STRATEGY & innovation

March 11, 2009

Welcome!

There's a great deal of talk now about the need for companies to innovate through the recession and to be able to transform themselves in order to continue to grow. But are “transformation” and “innovation” interchangeable concepts? We don't think so. As Scott Anthony writes in this week's feature, mastering transformation **requires** mastering innovation. Innovation fuels the engine of transformation. And in these difficult times, companies can't afford to cut back on fuel. Read more, including results from our annual transformation survey, below.

Thank you for reading "Strategy & Innovation", and feel free to forward it along to others who may be interested. As always, comments and suggestions are welcome – send them to editor@strategyandinnovation.com.

—Renee Hopkins Callahan, Editor

For *BusinessWeek's* Innovation Article:
http://www.businessweek.com/innovate/NussbaumOnDesign/archives/2008/12/innovation_is_d.html

Innosight News and Events

FORTUNE Brainstorm: GREEN conference will deliver answers and deepen your connections with an extraordinarily accomplished group of business and environmental pioneers including Innosight's Mark Johnson, April 20 to 22, Laguna Niguel, California.

http://www.timeinc.net/fortune/conferences/brainstormgreen/green_home.html

Front End of Innovation Conference, an annual PDMA-sponsored innovation event at which Innosight will be exhibiting, May 18 to 20, Boston World Trade Center and Seaport Hotel.

http://www.iirusa.com/feiusa/fei-home.xml

Feature

The Transformation Imperative

Companies that master transformation have a greater chance of surviving the current economic crisis

By Scott D. Anthony

A growing realism is setting into corporations around the world. Times aren't getting better any time soon. Times aren't getting more stable any time soon.

So the question turns from, "When will things return to normal?" to "What do we do now in the face of the 'new normal' of constant change?"

Charles Darwin serves as a useful guide in today's tough times. Darwin noted that the species that survived weren't necessarily the strongest or the smartest, but the ones that are most adaptable to change. Similarly, a recent annual survey Innosight conducted in conjunction with *Forbes* magazine highlighted how managers increasingly recognize the new corporate imperative: transformation.

Close to 600 managers from more than 150 different organizations, ranging from sole proprietorship to behemoths like Microsoft, P&G, and Toshiba took the survey. More than 100 respondents were from billion-dollar-plus companies, although there were only negligible differences in response between large and small companies.

A huge majority – almost 80 percent of respondents – said that their organizations recognized the need to transform. Close to 70 percent of survey-takers reported their companies had already committed to transformation. Today's tough economic climate hasn't dampened the desire for transformation; both figures were virtually unchanged from the last annual survey Innosight administered in 2007. Further, close to 80 percent of this year's respondents reported that today's economic environment has *increased* the need for transformation.

My forthcoming book, *The Silver Lining*, describes how one way to think about what transformation looks like is to visualize what a classically trained musician has to do if he wants to become a competent jazz player. He has to *stop* some behaviors, such as precisely following sheet music. He has to *change* the way he uses his ears, listening for unexpected changes. And he has to *start* a new behavior — improvisation. Fortunately, the musician has the right skills to make the transition, but it requires thinking and acting differently.

Mastering transformation requires mastering innovation. Transformation comes from entering new markets and leaving old ones. Almost any company that has transformed itself has done so through disposing of some businesses and innovating their way into others.

A classic example is IBM, which was struggling in the early 1990s. Over the past two decades IBM has shed long-time core businesses, like consumer printers, hard disk drives, and personal computers. It has created innovative growth businesses in markets such as services and grid computing. Some of these innovation efforts have been organic; some have involved small and large acquisitions. The company has thrived by being willing to break from its past to confidently confront today's challenges.

Companies rarely transform themselves through cost-cutting or improved operational effectiveness. Operational effectiveness is necessary to compete, and world-class operators can create competitive advantage, but in almost all cases operational effectiveness is insufficient to stave off disruption and drive long-term competitive advantage. But being the best-run buggy whip manufacturer in the world isn't worth much when disruptive forces rip through an industry.

