building to standards and understanding how that relates back to new ways of doing business, and actually developing standards around business processes and around data.

Exciting stuff

There is a piece of it that's just not appealing. Besides, we feel like this should all be about innovation, which should be all exciting stuff. Architecture just doesn't have the right feel for a lot of businesspeople, who are saying, "Oh sure, the digital economy is very exciting."

Gardner: We've also been hearing here at the conference that there is this delayed gratification effect, whereby a lot of the structure and discipline that you might bring to architecture can have a long term and strategic benefit, but most people are focused on the here and the now.

A recurring theme for me here has been how we accommodate both. How do we present something to our executives and across the organization that they can work with now, but that also will put us in a long-term good position? Jeanne?

Ross: This is where there is a certain art in architecture. We've learned a lot about methodologies, disciplines, and tools, but there is an art to be able to take the long-term vision for an organization and not just say, "It'll come guys, be patient," but rather, "I understand that starting tomorrow, we need to start generating value from more disciplined processes."

Great organizations actually learn how to do something in the near term that builds towards the long-term, but also delivers on some new value to the organization today.

Gardner: Len, we're looking at quite a bit of change. We're asking the organization to change how they use and perceive IT and elevate the way in which they process the logic of the business itself to an architectural level. Then, we're also asking these architects, the individuals, to put on many hats and be multi-disciplined.

The question to you is, in examining the state of EA, this concept of a professional category or definition of EA, where is it at this time?

Fehskens: It's really just a gleam in many people's eye at this point. If you look at the discipline of EA and compare it to mature professions like law and medicine, we're back 200-300 years ago. We've been doing a lot of research recently into the professionalization of other disciplines.

Most of the people studying the subject come up with a fairly short list of characteristics of professions. They usually include things like a well-defined body of knowledge, and well-defined educational program and particular degree programs, often offered by schools that are specifically focused on the discipline, not just the department within a larger organization.

There's some kind of professional certification or vetting process and often even some kind of legal sanction, a right to practice or right to bear the title. We don't have any of those things right now for EA.

Proprietary knowledge

The body of knowledge is widely distributed and is largely proprietary. We're at a state similar to going to a lawyer, and the lawyers try to sell themselves based on secret processes that only they had that would allow you to get a fair shake before a judge. Or similar thing with a doctor, who would say, "Come to this hospital, because we're the only people who know how to do this particular kind of procedure."

So, we've got a long way to go. The big thing we've got going for us is that, as Jeanne pointed out, the stakes are high and so many organizations are becoming dependent upon the competent practice of EA as a discipline.

There's a lot of energy in the system to move forward very quickly on the professionalization of the discipline, and in addition to take advantage of what we've learned from watching the professionalization of disciplines like law, medicine, engineering, civil architecture, etc. We've got long ways to go, but we are running really hard to make some progress.

Gardner: Dave, we have high stakes. We have a great opportunity. This is a cake that hasn't been baked yet, so folks can work with this. As a practitioner and someone who's involved with the forum, tell us where you see the current traction. Where are people who are doing this doing it well, and what is it about them that makes make prepared for this?

Hornford: Where people are doing it well is where they are focused on business value. The question of what is business value is highly dependent. People will mention a term, "agility." I work with a mining company. They define agility as the ability to disassemble their business. They have a mine. Someone buys the mine. We need to remove the mine from the business. A different organization will define agility a different way, but underpinning all of that is what is the business trying to achieve? What is their vision and what is their goal?

Practitioners who are pursuing this have to be very clear on what is the end state, what is the goal, what is the business transformation, and how will the digital assets of the corporation the IT asset actually enable where they're going, so that they're able to move themselves to a target more effectively than their competition.

The stakes are high in the sense that should someone in your industry figure this out, they will change the game on you, and you will now be in a serious trouble. As long as all of your competition is struggling as long as you are, you're okay. It's when someone figures it out that they will change the game.

Gardner: Jeanne, through your research and publishing, you've identified some steps -- four that we heard about earlier. Two of these seem to be very focused on IT, but then progress beyond IT. It's this transition that seems to get people a little tripped up.

