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*The Time Has Come for Business Model Innovation*

## **Welcome!**

Later this month Mark W. Johnson's book, "Seizing the White Space: Business Model Innovation for Growth and Renewal," will be officially published (although you can get the book now from Amazon). To celebrate the publication of the book and to start what we hope will be an ongoing discussion about business model innovation, this issue includes several articles on the subject.

In "The Time Has Come For Business Model Innovation," Mark explains how business model innovation relates to disruptive innovation and why it's so important. His articles "A New Framework for Business Model Innovation" and "When Should You Innovate Your Business Model?" drill down further into aspects of his business model framework. Finally, his "Why Systems Thinking, Rather Than New Technologies, Will Jump-Start the Clean-Tech Economy" discusses the type of business model innovation that will be needed as the energy industry transforms.

Comments and suggestions are always welcome – send them to [editor@strategyandinnovation.com](mailto:editor@strategyandinnovation.com).

— Renee Hopkins, Editor

## **Events**

The Front End of Innovation Europe - Innosight's Scott Anthony will be a keynote speaker at Front End of Innovation Europe 2010. February 8-10, Amsterdam Hilton, Netherlands.

[http://www.innosight.com/news\\_events/event.html?id=862](http://www.innosight.com/news_events/event.html?id=862)

## **Feature: *The Time Has Come for Business Model Innovation***

By Renee Hopkins

*Mark W. Johnson, Chairman and Co-Founder of Innosight, is author of Seizing the White Space: Business Model Innovation for Growth and Renewal (Harvard Business Press: February 2010). He talked with Strategy & Innovation editor Renee Hopkins about why business model innovation is important and how companies can master it.*

***Q: In your book, you say “disruptive innovation and business model innovation are opposite sides of the same coin.” How did you get started thinking this way, and why is it important?***

A: We start with the work of disruptive innovation, which says that when you go into a new market that offers an opportunity for new growth, you should come in with a simpler, low-cost approach. This way you can offer products or services the incumbent’s not going to be motivated to match, because it’s either too small a market, the margins aren’t interesting, or it doesn’t further the company goals.

Now, why doesn’t the incumbent go after the entrant who does something disruptive? Clay Christensen noticed this phenomenon in the disk drive industry – that those who succeeded were not the incumbents, but a new set of companies, the disruptors. That’s also what happened with Digital Equipment (DEC), in the minicomputer world. Strangely, DEC didn’t go after the personal computer when it came to the consumer market and schools. Why?

It’s not that the incumbents couldn’t have addressed these technological innovations within their own four walls. But they didn’t have a business model that would allow them to take advantage of these technological innovations. Even if you don’t define business model as I do in my book, DEC executives had a “theory of the case” of how they did business, how they added value for customers, and how they succeeded in business, which didn’t account for the nature of the personal computer and how it was sold uniquely to consumers at first. Therefore they didn’t allocate resources to that technology – so it was a resource allocation issue that could have been addressed by business model innovation.

Disruptive innovation and business model innovation are linked, are two sides of the same coin, because disruption isn’t inherent in the technology, it’s inherent in the business model. Years ago, when we at Innosight were working out the rationale for disruption, we hadn’t yet taken it to the next level and explored in detail what a business model was, exactly. So when I had the opportunity to take on this topic with Dan Pantaleo, a VP in Global Communications at SAP, I jumped on it. What did we mean, when we spoke of disruption in a business model? What does it mean to change a business model? What are the reasons, the circumstances, that would require you to change a business model?

We did realize it’s not always one-to-one. Not all disruptive innovations entail business model innovation and not all business model innovations are disruptive innovations. Sometimes companies embark on business model innovation independent of disruption in the classic sense. As I wrote in the book, a great example of that is FedEx addressing unmet jobs by creating a whole new business system that one-upped UPS and the Postal Service.

FedEx was not really disruptive to either UPS's or the Post Office's business models; in fact, FedEx's system should have been very attractive to either of those companies, since it would have allowed either of them to make more money and higher margins from their most-demanding customers. But it was such a fundamentally different business model from the ones they were operating under, they couldn't change to grasp the opportunity to fulfill that unmet need, however high the margins may have been.

