

# naked**innovation**

*uncovering a shared approach  
for creating value*

Zachary Jean Paradis

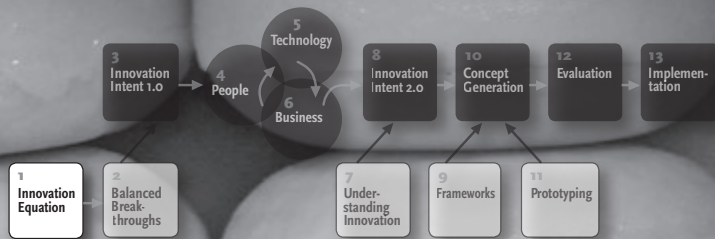
David McGaw

IIT Institute of Design

This is a chapter from *Naked Innovation: Uncovering a Shared Approach for Creating Value*, version 0.9.1. It's a public beta, so you should expect to find things that need improving. With your help, the forthcoming second edition of the book will be even better. Permission is granted to download and share this chapter for the purposes of review and collaborative critique. Any redistribution must credit the authors and NakedInnovation.com. This chapter and the book are both ©2007 Zachary Jean Paradis and David McGaw.

## **Join the conversation!**

After you've read this chapter, we'd love to hear your feedback. Please visit **NakedInnovation.com** to share your thoughts.

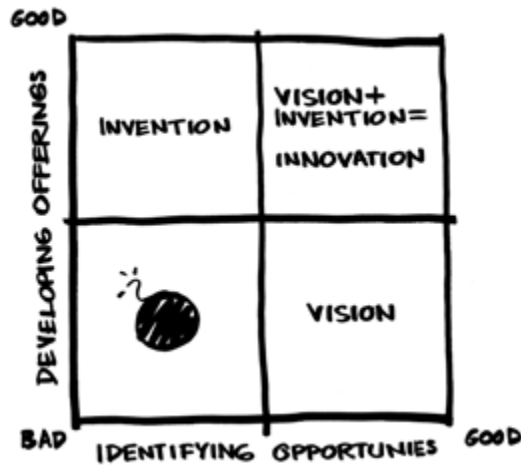


# 1 The Innovation Equation

## *What Organizations Do*

INNOVATION CAN BE HARD WORK. But it isn't rocket science either (more on what that is later). It is a core activity for every organization and the collective result of many individuals' hard work. The father of management, Peter Drucker, said businesses have two purposes—identifying opportunities and developing offerings. Through these ongoing and complementary activities, organizations add value to customers' lives which is then returned. Value for customers means making their lives better by saving them time, lowering their costs, transforming their lives, or elevating their status. Customers return these benefits through payment, brand loyalty, and ultimately, long-term shareholder value. This process of creation and exchange of value with consumers, is what makes a market-based economy and society function. Value is the fuel on which we run, so we better be damn good at creating it. We'll assume Drucker was correct and start there. Firms are vehicles for delivering value. How do we as individuals contribute to identifying opportunities, developing offerings, and creating value?

Let's consider how identifying opportunities and developing offerings come together to produce value. It takes a great deal




---

 THE INNOVATION EQUATION

of understanding, creativity, and dedication to successfully execute disruptive innovations like the original McDonald's Happy Meal or the Apple iPod. Offerings get released every day that may be technically inventive yet no one wants to pay for them. Similarly, we are regularly confronted with less than inventive products like New Coke, pushed with heavy marketing.

Chris Conley, co-founder of gravitytank, a Chicago-based innovation consultancy, has pushed Drucker's thinking and established a compelling model for understanding the activities organizations do and how they add up to success or failure. We call this model the *Innovation Equation*:

$$\text{Vision} + \text{Invention} = \text{Innovation}$$

Consider the position map above, which shows the combinations of success and failure at each activity. Some level of success

could be achieved anywhere on the map, but let's explore an illustrative example for each.

