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Investing at the Pace of Confidence: a Lesson for Scaling Up a New Growth Initiative

Greetings!

What's the best strategy for funding a new growth venture? The question is tricky, because scaling up funding too early can be even more damaging to growth prospects than being too late.

In this issue, Innosight partner Kevin Bolen hits upon a new balance for "building the runway at the same time you build the plane."

Speaking of growth, Innosight is doing it by helping our clients grow through challenging economic times. As a result, our offices in Watertown, MA had been bursting at the seams. So this fall, we relocated. Our new global headquarters building near Route 128 in Lexington, MA offers triple the square footage and includes innovation spaces designed to better serve clients.

Continuing on the trail of what's new, Scott D. Anthony and Innosight are unveiling a book aimed at cutting through the vast complexities of innovation. Called *The Little Black Book of Innovation*, the Harvard Business Press title hits stores in January. Picking up on key themes from the book are an excerpt in *The Atlantic* as well as a piece in MIT's *Technology Review* that is co-authored with Innosight co-founder Clay Christensen.

We're also excited to unveil our newly redesigned and enhanced website, at Innosight.com, under the banner of our refreshed company logo. Please visit for a wealth of innovation resources and thought leadership. Discover more about our impact and the work we're doing with leading companies. And get to know our diverse Innosight team members. Coming in early 2012, watch for a redesigned and updated *Strategy & Innovation*.

In the meantime, here's wishing you a happy holiday and health and success in the new year.

— Evan I. Schwartz, Director of Storytelling
(eschwartz@innosight.com)

Innosight News & Events

Clay Christensen Named World's Most Influential Management Thinker



The Thinkers50 bi-annual ranking recognized Innosight co-founder **Clayton M. Christensen** as the most influential business thinker in the world, as well as the winner of the 2011 Innovation Award. [See the rankings](#) at the Harvard Business Review website.

iTwin wins Popular Science's Best of What's New Award

Popular Science gave the device, an Innosight Ventures portfolio company, one of the publication's highest honors the [Best of What's New Award](#).

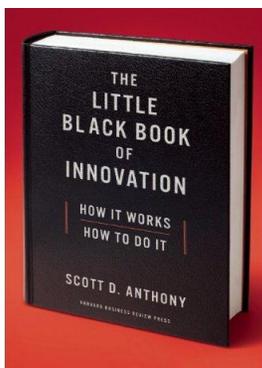
For Clay Christensen's 2011 Innovation Award:

<http://hbr.org/web/slideshows/the-50-most-influential-management-gurus/1-christensen>

For iTwin's Best of What's New Award:

<http://techcrunch.com/2011/11/16/tc50-company-itwin-wins-popular-sciences-best-of-whats-new-award/>

Introducing: *The Little Black Book of Innovation*



We're pleased to announce the new book from Innosight's [Scott D. Anthony](#)¹ and Harvard Business Review Press.

Innovation may be the hottest discipline around today—in business circles and beyond. But for all the enthusiasm the topic inspires, the practice of innovation remains stubbornly impenetrable. No longer. *The Little Black Book of Innovation*, Scott D. Anthony draws on stories from his research and field work with companies like Procter & Gamble to demystify innovation. All in his trademark conversational style.

“A vital handbook for leaders seeking to teach and evangelize the power of innovation.”

-Colin Watts, chief innovation officer, Walgreens

Learn more about the book [here](#)².

You can now [Preorder at Amazon](#)³.

This is an excerpt of the book published at TheAtlantic.com.

Making Innovation Cheap and Easy

By **Scott D. Anthony**

An important change is taking place in the world of innovation. Put simply, innovation can be done very cheaply.

It used to be that innovation was relatively expensive. For example, one case taught in Harvard Business School's entrepreneurship program describes how Robin Wolaner came up with an idea for a high-quality magazine targeting parents in the mid-1980s. Wolaner's original plan suggested that it would cost \$5 million to develop the idea. Before she attempted to raise that amount of capital, she decided to run a simple market test. She sent a sample issue of her magazine to a set of parents. Each test issue included a reply card that people could return to indicate interest in subscribing. High levels of response validated the market interest in the idea, and Wolaner was off and running. She eventually sold her magazine (Parenting) to Time Life, Inc., for about \$10 million. This test cost Wolaner about \$150,000 to run.

Contrast Wolaner's story to the two bright entrepreneurs my colleague and I met in Singapore in September 2010. The duo had an idea for a Web site that would democratize tools used by designers of a type of chip called a field programmable gate array (FPGA). It's a big market -- the companies that sell FPGAs are multibillion-dollar enterprises, and the leading tool providers are big companies, too. The founders had built a functional Web site with real, live tools. They had run a marketing campaign to attract a couple hundred users to the site. The company had earned modest revenues.