We talk about often platforms that the IT people are focused on. I have project. I have a set of requirements. I'm going to install, manage, and optimize a platform, but at some point, that needs to work towards the business agility. Help us understand the role of the enterprise architect today in making that transition?

Ross: Right now, the enterprise architect would help design the platforms, but the critical thing to recognize about platforms is they represent the underpinnings of processes, which would be data technology and applications.

Process vision

The architect is working very closely in designing these platforms with people who have a vision of how a process ought to be performed. It might be in terms of an end-to-end process. It might be in terms of a process that's done repeatedly in different parts of an organization.

But, the architect's role is to make sure that there is a vision. You may have to help provide that vision as to what that process is, and how it fits into the bigger vision that Dave was talking about. So there is a lot of negotiation and envisioning that becomes part of an architect's role that is above and beyond just the technology piece and the methodology that we've worked so hard at in terms of developing the discipline.

Gardner: Len, when you go out and hear the requirements in the field and you see the need for a professional category, it seems that things are moving so fast that it's almost perhaps a benefit to have this as a loose concept.

So, the question for you is, if business processes are dynamic and continue to be accelerating in how quickly people need to adapt, isn't the role of the enterprise architect managing adaptability, rather than actually being a category like a lawyer or a doctor?

Fehskens: Yes, but I don't think that changes the fact that the skills associated with doing architecture are largely independent of the domain that you're working in.

There is a set of capabilities that an architect has to have that are largely independent of where they are working. While Dave and Jeanne were talking, I was thinking that, despite the fact that the discipline is so immature as a profession, we're still doing surprisingly well.

In terms of its maturity as a profession, it may be 100 or 200 years back, compared to law or medicine, but on the other hand, the quality of the practice is much more like where medicine and law were 50 year, 25 years ago.

So, there is a disparity between the capability, the quality of the services that enterprise architects are providing, and the maturity of the profession. That's a characteristic of architects. Architects have to be inherently adaptable.

In a lot of cases, we make a big deal about the technical expertise of architects, but in a lot of architectural engagements that I have been involved in, I didn't actually know anything at all about the subject matter that I was being asked to architect.

What I did know how to do was ask the right questions, find the people who knew the answers to those, and help the people who actually had the information orchestrate, arrange, and understand it in a way that allowed them to solve the problem that they really had.

Dynamic environment

I agree that there is something fundamentally different about the kind of work that architects do, compared to say lawyers and doctors. It is a much more dynamic environment, but the skills to deal with that dynamism are not really dynamic themselves. They're pretty stable in terms of the ability of architects to face a whole host of different kinds of problems and apply the same skills to them in a way that produces successful results.

Gardner: Dave, we heard the need for architects to be evangelists, to rally the troops, to get people on the same page, to hasten transformation, which is inherently difficult. So how about leadership? We haven't heard that word, but it seems that the role of the architect is to really be a leader above many other activities within the organization. What is it about the leadership capability that you think can make or break the enterprise architect?

Hornford: The fundamental with leadership in EA is that architects don't own things. They are not responsible for the business process. They are not responsible for the sales results. They are responsible for leading a group of people to that transformation, to that happy place, or to the end state that you're trying to achieve.

If you don't have good leadership skills, the rest of it fundamentally doesn't matter. You'll be sitting back and saying, "Well, if I only had a hammer. If I only had authority, I could make

people do things." Well, if you have that authority, you would be the general manager. You'd be the COO. They're looking for someone to assist them in areas of the business at times that they can't be there.

I learned far more about doing EA in an 18-month period, when I was a general manager of a subsidiary for a telephone company. My job was to integrate that into the telephone company. I got that role as the enterprise architect for the integration, but through transformations I became the general manager of the subsidiary.

I learned more there, because I had the balance between having authority and not having to do some of the softer leadership, and coaching myself into doing the changes that were necessary. Seeing that transformation was a great learning experience, because it highlighted that you must lead as an architect. If you do not lead and do not take the risk to lead, the transformation won't occur. One of the barriers for the profession today is that many architects are not prepared to take the risk of leadership.