***Q: UPS and the Post Office couldn't change their business models or wouldn't change them?***

Whether threatened by classic disruption or not, companies have a tough time changing their business models. In fact, really they don't change them significantly. Companies that do manage to adopt whole new business models do it by creating whole new business units that have new business models. They don't do it by taking an existing business unit and turning it on its head. So, Dow Corning didn't change Dow Corning's business model; it really needed to set up a separate unit, which they called Xiameter, where it could operate under a whole new business model.

***Q: Have any companies started a new business unit with a different business model that ended up filtering back into the company and changing the way it did business, too?***

A: Xiameter is actually an excellent example of this: it is affecting the larger Dow Corning enterprise. Because if you see what's happening now, Xiameter is becoming a bigger and bigger part of the overall business proposition, and Dow Corning is putting more of its business through the Xiameter model over the Internet. It's not at 100 percent, but the company did announce recently that the Xiameter model would become a much bigger play for the entire business.

Xiameter has made Corning's entire business more resilient by allowing the core business to better set its prices. Xiameter sells at lower margins than Dow Corning's traditional core high-touch model does, but it has avoided a race to the bottom because Dow Corning knows if it's going to get into a low-cost game, it ought to send that business over to Xiameter where it can just use spot-market pricing, and not try to simply negotiate for the low price. That's redefined profitability at the low end and helped better define and focus Dow Corning's core business. **(See 'When Should You Innovate Your Business Model?' for more on Xiameter.)**

I think also that Hewlett-Packard has been greatly influenced by what its ink-jet printing division has done with the blades-and-razor model, selling cartridges at a higher margin than the printer. And Dayton-Hudson originally set up Target as its discount arm, but now Target's all that's really left, if you want to look at it that way – or, they've morphed into just Target. This is, in fact, a business model that has extended to the industry at large, as evidenced by the fact that discount retailing is now 75 percent of the market cap for the entire retail industry. So now the dominant players are the discount retailers.

***Q: One of the points you make in your book, and I think you're saying again here, is that one***

***reason business model innovation is so important is that it allows you to experiment with something that might work out, then filter it back in through your company if it looks like the world is changing in that direction.***

Absolutely. It allows you to focus on where the world is going and what you need to do to address a specific customer job, unencumbered by your company's existing systems and structure. The process I outline for systematically engaging in business model innovation requires you to start with and stay focused on where the customer is going, where your opportunity is, and then build the right business system to support that.

Then by comparing how different the new business model is from your current one (particularly in terms of margins, overhead, and success metrics), you can get a clear picture of what you'd need to do to grasp the new opportunity. Would it be easy because it dovetails well with your current model, or would it require you to marshal different resources and processes? Knowing that, if the world really is going that way, then you can be flexible and respond effectively because you've already experimented with and built a business model that will take advantage of that shift.

A great example, though it hasn't completely played out, is Amazon. Jeff Bezos has been relentless in pursuing customer opportunities beyond his current business model. He even says, "I really look where the customer is going and where I need to deliver value for that customer, and I don't care about legacy. I will do what it takes."

And you can see his sequential business model innovations, initiated even before the previous business model is fully fleshed out, when he moved from online book retailing to more general retailing, to brokering other vendors' offerings, to even more radically leveraging Amazon's computing expertise to become a cloud-computing vendor of IT services, and then on again, with the Kindle e-reader, to become a hardware manufacturer. Bezos has been criticized by Wall Street for doing what he's doing, and he still did it.

***Q. I guess you could say that Apple has done the same thing, shifted its entire focus away from computers, more toward devices and systems like the app store, iPods, and iTunes.***

And Apple's even moved off iPods now to the iPhone as a new platform, and of course just announced its new tablet, the iPad. Beginning with the iPhone, applications for small devices have become incredibly important in Apple's business model, independent of the computer. Basically, Apple has taken a giant step past Dell in democratizing computing – a further step in the progression from the giant, expensive mainframes, through minis, but beyond the PC – by taking advantage of the shift to smaller computing devices, which is what the iPhone really is. That's pretty cool, because if anybody says, "The iPod isn't going to last because you can get your songs anywhere and we'll be platform-agnostic," Apple can say, "Fine, we're with you."