### *Bad Vision, Bad Invention*

Identifying opportunities poorly often leads to developing offerings poorly. This is not a recipe for success in the market. Take for example, the much-maligned :CueCat. Launched in the late 1990s by a RadioShack vendor, it was intended to connect consumers with advertisers through an inexpensive scanner and special bar codes in magazines. It was an abysmal failure—who reads a magazine sitting in front of a computer? And if you were sitting in front of a computer, why wouldn't you just visit the advertisers' website without a bar code? It was a device that solved no problem and fulfilled no compelling need. If the opportunity was suspect, :CueCat's design, development, and launch didn't make it better. Was it a good idea to design the product to look like a cat (to complement your computer "mouse", of course)? Those clever :CueCat people also thought it would be brilliant to ship hundreds of thousands of them for free to subscribers of magazines like *Wired*, at a cost of more than \$1 million. :CueCat

### **:CueCat, the Unintended Innovation?**

Although considered a failure for the company that created it, :CueCat was still a product based in some innovative ideas and technology. Barcode scanners are relatively expensive to purchase even to this day yet somehow hundreds of thousands were given away. At the time of its release, hacker culture quickly bypassed its weak protection schemes and wrote a slew of free applications useful for cataloging books, CDs, DVDs, and other media. There was some value in their work but :CueCat's creators were never able to monetize it.

attracted few users and no profit. You get the point. We want to avoid this.

### *Vision*

Identifying opportunities is a big deal as evidenced by the \$2 billion spent each year on market research. But, quality market research doesn't necessarily guarantee success. The Pontiac Aztek is a prime example. At the time of its launch in late 2001, highways were dominated by off-road vehicles with poor gas mileage, rough rides (especially on pavement where they were most often driven), and they rolled over with far too much regularity. General Motors correctly identified that consumers would pay for a vehicle that offered the benefits of a car combined with those of a traditional SUV. Unfortunately, they squandered this opportunity with an offering that could generously be described as awkward. The aesthetics of the Aztek were ridiculed and sales were less than half of the 75,000 GM projected for its first year of release. Just 27,322 were sold and half of those were to rental car companies and company employees. The car was discontinued within a few years. Fantastic opportunity identification and vision building can be easily undermined by poor design and development.

### *Invention*

Now let's consider the Segway PT (personal transporter), code-named "Ginger" at the time. Revealed in December of 2001 by noted inventor Dean Kamen, Segway is a marvel of development and technology. With a footprint not much larger than a human, Segway was carefully designed as the solution for individual transportation between home and office, for getting around a city center, shopping, and other outdoor trips. Its release was met with much fanfare, expert interest, and public curiosity. There was only one problem. No one was willing to actually buy one. Segway was a failure in identifying a viable opportunity. At nearly \$5,000, it was too expensive to attract

enough buyers to make the product profitable. With its launch came a wave of Segway bans in cities across the United States and those riding them were quickly derided as "dorky" (*insert picture of Segway geek here*). The real basic need of personal

## **The Revolutions of Business: A Story of Optimization**

To understand why innovation is "the new black" requires one to walk the path of business thought leaders over the last century. Nearly every MBA student is taught about key revolutions in business, usually in a class titled Organizational Behavior. These revolutions, starting with Taylorism and ending with Information Technology, revolve around the optimization of factories, companies, industries, and information, roughly in that order. Each changed the game so drastically that firms were forced to get on board to compete. They were relatively easy to copy but the slower flow of information in the previous century allowed early adopters to gain a big edge. As a result of the Internet, the IT revolution, and the tens of thousands of MBA graduates in business today, most firms understand the history and value of optimization and productivity gains.

How do you gain competitive edge today, when every firm is immediately aware of new ways to optimize? Business schools and publications like *Harvard Business Review* and *BusinessWeek* are happy to extol the virtues of new methods of gaining productivity—thereby tipping your competitors off to ways they can squeeze another drop from their resources. Companies have never before been on such equal ground when it comes to optimization of operations. In fact, firms are forced to deal with ever more rapidly evolving markets and competition so they have to be exceptional at understanding emergent opportunities and managing change. We have entered the era of **Continuous Innovation**.

transportation and the more complex opportunities and risks therein were simply not well understood by Dean Kamen and his team. Much like rocket scientists (we told you we would come back to them), Kamen treated technological development and invention as an end goal rather than part of a solution.

