

If You Really Want to Change the World

A Guide to Creating and Building Breakthrough Ventures

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Chapter 1

Against Failure

When Steve Jobs called to offer to buy Siri – the venture that created the category of virtual personal assistants – it was no accident. It's not as if the Siri team had been aiming to create something so powerful that it would compel the head of Apple to pick up the phone. But the team *had* set out to create a breakthrough in the market – something that had the potential to change the world and create a billion-dollar venture.

It wasn't a success that they achieved through any of what we now think of as the normal paths to success in Silicon Valley. They hadn't gone through repeated failures and iterated until they hit the sweet spot (although there were certainly failures along the way). They hadn't developed a really cool technology and then simply transferred it into the market (although the tech is pretty cool). They hadn't launched the venture and then puzzled over product-market fit or what might be a minimally viable product.

Instead, they started with a process that identified a real, sizable, and sustained market need, identified and built technology that might solve it, and worked hard to develop the value proposition and business plan.

But this isn't a book about Siri or Apple. It's about the process that we – and others – have used to create and build billion-dollar ventures, businesses that intend to change the world that will have a permanent part of the landscape. It's not that this is a “guaranteed process” – something that sounds like it belongs on a late-night

TV infomercial. But the batting average for those who follow this process is pretty good. We don't always end up with a successful venture, but often we do. And we think the world is a better place – with more satisfied people, more value, more impact on society and civilization – when ventures that can change it actually work. So we wanted to write this book and share the process that we've developed over the past decades.

Who we are

We're two technologists, executives, and venture capitalists who have combined in a unique way successful careers in technology development and business building. Henry has been a senior partner of the private equity firm Warburg Pincus for more than 30 years. Norman is the President of SRI Ventures, formerly the Stanford Research Institute. But that doesn't tell you much.

Henry started his career as a scientist and engineer and then in senior management of research and development of electronic products and devices at the RCA Corporation both in the Solid State product division and at the RCA Laboratories where he rose to the position of Vice President. He holds 31 US patents, has published 130 scientific papers, a widely used text book on semiconductor lasers and is responsible for the development of many breakthrough devices starting with silicon transistors, LEDs, integrated circuits, semiconductor lasers, solar cells, microwave devices and solid state imagers. His pioneering accomplishments include the design of one of the most successful silicon transistors in history (the 2N2102), and the development of the core heterojunction technology

for semiconductor lasers now in universal use for communications and other applications. He was elected to the National Academy of Engineering in recognition of these accomplishments.

Starting in 1983, when he joined the private equity firm of Warburg Pincus, Henry, as a senior partner and a managing director has successfully seeded and managed investments throughout their lifetime in diverse fields of technology and services ranging from semiconductor companies to companies providing financial services, energy generation and storage, industrial software and communications equipment and services. Many of these companies became publicly listed on the New York Stock Exchange and NASDAQ and some reached the billion-dollar revenue level and multi-billion dollar valuations.

Norman's thirty five-year career also began at RCA Labs, as a mathematician, computer scientist, and executive leader. He helped create, develop, and lead breakthroughs such as a complete simulation of display systems, software representations of the human visual system to assist the development of HDTV (for which his team received an EMMY), computer vision techniques for recognizing breast cancer, and the development of neural networks for recognition of objects – the early predecessor of today's "deep learning" technology. In 1992, Norman was a co-founder and creator of SRI's commercialization process, a process that led to the creation of over 70 ventures, including companies like Nuance Communications, Intuitive Surgical, and Siri. The total market value of these companies exceeds \$20B. In this book we describe the elements of this commercialization process.

Even though we have helped create, launched, and invested in ventures in diverse market areas with different technologies and business models, certain fundamental principles contributed to their success and certain fundamental mistakes precipitated their failure. Our goal in this book is to share those fundamental principles with you. We address all these issues in a systematic way beginning with the source of venture ideas and ending with what it takes to build a creative company able to sustain itself on the basis of continuous innovation. Our intent was not to write a book of case histories but to distill from our experience of dealing with many companies in all stages of development lessons and principles that we believe are broadly applicable.

Why write this book

It's worth saying a few more words on why we're writing this book. It's not just to share the process – although that's the primary goal – but it's also to counter two really pernicious trends that have taken over the start-up community. The trends emerged in Silicon Valley, but they've spread, and, in our view, they create an enormous amount of social loss. The approaches hurt people personally and professionally and, even more broadly, they actually hurt larger society by misdirecting resources that otherwise could have been productively employed.

