

COURSE MATERIAL

Creation of Sustainable Business Model

By

Dr. DEBASISHA MISHRA

Business Terminologies

BUSINESS MODEL:

Business Model means the pattern of economic activity (cash flowing in and out of your business for various purposes and the timing thereof) that dictates whether or not you run out of cash and whether or not you deliver attractive PROFITS to your investors and yourself. The schematic diagram of business model is given in next page.

Creating a business model is an iterative process from PLAN A to B to C

ANALOGS

Analogs to your idea are successful predecessor companies that are worth mimicking in some way. There are many analogs out there, portions of which can be borrowed or adapted to help you understand the economics and various other facets of your proposed business and its business model.

DON'T REINVENT THE WHEEL: ANALOGS

ANTILOGS

Antilogs are predecessor companies compared to which you explicitly choose to do things *differently*, perhaps because some of what they did has been unsuccessful.

BE DIFFERENT: ANTILOGS

LEAP OF FAITH

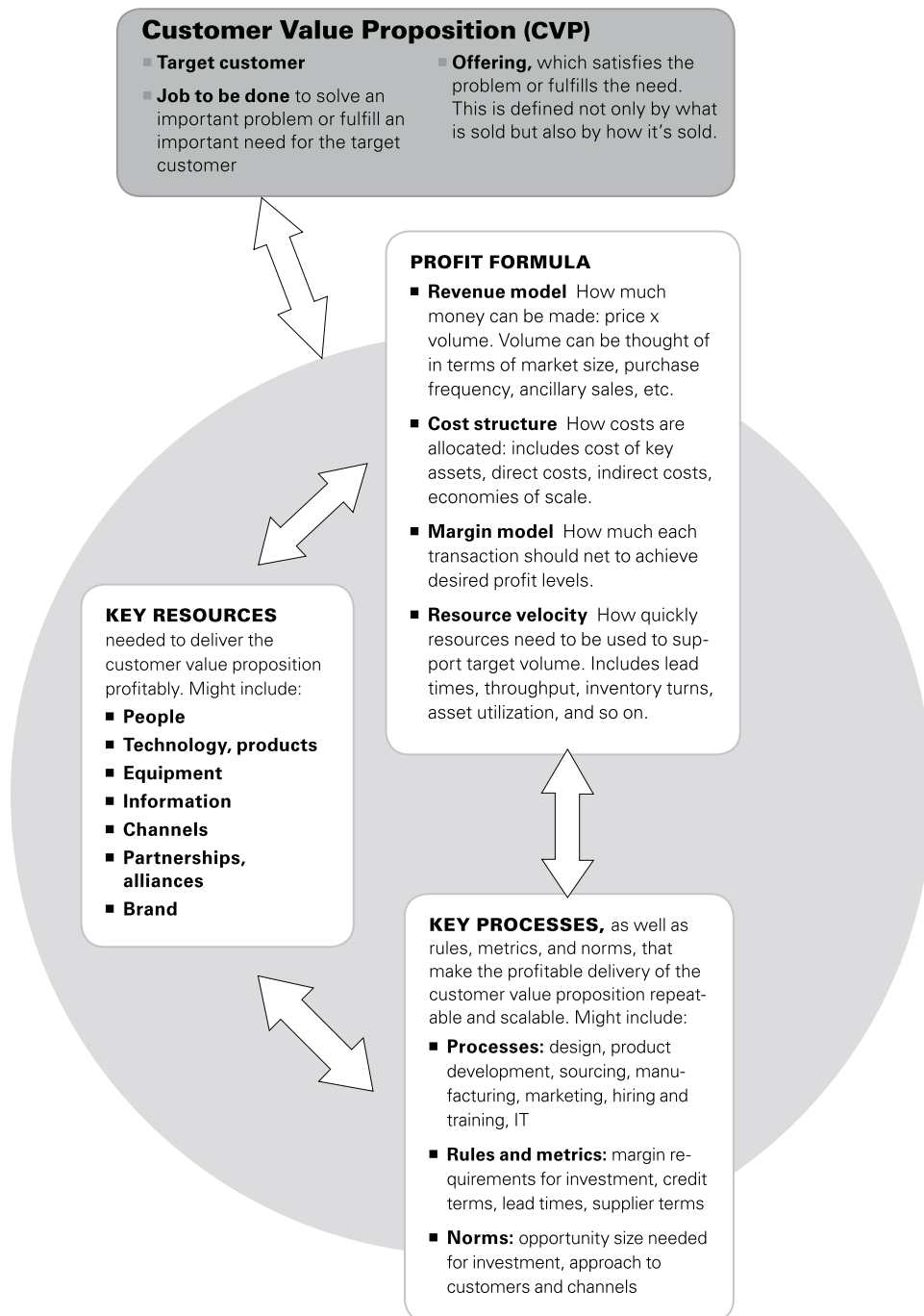
It is not what you know that will likely make you fail, it is “what you don’t know you don’t know”...