It's fascinating, that play. Even here at Innosight people said Apple was running into the

sustaining space of Nokia and other phone companies that would have reason to go after it with a vengeance. But I think what we didn't realize is that Apple was developing so innovative a new business model, integrating the hardware with a crowdsourcing model for the apps in so tight a way, that it was something materially different not just from a phone, but from how the phone manufacturers make their money.

And that's really the point. It's far harder for an incumbent to fight back against a business model innovation than it is for them to match and raise the stakes on a technology innovation.

***Q. Do some industries need business model innovation more than others?***

Yes – media, no question about it. The newspaper industry has to address the fact that it's been disrupted by Internet technology and the new business models that the Internet has enabled. The newspaper industry has to be open to continuing to devise ways not just to put content online but to develop new business models.

The Internet has just enabled so much. In fact the buzzword “business model” really came with the whole Internet era of the late 1990s and early 2000s. So, yes, media in the broadest sense, whether you're talking about newspapers, journalism, networks, cable, you name it. That's a pretty broad swath.

Of course healthcare needs business model innovation as a way to truly take out costs and create greater value. That's going to be hard for a while – healthcare reform is focused on other priorities, but it doesn't change the fact that business model innovation is needed there. Nor should healthcare providers sit back and wait for Congress to finish debating the question of coverage (which is really just focusing on one means of increasing access to current models of health care). While some providers do that, others more farseeing will be forging ahead to capitalize on this huge and manifold set of jobs many, many customers need done.

And defense absolutely needs business model innovation, because we're fighting a different kind of war, and in order to fight that war, the organization that's behind the fighting of that war has got to change fundamentally. I think Secretary Gates gets it intuitively, but a lot has to change to enable that to happen.

And finally, energy. Again, that's a term that covers a very large swath of industries – automotive, utilities, oil and gas. As we think about electric vehicles, hydrogen fuel cells, electric grid technologies, and smart grids – renewable energy in general and the integration of different types of renewable energy into a coherent system – that's naturally going to require a different business model than the one that's powering our cars and light bulbs today.

Related references

<http://www.seizingthewhitespace.com>

## Feature: When Should You Innovate Your Business Model?

*Business model innovation is not just for start-ups - here's how incumbents can innovate.*

**By Mark W. Johnson**

In my book *Seizing the White Space: Business Model Innovation for Growth and Renewal*, I tried to distill the question of when to innovate your business model into a specific set of circumstances. But it can never be a cookie-cutter exercise. It's always going to come down to judgment and perspective, thinking through the specific situation of your company. There are just too many moving parts to say in perfect confidence, "OK, well, we're in this situation, so we're going to fundamentally change our business model, and we need to set up a separate business unit." It doesn't work that way.

What I suggest in the book is that strategists need to think first about the external circumstances and then about what you may or may not need to change in your company. This thought process will help you decide if what you're talking about is fundamental business model change.

So, what are the **external circumstances** that might suggest it's time to innovate your business model? They can be grouped into threats and opportunities.

### ***External Circumstances: Threats***

First, there are two basic threats to the incumbent business that require the business model to be changed. Or, as Peter Drucker would say, times when "the theory of the business is no longer working."

One of those threats is the process of *commoditization*. Generally speaking, industries go through a fairly predictable progression, in which the basis of competition is moves from performance – making the better widget – to reliability – that is, making that widget more reliable, longer-lasting, and more durable – to customization and convenience – making multiple different widgets and making them more convenient and customized for individual tastes – to, eventually when all of that's said and done, pure commoditization, when everyone's competing only on price and cost.