Failure has become *de rigeur*, particularly in software ventures that initially require little capital and small teams. The idea seems simple enough: since you can't predict what's going to work, you have to put together a great team, launch the venture, and just keep trying. Start with a strong original concept, sure, but you

should be pretty sure that it's not going to work, so be prepared to offer minimally viable products, and then pivot based on the feedback that you get from launching those products. Eventually, you'll get to state where the product you develop actually meets the market need.

Again, that seems reasonable enough – but there are a number of flaws. First, often times this is an approach that appeals to technologists who are in love with their tech. There's nothing wrong with being in love with tech; we've all been there. But there is a problem with using your love of a piece of technology as the basis for a business. That's the approach that leads not to inevitable failure, but failure at a pretty high rate, for sure.

Worse yet, this celebration of failure – it's started to feel like almost like a fetish – means that untold resources are being poured into ventures that really have only a passingly small chance at success. That's a waste. It borders on the criminal since those resources could be used to really make the world a better place.

This approach only makes sense if you can't figure out possible market need in advance. That is, if you really want to change the way the world works, what you need to look for is a really big market opportunity.

It's also worth thinking about who such an approach rooted in failure appeals to – more the investors than the entrepreneurs. Many venture capital investors like to have a broad portfolio where lots of small bets have been made by them or others, some of which have a greater likelihood of taking off but most of which will fail. This approach allows them to pick and choose the ones that show traction and to spread their risk out over many different possible ventures. It also means they

don't have invest too heavily in any one venture at the earliest stages. It's an approach that makes perfect sense for them. But not for the entrepreneurs who have to bear the cost – financial, personal, professional – of a culture of failure.

Tech transfer, another popular approach, creates just as much social loss and only the occasional hit. This approach is popular especially among those who do primary research – who produce core technological ideas. The idea here is again pretty obvious. Give scientists the space to tinker and they'll come up with advances. Since most scientists aren't good at commercializing their technology into products that people want, then they (or their institutions), usually license the technology to somebody else for commercialization. More often than not, those commercialization efforts fail.

Both of these approaches are essentially *tech first*. They prioritize the technology before anything else. We love technology, but our process is fundamentally different. It allows entrepreneurs to create the opportunity for a world-changing venture by combining four critical ingredients: a market opportunity in a large and vulnerable market, an outstanding team capable of execution, a differentiated technology or business solution that trumps the competition, and the ability to develop a value proposition and business plan that articulates the value, strategy, and plan of the company, and attracts the required capital. Without every one of them, the probability of success is near zero.

Successful entrepreneurs know this. One serial entrepreneur, who had four successful startups to his credit (all of which had been acquired by big companies), including one that provided key technology to enable wireless systems produced by

Qualcomm, said, “Let me start with my goal in life—I want to leave a legacy where my endeavors have changed in a big way how people communicate and do business and in this manner change the world of commerce and human interactions. Sure, I want to continue to be financially successful but that I could do in other ways. It is the lure of world changing ventures that keeps me going and motivated to work around the clock.”

He had chosen to sell each of his earlier companies after their products’ market potential had been validated but *before* they became full-fledged companies positioned for the public markets. Why? “I really never had the kind of investors who were interested in that,” he said. “I started these ventures, recruited excellent people to execute on my vision, but the kind of investors I had chosen were more interested in a short business cycle than the longer term. I never had a roadmap for going from the early stage entrepreneurial company to a company that would be a long term winning player and able to access the capital that would be needed.” This book gives the reader this roadmap.

What do we mean by “world changing” products or services? Those that meet market needs in a way not done before. The enterprises that offer them reach a market of sufficient size to be perceived as major players either in established markets or new markets pioneered by ventures offering these new products or services. Such businesses start with a vision that reaches beyond the current market offerings. The big trick is how to take such a vision and build it into a world-leading venture.

We think of the world leading business building process as an escalator with exit points. Each exit point represents a milestone where the entrepreneurs and investors can choose to realize the value of the business by a sale. But continuing on the escalator to the billion-dollar value, business requires new resources, people, talent, courage, and commitment. It also usually involves a public offering of stock (IPO) to access capital. What we discuss here is just those requirements for continued success. Keep going up the escalator and you can realize more value at the next exit level -- but only if you have the resources and talent to continue business building. Our experience over many years with enterprises that have scaled the escalator to various levels has given us the unique insights that we share here and that we think are valuable to all interested in building major businesses.

