

THE
INNOVATION
ZONE

**HOW GREAT COMPANIES
RE-INNOVATE FOR AMAZING SUCCESS**

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INTRODUCTION

INNOVATION IN AN ERA OF UNCERTAINTY

I recall a discussion I had some years ago with Dee Hock, the founder of credit card behemoth VISA International, in which he said to me, “We’re all playing a new game by the old rules. We just don’t know what the new rules are yet.” Indeed, at times it feels as though the world has moved forward in leaps and bounds while we have been standing still.

If you are expecting me to comfort you with the assurance that it’s all an illusion or that it will somehow soon get better, sorry, I can’t and I won’t. It’s real and it’s going to get much harder to keep up with the pace of all this uncertainty and the innovation it will demand of us. To quote Yogi Berra, “The future ain’t what it used to be.”

For me, much of my own thinking about the impact of uncertainty on innovation crystallized in a conversation with Peter Drucker shortly after the attacks on the World Trade Center on September 11, 2001. I asked Peter if he felt that we were entering an era of uncertainty during which the level of anxiety and concern would rise significantly. His response, not unlike Dee Hock’s, was not reassuring.

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what it used to be.*

According to Drucker, whether or not uncertainty is increasing is the wrong question. “There are periods, and we have been at the end of one,” he told me, “where the same basic trends continue for a long time, and then there are transition periods. During these transitions you don’t know yet what the new trends are. Uncertainty will be no greater than it was when I started work, which was in 1927 when you had a period of uncertainty and unpredictability up through World War II. Then after the 1950s, you had a period of great predictability and of great simplicity because basically every major policy decision was based on the question, Is it good for the Russians or is it good for

us?” Drucker’s conclusion: “We are now at the beginning of a long period of uncertainty.”

What will this era of uncertainty look like? What sort of impact can we expect it to have on how we innovate? It’s a mixed bag for sure. But a few key trends stand out.

Trend: Innovate More, Invent Less

First and foremost we will continue to experience mounting pressure on all industries to innovate at ever-faster rates. As quality, access to talent, supply chains, pricing, and cost efficiencies all narrow into a slim band of differentiation, innovation will become a hotbed of competition. However, in many cases, this will lead to rampant invention with an emphasis on newness and quantity over value.

Open up any of the dozens of catalogs that tout new consumer products and you’re bound to marvel at the flood of new, improved, just invented, one-of-a-kind, cool, and yet utterly useless gadgets on the market today. Is this really what innovation is all about? Do you need an Internet-enabled porta-potty? Or how about a device to attach your laptop to your steering wheel, complete with its own built-in heads-up display (if you’re from Boston or Bangalore, don’t answer)! What about a toaster to monogram your bagel? Absurd? Absolutely.

For too long we have gauged the success of the innovation economy by the increasing volume and speed with which we can move products from the shelf to the landfill! Today in the United States alone we discard more than five hundred thousand cell phones every day. It’s time to change our view of innovation before we suffocate under its weight.

It seems that we have suddenly created an ability to invent beyond our wildest dreams; manufacturing is a global commodity, the Internet allows us to share ideas and to build on them in ridiculously short time frames, capital moves much more efficiently to fund new ideas, and micro markets can easily be targeted and fulfilled with well-oiled supply chains.

As a result we are surrounded by more useless inventions than at any other time in history. Affluence seems measured by the number of things we can accumulate and then drag to the trash bin. You only need to skim the pages of any in-flight SkyMall catalog to see the sort of ridiculous gadgetry being created. Invention is rampant. There is

even a U.S. TV show called *American Inventor* that showcases the mythology of the lone genius inventor. Our culture of invention worship is the root cause of most of our confusion around innovation. The problem is that we use invention and innovation synonymously. While you need invention to get to innovation, invention on its own creates volume—not value.

Trend: Educate for Innovation

Second is the impact innovation is already having on education. Like just about everyone in the workforce today, my training on innovation came in bits and pieces and even then the lessons were few and far between. I often joke that I must have been out sick on the day they taught innovation in my grade school class! Innovation was historically a mix of brute force and intuition with a dose of luck. No longer. Universities are starting to add innovation-specific offerings across disciplines, from engineering to business.

What's even more startling is the heightened emphasis on innovation methods and skills in K–12. Programs such as Destination Imagination (www.DestinationImagination.org) have provided more than nine million children in twenty countries worldwide with training in innovation and creative problem solving. And Dean Kaman's FIRST robotics competition also teaches team-building and innovation skills to middle and high school students. These kids are just starting to flow into the workforce. When they arrive their ability to innovate will make the rest of us appear to have been asleep at the wheel, if we were even in the driver's seat at all! Keep in mind that you probably can't teach someone innovation any more than you can teach someone good judgment, but you can teach them how others have been innovative. You can teach the tools of innovation and you can illustrate the behaviors most likely to support a culture of innovation.