Gardner: Jeanne, what about this issue of authority? Just because the enterprise architect has the vision and maybe has a very good plan as to what should take place in a particular way for that particular company, at this particular time they don't have the budget and the authority. If they can't marshal those people who do have the budget and authority to cooperate -- wow, lost opportunity. Let's discuss the issue of authority, and the role of the enterprise architect.

Ross: That's quite a dilemma. In an environment where the architect can see the possibilities and can't get the commitment of other people, it's really not possible to win that. One of two things has to happen. Either the architect is successful in spreading the word and getting commitment or the architect should go somewhere where that's possible, because I just don't think you can successfully pursue architecture alone. You can't just go off in a corner and be a successful architect, as we've been discussing here.

The first thing you do, because you are in an environment where you get it and you see it and you know what needs to be done, is that you do everything you can to get commitment across managers who can make things happen. But, there are situations where that's not going to happen, and you're better off finding an organization that's longing for good architecture talent -- and they're out there. There are plenty of organizations looking for architects to help them down that path.

Hornford: A key point that you made this morning in your presentation was the fundamental for commitments. If those commitments aren't there, the organization will not absorb, consume, or benefit from EA.

Compelling value proposition

Fehskens: A phrase that you'll hear architects use a lot is "compelling value proposition." The authority of an architect ultimately comes from their ability to articulate a compelling value proposition for architecture in general, for specific architect in a specific situation. Jeanne is

absolutely right. Even if you have a compelling value proposition and it falls on deaf ears, for whatever reason, that's the end of the road.

There isn't any place you can go, because the only leverage an architect has is the ability to articulate a compelling value proposition that says, "I've recognized this. I acknowledge this is promise, but here's why you have reason to believe that I can actually deliver on this and that when I have delivered on this, this thing itself will deliver these promised benefits."

But, you have to be able to make that argument and you have to be able to do it in the language of the audience that you're speaking to. This is probably one of the biggest problems that architects coming from a technical background have. They'll tell you about features and functions but never get around talking about benefits.

My experience with businesspeople is they don't really care how you do something. All they care is what results you're going to produce. What you do is just a black box. All they care about is whether or not the black box delivers all the promises that it made.

To convince somebody that you can actually do this, that the black box will actually solve this problem without going into the details of the intricacies and sort of trying to prove that if I just show you how it works then you'll obviously come to the conclusion that it will do what I promise, you can't do that that. For most audiences that just doesn't work. That's probably one of the most fundamental skills that architects need in order to work through this problem -- getting people to buy into what they are trying to sell.

Gardner: Based on what we've been hearing here at the conference, the metric of success and perhaps even the lever to get the authority and commitment is this notion of business agility. As Dave pointed out, business agility can be very different for different companies at different times. It could be a divestiture. It could be growing into a new market. It could be acquiring, or what have you.

So, if we need to get to business agility with our focus on the short-term as well the long-term strategy, what is it that an enterprise architect needs to do in order to assess and project business agility? Perhaps the technical folks are not quite are used to something like that.

Ross: The thing to recognize about business agility is that it's a journey. You don't want to start making your compelling business values something you can't deliver for three years. Many times the path to agility is through risk management, where you can demonstrate the ability of the IT unit to reduce downtime to increase security or lower cost. The IT unit can often find ways to lower IT cost or to lower operational cost through IT.

So, many times, the compelling value proposition for agility is down the road. We've already learned how to save money. Then, it's an easier sell to say, "Oh, you know, we haven't used IT all that well in the past, but now we can make you more agile." I just don't think anybody is going to buy it.

It’s a matter of taking it a step at a time, showing the organization what IT can help them do, and then, over time, there's this natural transition. In fact, I'm guessing a lot of organizations say, "Look, we're more agile than we used to be." It wasn’t because they said they were going to be agile, but rather because they said they were going to keep doing things better day after day.

Common ground

Gardner: Because the economy remains difficult, because budgets are under pressure, this notion of cost could be really a good common ground to bind areas that perhaps have been disparate in terms of IT, business, and so forth.

Len, what about that -- enterprise architects as cost-cutters or cost-optimizers? Is this a short-term, let’s do this because the economy requires it, or is that really a key fundamental point of successful architects?