Siri

Since we started with Apple's acquisition of Siri, we wanted to tell you the story more fully as an illustration of the process. When Apple bought Siri in 2010, two years after its initial launch in January 2008, it became the landmark application that opened a whole new way that consumers are getting value from their smart phones. In October 2011, Siri became a key application of the iPhone 4S, and since the launch of the 4S, Siri has become a product phenomenon and a feature in every subsequent iPhone generation. Hundreds of competitor products emerged, with the leading ones launched from Google (Google Now), Microsoft (Cortana), and Amazon (Echo). Siri created and named what is now known as the category of virtual personal assistant.

The technological basis for Siri was developed over decades, but the market vision that led to Siri can be traced to 2003 when SRI formed a team with one of us (Norman), Bill Mark, and Adam Cheyer, which we called “Vanguard,” driven by a vision that the smart phone would create a market and technology revolution, and that SRI was well suited to take leadership in this revolution as it had in every past computing revolution. We believed that the smart phone computing capabilities were likely to increase to the point that much of the value of the personal computer would be made obsolete, replaced by smart phones.

Many of the core ideas of Siri that the Vanguard team developed were articulated in an article for the Red Herring Newsletters in January 2004 called “The Quiet Boom,” in which Norman described the need for intelligence in the mobile phone:

“Even with an effective speech interface, consumers will be frustrated if they’re required to access the services they want through a series of tedious questions. An experience as simple as buying a ticket to a ballgame and making a restaurant reservation can take dozens of keystrokes and many minutes. Instead, users must be able to easily ask for what they want, just as they might ask a real person. We’re now seeing software agents – lightweight programs designed to perform tasks autonomously and securely – reach the level of commercialization. They can now act as “intelligent assistants” for many requests. The user can specify a request and agents will break down the tasks and reliably perform them.¹”

¹ Red Herring Newsletter, IC Report, Vol 2 No. 1, January 2004

Over the next 4 years, this vision also helped the team crystallize, advance, and fund the market concepts we were exploring. Creating a venture was not initially our goal. We believed that the major players of carriers and handset providers would dominate the market. Instead, we wanted to develop a commercial project. We talked to dozens of these companies including like Deutsche Telekom, Motorola, and T-Mobile to potentially start a project together.

When we explored market concepts, we tried to immediately begin working with customers and solving real world problems. Think of this as “playing in traffic” -- working with customers with real needs and solving their real problems, we have only hypotheses about whether are market concepts are valid.

We were also fortunate that a government agency, DARPA (the Defense Advanced Research Program Agency), had, in parallel, a vision of creating a program that would lead to breakthroughs in artificial intelligence. DARPA is the primary US agency responsible for funding breakthrough technologies such as the Internet and many other world-leading innovations. The Director of DARPA at the time, Tony Tether, was seeking to create a program that fundamentally inspired us: the CALO² program (for Cognitive Assistant that Learns and Organizes). DARPA originally constructed the project to answer the question of whether artificial intelligent software systems could assist people in their daily lives. The fictional model that inspired was the character Radar O’Reilly on the TV series MASH; Radar always knew what the colonel wanted before the colonel knew what the colonel wanted.

² <http://en.wikipedia.org/wiki/CALO>

CALO developed into a massive program under the leadership of Bill Mark, Vice President of the Information Computing Science Division, Adam Cheyer, Program Director Artificial Intelligence Center, Ray Perrault, Director Artificial Intelligence Center, David Israel, Program Director Artificial Intelligence Center, and many others. DARPA funded the program from 2003 to 2009, and it included the participation over 23 universities (including Stanford University, Carnegie Mellon, UC Berkeley, and MIT) and labs from the “who’s who” of the computer artificial intelligence world. At \$150M, it was the largest artificial intelligence program in the history of DARPA. While CALO was visionary, at the same time it developed practical artificial intelligence. Concepts from CALO contributed to the basis of Siri and subsequent ventures.