No nation has the innovation edge, at least not yet. Sure, the United States is still the world's envy when it comes to higher education. While the United States may outsource in nearly every industry to the rest of the world, the rest of the world outsources education to the United States, not only by sending their students to our schools but by contracting with U.S. universities to build campuses on their soil. But our belief in the lead we have in higher education offers a false security, if any at all. Already, U.S. universities such as Weill Med-

ical College (Cornell University), Georgetown, Carnegie Mellon, Texas A&M, Northwestern, Michigan State University, and Rochester Institute of Technology are offering classes in the Middle East.¹ This internationalization of U.S. universities is sure to dull the edge we have on education and also will slim the ranks of researchers at U.S. schools. The double whammy is something I fear we are very unprepared for.

Unlike the infrastructure and facilities, laboratories, and scientific equipment needed to train the last few generations of innovators, tomorrow's innovators will have access to all the knowledge and simulation they need at their fingertips. Innovation is really about increasing your confidence factor in predictable results from unpredictable experimentation. When experimentation was expensive very few could truly innovate. The barriers to entry included extensive R&D facilities and the ability to absorb the losses and risk that experimentation entailed. However, as experimentation became more virtual through computer-based simulation it also grew far less risky, and in some cases, except for the time expended, free! It's like creating a casino where the chips are piled up for the taking, available to everyone who steps through the door, but the payouts are real. Anyone is welcome to play at this table and the card game is barely five minutes old.

Trend: Personalize Through Innovation

Lastly, the greatest impact of innovation in the next few years will be the change it creates in the nature of personalization. In the end markets can only be as rich in diversity, options, and innovations as buyers are in their preferences. Consumers already have the ability to order personalized clothing from Lands' End, personalized footwear from Nike, even personalized nutrition bars. This will quickly extend to every aspect of our lives.

This is where innovation will most dramatically alter the behaviors of markets, and perhaps where the brightest light on the innovation horizon is just starting to shine. Innovation has always been about creating products and services that attract the largest number of interested buyers. This is the cornerstone of mass markets. However, as innovation has accelerated we've consistently shortened the useful life of each new innovation. This may increase the rate at which products and services turn over in the market, but it's a fundamentally inefficient way to address the true needs of each consumer

and the way in which a product or service adds true meaning to a buyer's life. Personalization is where innovation takes on a new dimension that simply has no parallel in today's market. We may talk about "markets of one," but we've hardly delivered on the vision. When we do, innovation will finally be driven by the market.

The challenges are there, but so are the opportunities. Vast new global markets and prosperity will open up through this new era of innovation.

Innovating Innovation

It's easy to discount the speed and the ease with which we will shift into this new innovation-based economy. As Drucker was fond of saying, "What killed the sail [ship] was not the steamship but the fact that it takes five to eight years to train a sailor, and it takes five to eight days to train somebody to shovel coal."

The longer I look at the rate with which younger generations are already adopting the new tenets of innovation through online social networks and mass collaboration and fundamentally changing their own attitudes about what innovation is and how it should be approached, the more convinced I am that the chains that bind us to old ideas of innovation are much more fragile than we want to admit.

A new future for innovation clearly awaits us. It is not the sort of innovation we have become accustomed to, focused on products, but rather one focused on new business models that extract greater value from social networks, collaboration, and process. It's not here yet—but it will arrive much faster than we expect. In the interim we'll scurry about trying to make sense of the commotion, looking for a way to understand it and to move forward. I have no doubt that we will get there; we always do, although perhaps not in the way we had expected. What's clear is that the discussion about innovation has to become much broader than just a discussion of products. Businesses themselves must be innovative. The twentieth-century notion of organizations and business models has no more secure place in the twenty-first century than the nineteenth-century model did in the twentieth century. Defining the new model is our job and the purpose for this book, to understand not just how to innovate products and services but how to innovate innovation itself.

CHAPTER

1

UNEXPECTED POSSIBILITIES

Innovation always takes us by surprise. When the first Motorola brick-sized cell phones were introduced in 1983, the most ambitious projections were for 50 million phones in use in the year 2008. However, in 2008, more than 3.3 billion cell phones are in use around the globe. How could we consistently be so wrong about the future?

Every time we encounter massive change, such as that brought on by cell phones, it's nearly impossible to fully appreciate the true nature of the change or the way in which it will alter our behavior. That's the reason humanity has such a miserable track record of predicting the true impact of innovation and change on the future. Thomas Watson, founder of IBM, is reported to have said that the worldwide market for computers would never exceed five. True or not, this statement always sticks in my mind as a great metaphor for how even the most visionary among us are stymied by the unpredictability of the future!

Whether it's the computer, the printing press, the automobile, or the cell phone, the human ability to find applications for new ideas and react to and adapt to change is a constant source of amazement. It is ultimately the most encouraging and optimistic aspect of human nature.

