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FORUM

Amy Rowell, the Executive Editor of *Innovate Forum*, recently had the opportunity to speak with Faisal Hoque, innovator, entrepreneur and co-author of the recently released book, *Sustained Innovation: Converging Business and Technology to Achieve Enduring Performance*. His key message? Business and technology are inexorably linked in the quest to achieve sustained innovation. But what exactly is sustained innovation? And how can organizations position themselves to succeed in the long run by embracing this notion of sustained innovation? In the following interview, Faisal provides an insightful look at these topics - and challenges us to examine our own views with respect to innovation, technology and business success.

To set the stage, we begin with an excerpt from his book, *Sustained Innovation: Converging Business and Technology to Achieve Enduring Performance*

> "[In spite of the challenges they face], companies do thrive in this difficult world. GE, 3M, UPS, FedEx, and Wal-Mart, for example, all reinvent themselves as necessary. The innovation is different in each company – sometimes it's product innovation, sometimes it's process innovation, sometimes it's business model innovation. These companies don't fixate on one solution, and don't allow themselves to get trapped by tunnel vision. They have a holistic imagination: what will we have to do in order to be in business a year from now, five years from now, ten? And then they do it. This is sustained innovation."

ROWELL **The above paragraph introduces the idea that sustained innovation, by definition, involves thinking longer term. But can you elaborate a bit more here? What are the basic tenets of a sustained innovation model?**

HOQUE Some forms of innovation create new markets; sustained innovation really creates great enterprises. In the book, we give a lot of examples – whether it's P&G, GE or Xerox's overall success over the years – there's a common theme. First, there's an original idea, then there's a refinement of that original idea that is based on moving along the adoption curve of the target audience.

In short, there are three "must-haves" that relate to sustained innovation: 1) You have to have an innovative idea, or product or service, 2) You have to have a business model that enables people to access the new product or service – whether that means physical access or price accessibility, and 3) People have to be ready to adopt the innovation.

When all that happens, that's when innovation can be sustained

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ROWELL So, let me ask this – when you advocate sustained innovation – it appears that you are, at some level, advocating incremental innovation. Some might argue that a company can become too narrowly focused and miss out on disruptive innovation opportunities if they concentrate their efforts on incremental improvements. Do you see this as a challenge?

HOQUE Yes. It is a challenge. Disruptive innovation really changes the whole market – whether it's the iPod or microfinance – these are very different ideas that haven't been done before. These types of ideas really require a different way of thinking, a different kind of process, a different way of looking at a problem – you absolutely need that otherwise there would be no really new innovation. But sustained innovation and disruptive innovation are not mutually exclusive. The iPod is a great example. The first version of the iPod is very different from today's iPod. The same is true with respect to the first version of the Internet vs today's Internet.

So all game-changing innovation starts as a disruptive innovation but ultimately it has to be sustained in order to have a real impact – otherwise it's just a great idea that never took off.

ROWELL So, let's back up for just a moment – and talk a bit more about this notion of sustained innovation – which is what people are really after today. Companies recognize that they can't innovate once and be successful – but they are often at a loss as to how to make sustained innovation a part of their culture. For these organizations, can you recommend a set of guidelines – ie. "what to do and how to do it" that might enable them to innovate more effectively over the long term?

HOQUE Ok, actually, when we looked at these things we didn't look at it just from the standpoint of a "what do you do and how do you do it" point of view. Instead, we break it down into three different key areas:

1- First, we use a management framework – which we define as a set of capabilities that can be used by management to create repeatable innovation. These capabilities are in the following areas: how they create an organization, how they create a governance process, how they manage their investments, how they create their overall enterprise architecture combining business and process and technology, and how they put together a strategy to execute.

2- The second thing we do is to ask the following questions regarding each of the functional areas mentioned above: a) what is the organizational model, b) what kind of process do they employ to enable those organizations, c) what kind of information do they use to have that come together, and, d) what kind of automation do they use to make all these things work.

3- Based on this information, we devised a maturity model that would say, ok – if management is using this key set of capabilities with a base level of maturity in these 3 or 4 dimensions, they have reached a certain level of maturity in terms of making their innovation repeatable.

ROWELL So – let's take P&G as an example. They are certainly viewed as being very successful in the area of open innovation – but what are some of your thoughts on P&G?

HOQUE So, it's a great point. You cannot go anywhere where you don't see P&G being cited as an example of how open innovation can work. How did they actually do it? At the end of the day – they created an extended enterprise by utilizing technology to reach out to a very broad audience in a very short time that they would not be able to do otherwise. Essentially, P&G uses a web-based collaborative environment that allows them to gather data – which goes to a centralized environment where it can be used as a feedback mechanism for product innovation.