Innosight's field work and research suggests that there are common elements to organizational transformations (see **Figure 1**). An organization must start with a clear and compelling blueprint for transformation. That blueprint is supported by four interlocking categories, with 12 specific elements:

- **Dedicated resources.** Transformation doesn't happen by accident. Companies must allocate people and dollars to transformational efforts. Also, senior leaders must actively engage in transformational efforts that might run against normal operating procedure.
- **Lead opportunities.** Innovation and transformation go hand in glove. Companies need to select opportunity areas that have the highest potential to drive transformational growth, develop new business models to win in those opportunity areas, and scale new growth businesses.
- **Tools and enablers.** For transformation efforts to "stick," companies need to have the right tools, processes, metrics, and incentives. Without these enablers, transformation efforts can fall prey to the "sucking sound" of the core.
- **Appropriate mindsets.** Innovation is an intensely human process, but companies often overlook how important it is to have formal efforts to overcome internal resistance, teach new mindsets, and build a culture that supports transformation.

Given the complexity of the challenge, it is not surprising that many survey respondents reported struggling with transformation efforts. Only 12 percent of survey takers said they strongly agreed with the statement, "Our organization is making above-average progress transforming itself." However, that figure was up from 10 percent in 2007.

The bad news? There's no silver bullet for transformation. Both leaders and laggards reported struggling to successfully put the transformation pieces together. Survey respondents answered detailed questions about the 13 discrete pieces of the transformation equation described above. How important is the factor to successful transformation efforts? Did they conceptually know what to do? Were they successfully implementing that factor?

As **Figure 2** shows, more than 80 percent of the respondents said that 11 of the 13 factors were important (interestingly, the importance of many factors decreased from 2007). However, more than 50 percent of respondents reported successfully implementing only *three* of the 13 factors — engaging senior management, selecting opportunity areas, and creating a blueprint for transformation.

There are two pieces of good news. First, the scores related to conceptual understanding and implementation generally increased from 2007 (the 2007 survey did not ask about a strategic blueprint or conducive culture for transformation).

Further, analyzing the leaders — companies that report making solid progress on innovation — provides a useful way to guide companies just beginning their transformation efforts. **Figure 3** shows the gap between companies that report making the most progress and companies that report making the least progress. While there are gaps across the board, companies that report making above-average performance lap the field when it comes to senior management engagement, setting strategy, and allocating resources.

This reinforces an Innosight viewpoint that transformation must start at the top of the house. If the Chief Executive Officer and his or her team aren't running point on transformation, efforts are likely to stumble.

One leadership is engaged, consider the following six pointers:

1. Create a clear and compelling blueprint for change. Ideally such a blueprint clearly describes the transformation imperative, and identifies what options are on and off the table.

2. Translate that blueprint into meaningful resource allocation decisions. Mission statements don't transform anything. People have to spend time and money driving transformation.

3. Ask yourself what you will **stop** doing in order to shift resources in support of transformational efforts. Take a hard look at whether in-process innovation efforts or even existing businesses need to be shut down or spun off.

4. Pick a handful of "demonstration" projects to show how acting differently leads to different results. Culture is a lagging, not a leading variable. Demonstration projects can help to show the power of new approaches.

5. Support early success efforts with metrics, processes, and structures to allow transformation to "stick."

6. Bring in outside voices to shake up the status quo. Einstein once defined insanity as doing the same thing and expecting different results. Outside perspectives can help to ensure that companies can successfully break from their past.

Success *is* possible. Respondents noted that companies like IBM, Hewlett-Packard, Procter & Gamble, and Google seem to have successfully transformed themselves in recent years. And generally survey respondents reported progress compared to respondents to a similar survey Innosight conducted in 2007.

Transformation is increasingly becoming an absolute corporate necessity. If your company has recognized the transformation imperative but is struggling to make progress, take heart. You are not alone. But don't stop your efforts, because no corporate initiative is more important in today's challenging markets.