"Wow," we said. "A functional Web site, a marketing campaign, and early revenue. Who are your investors, and how much have they invested to date?"

They looked at each other sheepishly. The total out-of-pocket investment was less than \$1,000. They had done the Web site themselves in their spare time. They did focused advertising on Google to attract early customers. Now that's what I call doing things on the cheap!

If Wolaner was launching her magazine business today (perhaps a dubious proposal in the current media market), there is simply no way she would need to spend \$150,000 running tests. You could probably run the same set of tests for less than \$5,000 using primarily free or easily available tools on the Internet.

Read more of [The Atlantic excerpt here](#)⁴

Source Notes:

1. <http://www.innosight.com/about-us/scott-anthony.cfm>
2. <http://www.innosight.com/little-black-book/index.cfm>
3. <http://www.amazon.com/Little-Black-Book-Innovation-Works/dp/1422171728>
4. <http://www.theatlantic.com/business/archive/2011/11/making-innovation-cheap-and-easy/248718/>

Corporate Innovators: The Empire Strikes Back

How Xerox and other big corporations are harnessing the force of disruptive innovation. As published in MIT's Technology Review.

By **Scott D. Anthony** and **Clayton M. Christensen**



It has been a long time since anyone considered Xerox an innovation powerhouse. On the contrary, Xerox typically serves as a cautionary tale of opportunity lost: many obituaries of Steve Jobs described how a fateful visit by Jobs to the Xerox Palo Alto Research Center in 1979 inspired many of the breakthroughs that Apple built into its Macintosh computer. Back then, Xerox dominated the photocopier market and was understandably focused on improving and sustaining its high-margin products. The company's Connecticut headquarters became the

place where inventions in its Silicon Valley lab went to die. Inevitably, simpler and cheaper copiers from Canon and other rivals cut down Xerox in its core market. It is a classic story of the "innovator's dilemma." Xerox struggled to defend against threats at the low end of its business, failed to create growth in new markets, and found itself on the brink of irrelevance, if not extinction.

But now Xerox is turning things around. In the fall of 2009, the first order of business for its new CEO, Ursula Burns, was to buy Affiliated Computer Services for \$6.4 billion. The 74,000-employee services company had built a powerful new business model by taking over document management from corporations, state governments, and law firms, typically using non-Xerox equipment. For companies, outsourcing was simpler and cheaper than doing it themselves.

Under Burns, Xerox was now redefining its mission. "I kept asking people: *What is it that we do?*" she said in a recent speech at the Churchill Club. "The answer was always: 'We're a copier company, a printer company, a document company.' 'No, that's not what we do,' I said. 'We help companies transform very complex and burdensome business processes.'"

As Burns plunged Xerox into the services business, she devoted R&D resources—at the storied PARC lab and elsewhere—to developing simple, Web-based document tools such as BlitzDocs, which enables banks to streamline the mortgage approval process, and CategoriX, which helps law firms increase their analytical capabilities and manage millions of documents.

This is *disruptive innovation*—making the complicated simple, making the expensive affordable, driving growth by transforming what exists and creating what doesn't. And it appears to be working: profits in Xerox's services business rose to \$911 million in the first three quarters of 2011, up 13 percent from a year ago. Within three years, Burns expects two-thirds of Xerox's revenue to come from the services side of the business, compared to around half now.

Read more of the [Technology Review article here](#)¹.

Source Notes:

1. <http://www.technologyreview.com/business/39205/>

Eight TEDMED Takeaways

Routes to a better healthcare future were presented at the medical offshoot of TED

By Evan I. Schwartz



Architect Michael Graves showcased new designs for healthcare furniture at TED MED
(photo by Christopher Herot)

Breakthrough thinking will transform the healthcare industry while improving patient outcomes—if we are able to clear the twin barriers of outmoded R&D models and the FDA approval logjam. That was the top-level message coming out of this year’s TEDMED conference in San Diego, where I made note of eight key trends about where healthcare is heading:

1. Engaging with healthcare consumers while they shop

With common ailments such as high cholesterol and hypertension, about a quarter of people remain undiagnosed, and about half don’t get the correct treatment, said Cheryl Pegus, chief medical officer at Walgreens. To help, Walgreens is treating healthcare more like a concierge service by [bringing its pharmacists out from the stacks behind the counter](#)¹, placing them at Apple Store-like genius bars, and having them roam the aisles with iPads.

