Chapter 2

Innovation as a Competitive Weapon

Now that we have established a working definition of innovation and charted out its various forms, let's explore how innovation can be wielded for competitive advantage. To begin, I'll draw from a particularly challenging juncture in my innovation journey.

Near the midpoint of my high-tech career, I took on a position as R&D manager for a small product line within Hewlett-Packard Company's test and measurement business. The main reason I got the job was that the HP[6] managers then responsible for it wanted to shut it down. They saw it as a weak business in a stagnant market, running a distant second to the market leader, with no hope for improvement.

A few of us from outside the product line saw it differently. We felt that by taking the business down a different path, HP could win in a promising new market. At the time we ran a different HP business that sold related products into that new market. We were confident that by coordinating the strategies of the two businesses, we could turn things around. We

[6] In this case study, "HP" refers to the original Hewlett-Packard Company, not today's computer and printer version of it, HP Inc.

were encouraged by the fact that some of their engineers and first-level managers agreed with our vision.

Three of us—my marketing counterpart, our financial analyst, and I—made our case to the R&D and marketing managers of that product line. They were unmoved. These two managers had no experience with this new market and failed to see the potential in it. They had other, more pressing matters to attend to. As far as they were concerned, the only option was to terminate the product line and move all the engineers onto more important projects.

The three of us spent several months with charts and graphs and customer testimonials trying to persuade them otherwise. Finally, in desperation, we asked if we could take over the product line ourselves. Much to our surprise, they said yes. These two managers and their boss were clearly relieved to transfer this albatross to someone else so they would not have to explain to the company CEO why they were shutting it down.

So, we took it over. Within two years, helped by those engineers and first-level managers from that product line who shared our vision, we launched a new product family that took the competition by surprise, vaulted HP into market leadership, and allowed us to capture most of the growth in that new market. Over the next six years, this outcast product line—digital sampling oscilloscopes—generated nearly a billion dollars of revenue for the company.[7] It was one of the most successful growth stories in HP's test and measurement business over that entire decade. It's a story we will explore in detail in the next chapter.

How could capable, respected managers in that business fail to see such an opportunity while a trio of outsiders could realize its potential? It would be easy to say their managers just missed it, but that's not the answer. They had a well-conceived business plan, but our proposal did not fit within it. Managers must make trade-offs all the time when deciding which businesses to pursue and which projects to fund. Rarely will they

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[7] All nonpublic company financials have been disguised for business confidentiality, although they remain in the general ballpark.

have all the data they wish they had at the time they must act. They make the best decision they can and then move on. In this case those managers put other projects ahead of ours. To their credit, they let the product line move to a new home rather than simply die away.

The problem managers face when dealing with this kind of disruptive change arises because of something I call *the curse of the corporate business model*. It is a theme that will appear repeatedly over the course of this book.

THE CURSE OF THE CORPORATE BUSINESS MODEL

Throughout history, large corporations have demonstrated one consistent business trait: they are good at pursuing growth in their mainstream businesses but terrible at capitalizing on disruptive changes in their markets. Examples abound. Smith Corona, once a dominant manufacturer of typewriters, missed the emergence of computer word processing. Lockheed failed to respond to the transition of civilian airliners from propeller-driven to jet-powered until it was too late. Department stores like Sears and JCPenney did not appreciate the importance of discount retailing led by Walmart and Target. Although each of these companies still exist, they no longer dominate those markets.

There are three main reasons why established companies have difficulty dealing with disruptive changes:

1. **Corporate metrics and reward structures do not encourage investment in new, untried ideas.** In the corporate world, managers are rewarded for delivering continual, predictable growth and profits. This is what Wall Street investors demand, and woe to the senior management team that does not do this. Entering a new business comes with considerable uncertainty, and this does not align with the need to deliver predictable results. This same logic percolates all the way down the management chain.[8]

[8] For those Wall Street types who claim that stockholders do indeed factor a company's long-term investment strategy into their decision to buy or hold a

2. **Managers do not see the rewards as being worth the risk.** If a start-up company is wildly successful, its employees can become instant multimillionaires. That incentive can be extremely inspiring even though the chance of it happening is remote. In a large corporation, the manager who guides a new business to spectacular growth may be rewarded with a few hundred stock options or the now popular restricted stock units, and perhaps a promotion. But if it doesn't work out, their career path will likely be permanently derailed. Many managers don't see the reward as being worth the risk, especially since there are rarely any penalties for avoiding it.
3. **Managers in large corporations are inherently more conservative than their counterparts in start-ups.** The people most comfortable taking risks are not at the large companies; they are at the start-ups. Even if those people began their careers in large corporations, they soon fled what they felt was a risk-averse, overly bureaucratic culture. Managers in large companies got there in part because they liked the idea of a regular paycheck and predictable job hours. While they might be willing to take calculated risks within their present businesses, stretching outside this comfort zone becomes difficult.

    Some managers in the corporate world may object to this categorization and claim they are not shy of taking risks. If so, ask them whether they are ready to lose their job if their next risky decision does not work out. If their response is "How do you expect me to take risks if I may lose my job for a decision that doesn't work out?" simply point out that this is what happens all the time in the world of start-ups.

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stock, note that according to Reuters, the average investor today holds a stock for only 5.5 months—just long enough to care about reaping a return from short-term profits (Chatterjee 2020).