The Segway is not dissimilar to the many precursors to the iPod. They were technically relevant and robust in terms of feature set yet really didn't address people's needs. While this approach can occasionally be successful, it more often produces marginalized inventions with little chance to be breakthroughs. Speaking of the iPod....

#### *Innovation: Vision + Invention*

You've heard a lot about the iPod, and that is because it is too universal and gettable of an example to ignore (we promise to pepper the remainder of the book with other examples). You may have an iPod or iPhone in your pocket or bag right now. If you don't, you probably have considered buying one. If not, you work for Microsoft or you're currently listening to the music of AM radio. The iPod is an exceptional example of how identifying opportunities and developing offerings come together as a successful innovation yet its success had far greater implications for Apple than initially intended.

Steve Jobs and company were looking for a way to increase Macintosh hardware sales. Broadly, they identified two growth strategies: making software and hardware that would empower people yet require a Mac to run. iLife and iPod are like siblings while the iPhone is like a new species. Digital cameras were considered first as Apple was the originator of the category years earlier with the Quicktake 100. Clearly, Apple could have developed a fantastic digital camera but they chose not to. Why? They understood the market was both competitive and

offered compelling offerings. Digital cameras actually worked pretty well and were sold at a reasonable price.

The MP3 market revealed enormous opportunities for creating value through product design, feature set, and integration with iTunes. Apple took advantage of the fact that most MP3 players were horrible to use, looked like voice recorders, and held a woefully small number of songs combined with the explosion of Napster—remember Apple's ad campaign "Rip.Mix.Burn"? It was a perfect match for Apple's obsession with creating integrated user experiences. It was a perfect storm of innovation to create the wildly popular iPod. The first iPods owners immediately grasped the tremendous value they received in using it. Our culture has benefited through entertaining marketing communications and an increasingly innovative handheld device market. Without realizing it, releasing iPod changed the world and how Apple saw itself. Known for 30 years as Apple Computer Inc., they recently switched their name to Apple Inc. hinting at what was and is to come. Innovation, especially disruptive innovation, is fundamentally about changing the status quo.

#### **The Lesson of the Innovation Equation**

Understanding the Innovation Equation means understanding how the things we do—identifying opportunities and developing offerings—translate into the things we make. At a high level, it is the model for everything this book is talking about. The Innovation Equation means being obsessed with generating value for people. It also means being ready to fundamentally change how you and your firm act and define yourselves depending on context. Unfortunately, most organizations don't consistently do great marketing and development, nor are they obsessed with creating unique value for their customers. Most do not embrace change, even when facing extinction. But does this mean we should avoid embracing innovation?

In fact, the innovation consultancy Doblin Inc., says that nearly 95% of innovations fail according to their own measures of success. For a moment, just consider how large of a percentage that is... now take a deep breath. This is difficult yet important for us to admit. We have all worked on multiple projects that failed. We all have wasted valuable resources not working with our colleagues in a way that helps to identify opportunities or develop compelling offerings. *In reality, many of the things we do on a day-to-day basis destroy rather than create value for customers, our firms, and shareholders.* Whether it was building something we shouldn't have built, installing a big software system that didn't make sense, advertising in ways that produced no return, or spending just a few too many hours surfing the Internet—we destroyed value. We said it. We've uncovered this ugly truth.

It would be easy for us to blame the factors that make innovation hard. Competition is fierce! Globalization isn't fair! The Internet gives consumers and competitors too much information! We don't have enough time! We don't have enough money! Marketing doesn't get it! Engineering doesn't get it! The damn designers don't get it! We tried it before and it failed! All of these complaints are true to some extent and it is why it makes this hard work. More importantly, the world is in constant flux. What people do changes. How businesses make profits change. Clearly, technology changes. Simply put, what is important to make now will not be what is important to make tomorrow. Regardless, the equation is simple: Vision + Invention = Innovation. Being great at creating Vision—and knowing how to tie that to the things we Invent—is remarkably powerful and not as complex as it may seem. To see why, let's look at why the offerings we create are or aren't successful in the market.