Figure 1: The Transformation Blueprint

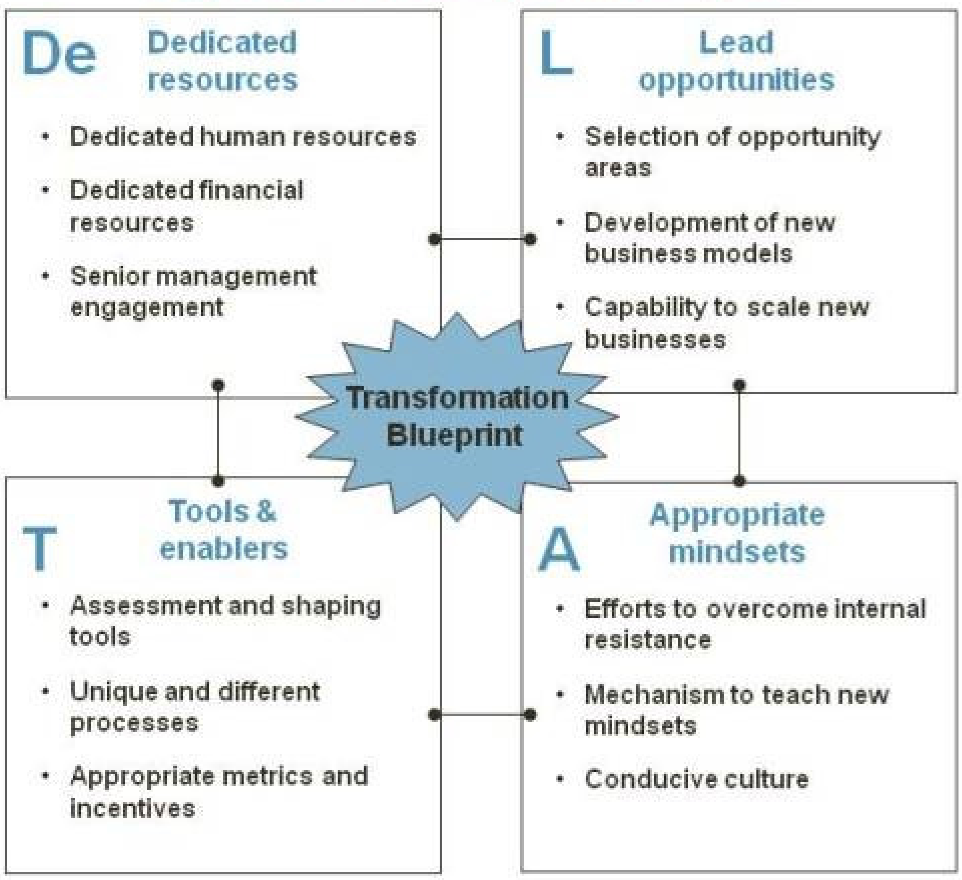


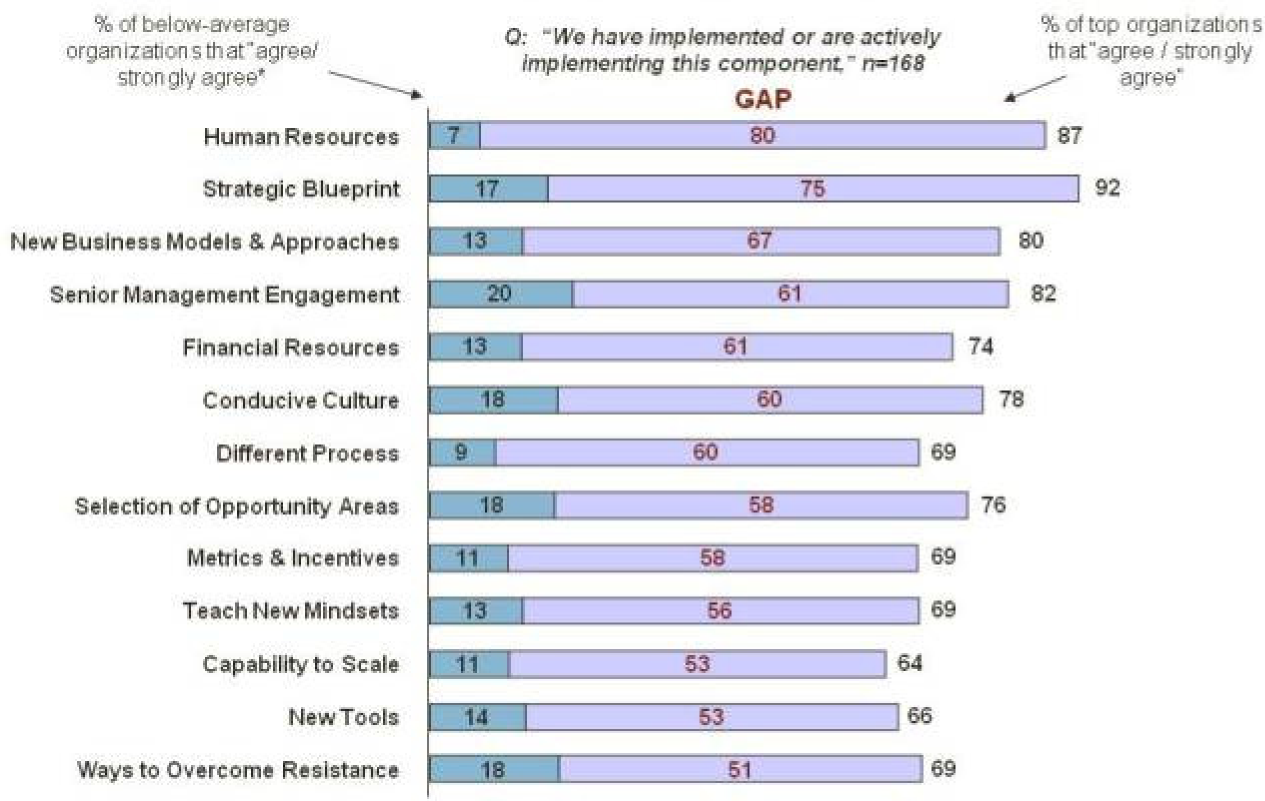
Figure 2: Challenges Across the Board

% agree or strongly agree that ... (% change from 07)

Area	"This factor is important"	"We understand what needs to be done"	"We have successfully implemented"
Senior Management Engagement	96 (-1)	77 (6)	59 (15)
Conducive Culture	92 (N/A)	62 (N/A)	47 (N/A)
Teach New Mindsets	89 (-5)	54 (5)	43 (13)
Metrics & Incentives	82 (-9)	53 (9)	39 (15)
New Business Models & Approaches	90 (-5)	63 (8)	46 (6)
Selection of Opportunity Areas	95 (-1)	75 (4)	56 (-1)
Financial Resources	91 (4)	73 (4)	45 (0)
Capability to Scale	82 (-6)	53 (2)	37 (7)
Human Resources	88 (1)	68 (6)	47 (2)
Strategic Blueprint	93 (N/A)	76 (N/A)	51 (N/A)
Ways to Overcome Resistance	80 (-7)	53 (6)	42 (10)
New Tools	81 (0)	53 (6)	38 (6)
Different Process	70 (-12)	47 (2)	37 (4)

Note: Fully completed surveys only; 2007 N=335; 2008 N=467

Figure 3: Leaders Focus on Resources, Blueprints, and Strategy



* Top organizations reported a score of 5 on the question of "Our organization is making above-average progress transforming itself" (n=64); below average organizations report a score of 1 or 2 (n=104)

Innovators' Insight

Thinking Outside the Box…of Wine
What causes roadblocks in the up-market march of disruptive innovations like boxed wine?