Identify the questions where analogs and antilogs don’t provide the answers.

The questions you cannot answer from historical precedent lead you to your *leaps of faith* – beliefs you hold about the answers to your questions despite having no real evidence that these beliefs are actually true.

The Elements of a Successful Business Model

Every successful company already operates according to an effective business model. By systematically identifying all of its constituent parts, executives can understand how the model fulfills a potent value proposition in a profitable way using certain key resources and key processes. With that understanding, they can then judge how well the same model could be used to fulfill a radically different CVP—and what they'd need to do to construct a new one, if need be, to capitalize on that opportunity.



ANALOG, ANTILOG AND LEAPS OF FAITH

Case 1: Apple Branches Out from Personal Computers

If you ask anyone born after about 1990 what Apple is famous for, the answer will likely be "the iPod." And with half of Apple's 2006 revenue generated through sales of its iPod and music-related business, this young person wouldn't be all wrong.

But those born before 1990 remember that Apple was once a computer company. Apple built the world's first PC with a keyboard. Apple developed sleek computers that were innovative in design and intuitive to use. By consistently offering the world a different and better computing experience. Apple grew a population of vocal evangelists: people who lived and breathed for Apple products and who were willing to stand in line to get a glimpse at the newest Apple creations.

The iPod catapulted Apple from its computer origins into the world of consumer electronics. The wildly successful portable music device and its associated music store did not magically appear out of Apple's DNA, however. Apple's music portfolio can be traced to a few key analogs and antilogs.

In 2000, Apple was looking for its next big product. The company had struggled for years in the hotly competitive personal computer industry and was in need of some dramatic reinvigoration—something as revolutionary as the Apple II had been to the computer world in 1977. So, rather than sticking to the company's bread and butter, Apple's legendary leader, Steve Jobs, decided it was time to take a stab at the new digital music phenomenon. Music and consumer electronics were not industries where Apple had any obvious advantage. They would have to innovate.

In 2000, the music industry was seeing a flurry of activity and change. Napster, the new peer-to-peer music-sharing site, was wreaking havoc on record companies' bottom lines. In what can only be called a massive theft operation, Napster's users were—illegally, as the courts later decided—downloading millions of pirated songs to their computers. It was no surprise that the music labels grew increasingly hostile to digital music, opting to sue Napster for copyright infringement.

By late 2000, there was a seemingly voracious appetite for digital music. It appeared that everyone under the age of twenty-five was downloading tunes. Piracy of copyrighted music abounded. But without court action, there seemed to be no way to get people to start buying music, versus stealing it. And there were no well-designed products on which to play digital music, in Jobs' view. The scene was set for Apple to pounce.

Apple's Analogs and Antilogs

Jumping into a totally new industry requires more than just guts. It also requires some savvy about what works and what doesn't work. Fortunately for Apple, there were some analogs to light the way, starting with Sony's Walkman. This revolutionary product, introduced in 1979, was the first truly portable, personal music player. Sony CEO Akio Morita said, "Although I originally thought it would be considered rude for one person to be listening to his music in isolation, buyers began to see their little portable stereo sets as very personal... We found that everybody seemed to want his or her own." Sure enough, within twenty-five years after it entered the market, Sony had sold more than 330 million Walkmans. The Walkman analog proved that people all over the world enjoyed listening to music on their own and were willing to pay for a device to do so. Most importantly, it proved that personal listening on the go was a socially acceptable activity

Further, some 26 million Napster users worldwide, sitting around in their jeans and t-shirts sharing their music files, made it clear that individual songs were just as much, if not more, appealing to music consumers than complete albums.⁵ Napster proved to the world—and to Apple—that downloading music from the Internet was more attractive than going to the local record store. It also proved that people would go through the trouble of downloading digital music if it were free. Whether they would pay, however, was another question.