Fehskens: No, it’s a long-term requirement. It goes back to what the essence of architecture is about. Architects are ultimately charged with making sure that whatever it is, their architecting is fit for purpose. Fitness for purpose involves not doing any more than you absolutely have to.

The notion of engineering efficiency is built into the architectural concept. It goes back to an idea that that was developed in the '80s in the business process re-engineering movement which was the best way to make things simpler is to get rid of stuff. And, the stuff that you need to get rid of is the stuff that’s not essential or doesn’t really address the specific mission that you're trying to achieve.

Architects don’t cut costs for the sake of cutting costs. They cut costs by removing unnecessary cruft from whatever it is that they're responsible for architecting and focusing in on the stuff that really matters and the stuff that’s actually going to deliver the value, not stuff that’s there because it looks keen or because it’s the latest technology widget or whatever. Again, that’s an inherent property of what it is that architects do.

Just as agility is, in some respects, a side-effect of what architects do, we need to keep in mind that agility is a means to the end of alignment. You can have a lot of agility if you never achieve alignment. Then, you're just continuously misaligned.

Similarly, the cost cutting itself is not the goal, the goal is ultimately efficiency and making sure that you're not wasting time doing stuff. That doesn’t matter, because you are not only wasting time, but you are obviously wasting money, and you're committing resources that are necessary to solve this problem. Actually, those additional resources sometimes just get in the way, they make things worse, rather than making things better.

The architect’s approach to dealing with the architectural way of problem solving means that agility and cost cutting sort of are not short-term focuses. They are just built into the idea of why we do architecture in the first place.

Hornford: And that cost isn't necessary. A lot of people focus on IT cost. It is cost to the business.

Gardner: Total cost?

Hornford: Total cost, and it's not agility of your IT infrastructure, but agility of your business. If you lose that linkage, you lose the alignment that Len mentioned. Then, you're not able to deliver the compelling value preposition.

Gardner: We talked earlier about the notion of moving from a platform mentality to a business process and agility mentality. We hear a lot from the vendors and suppliers. They have a role in this as well. The architects are beavering away in these companies, trying to change culture and transform the business, but we hear marketing from the vendors, "If you do this product, this platform, or this technology, it will solve your problems." Is there a message to the enterprise architects that they should be taking to their organization about the role of the vendors and is that changing from what we've perceived in the past as the role of a vendor or a supplier? Len?

Limit to leverage

Fehskens: Big question. The short answer is yes. I often joke that every architect will answer the question "yes, but." So, here comes the but. There is a limit to the leverage you have over suppliers, and the architects have to work with the material that's available to them. Hopefully, the vendors are listening to the needs of their customers and doing the same kind of thing on their side that architects are trying to do.

Gardner: Don't the suppliers have to adjust too?

Fehskens: Yeah. It's a big ecosystem. If you're selling something that nobody needs or wants, you're going to go out of business. Suppliers have to be adaptable to the needs of the customers who are changing. We're all in this big dance, and everybody is trying to avoid stepping on somebody else's feet or tripping up and falling over their own.

How does that sort itself out? That's a difficult question to answer, because there are time-lags and some organizations misread the environment in the current business climate, and they go out of business. Other organizations are very good at anticipating future needs by looking at the trends. They happen to be in the right place at the right time, when somebody needs something they've got and it's available, and they end up winning the battle.

So, yes, we all have to learn how to cooperate. One of the goals of professionalizing the discipline is making it possible for architects on both sides of that relationship to communicate with one another in language that they both understand and recognize that you can't optimize your side at the expense of other side, because at some point that's going to come back and bite you. We have to make it possible for architects to have those conversations and to make it apparent to the businesspeople on both sides what the business value is.

A big part of architecture work has been around the development of standards that facilitate interoperability. In many respects, conforming to interoperability standard is counterintuitive to a business, because you basically give away whatever proprietary advantage you have by locking in the customer doing it your own way.

On the other hand, the same mechanism that allows you to lock a customer in also allows the customer to lock you out, if they decide that they get better payoff from taking advantage of interoperability amongst multiple or other vendors who've agreed to collaborate and adopt a particular standard. It's all about reading the environment and responding appropriately. This ultimately goes back to the idea of fitness for purpose.