By Taylor Owings

In a down economy and in the midst of a "green" movement, there is good news for oenophiles: high-quality boxed wines are on the rise. Both cheaper and more environmentally friendly, wines packaged in cardboard instead of glass make perfect sense for people who are willing to give up the elegance of the bottle. Boxed wines have had great success disrupting the low-end of the wine market, and are now beginning to make the march upward. The question is, will this march continue until the entire wine market has been transformed?

For the 14th consecutive year, Franzia — the boxed wine behemoth that is known for selling low-quality, affordable wine — has been named the worldwide leader in case sales by *The U.S. Wine Market: Impact Databank Review and Forecast* reports (see related reference). Franzia has been able to dominate the wine market for so long by working a low-end disruption very well — it focuses on serving the consumer who wants a no-frills table wine at the lowest possible price point. Franzia's firm grip on the lowest end of the market has left some room for small, boutique companies to enter and compete with a slightly more elevated offering. In fact, the hottest segment of the market in 2008, at 8.2 percent growth, was the group of small labels just 100,000 to 250,000 cases per year.

Several of these small wineries, notably some well-respected labels from Italy, have begun (see related reference) to package some excellent varietals in boxes rather than bottles. In so doing, they are attempting to move boxed wine up-market from Franzia's low end, betting that consumers who have a higher threshold for taste than Franzia can satisfy might be willing to accept the unrefined look of wine in a box.

Tyler Colman, the self-appointed "Dr. Vino" (see related reference) and author of *Wine Politics* and *A Year of Wine*, could not be happier. He has been outspoken in his support for wineries that package high-quality wine in boxes rather than bottles. His arguments are all tremendously practical: Cardboard boxes are much lighter than glass bottles, reducing by more than four times the greenhouse gas emissions associated with transporting wine.

Boxed wine is also more convenient for consumers (see related reference): box packaging both reduces the fragility of the package for increased portability and contains an airtight layer to keep oxygen away from the libation so that it can be preserved for several weeks, rather than the several days that a re-corked bottle can survive.

Last but not least among the practical reasons to switch to cardboard is the fact that boxed wine is much less expensive. A quick search on the Beverages & More website yielded two '05 Chardonnays that had received an 87 point rating from connoisseur Wilfred Wong: the 3-liter box of wine was priced at $7.33 per liter and the 750-milileter bottle of wine at $19.99 per liter (that's a 63 percent savings for switching to the box).

Boxed wine satisfies so many jobs it might seem inevitable that this über-practical packaging would become ubiquitous. What would keep this disruption from marching all the way up-market? Is it just the stigma created by Franzia? Or, is there more to it?

It turns out there's one big tradeoff associated with packaging wine in a cardboard box: you give up the ability to let the wine age. Plastic bags and cardboard expose wine to an excessive amount of oxygen, requiring it to be consumed within a few years of packaging. Therefore, given the technology currently available, the most complex, full-bodied, and expensive wines cannot be packaged in boxes, because those wines are often aged for decades before they are considered at their peak.

So, we have come to an impassable obstacle in the ever-upwards march of boxed wines – at least as long as technology doesn't allow for aging wines in boxes. But, surely this is an obstacle that only affects the smallest of niches at the top of the market, right?

Maybe so, but I believe there's an emotional job-to-done at play here. Consumer knowledge about wine is so rudimentary that people will often rely on a taboo or heuristic, such as bottle vs. boxed packaging, to make their purchase decisions about wine. And even though boxed packaging is sufficient for the vast majority of wines consumed in America, and in fact some very good wines are now available in boxes, the bottle remains a visual cue for the best of the best while the box is a taboo for those who heed such outward "signs" of quality.

And, consider this blatant taboo against boxed wine: a piece of advice from an ABC News article suggests (see related reference): "To cut back on wine costs …head for the much cheaper boxed wine" and simply "hide the evidence" by pouring the wine into a vase and presenting that with your meal.

Here's another wine taboo in action: a sommelier friend of mine revealed that diners often use the "price equals quality" heuristic because they cannot distinguish quality just from reading labels and information on the menu. They will avoid choosing the lowest-priced bottle of wine. Therefore, many restaurants price their wine such that they make their highest margins on the **second** least-expensive wine on the list.