It was a question for which the record companies themselves offered some clues. Even before Napster opened the floodgates, the music industry had experimented with selling downloadable digital music online. Various record labels launched Web sites from which music could be downloaded (for a fee, of course). The first, MusicNet and Pressplay, were subscription based models; users paid a monthly fee to access the songs. With MusicNet, users could download songs to one computer, but as soon as the subscription ended or a bill wasn't paid, those songs disappeared. And MusicNet didn't allow users to download their songs to portable devices, so users had the option of listening to their music on their computer or not at all. Pressplay did allow users to burn a small subset of their songs to CDs for use on the go, but users of these two services didn't really own the music they purchased. And each of the record company sites provided only songs from the musicians that they represented. As a result, neither site contained an exhaustive music library, so users would have to shop from site to site to find the songs and artists they wanted. Consumer response was tepid at best.

From these two pay-for-music antilog sites, it became clear to Jobs and his team that users wanted all of their music in one place. And if users were in fact going to pay for music, they didn't want to rent it, they wanted to own it and be able to play it on their portable devices—not just on their computers. Moreover, people wanted songs, not albums.

Apple could learn from another antilog. In 1998, Diamond Media Systems launched the Rio, the first mass-marketed MP3 player. But its clunky user interface made it difficult for users to find or organize songs. There was only enough storage to play about sixty minutes of music. And transferring music from a computer onto the Rio was painfully slow. "The products stank," recalled Greg Joswiak, Apple's vice president of product marketing. The Rio's struggle in the marketplace confirmed for Jobs that there was no market for anemic or complicated portable digital music players. If it wanted to enter the MP3 player game, Apple would need to solve the storage and user-interface problems that Rio presented.

Apple's Leaps of Faith

Jobs and the Apple team faced some tantalizing questions that led to their leaps of faith. Was there a different business model that would work? Jobs believed there was. Would there be consumer acceptance of a site that offered a huge selection of music for a small fee? It was a leap of faith that music lovers would actually **pay** for their tunes. What if Apple offered both hardware **and** software—an MP3 player and the tunes to play on it—in such a way that the record companies would dance to Apple's tune? Would they play? Jobs was confident they would.

Step one for Apple was taken in early 2001. The iTunes Jukebox, launched in January of 2001, allowed Apple computer users to store, manage, and group their music from any source (otherwise known as creating "playlists") on their Macintosh computers. Around the time of the launch, Jobs also decided it was time for Apple to have its own portable music device, so Apple users could take their newly organized playlists with them. He gave his development team eight months to deliver and launch the new device.

The device—or **iPod** as it was coined—launched in October 2001 just in time for the holiday season. The iPod was a chartbuster from day one, contributing revenue of \$143 million to Apple in its first year on the market. Apple had officially entered the consumer electronics industry. But to complete the picture, Jobs needed a way to sell music as well. Let's use Gillette as an analog: Apple was already selling razors (the iPod), but Jobs wanted to sell the razor blades (music), too.

At about the same time, Napster closed its site in accordance with a court injunction. But the Napster analog had shown that an online music store with a large inventory of free music could be successful. Jobs knew the Recording Industry Association of America (RIAA) wanted to take down anyone who dared to enable copyright infringement. So, a pirated-music Web site like Napster wasn't going to work. But customers needed an easy—and legal—way to get digital music. Apple's solution was brilliant.

Jobs personally called individual artists, including the Eagles' vocalist and drummer Don Henley, to persuade them to make their music available on the service. Apple was the first to negotiate and

reach agreement with five record companies, allowing Apple to sell hundreds of thousands of songs from artists spanning all five major labels. In a revolutionary move, Apple worked out a deal to sell (not rent) each song for 99 cents. Once they shelled out the cash, Apple's customers could keep their songs indefinitely, share them on as many as three Macintosh computers, burn them to an unlimited number of CDs, and transfer them to any number of iPod portable music players.

The online iTunes Store was born in April 2003. On its first day, Apple sold a million downloads. By the end of July, it had sold 7.5 million tracks. Apple's iTunes would be named **Time** magazine's Coolest Invention of 2003. The iTunes proposition was straightforward. No subscription was necessary, and there was no variability in the song price: every track cost 99 cents. It was simple, clean, and easy for a user to buy, download, organize, and own music. Musician Seal described the iTunes store, saying, "You can't stop piracy, so you have to work with technology, and you have to get into the rhythm of it. That's what Apple has done here." Best of all, the record labels were happy! One executive said, "Until Apple, it wasn't cool to buy digital music. This was about getting to that pivotal group of people—the people who buy the cool sneakers and wear the right clothes—and showing them that legally downloading music could be cooler than stealing it."

