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## Feature Story

### The Innovator's Survival Guide

Kevin Bolen

Innovators, are you feeling a bit lonely at the moment? Don't take it personally. During turbulent economic times, companies naturally tend to focus on what's familiar. Talking about the core business is like eating comfort food. Friendly discussions with loyal clients ease the anxiety generated by the media about the state of the broader market. Releasing incremental enhancements to existing offerings provides low-risk reasons to celebrate accomplishments at a time when so much seems out of control.

These prevailing sentiments have the effect of alienating those focused on the "new and different." Whereas just a few short months ago, your programs were the lifeblood of the corporate strategy, suddenly you find yourself on the outside looking in. This is a lonely place, and prolonged isolation can lead to rash, unproductive behavior. However, a more thoughtful response during such times can actually accelerate and expand returns on innovation initiatives.

To help you make the right decisions, we offer a brief list of actions that innovators should and should not be taking in today's skittish climate. We focus on the two main areas most likely to provoke the wrong behavior: your relationship with an increasingly nervous core business and the efficient allocation of scarce funds.

In terms of working with colleagues and leaders in the core business, Innovators SHOULD accept the realities of the marketplace and lend their help to the cause. Innosight's research has shown that innovation can only succeed when the core business is stable. Without this foundation, management's time and attention will be overwhelmed by the need to appease stakeholders such as clients and partners. Their ability to think constructively about any concept more than three months out will be impaired.

Our advice: don't fight this. Instead, innovators should look for ways their teams can help right the ship:

- Offer to temporarily suspend your market trials and reallocate those resources to research efforts within the core client base
- Develop a jobs-to-be-done analysis for current consumers that highlights changes in their evaluation criteria and consideration of competitive offers in light of the economy
- Conduct a disruptive threat assessment to analyze and counteract the actions of emerging competitors who may see your current weakness as an opportunity to advance

- Provide input on marketing and messaging tactics to better align your value proposition to consumers' changing needs and circumstances
- Outline ways to de-feature the existing offerings to better meet the basic needs of consumers at a lower price point

Innovators SHOULD NOT react to leadership's focus on core offerings by trying to cram their new offerings into the core. There are reasons why new concepts are kept outside the core — it was the right choice in a booming economy and it is still the right choice. Trying to push new technology or service offerings through the traditional business model will fail on two fronts.

One is that the new concept will not be given the time and freedom it needs to evolve naturally based on market input through early stage releases. The other is that the existing channel and consumer base will be confused by the new offering at a time when they too are seeking familiarity and stability. In short, offer your help and expertise but don't offer to assimilate.

A large part of the internal discussions will likely center around near-term budgets as capital tightens and revenues are less predictable. Many across the organization will turn defensive and try to hoard their share. Innovators SHOULD embrace this scarcity. Entrepreneurs operating outside your company are feeling the credit squeeze and reinventing their business models accordingly — so should you.

Rather than passively waiting (and actively praying) to see how your budget fares in the latest round of reviews, why not pre-empt the discussion and voluntarily scale back your line items? Leadership will appreciate having one less hard negotiation to walk through and you will likely find that a sharper focus increases your time and freedom to experiment properly. Ways you can consider "giving back" include:

Release any part-time team members back to their "day jobs" in the core business — in reality, two or three dedicated people will accomplish far more than 30 people assigned to spend 10 percent of their time on a program anyway.

Prune your portfolio — revisit the concepts in your portfolio, prioritize them based on anticipated time to profit, and temporarily shelve the bottom half of the list or any idea that will not be profitable within 6 months.

De-feature your concepts — look for performance areas where you may be overshooting the needs of the customer and eliminate them. Remember, consumers are in this economy with you and they will not be paying for performance they don't need. Be ruthless here.

Revisit your research approaches and expenses — entrepreneurs make do with small sample sizes, social media input, and low-cost interviews to get directional information with which to develop their concepts. Since markets that don't yet exist can't be accurately measured, why not scale back your pursuit of perfect data in favor of quick insights?

Reduce the cost of your field trials — if you focus on testing one or two assumptions at a time, you will soon realize you do not need a fully functioning prototype or a three-month in-market pilot release to learn new things about your offering and the target market. Use a 3-D illustration instead of a prototype. Launch a website describing your new service and solicit comments instead of staffing a sales person to gauge the market.

Innovators SHOULD NOT respond to the threat of budget cuts by inflating the business case for their ideas. In times of economic scarcity and budget reviews, it is tempting to want to present compelling data to justify continued investment in your new concept. You goose the size of the target market by 15 percent, reduce production costs by 20 percent, bring the release date ahead 9 weeks and Presto! you are suddenly helping the bottom line! Innovation is heralded as a hero and your offerings are back at the center of attention.

Leadership is not immune to emotional responses at times like these. If you present them a business case that appears to make their challenges go away without hard decisions around funding and staffing cuts, they will cling to it. It is your job as the good innovator to resist this siren song. The core business must respond diligently to the economic challenges and your new concepts must be allowed to evolve and react at the pace of their market. Attempts to “go big” quickly to save a company rarely, if ever, succeed.

Finally, innovators SHOULD be sensible when it comes to managing their own careers. Depending on how long this current crisis lasts, and its resulting impacts on basic business models in some industries, it is inevitable that certain companies will not survive. As signs of their impending failure emerge, the first and deepest cuts will come in non-revenue-producing areas including innovation and R&D.

Do your part to shore up the core business but recognize the signs when you have become irrevocably disrupted and plan accordingly. Perhaps your idea won't survive inside a legacy company but would thrive as a startup. Even in downturns, there is always a market for truly disruptive ideas and the people who drive them.