ROWELL My understanding is that P&G also capitalized on some powerful visualization tools to aid them in their product development efforts – is that the sort of thing that you would highlight as a technology enabler, along with collaborative tools, for example?

HOQUE Sure, in fact P&G isn't the only company to take advantage of this type of technology in its innovation efforts – another example we cite is the Boeing Dreamliner, which also used visualization tools. Now we highlight that, but what we really highlight is the common theme of utilizing technology – whether it's collaborative technology or whether it's technology to visualize what should be the optimal product or whether it's to manage your supplier base or your partner base. In P&G's case, you could argue that their consumer became their partner. The same thing happened with Boeing where the consumer did become their partner, along with all the technicians and scientists who worked on the aircraft itself. But it's really the notion of how do you create an extended enterprise outside of your environment, that brings all of these people together.

ROWELL Another point that you make is that business and technology convergence plays key role in driving sustained innovation. What exactly do you mean here?

HOQUE Compared to more general discussions about innovation, all of the business model innovations that we talk about involve some sort of technology infusion. So when we're talking about innovation, we're talking about it in that context.

In particular, our focus is on any technology that has an impact on creating a new business model – whether it's a new mobile technology that allows you to change the way that people do trading at a remote area, or a solar energy container that can drive portable energy for providing an electricity source. The thing is when you really look at it, probably close to 70% of today's business model innovation utilizes information technology in one form or another.

ROWELL Ok – so again, I'm going to bring us back to a fundamental question – are there any general observations that you can offer that might prove valuable to other firms seeking to put a repeatable innovation process in place?

HOQUE Sure.

1- The first generalization is whether it's the business model, or the use of a collaborative environment to create an extended enterprise to help your customer – it all boils down to how you create the business model utilizing technology. That's the first observation.

2- The second observation is that effective and successful organizations require a lot of management thinking – in the sense, "how do you prioritize these – what is your innovation portfolio, per se – so you have lots of innovative ideas and you have to create a funding model to support them – so there is an investment management process along with a governance process.

3- The next thing is that they all require a business architecture that combines with a technology architecture to make this environment very adaptive to the market need.

4- And the last is that there has to be a cohesive strategy – in terms of a 1, 2, 3 or 4 year plan – which tells you how can go from point A to

> " *The need for holistic thinking becomes critical because it is about knowledge at the end of the day.* "

point B to point C in terms of refinement of the original idea.

So, those are the very core themes – the commonality among all these things that we have observed. Another thing that we observed is that there's a huge risk management aspect to this whole thing; ie. how you manage risk, and the risk comes from your partner or supplier/sourcing point of view; and the risk comes from your whole product or go to market or service point of view in terms of what you're really taking out to the market – the risk, again, has to be looked at from a portfolio of risk management—where to focus and where not to focus in order to mitigate risk.

ROWELL What you're describing sounds like simply proven management techniques – aka management guru, Peter Drucker. What distinguishes the principles that you're proposing from those advocated by Drucker decades ago?

HOQUE To your point, in many ways, sustained innovation is not new, which is why we drew the parallel to Drucker's thinking in our book – we argued that this guy introduced these principles 40 years ago and that, in many ways, they are still valid today. From that point of view – there are basic management principles that do still apply today. What is new since Drucker's days is that when we look at this notion of multi-disciplinary principles or ideas coming together– the technology didn't play as significant a role as it does today – so from that point of view, it requires a whole new set of management challenges that did not exist – because it's a combination of left brain, right brain because technology people don't necessarily think like business people and business people don't necessarily think like the technology people – so it's engineering vs marketing and sales.

So, today's innovation means pulling all of this information together - utilizing those principles that I talked about –we call this business technology management, not business management – not technology management – but business technology management, which looks at both perspectives (technology and business) – not just one perspective vs another.

ROWELL So we can say, to a large extent – an organization should have an appreciation for some of the fundamental management techniques – but now, we are almost looking at it holistically – from the perspective of the organization as a whole – this is even more important today because things have become more complex today – is that essentially what you're getting at?

HOQUE Yes, in fact, we use the same term, actually – when we describe our framework, we call it a holistic framework. In fact, if you take any of the examples we mention in the book –whether it's Xerox, or P&G, or any of the topics we talked about – you cannot imagine – say P&G, for example, thinking just about the next consumer product but not about capturing the data that drives that consumer product, right? So that's where it becomes very challenging – the need for holistic thinking becomes critical – so again, we'll go back to Drucker – because it is about knowledge – at the end of the day, you're talking about knowledge management principles that pull all that stuff together in one – it's the refinement of basic management, but in terms of who's bringing business and technology together – you can't have these things separated anymore.