2. Seeing the world differently can trigger design breakthroughs

Celebrated architect Michael Graves, who gets around in an iBot wheelchair, rolled onto stage to speak about his approach to patient-centered design. When it comes to building hospitals, most of the money goes into grand lobby areas while patient rooms remain grim and dysfunctional. Live in a wheelchair for a week, he tells his students at Princeton, and it will change your perspective. Graves showed off [his new set of healthcare furniture](#)² with rounded edges, prominent handles, and functional compartments that he says is off to a strong start in sales around the world.

3. Augmenting humans with robots

Rather than replace humans, robots can enable humans to do new things, such as perform non-invasive surgery using 3-D magnification. Catherine Mohr, the director of

medical research at Intuitive Surgical, told of how her [Da Vinci Robotic Surgical System](#)³ already helps doctors perform hysterectomies. Coming soon: colonoscopic bots. But the most inspirational TEDMED moment came when a paraplegic named Paul rose from his wheelchair and walked across the stage—aided by a robotic exoskeleton developed by [Ekso Bionics](#)⁴. For now, the cost is out of reach for most of the world's 70 million paraplegics. But the company expects to bring it down to about the price of a luxury car within a couple years.

4. **Recognizing stress as a potent killer**

Age remains the best predictor of disease, but the way we deal with stress controls our biological age to an alarming degree, said UC San Francisco professor Elissa Epel. The 2009 Nobel Prize in Medicine was awarded to Epel's colleague Nancy Blackburn, who demonstrated how telomeres (the hard tips on ends of our chromosomes) are eroded by stress and how eroded telomeres are among the best markers for disease and premature death. Epel told of how lifestyle and attitude changes can affect the length of our telomeres.

5. **Seeking and destroying cancer in new ways**

U.C. San Diego neurosurgeon [Quyen Nguyen](#)⁵ revealed a method for “lighting up” tumors with fluorescent blue and green probes that shine through tissue. This enables surgeons to clearly identify what's cancerous and avoid mistakes such as leaving cells behind or cutting what's healthy, she says. [Her new solution](#)⁶ was developed in collaboration with a Nobel-winning chemist. Later on, Bill Doyle, founder of [NovoCure](#)⁷, showed a new way to destroy cancerous tumors, by blasting them apart with external transducers that emit low-intensity electrical fields into the head and body.

6. **Putting the brakes on “Moore's law in reverse”**

Many advances revealed at TEDMED have been slow to reach real-world patients in the U.S. because of the absurdly high hurdles in the FDA approval process, said Juan Enriquez, the former director of Harvard's Life Sciences Project. Our “fundamentally broken” system would reject aspirin for public safety reasons, Enriquez charged. As a result, medicine is going through a kind of “Moore's Law in Reverse,” in which clinical trials are increasing in length every year. On average, the cost of bringing a new drug to market has shot up from \$300 million in 1990 to \$1.2 billion today. Enriquez called for breaking the logjam with a new system for measuring lost opportunity costs, in terms of saved money and lives.

7. **Innovating the innovation model**

Addressing another major barrier to innovation, Pfizer chief medical officer Freda Lewis-Hall delivered an impassioned plea for what she called “Meta Collaboration,” a way of using open innovation to bridge separate networks of specialized expertise. Lewis-Hall noted that we have “Star Trek level tools,” as well pressing needs and ample resources. Yet problems such as Alzheimer's are so giant and complex that we need to innovate the innovation model. One early example is an initiative by the World Intellectual

Property Organization to open up use of patented drugs for neglected tropical diseases. ([see her talk on video](#)⁸)

8. Embracing R&D in storytelling

Medical presentations are often dry and clinical. Several speakers touched on the challenge of telling more compelling stories to explain health problems and solutions. One way is to use visual metaphors—for instance depicting the body as a city. “Story gives soul to data,” said Alexander Tsiaras, founder of startup TheVisualMD.com. Pixar met NIH as he projected examples of how to use video and graphics to tell powerful tales that give audiences a new understanding of their health and to “marvel at how we’re made.”

TEDMED 2011 did have at least one shortcoming: Not enough focus on the cost model. Most of the breakthroughs were sustaining innovations that will improve care, but at potentially higher prices. The conference could benefit from a shift to more disruptive innovations that would lower cost and improve access to care.

Leaning in that direction, Jay Walker, the new curator and owner of TEDMED, had his team compile a list of [20 Great Challenges](#)⁹ that we currently face, ranging from prescription adherence to childhood obesity. He will host the next TEDMED in Washington, D.C. this coming April, to bring these challenges straight into the center of the national discussion.