Part of the reason it is so difficult to project the path of innovation is that big change rarely comes in singular form. The impact of innovation is not predictable like the trajectory of a cannonball—it's more like the shape of a dust storm. Massive change is accompanied by a context of uncertainty, with so many forces interacting in chaotic ways that they defy any reasonable person's ability to project how the chaos will evolve.

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Today the changes we are experiencing in the world are many. Global markets are responding in near unison to economic and political threats and opportunities. The growing ranks of consumers are stressing industry and ecology. The empowerment of massive new pools of well-educated knowledge workers is creating unprecedented mobility of work. The number of college graduates worldwide today has increased to over 30 percent of the population in developed countries.¹ Going forward it is expected that over the next twenty years demand for higher education will increase 300 percent globally. On the other hand, the looming and amorphous threat of terrorism creates a constant undercurrent that we have barely begun to factor into our psychology.

It's an overwhelming cocktail of change. We've built organizations, economies, and societies that seem to have exceeded our ability to keep pace with our ability to innovate.

Part of the problem is that we are at the tail end of an era focused almost entirely on the innovation of products and services, and we are just at the beginning of a new era that focuses on the innovation of business models. This goes beyond just asking how we can make what we make better and cheaper or asking how we can do what we do faster. It is about asking why we do something to begin with. When Apple created iTunes it didn't just create a faster, cheaper, better digital format for music, it altered the very nature of the relationship between music and people. eBay did not just create a market for auctions, it changed the way in which we look at the very experience of shopping and how community plays a role in the experience. When GM created OnStar it didn't just make getting from point A to point B faster, it changed the relationship between auto manufacturer and buyer and fundamentally altered the reasons for buying a car. Dell did not create personal computers, but it radically changed the way people build and buy them. Google did not invent Internet search, but it changed the way advertisers find and pay for buyers.

These are all examples of business model innovation: obvious in themselves, but obviousness is the foundation of every great innovation. However, until recently business model innovation occurred infrequently. The change in today's world and in the future will be that the innovation of our businesses will need to be as continuous a process as the innovation of products has been over the last hundred years.

We are just at the beginning of a new era that focuses on the innovation of business models.

Of course, it will continue to be important to innovate products and services, but it's not enough to simply acknowledge product innovation. We need to rethink innovation to include the way we define and redefine our businesses. We need to think of products and services as the outcome of a process of continuous business innovation. It's here that the greatest payback and value of innovation will be found, but it has yet to be fully understood and exploited. We are stuck in an old model of innovation. So to help set aside old ways of thinking about innovation, let me begin by first defining what innovation is not.

First, innovation is not invention. It's not about creating the next new gadget, wonder drug, or weapon. Innovation is not about accelerating the rate at which we create stuff, it's about accelerating the rate at which we create *value*. Innovation cannot exist in the absence of value that is recognized and rewarded. Invention can. Patent and trademark files are filled with inventions that never created any value. Innovation is not invention run amuck.

Innovation is a process of change with a purpose and measurable value.

Second, innovation is not a slogan or a mantra into which we can pour old wine, just to create the illusion of faster, cheaper, better. Innovation is about change that matters, change that creates a new experience. Innovation is about changing behavior. Innovation is about altering the context of our lives and creating possibilities no one has dreamed of—not just an idea that sits on a shelf.

Simply put, *innovation is a process of change with measurable value*. If you keep that in mind as you read this book, you'll have a compass setting that helps you understand the ways in which you can harness innovation.

Most important, keep in mind that innovation is about dealing with uncertainty in all its forms, good and bad. The more innovative you are the more likely you are to survive and thrive in the future.

That's not a mandate for your next best product, it's a mandate for how well you can innovate your business in the face of the unknown.

INNOVATION VERSUS INVENTION

Invention is an event. It

- Requires little effort
- Occurs in an instant of time
- Provides discrete and autonomous ideas
- Typically leads to little long-term value
- Focuses on products and not processes

Innovation is more—it's a process. It

- Provides measurable value
- Requires sustained investment and nurturing
- Alters behavior and culture
- Causes fundamental changes in a business and processes, not just a product or service

The Nature of Innovation

Innovation is steeped in and intimately tied to uncertainty. We cannot predict what we cannot know. What we can do is prepare ourselves to deal with the unknown when it arrives. It's what I call the *uncertainty principle*, namely, as the world moves faster and becomes less predictable, our windows of opportunity to respond become ever smaller. Opportunity doesn't go away; in fact it increases, but each opportunity lasts for less time. That is perhaps the most daunting and intimidating aspect of innovation: its relentless progress toward increasingly faster-moving targets. For many of us, the idea of innovation as an endless series of unplanned explorations into the unknown with unknown return is difficult to grasp and justify.

The future is periodically shaped by things that do not yet exist. And the solutions that we need will develop in response to problems that also don't yet exist. For

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