In 2007 we decided that the market opportunity would best be pursued as a new venture, rather than as a project and license with an existing company. We were able to develop a few commercial projects, but they all were long and difficult to achieve, and only executed a small part of our vision. Why? In almost all our discussions with existing telecom players, they responded with one of the following:

- Not possible – the tech is 20 years away
- Too expensive (we were seeking \$5M - \$10M in development funding plus license)
- Not part of their business model
- Doing it themselves

We formed a stakeholder team of SRI business and technology leaders to help build these elements. By “stakeholder team” we mean the team internal to SRI

formed prior to creating a venture. It can be composed of both internal and external members, some (but usually not all) will eventually leave to join the venture.

The initial members included Adam Cheyer³, Bill Mark⁴, and Norman. We iterated frequently on the four critical ingredients, and over a period of months developed a value proposition and business plan.

Once we had reached a stage where we believed the opportunity was feasible, we needed leadership with commercial experience. We were fortunate to recruit Dag Kittlaus as an Entrepreneur-in-Residence (EIR) at SRI, a position that indicates a founding member of the team. Our agreement with Dag was that when and if SRI created the venture, he would likely become a CEO.⁵

Dag had just left Motorola where he had demonstrated his entrepreneurial skill by creating a Mobile Internet Portal, and launched dozens of innovative mobile applications. He was highly knowledgeable about the mobile market. The stakeholder team was now led by Dag as EIR and future CEO of the venture, Tom Gruber, who joined a few months later as EIR and future CTO, and Adam as future VP of Engineering, together with Bill and Norman (who planned to remain at SRI). We met almost daily, constantly discussing the product possibilities, all working together in SRI's venture incubation space.

The stakeholder team worked together over several months, proposed many possible applications to launch the venture, and finally came back to the application that addressed the highest pain point: people wanted to perform all sorts of tasks

³ Adam Cheyer bio reference <http://www.adam.cheyer.com>

⁴ Bill Mark bio reference <http://www.sri.com/about/people/william-mark>

⁵ Dag Kittlaus bio reference <https://www.linkedin.com/pub/dag-kittlaus/0/958/95b>

with their smartphones but were frustrated by the repeated keyboard clicking needed to get any task accomplished. When they tried to make a restaurant reservation or buy a movie ticket on their phone, they just had to keep typing on those impossible keypads. It didn't seem like a big deal, but it was. Although smartphones had more computational power than the original PCs, their popular applications were limited to simple functions requiring few steps, such as ring tones and sms messaging. In fact, market research found that each time users needed to click through a screen on their smartphone, 20% of them abandoned that application or purchase intent. Having to click through multiple stages and screens to perform and execute tasks was just too annoying for most people. And, as a result, businesses were losing revenue and opportunity. This was the market problem we were seeking to solve with a revolutionary new product.

The breakthrough idea behind Siri was simple and powerful: In contrast to search engines, we decided that Siri would be a "do engine" that allowed people to use their natural language through voice to get answers to their queries and have all the effort to get the answers done by Siri rather than doing it themselves. (Only later would we call it a "virtual personal assistant.") Siri would allow people to buy tickets, make reservations, get the weather, and find a movie with a smartphone and with almost no clicks. Siri would give answers, not links.

But how to make money?

We decided that Siri's revenue model was dependent on "cpa" or click-per-action, basically getting a fee for helping execute a transaction. We could get

substantial revenue from the lead generation Siri provided for hotels, restaurants, and more.

We articulated Siri's value proposition in a few bullet points:

- Help people save time
- Help people save money
- Provide frequent use, so consumers would learn to depend on Siri
- Provide uses that would be revenue generating
- Surprise and delight the consumer

This was our "Eureka" moment when the value proposition of Siri became clear. We could solve a major problem for millions of consumers, with a powerful product that could generate billions of dollars in revenue.

But the technology was daunting. Speech-to-text was the easy part because SRI had a great deal of experience in that technology. Years before it had launched the company Nuance that had tackled speech-to-text, and it was the world leader in that market. The hard part was having the computing capability to analyze the words in the text to *understand the intent* the user was trying to express in the utterance, and then to *reason* about and *provide an answer* to the request. This requires the computer to identify concepts that humans talk about and to associate groups of words with those concepts. This process of analysis, representation, and association constitutes the subfield of artificial intelligence known as natural language understanding. Humans perform these tasks easily, but for computers it has been extraordinarily difficult and in general, most people believed impossible.