Source Notes:

1. <http://www.nytimes.com/2011/10/22/business/at-walgreens-pharmacists-urged-to-mix-with-public.html>
2. http://www.michaelgraves.com/content/files/MGDG_Stryker%20Release%20MGDG.pdf
3. http://www.intuitivesurgical.com/products/davinci_surgical_system/
4. <http://berkeleybionics.com/>
5. <http://drnguyen.ucsd.edu/>
6. <http://www.tsienlab.ucsd.edu/Publications/Nguyen%202010%20PNAS%20-%20Surgery%20with%20Fluorescence%20Imaging.pdf>
7. <http://www.novocure.com/>
8. <http://www.youtube.com/watch?v=wY8I-2rDgNE>
9. <http://www.tedmed.com/conference/great>

Investing at the Pace of Confidence

A key lesson for scaling up a new product or growth initiative



By **Kevin Bolen**

Google reportedly made just \$200,000 its first year operating out of a dorm room. This forced austerity likely saved them from the “signal flare” fate of so many other promising concepts over the years that have shot forth brilliantly only to fall equally fast into anonymity.

Google’s initial business model was to license its search technology to the big destination websites like Yahoo and AOL. Seemed like a solid strategy at the time, and had they been part of a large technology enterprise, they likely would have received millions in capital and a small army of engineers and sales leads to make this vision a reality. They would have been forced to forecast and then achieve quarterly sales targets and spend time developing three year analyses on breakeven and penetration designed to “prove” their direction was sound. Any mention of pivoting away from this “juggernaut” of an opportunity to focus on this emerging notion of paid placements of banner ads would have likely been dismissed as a distraction with no room in the budget for exploration. All headcount would have been fully consumed by making the “highly profitable licensing opportunity” live up to expectations.

A frequent question from our clients seeking to avoid this “signal flare” fate for their own Google-in-training-wheels is: “how do I fund new ventures?”

Structuring and releasing funding involves a tricky balance. Provide too much capital early on and ideas and pursuit teams get bloated as expectations inflate to unattainable levels. Offer too little and concepts don’t develop to their full potential, or they develop so slowly the competition seizes the market.

The challenge is that there is no hard and fast rule. Each idea will require a different length runway to build momentum. Some new endeavors will take off like a buzzy little Cessna while others will lumber along like a 747 before sufficient lift is generated. So how do you tell if you

have a Cessna or a 747 on your hands? You can't. You build the runway at the same time you build the plane.

The lesson: a startup team should only be given sufficient capital to take their idea to the next level.

Initially, this may mean a few thousand dollars to cover travel costs while they go around meeting various target customers to gauge their receptivity to the new concept. If they get overwhelming approval and provide sufficient evidence of this response, then additional funds can be released to move towards prototyping. At this phase, assumptions about operating cost and customer usability assumptions must go through critical tests.

Ideas may stay in this development stage through a series of iterations as each prototype improves based on customer feedback and operational performance. So long as the number of customers evaluating the option is increasing and the feedback with each subsequent test is favorable, the experiments and funding continue to expand in line with the confidence you have in the direction. Should successive iterations fail to generate increased response, the money is scaled back or shut off entirely as the concept clearly needs to be rethought. That can be done for free!

What may seem like a fairly logical concept—one the venture capital world has employed for years—is rarely followed within large enterprises.

The challenge is one of internal competition. As more than one client has said to me “anything less than a one million budget around here just doesn't matter.” An organization generating \$50 billion in revenues has no mechanism for processing a request for \$5,000 in travel vouchers to pursue something new and often believes anything that has real potential to impact their bottom line, will need “real” dollars.

As a result, they seek to cull their broad and diverse list of potential opportunities to a top few to concentrate sparse time and capital. They use highly subjective tools (aka doctored spreadsheets and anecdotal assertions) to bring “rigor” to this evaluation and then overweight these anointed initiatives with more capital than they can effectively or efficiently utilize in the near term. The mission of the pursuit team now shifts from one of true exploration and incubation where failure and iteration are accepted as likely (not just possible) outcomes to one where ROI on a predetermined timeline is the primary objective. Their focus is less on learning what the market has to say about this new direction and more on generating sufficient progress to survive the next Board review.

So the next time you are on an evaluation team or reviewing your own growth portfolio, ask yourself, how confident are you in this concept? What evidence have you seen to support that

confidence besides a fanciful five-year growth projection? What else would you like to know before going further? How much would it cost to learn more?

My bet is that the cost of learning would be far lower than expected. But the ROI would be much higher.

Strategy & Innovation is published by Innosight, whose consulting and training services help companies create new growth through innovation. Building on the disruptive innovation frameworks developed by our founder, Harvard Business School professor Clayton Christensen, Innosight's approach and proprietary tools facilitate the discovery of new, high-growth markets and the rapid creation of breakthrough products and services. If you have an issue that you would like analyzed or if you have a comment, please email editor@strategyandinnovation.com.