Boxed wines will continue their up-market march into markets where consumers don't care about taboo or who know better than to attend to it. Yet as long as the job of "give me cues to help me choose the best wine" exists, there will still be a significant portion of the market that pays a premium for the bottle.

Of course, if the technological barriers to aging wine in boxes can be overcome, there would be very little justification for the boxed-wine taboo and the bottle might be completely replaced. Additionally, if the consumer population becomes much more educated and confident in their ability to distinguish excellent wines, people will probably stop relying so heavily on taboos and heuristics. This is the case in France, where aptitude for wine is high and so are boxed wine sales – much higher than in America. But considering our penchant for arrogance – or, self-confidence – in the culinary arts is significantly lower, Americans might just continue to be swayed and swindled by the bottle.

Would-be disruptors can take two lessons from boxed wine:

1. It is easy to dismiss low-end threats. Boxed wine was a punch line, but it offers meaningful benefits and has been on a steady march up-market.

2. Determining the disruptive impact of an idea depends on assessing its ability to move up-market, and the degree to which that improvement trajectory intersects the job/performance thresholds of more demanding consumers. One can certainly argue that there are some reasons to believe there are rate limiters to the disruptive curve, but don't discount the disruptors just yet!

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Emerging Technology Watch

'Doc in a Box' Surgery Robot for the Battlefield

By Renee Hopkins Callahan

According to *Wired* (see related reference), University of Hawaii roboticist Peter Berkelman has developed a robot-assisted surgery droid for just $75,000, while higher-end surgery droids can cost more than $1 million and require extensive set-up. Berkelman's version isn't good enough for higher-end surgeries but is small enough to fit in a soldier's backpack and easy to set up. It could certainly be good enough for removing shrapnel and handling other battlefield injuries. The technology is still in the testing stage.

Related reference

Wired: http://www.wired.com/medtech/health/magazine/17-03/st_alphageek

From the InnoBlog

Surviving the Solar Shakeout with Business Model Innovation

By Josh Suskewicz

Last week First Solar, one of the world's leading solar power companies, announced that it was buying start-up OptiSolar's portfolio of impending projects for $400 million (see related reference). OptiSolar had appeared out of nowhere last year to ink massive contracts with utilities, including a record $550 million deal with PG&E, and seemed poised to become a major player in the industry. I and others wrote admiringly about their differentiated, fully integrated business model – whereas most solar power companies simply make solar modules that they sell to contractors and developers, OptiSolar planned to control their full value chain – they would actually build and operate power plants using their panels.

Then came the credit crunch, and funding for OptiSolar's ambitious plans disappeared. First Solar, which has minted cash over the last few years as its highly disruptive thin-film solar panel approach matured, is using its war chest to step into the void.

Some observers are voicing concerns about the price and timing of the deal. Why not be conservative with cash while economic storms are still raging? Other analysts would rather see First Solar spend its money on diversifying its technology mix by picking up early stage competitors with distinct and promising technologies, such as CIGS cells.

These are legitimate warnings – it's certainly hard to fault analysts for urging caution and diversified portfolios in times like these. But I really like the deal, because it sets the stage for First Solar to marry its disruptive technology with a powerful, differentiated business model.

Taking on OptiSolar's power plant projects (and, significantly, its plant development team) sets First Solar up to move to an integrated model that will allow it to extend its already industry leading price advantage. Solar as an industry is still immature; system prices are too high and the value chain has not fully cohered. As a result, project costs are pretty variable, and the modules themselves can be just a fraction of the total price tag. By forward integrating, module makers can assert control over a greater share of the process, trimming costs and ensuring quality for their end users. This is consistent with one of the core disruptive innovation theories (integration vs. modularity), and looks like another smart strategic step for First Solar away from the rest of the solar pack.