Natural language and reasoning systems had never been in wide use in the commercial world. To implement even the most primitive systems required Ph.D.-level computer scientists specializing in artificial intelligence and natural language. Beyond that, the systems were brittle and difficult to use. We were talking about a product that would be available to millions of consumers.

The broad basis of the technology had been developed under programs with DARPA by the SRI Speech Lab and the SRI Artificial Intelligence Lab, as well as by the internal investments of SRI. But the specific technological implementation that allowed us to make Siri a product that could be deployed to millions was done by Adam Cheyer and Didier Guzzoni. Adam had for almost two decades designed and implemented a vision of delegated computing and “agent based systems” that enabled humans to interact with networked programs and devices. He and his Ph.D. thesis student, Didier Guzzoni developed approaches for natural language understanding and reasoning that vastly simplified the task of understanding and responding to queries. These were the specific approaches that were the basis for Siri’s intelligence.

In the current state of artificial intelligence and natural language understanding, even with Adam and Didier’s solution, it was unrealistic to expect the computer to understand everything a user might possibly say. A computer might do reasonably well with taking spoken words and turning them into text, but even so, with Siri, it needed to understand what the user wanted so it could provide an answer – such as buy a ticket or make a reservation. We decided to restrict Siri to

the vertical market domains of travel and entertainment, thereby circumscribing the kinds of general requests it could be expected to understand.

To further simplify the reasoning part of the equation, Siri was designed to handle user utterances that were requests for Web-oriented services. Siri would interpret the utterance in the context of one or more Web services, input the correct information into the Web service, and combine the results into an answer for the consumer. For example, if a user asks for “hotels” that are “available tomorrow” “in San Francisco” using terms such as “top-rated” or “romantic,” Siri needs to access and consolidate the results from Web sites that handle hotel reservations (such as hotels.com) and have extensive written reviews (such as Yelp). As a result, Siri enables a smartphone to act as a (limited) personal assistant, allowing the user to buy tickets, make dinner reservations, or check the weather with no clicks at all. Unlocking the promise of smartphones using invisible technology is Siri’s key function.

At this point, in 2007, we decided to seek outside investment for a spinoff. We approached a small number of venture capitalists familiar with SRI and who regularly participated in SRI venture reviews for advice on strategy and plans. Gaining venture funding for Siri, since it depended on creating breakthroughs in the market and in technology, was not going to be easy. Many venture capitalists have seen the cycle of hype vs. reality for artificial intelligence and were skeptical that it would work. They worried about every element of the value proposition and business plan, including market, technology, competitors, and more. Some specific issues, among many more, were

- Would we be able to grow a large consumer base?
- Would the artificial intelligence work?
- Would the processing power of the smartphone be sufficient?
- Would the latency of communication and processing be too slow?
- Would the business model of lead generation be sufficiently revenue generating?
- Would possible competitors, such as Google or Microsoft, be able to rapidly move with own products and kill the young venture?

The team went to the top venture capitalists in Silicon Valley with a compelling value proposition and business plan and addressed these concerns with an in depth explanation of both the opportunity and the risks.

In the end, concerns can only be mitigated, never removed completely. Siri was going to be a bold but risky investment. It would clearly impact the wireless industry with its disruptive technology. It would be a breakthrough resulting from a convergence of remarkable worldwide trends – ranging from the emergence of smartphones, the advancement of computing, storage and communications speeds, the growth of Web services, and the development of new artificial intelligent algorithms. These trends were all converging in 2008. It was the right time.

Enough money was raised from venture groups to fund the new venture for 18 months (\$8.5 million). Siri was also fortunate that two of Silicon Valley's top venture capitalists: Gary Morgenthaler of Morgenthaler Ventures and Shawn Carolan of Menlo Ventures, invested and joined the board, in addition to Dag

Kittlaus and myself. These two venture capitalists provided great value in helping the company manage the difficult and uncertain path from creation to success.

Many issues emerged. Companies were both providers and competitors, such as Nuance, and we needed to decide how to manage this. Nuance provided Siri's speech to text, but not its core technology, which was natural language understanding. Google and others were building solutions closer and closer to Siri. Other companies were making offers to acquire, even before Apple made their offer. Deal terms with providers and Web services companies were complex. Other opportunities emerged with major wireless carriers, but would cause significant distraction from our initial product.