Gardner: Jeanne, the relationship between the enterprise architect, the business, and the supplier -- is this an evolving dance? What are some of the new choreography steps?

Ross: I'm not sure I know the dance yet. One benefit we get from good architecture is that we understand the process components and the underlying technology and application from data components, which allows us to take advantage of what's on the market.

If there is a good component, we can grab it, and if there is not, then we don't need to take it. What architecture is doing -- and I think we're seeing vendors start to respond to this, but have a long way to go -- is spur a real developing marketplace for the components that many organizations need. I look out there and I say, "Now pretty much everyone gets it that they don't have to provide any benefits internally to their employees, because you can outsource that." We get that component. It's a plug and play.

Core to the business

There are things that are more core to the business that we'll see more available. I don't think the architects are going to also become the vendor managers. They're the ones who are going to design the components and recognize the interfaces, but they'll be working closely with the vendors to make sure the pieces come together.

Gardner: It does seem that the vendors are appreciating that they're elevating inside their enterprises. The notion of EA is elevating beyond platforms. Their response seems to be that we'll provide everything -- we'll merge, acquire, and provide everything at an architectural level. Do you think that's the right way?

Ross: I should note that I use the term "platform" differently from you. There is technology platform, which I think is what you are referring to, but there are digitized process platforms that are really valuable, and many times vendors can provide the whole thing. Software as a service (SaaS) is a partial example, but actual business process outsourcing really accomplishes that. I think of these as potential platforms for organizations.

But, there is a fine line between a platform and an outsourced process, and organizations are trying to piece that together. What's our platform? What are the components for plugging into and taking out of that platform? That's the architectural challenge. I feel like I just didn't answer your question, but it is the thought that came to my mind.

Gardner: It occurs to me that this is another point of variability and that the architect needs to not only consider the variables internally, but suppliers are redefining themselves, and cloud computing is pushing the envelope on what you would consider as sourcing options.

So, Dave, last question before we close up. This notion of a dynamic environment for sourcing and vendors redefining their role, perhaps trying to expand their role, sounds to me like the enterprise architect's role becomes almost more critical as a result.

Hornford: I'd agree with that. If we're going to look at our sourcing options, using the word "component" as opposed to "platform," I can acquire a benefit. I can acquire a benefits engine as a service or I can build my own and manage my own process, whether it's fully manual or digitized. Those choices come down to my value in my business.

Different organizations will have different things that matter to them. They will structure and compose their businesses for a different value chain for a different value proposition to their customers.

If we get back to the core of what an architect has to deliver, it's understanding what is the business's value, where are we delivering value to my customers? How that organization is structured, how it succeeds, how it gets its agility, and how it gets its cost may be different for different organizations. We have a larger collection of tools available to us without a clear, "This is the right answer. Everyone does it this way."

Gardner: Well, we'll have to wrap it up there. It's obviously a deep and interesting subject, and we will be revisiting it often, I'm sure. We've been discussing the advancing role and powerful potential for EA, and how practitioners and leaders face a vast new promise for IT business alignment improvement, but there are also quite a few missing parts, and perhaps even a lost opportunity, if you don't do this and your competitor does.

This sponsored podcast discussion is coming to you from The Open Group's Enterprise Architecture Practitioners Conference in Boston. We're here in the week of July 19, 2010. Please join me in thanking our guests. We've been here with Jeanne Ross, Director and Principal Research Scientist for the MIT Center for Information Systems Research. Thank you.

Ross: Thank you so much, Dana.

Gardner: We are also here with Dave Hornford, he is the Architecture Practice Principal at Integritas Solutions, as well as the Chairman of The Open Group's Architecture Forum. Thank you, Dave.

Hornford: Thank you, Dana.

Gardner: And also Len Fehskens, he is the Vice President of Skills and Capabilities at The Open Group. Thanks, Len.

Fehskens: Thank you, Dana.

Gardner: This is Dana Gardner, Principal Analyst at Interarbor Solutions and you've been listening to BriefingsDirect. Thanks for joining and come back next time.

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