In the evolution of that lifecycle, business model innovation starts to play a role at the point when you get to customization and convenience, and is fairly imperative as a way to escape commoditization. A great example of the convenience play is Dell Computer, which came into the personal computer market and said, "We're going to make a play for convenience and customization" and introduced a fundamentally different direct-to-customer, manufacture-just-what-the-customer wants business model to the personal computer industry.

Xiameter is a good example of escaping the profit-killing effects of commoditization. Dow Corning, longtime maker of high-end silicon products sold through a high-margin, high-touch

business model, created a whole new business called Xiameter to address decreasing demand for technical support among some segments of its customer base. Rather than cede those customers away to a competitor, it created a radically different business model in which it lowered costs, not only by stripping away support (which would just lower its margins) but by sourcing its product on the spot market, thus dynamically lowering its costs.

The point is two-fold; Xiameter didn't try to address this new customer need by shoehorning it into its existing model, which would never have worked. And it didn't put its head in the sand and say, "Well, we can't serve those customers profitably, so we won't, and we hope no other competitor does either."

*Classic disruption* is the second threat to the business that would require a new business model. Take the classic case of the old integrated steel mills when they confronted a disruptive threat from small minimills, which had worked out a way to produce lesser-grade steel at far lower cost. The big, integrated mills had two choices. They could either have passed along all that low-cost business to the minimills (which is, in fact, what they did), or they could have said, "Well, we're being disrupted, so let's come up with a whole new business model to address that." If they had gone with option two, they might have survived when the minimills improved their quality and ate up the entire customer base from the bottom up.

Those are the two clear-cut threats that require new business models, and they are circumstances in which incumbents find themselves in a reactive mode.

But companies can employ business model innovation proactively as well, not to counter threats but to create or capitalize on opportunities. In that case there are two particularly fruitful circumstances as well in which a new business model can enable a business to take advantage of opportunities.

### ***External Circumstances: Opportunities***

The first opportunity is the chance to "*democratize*" a market — that is, to open it up to people who have previously been entirely shut out — because all current alternatives are either too expensive, time-consuming, complicated, or inaccessible for them. To use the computing world as an example, we went from mainframe computers to minicomputers, to personal computers, to laptop computers, to netbooks and handhelds. And each of those democratizing moves, where computing became more ubiquitous and accessible to more people, required a different business model. There's a lot more to it than that, but that's a fairly simple example.

The final circumstance in which business model innovation is needed is to *capitalize on an internal innovation that doesn't mesh well with your current business model*. Xerox PARC is the classic sad example — scientists there famously came up with the graphical user interface and the mouse. But those technologies would have required Xerox to take a different approach than just saying, "How does this apply to copiers and the copier business model?" So those technologies ended up in the Apple computing business model. The Ethernet technology went

into 3Com, and Adobe used the PostScript technology when it started up.

Really, those technologies required three different business models. Xerox wasn't willing to come up with new business models and therefore didn't end up with any part in commercializing any of those technologies.

### ***Internal: Look at Your Current Business Model***

The only way an individual company can determine for sure whether a particular threat or opportunity requires an entirely new business model is to work up an initial estimate of the business model that could capture the new opportunity (or address the threat) and compare it with its current model. The Swiffer, for instance, although it was highly disruptive to the traditional mop makers, fit squarely within Procter & Gamble's established model for making and distributing household consumables in high volume.

That's why it's imperative that companies judge opportunities and threats first according to their own capacity to meet them – that is according to how they fit with their own business models – rather than according to how near or far the opportunity might be to competitors. Going after a seemingly lucrative opportunity with the wrong business model is the reason so many companies fail in their efforts at transformational growth. Failing to respond to a disruptor in your market because it requires you to develop a new business model can be suicidal, as the big integrated steel companies found out.

Conversely, though, failing to grasp opportunities like P&G had with Swiffer to disrupt other markets using your current business model is just throwing money away — something companies can ill afford in the current economy.

That said, if the opportunity requires a business model that features smaller margins, a much smaller overhead structure, or a dramatically changed resource velocity (that is, a dramatic change in the speed with which assets need to move through the business system), it's a good bet that it can only be addressed by setting up a separate unit to run this separate business model.