## Innovators' Update

# Cleantech Hits A Speed Bump

Josh Suskewicz

Within the last few years we've written a couple of Innovators' Insights on companies participating in various aspects of the clean technology and alternative energy sectors. Given the continued attention paid to all things green, the rapid expansion of the industry, and the deteriorating economic climate, it's worth a look to see how these companies are faring.

First, an Insight from March 2007 titled "[Juicing the Electric Vehicle Market](#)" singled out electric car companies like Tesla Motors for "cramming" new technology into old models, and suggested that Neighborhood Electric Vehicles (NEVs) like Chrysler's GEM had a better chance of success. Indeed, in the last few weeks Tesla has announced yet another production delay, major layoffs, and the ouster of its CEO.

Despite a very attractive prototype, tons of buzz, and the support of the Google guys, Tesla has yet to find firm footing in the face of the age-old challenge of getting new-to-the-world technologies to perform seamlessly at the high end of an established market. All the while, NEVs have been expanding their presence in much less demanding settings like enclosed communities and small towns, and received a good deal of press coverage over the summer as gas prices spiked.

Next, in "[Going Green Disruptively](#)" from November 2007, we took a look at the rapidly expanding cleantech market as a whole and urged caution because billions of investment dollars seemed to be chasing new technologies rather than new business models.

That kind of scenario has played out in too many situations that later came to be seen as bubbles — the Internet gold rush, for example — and given that context, the odds of success for technology investments seemed frighteningly low. The article outlined three potentially winning strategies amidst the general tendency to focus on cramming new technologies into old paradigms. How are the companies we cited holding up?

Novel wind turbine developer Magenn Power exemplified the first strategy we outlined, new market disruption (a Magenn wind turbine is pictured on this page). Instead of looking to compete with incumbent manufacturers like GE that develop powerful and expensive wind turbines for existing energy grids in the developed world, Magenn plans to take their unique approach to off-grid markets. The first commercial-scale prototype was launched this year and the company recently announced a deal with a park in Ontario to power a campground. These are small steps forward, to be sure, but as the technology is proven out, Magenn's strategic focus on nonconsumption continues to excite us.

The second strategy, low-end disruption, was represented by thin-film pioneer First Solar, whose less powerful but less expensive solar panels have proven really attractive to the marketplace. The company has zoomed to the top of the industry, taking its place alongside powerful crystalline silicon-based

incumbents like SunPower. And First Solar's disruptive march continues: this year revenues more than doubled as the company executes on its aggressive expansion plans.

The final strategy, business model innovation, was illustrated by Better Place, former SAP executive Shai Agassi's bold effort to obviate gasoline-fueled cars through the development of an electric recharging infrastructure based on currently available technologies.

Though the model is yet to launch, it continues to build significant momentum. Preparations in the initial foothold market, Israel, have picked up, a second country, Denmark, has signed on, and in recent days it was announced that Australia will be next. In the face of the global credit crunch, Better Place managed to raise \$1 billion to build out its network in Australia — by far its largest and most extensive market yet. France and areas of the United States are rumored to be in the pipeline as well.

Looking beyond the companies highlighted here, we see that for much of the last year the cleantech investment boom continued apace. According to some measures, investment continued to soar in the first three quarters, shattering records set in 2007 despite a general retreat in venture capital funding.

Despite the deepening credit crunch, the macro environment has been extremely supportive of cleantech. Oil prices ran up to record levels this year, and even though they have retreated recently they are still historically very high. Both presidential candidates have made next-generation energy technologies centerpieces of their campaigns.

That's the good news. Here's the bad news: the global financial crisis comes at a particularly bad time for the industry. It is threatening to stop many early stage companies in their tracks. In the stock market, many of the renewable energy companies that have gone public are significantly off their highs. A leading clean energy exchange traded fund, the Powershares WilderHill Clean Energy Index, is down 60 percent for the year, and new cleantech IPOs have essentially dried up, along with the general IPO market. And despite the extremely strong investment numbers up until now, some analysts expect cleantech venture-stage funding to grind to a halt.

Going forward, there are financial, political, and social concerns facing cleantech businesses. First of all, many cleantech companies are in the expansion stage, and the massive capital outlays they need to fund their rapid development are in doubt. They will have trouble accessing the public markets, and private capital is harder to come by.

Upstream businesses will be impacted as well; for example, tighter credit markets means that new polysilicon capacity will be constrained, which will in turn limit the ability of silicon-based solar companies to ramp up cost-effectively. Advantage: solar technologies that are much less reliant on silicon — thin-film and concentrators.

Second, many cleantech companies depend on government subsidies to compete. Solar, for one, still counts on subsidies to bring prices in line with other forms of energy generation as the underlying technologies mature. Even though the U.S. Congress squeezed an extension of renewable energy tax credits into September's financial bailout bill, it is very likely that global subsidies will take a hit.

Such incentive programs have catalyzed demand for clean technologies in Germany, Japan, Spain, and California; they will continue to play an important role, but it is hard to imagine them growing as they

have in recent years. With less of a tailwind from government incentives, will cleantech industries like solar be able to keep up their torrid growth?

Finally, popular support for green solutions may suffer, which would lead to less consumer demand for green products and initiatives. It is hard to pay premiums in times of recession and economic anxiety.

So who might have an advantage in the ensuing shakeout? What we predicted in the Innovator's Insights will be increasingly true: the cleantech companies with disruptive strategies and business models will win, while those that are little more than new technologies crammed into old business models — or new technologies with no business models at all — will lose.

Ultimately, fewer market-distorting subsidies and less easily available expansion capital will help highlight the companies whose environmentally sustainable solutions are wrapped in economically sustainable business models. Companies in the mould of First Solar or Better Place may emerge stronger than ever — as Google did earlier this decade — but many more will be bubble casualties like Pets.com.