The Siri team developed the product over the next 18 months. Siri started with software that originally came from researchers at SRI, never intended to be used as more than a prototype. It needed to be transformed into software that could be used by millions of people, with a compelling user experience, security, robustness, scalability, and all the other elements necessary for a commercial product. Finally, we were ready to test Siri in the real world. Between November 2009 and February 2010, we ran that test with a few hundred people.

Norman was one of the testers, and had an experience that profoundly impacted him: "I was on an airplane and just sitting down at my seat. We had been delayed, and my neighbor asked me what time we were expected to land. I reached for my iPhone and asked in natural language "Siri, what time is United flight 98 expected to arrive." Siri responded with the delayed time, and I happily provided it

to him. He looked stunned, and turned to me saying: “I have only one question: why are you sitting in coach? You ought to be a billionaire!”

In February 2010, the team launched Siri as a free application in the Apple App Store. The company had prepared for the launch of the Siri application with demonstrations and reviews by top bloggers from sites like Scoble and TechCrunch. The demonstrations were a great success and the press created an avalanche of consumer interest. Siri was being downloaded free at the rate of over one download per second. By the first weekend, 200,000 users had downloaded it. In addition, it was in the top 50 of all Apple Apps, and was the top LifeStyle App.

Two weeks after the launch, Dag Kittlaus recounted to the Siri board that he received a phone call: “Hi, this is Steve Jobs.” Kittlaus, thinking it was a joke, hung up. Then the phone rang again: “Really, it’s Steve Jobs.” It was.

Dag and Jobs talked for a while, with Jobs congratulating Kittlaus on Siri’s capability. He invited Kittlaus, Cheyer, and Gruber to his house. Kittlaus called the board of Siri immediately and discussed what to say about Siri. The board was not anxious to sell, since investors believed that the business value was almost certainly going to increase with successful trials and distribution deals signed. However, Kittlaus was instructed by the board to learn about Jobs’ interests and postpone any further discussion on selling the company.

At his house, Jobs continued to discuss Siri’s capability. He understood immediately the value of the artificial intelligence part of the engine and agreed to talk again in a few weeks. Jobs also understood the nature of the technology and the certainty that errors, such as in recognition of natural language, would always occur

– but he was not discouraged. This was remarkable, because virtually all the other Apple products were designed “for perfection.”

Over the next few weeks, Jobs opened discussions with Kittlaus about a purchase price for Siri, with multiple calls per week. Finally, Jobs made an offer that was a sufficient return on investment that cannot be revealed due to contractual obligations, but it was highly rewarding. The executive team was also deeply attracted to working with Jobs and Apple, and this was their chance. They unanimously wanted to approve the Apple acquisition. The board recognized that they might lose the team if they turned down Apple’s offer. The board agreed to sell.

A year later Siri became the core platform for a new and highly popular service on Apple phones. In the first few weeks Siri helped to accelerate billions of dollars of sales of the iPhone 4S.

Siri continues to be a core element of Apple’s IOS in all subsequent mobile devices. Although it was a breakthrough in both market and technology, consumers learned that the experience of using Siri could on occasion be disappointing - sometimes unable to recognize words or intent. This was largely due to the fact that Siri was broadened from the original focus of travel and entertainment to whatever anyone in the world wanted to ask Siri.

Yet, Apple and many other innovative companies are now all in a race to develop products that both advance the technology and serve new markets. There is much that can be done. Speech recognition, natural language, and machine learning are all still in their infancy. New virtual personal assistants will be even better at word and language recognition. They will retain context, enable conversations not

just question and answer, learn from their users, and will also become “specialists” helping consumers access information such as health records or bank accounts. SRI recently launched a new venture, Kasisto, that is such as specialist in the banking industry. There is no doubt that the future of virtual personal assistants is secure.

Siri fundamentally altered the way consumers view their mobile phone and helped change the world. That’s the promise of this book.

Plan for the book

The Siri story is but one example of how our framework can lead to success. We’ve provided the rest of the book with examples from our experience that show how to get the job done. We’ve attempted not to restrict our approach to specific industries but the broad framework applies to businesses targeting services and products of all kinds. We focus on such issues ranging from the market opportunities that create great ventures to the selection of products for a venture, the choosing of the team, all the way through to sustaining innovation within a successful public company. We distill lessons learned from direct experience into material that is actionable and provides answers to the important questions that entrepreneurial teams need to understand.