The same goes for models that need to run under different metrics, norms, or business rules (different gross margins, unit pricing, unit margins, quality measures, time to break-even, individual rewards and incentives, etc.).

That's a lot to take in, but the bottom line is that when addressing that big, big question of when business model innovation is called for, here's how best to think about it: Match the four external circumstances to the internal capabilities of your current business model. If responses to those circumstances require changing any of the things I've mentioned above, then you're probably not just looking at a tweak of the business model, but something fundamentally different.

## Feature: A New Framework for Business Models

*You can't innovate your business model until you're certain what it really is and what it needs to do.*

By Mark W. Johnson

Quick: Describe your company's business model.

Having trouble? That wouldn't surprise me. In reality, there isn't really any consensus about what the term "business model" even means. Suggestions range from the all-encompassing, everything-in-your-value-chain approach to the reductionist "A business model is nothing else than a representation of how an organization makes (or intends to make) money."

That latter definition is from Peter Drucker. And while I applaud his attempt to reach for the essence of the idea, I think he went too far. A business model has to specify more than just how a company intends to make money. It also needs to include some information about why a customer would ever want to give the company any money.

As something of a middle ground, I've proposed (in both an HBR article and in more depth in my book *Seizing the White Space* – see related references) a framework meant to be specific enough to overcome the reductionist problem but selective enough to overcome the unwieldiness of the kitchen-sink camp. I've broken it out into four boxes that answer the following questions:

1. Why would someone want to buy something from you?
2. How will you make money selling it?
3. What, exactly, are the important things you need to do to pull off the plan?

(I know that's three questions, but the answer to that last question comes in two parts, so the model requires four boxes.)

To answer the first question, you need to construct a customer value proposition (CVP) — not by trying to convince customers of the value of your products but the other way around, by identifying an important job a customer needs to get done and then proposing an offering that fulfills that job better than any alternative the customer can turn to. Generally speaking, the more important job is to the customer, the lower the level of satisfaction with current alternatives and the lower the price, the stronger the CVP.

To answer the second question, you need to specify your profit formula. On one level you could think of this merely as how much you expect to sell at a certain price minus your costs, but to be useful as a strategic tool, I've broken it out into four buckets:

1. **Revenue model** — simply, quantity times price

2. **Cost structure** — not only direct costs and indirect costs, but also overhead, which too many companies think of as immutable
3. **Margin model** — though technically part of the cost structure, I break it out separately because all too often companies mistake their margins for their entire profit formula and have tremendous difficulty understanding how a lower – margin opportunities could ever be profitable
4. **Resource velocity** — often overlooked as a profit generator, this measures how many widgets a company can invent, design, produce, warehouse, ship, service, sell, and pay for throughout the value chain for a given amount of investment, for a given amount of time. In some sense, it's a measure of not how much money flows through your company but how quickly it flows through it.

Finally, to answer the third question, you need to identify which company resources and which processes are essential to delivering the customer value proposition. These are not all the steps in the value chain — just those that are critical for the CVP.

As Peter Drucker did in the quote above, many people equate the profit formula with the entire business model. That's often all that's captured in many business model analogies, as well. Worse, many people focus just on the margin or overhead requirements of their current profit formula.

But every successful company is operating according to a business model that incorporates all four parts of this framework — a value proposition customers want, delivered through a coherent profit formula, which not only covers its overhead and margins but generates revenue at a certain volume and velocity, by employing certain key resources effectively through certain key processes.

Identify this model and you will go a long way toward understanding why your company is successful in what it's doing (or at least what it was doing before the recession). And unless you know that, you'll have little chance of working out what you need to change to be successful doing something else — like meeting whatever challenges the post-recession economy creates this year.