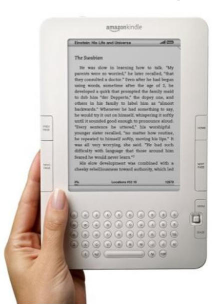
First Solar took baby steps towards such a model last month when it announced that it was providing financing for some of its customers' major development projects to help keep them on track. This latest, far more ambitious move does not necessarily commit the company to full-on integration – First Solar said it would likely sell the power plants rather than maintain and operate them at first – but it paves the way for flexible, emergent experimentation.

The move also locks in demand over the next few years, which will continue to enable the company to scale towards ever lower prices despite the credit markets. As competitors struggle to stay afloat, First Solar will be charging ahead in its quest to compete directly with fossil fuel energy on a cost basis without government subsidies. Once stimulus funds start flowing into the renewable energy sector and utilities get serious about solar, a forward-integrated First Solar will be ready and waiting to provide cutting edge, low cost, turnkey power plant solutions.

Related reference
OptiSolar acquisition: http://www.reuters.com/article/GCA-GreenBusiness/idUSTRE5225W420090303

The Kindle Controversy: Technology Races an Aging Business Model

By Andrew Laing



The new version of Amazon's Kindle e-book reader has been attracting quite a lot of press (including within this blog – see related references below), and generally the coverage so far seems to be positive: its screen is easier to read and displays more shades of gray, it's thinner, its keyboard is easier to use, and it doesn't look quite as much like a medical device (see related reference). One improvement, however, has been strongly criticized and may threaten an existing business model.

This new feature is the Kindle's ability to "read" text out loud (see related reference); text-to-speech technology has been improving rapidly in recent years, and supposedly the Kindle's computer-generated voice – named "Tom" – is reasonably pleasant to listen to, at least for a little while. Surprisingly, this has stirred up some controversy.

In this *New York Times* op-ed (see related reference), Roy Blount, the President of the Authors Guild, argues that the Kindle's new ability is essentially stealing value from authors and publishers because it offers each title as "an e-book and an audio book rolled into one" but doesn't pay anyone for audio rights and may threaten the market for audio books. Although one writer (see related reference) responds that the Kindle's speech synthesis just isn't good enough to compete with audio books, it seems inevitable that the technology will reach that point in the not-too-distant future.

This is a terrific example of an entrenched business model threatened by (and fighting against) a new technology that undermines it. From Baldwin Locomotive to VCRs to Better Place, (see related references) this kind of tension is ubiquitous, and overcoming it can require businesses to transform their business models to adapt – because, litigation aside, new technologies are tough to stop. Baldwin Locomotive may not have seen diesel coming early enough, but the entertainment industry adapted to VCRs after failing to stop them in court by using them as a new channel to sell their content. Through sites like Hulu, it's now adapting to the Internet as well. Whether Better Place's nascent business model will be undermined by better batteries remains to be seen, as my colleague Luke Langford explains (see related reference).

So how will book publishers adapt? The audio book industry may well be in for some tough times, but the Kindle could enable some fascinating (and potentially lucrative) new business models that weren't possible within the paper-and-ink paradigm. This blog post (see related reference) suggests just a few good ideas, from dynamic pricing to social networking to self-publishing. Making money through the Kindle might look different from making money through Barnes & Noble, but the faster the authors and publishers of the world recognize that business model innovation will be necessary and doesn't have to be zero- or negative-sum, the brighter the industry's future will be.

Update: Amazon appears to be taking this argument seriously, at least for now. On February 27th, Amazon announced it would be allowing publishers to decide whether to allow text-to-speech to be made available for their content (see related reference).

Related references
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Amazon update: http://bits.blogs.nytimes.com/2009/02/27/amazon-backs-off-text-to-speech-feature-in-kindle/

Innovation Links Posts

We've started posting once or twice a week annotated links to various news and blog items of interest in the innovation world. Since the last "Strategy & Innovation" was published, this link has been posted:

March 6: http://www.innosight.com/blog/325-innovation-links-for-march-6.html

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