Turning the Razor and Razor Blades Model Upside Down

Of course no one was really going to fill an iPod with thousands of songs at 99 cents each. Sure enough by 2007, only about 3 percent of music on iPods was downloaded or copied from the iTunes music store. The rest was downloaded from other places and was therefore unprotected and playable on any device. But Apple didn't care. The iTunes music store completed the user experience, and as long as a critical mass of people bought at least some of their music from the iTunes site, Apple could keep itself out of trouble with the RIAA. It didn't really matter to Apple financially if people bought only a small percentage of their music from iTunes, because the 99 cent price tag was barely enough to cover Apple's costs and the record companies' licensing fees. Shrewdly, Apple had turned the traditional "razor and razor blades model" on its head: Apple could make its money selling razors—the growing assortment of iPods—even if customers continued to steal most of the blades!

The Case 2: More Than Pants for Pantaloon

Halfway across the globe, in the world's second-most-populated country, another business mastermind had already begun to make his mark. Kishore Biyani, son of a Mumbai textile merchant, had grown up watching India's population multiply from 600 million people in 1975 to almost double that at the turn of the twenty-first century. He saw that things were changing in India, and changing rapidly. Not only was India's population growing, but its demographics had shifted dramatically. There was suddenly a significant and fast-growing number of young, educated, working-age people. Finding well-paid jobs meant moving to the cities. With incomes that would have seemed low to those in industrialized nations, these households could afford consumer goods like ready-made apparel, plus durables like air conditioners, washing machines, even hired help.

Biyani founded Pantaloon in 1987 (under its first name Manz Wear Pvt. Ltd.). At first Pantaloon was a menswear maker, manufacturing readymade pants sold mostly in independent mom-and-pop retailers and kiranas. In 1997, seeing the growing size and potential of the Indian consumer market and the lack of business savvy of many of the retailers who were his customers, Biyani decided to turn Pantaloon into a retail operation. He felt the world of manufacturing didn't offer enough of an opportunity, didn't provide him with a "big enough canvas." Retail, on the other hand, would provide him with unlimited opportunity. But what did a pants merchant know about retailing?

Analogs in Retailing: Pantaloon Learns from Walmart

The first thing Biyani did was to start reading about leading retailers, looking for lessons—analogs and antilogs—that he could apply in India, noting, "I read every book on Sam Walton, Macy's, Marks & Spencer. And management gurus like Tom Peters, whose book **Re-Imagine!** Impressed me." But almost in the same breath he declared that he didn't make a practice of visiting these stores. He reasoned, "By going to a Walmart or a Macy's, you could get overwhelmed into thinking that was the best model and stop learning." Instead, Biyani combined his exposure to foreign retailers with his practical understanding of Indian attitudes and buying behavior.

"When a consumer thinks about Walmart," recalled Biyani, "the first thing that usually comes to mind is the store's huge selection of discount goods spanning hundreds of categories from sporting goods to apparel to food to hair supplies. When a fellow retailer thinks about Walmart, he thinks about the company's maniacal focus on its supplier relationships and merchandising." Traditionally, Walmart purchased a large percentage of its products directly from its manufacturers. In so doing, the company eliminated the cost of doing business with wholesalers and was able to influence and more tightly manage relationships with its manufacturers. By removing the cost of a middleman, Walmart was able to pass along savings to customers. The

company was also famous for its merchandising ability, focusing much of its energy on product selection and pricing. It institutionalized the concept of category management, using shopper analysis, customer research, and merchandising plans to determine what should sit on the retailer's shelves. In the end, the Walmart customer always found the right products at the right price.

For Biyani, Walmart served as the perfect analog for both supplier relations and merchandising. Both his hypermarkets, called Big Bazaar, and his grocery stores, Food Bazaar, were modeled in many ways after Walmart. Like Walmart, but uncommon in India, Biyani went straight to his manufacturers rather than relying on wholesalers. Between 50 and 60 percent of Big Bazaar's products were bought directly from manufacturers. Like Walmart, avoiding the middleman allowed Biyani to pass savings along to his customers. Discounts in the Big Bazaar ranged from 5 to 60 percent. And just like Walmart, Biyani was focused on merchandising. He practiced the concept of category management both in his Big Bazaar and Food Bazaar stores, as well as in his growing chain of apparel stores, Pantaloon. He explained, "We have over 150 product categories and each is looked after by a manager who is responsible for its growth and profit." According to Damodar Mall, president of Pantaloon's food business, "By undertaking these activities, the category leader along with the retailer undertakes marketing and promotional activities for the particular category."