ROWELL If you had to pull out 2 or 3 companies that really epitomize this ability to look holistically – or really do it right – you mention P&G – but what other companies would you point to?

HOQUE Ok – so there are some companies that we cite as an example that have been successful at sustained innovation from a project- centric perspective while in other cases, it's the DNA of the organization

For example - GE, UPS or Fed-ex – they have all been successful in their own right – in terms of technology utilization for business model innovation. For example, UPS – the symbol of Brown – is just a symbol – they are a supply team and an information management company at the end of the day. In my native

Bangladesh, Grameen Bank, the 2006 Nobel Peace Prize winner -uses a combination of micro-finance and technology – so these are great, great examples of really impactful long lasting sustained innovation both from the enterprise perspective but also in a global context. These things have changed people's lives – for example how people take advantage of global resources, the example of Boeing's Dreamliner – that is a true example of global collaboration –a massive undertaking that brought in suppliers, innovators, consumers and the users together to create the next generation aircraft. So these are all great examples – but I would submit that they all follow those same basic principles.

In short, in order for innovation to be sustained, you have to create a set of management capabilities that drive the refinement of business models, processes and products so that they become more broadly accepted and become sustained. So from that point of view, the repeatability comes from having those capabilities – the holistic capabilities that drive that process to make it happen.

ROWELL Sustained innovation – in the way that you're describing it, is similar to what some call structured innovation, which suggests that you can apply rigor to the innovation process. How do you compare sustained innovation to structured innovation – and how do you tie in ROI discussions to the sustained innovation business model?

HOQUE So, with respect to structured innovation – most of the people who talk about structured innovation talk about it from a process structure point of view – a derivative of six sigma, lean manufacturing, etc. I actually have a fundamental problem with that theory because all of those things come from manufacturing. To the extent that manufacturing is a process and it's a structured process, you can extend those similar thoughts to innovation. There's a lot to be learned from that, but my fundamental argument with them is that their approach is anything but multi-disciplinary – it's still a very siloed approach – so when we looked at that approach for innovation – first we looked at what are the driving aspects of innovation – which are business and technology. So from that point of view, you have to actually apply both basic fundamental business management principles or process or structure as well as this process/technology-centric aspect and create this holistic view that pulls all of these things together.

The second point is that – all of our thoughts end up being around the convergence of business and technology – we're introducing a new index that actually talks about trying to bring business and technology together – along with this idea of framework and maturity – when you do that, you can then ask, what is the real financial performance of small and large companies as a result of converging business and technology?

This new index defines a way of looking at ROI for the financial performance of these companies in the context of how much business and technology convergence they've had and how we can predict their financial success.

> " *In my native Bangladesh, Grameen Bank uses a combination of micro-finance and technology to enable long lasting sustained innovation.* "

ROWELL So, let's talk about this payback piece of the picture – although a lot of consulting groups including Booz Allen, Boston Consulting Group, etc. are promoting the value of innovation – many companies are still stumped as to how to really make it pay. What would you say to these individuals?

HOQUE I would say this – let's stick with the fundamentals. Let's dig through what drives business models and what drives innovation today. I don't care whether people call it innovation, agility or something else. You have to create the killer next generation businesses that are sustainable and you have to utilize technology as a vehicle for it – so in order to do that you have to follow basic management principles but with the new thinking that brings all of these things in one place and you really drive ROI on the business – not on innovation, not on agility, not on technology – the ROI is simply the return from the business.

So, what you're saying is that you don't care what it's called – basically what's you're proposing is that companies need to come up with a strategy that enables them to sustain their business, period. Is that it?

Exactly. And then let's analyze where that sustainment comes from. We argue that it comes from a set of repeatable management capabilities. It's a set of capabilities that create your organizational construct that makes one company more successful than others. It's as simple as that.

About Faisal Hoque

Faisal Hoque is the founder, chairman and CEO of the Business Technology Management Corporation (BTM Corporation), leading the industry in the convergence of business and technology with its research, products, and solutions. A former senior executive at General Electric, Mr. Hoque is an internationally recognized visionary, entrepreneur and award winning thought leader. He is the author of *The Alignment Effect* (2002), *Winning the 3-Legged Race* (2005), *Six Billion Minds* (2006), and *Sustained Innovation* (2007). He has also written numerous articles for such leading publications as *BusinessWeek*, *The Economist*, and *The Wall Street Journal*. More information about Faisal can be found @ www.faisalhoque.com.