*This article was originally published on Harvard Business Review's 'The Conversation' blog (see related reference).*

Related references

<http://hbr.org/2008/12/reinventing-your-business-model/ar/1>

[http://blogs.hbr.org/cs/2010/01/is\\_your\\_business\\_model\\_a\\_myste\\_1.html](http://blogs.hbr.org/cs/2010/01/is_your_business_model_a_myste_1.html)

## **Feature: Why Systems Thinking Will Jump-Start the Clean-Tech Economy**

*New technologies won't get the job done on their own.*

By Mark W. Johnson

Whether they focus on wind power, solar power, clean coal, geothermal, biofuels, or something even more exotic, most efforts to wean the world economy from its dependence on oil view the challenge in technological terms. And the bulk of both public and private-sector investments have been made in companies using conventional business models aimed at fitting clean technologies into existing systems.

Sadly, history shows that this rarely works. Startups predictably struggle when competing head-on against incumbents in established markets. Disruptive market forces could over many years enable clean technologies to supplant fossil fuels the way the PC replaced the mainframe. But we won't have to wait that long if we can deliberately effect a wholesale shift in our energy infrastructure.

To be sure, this is an ambitious goal that requires thinking on a grand scale. The key, I believe, is to understand that in a major infrastructural shift, technologies don't replace other technologies. Rather, systems replace systems.

Thomas Edison grasped the systemic nature of technological transformation a century ago when he introduced the electric light bulb. He realized that the technology he envisioned — no matter how innovative—couldn't by itself sweep aside the kerosene-based lighting industry.

Instead of asking how he could solve the technical problem of inventing a light bulb, Edison asked how he could get consumers to switch from kerosene to electricity. He understood that despite the many advantages of electric light, it would replace kerosene only if it had its own, economically competitive network.

So, while scores of people worldwide worked on inventing a light bulb, Edison conceived a fully operational system. His technical platform included generators, meters, transmission lines, and substations, and he mapped out both how they would interact technically and how they would combine in a profitable business.

It had been widely assumed, for instance, that low-resistance filaments were most appropriate for light bulbs because they minimized the amount of energy lost as heat. But Edison determined that to make electric light economically competitive with kerosene lamps, he would have to limit the amount of costly copper used in transmission. Thus he'd need a high enough voltage to maintain current within a narrow wire—which meant a high-resistance filament in the light bulb itself.

Edison's search for a lamp filament "was conditioned by cost analyses," the science historian Thomas Hughes wrote in the journal *Technology and Culture*. "In his notebooks pages of economic calculation are mixed with pages reporting experimental data....His originality and

impact lie...in this synthesis.”

But an innovative business model wasn't enough to bring this revolutionary technological system to market. Edison also needed to test it out in a friendly foothold market, and he needed a leg up from favorable government policy. Accordingly, for his first small-scale trial, he chose close-packed Lower Manhattan, which was filled with Wall Street firms eager to be on the technological cutting edge, whose employees worked long into the night.

It was not coincidental that these were the very people who could fund its expansion. And he used his public standing to acquire regulatory support—for example, to get the needed permits despite opposition from the lamplighters' union.

To move from oil to a clean-tech infrastructure requires similar systems thinking. Governments and businesses must consider projects that balance four components: An enabling technological system conceived in the context of an innovative business model, implemented through a careful market adoption strategy, aided by supportive government policy.

This is a tall order, for which there are few models. But two intriguing systemic experiments are under way: Better Place, which is building a complete, competitive electric-car network, and Masdar — the organization set up by the government of Abu Dhabi to create a self-sustaining, carbon-neutral city, in a bid to become the Silicon Valley of the clean-tech industry.

It's easy to dismiss these big, bold, coordinated projects as quixotic, but when you consider that the \$15 billion Abu Dhabi is investing in Masdar is but a fraction of the \$100 billion President Obama has pledged to U.S. clean-tech efforts, it's clear that what we lack is not resources but vision. What we need now is not armchair critics but more such experimenters in systems thinking — the Thomas Edisons of clean tech.

*This article was excerpted from Environmental Leader (see related reference).*

Related reference

<http://www.environmentalleader.com/2010/02/01/why-systems-thinking-rather-than-new-technologies-will-jump-start-the-clean-tech-economy/>

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