Pantaloon Borrows from Marks & Spencer and Zara

Biyani wasn't done gathering his analogs. Marks & Spencer, the U.K.-based food and general merchandise retailer, had sold private labels—goods made exclusively for its stores—almost since its inception in 1893. Its in-house labels provided higher margins than did other brands. To gain the benefits of higher-margin goods, Biyani followed suit, offering private branded products both for his Big Bazaar and Food Bazaar retail stores. The Pantaloon apparel stores carried both branded apparel and vertically integrated private label items for the entire family, including casual, ethnic, formal, sports, and winter wear. The private label items were generally less expensive than the name brands, but delivered high margins. As Biyani explained, "Someone who is unable to afford the premium brand will opt for our brands, which are not exorbitantly priced."

The Spanish apparel retailer Zara provided Biyani with yet another analog, this one for inventory management. Zara's lesson was that customers were fickle and that fashion preferences changed with the wind. To ensure that Zara never had an abundance of unwanted inventory, the company utilized an inventive product-design and production process called fast fashion. Most Western retailers took half a year to design a line of clothing, get it produced in a low-wage country, and bring it to market. Zara's fashions moved from drawing board to store in as little as fifteen days.

The benefits were considerable. The faster you could bring a design to market, the better the chance customers' preferences would be the same as when the product was designed. This minimized the risk of launching a product that was already passe, forcing the retailer to mark down its obsolete inventory. And under this system, there was far less money tied up in inventory, freeing up cash for other uses—like opening more stores. "The aim ... is to respond to the demand of the market rather than try to forecast it months in advance," said Biyani. "This will be the key differentiator between the winners and losers because it reduces working capital requirements and improves return on capital."

Pantaloon's Leap of Faith: Getting the Shopping Experience Right

Biyani knew, however, that all these Western analogs would apply largely to the back end of his retail operation. How his stores should be organized and his merchandise presented was an entirely different matter. He thought about Walmart, whose stores were orderly, with long, straight aisles and systematically shelved products. Walmart stores were often located in busy suburban areas with plenty of parking. The purpose of Walmart's design and location was to make the shopping experience as convenient as possible for time-constrained American customers. Time and convenience were simply not the driving concerns of Biyani's target market, however. Was the typical clean and orderly Walmart store layout an analog, too? Or was it an antilog that would be rejected by Indian consumers, who were used to spending hours each day haggling in Indian markets?

Biyani's leap of faith—that Walmart's orderly layout would appeal to his customers in India—would be resolved when he launched his first Big Bazaars. Alas, he found that, "The customers never stopped. They kept on walking." And Biyani needed them to stop to pick up goods to buy!

Pantaloon Opts for Some Disorder in Its Plan B

For inspiration, Biyani looked no further than the traditional Indian bazaar. Bazaars, common throughout the country, provided Indians a place to buy just about everything. They were hardly an organized or sophisticated shopping experience. Quarters were cramped, with one vendor bumping up against the next. Customers had to pick through both dirty and clean items to find what they wanted. And, of course, there was no such thing as fixed prices. Bargaining and haggling were the modus operandi for the Indian bazaar, and this was the experience Indian shoppers were used to.

So, Biyani created a totally chaotic front-of-house shopping experience to mimic the Indian bazaar, while keeping his back-of-house efficiencies, unseen by the customer, in place. Letting the buyers

choose the vegetables they wanted gave them "a sense of victory," Biyani said. To keep the noise level up, employees announced deals on bullhorns. "The shouting, the untidiness, the chaos is part of the design," Biyani explained.

Biyani was learning that Western analogs could only take his ideas so far. Companies like Walmart, Marks & Spencer, and Zara taught him how to operate his retail stores efficiently and cost-effectively. But none of these chains were targeting this new and still highly diverse market, comprising more than two thousand ethnic groups and four major languages, plus a dozen more languages spoken less widely. It was Biyani's opportunity to put their lessons to use. At a certain point, Biyani had to address some crucial questions, of which orderliness versus chaos was only the first.

He had to experiment where best to locate his stores, how to merchandise his products, and how to design the layout of the stores. He did so systematically and iterated rapidly, continually improving his results. Not everything worked at the outset, but the back-end fundamentals were sound thanks to tips taken from his Western analogs. Biyani's attitude helped his business, too: he was nothing if not adaptable.

Is Pantaloon's Plan B Working?

By 2008, eleven years after Biyani's retailing company was founded, Pantaloon was India's largest retailer, with some thousand stores—including Pantaloon apparel stores, Food Bazaars, Big Bazaars, and more. And the National Retail Federation in the United States named Pantaloon the International Retailer of the Year for 2007. But the best news was this. Even with \$350 billion in revenue, organized retailers accounted for only 3 percent of retail sales in India. There was still plenty of room to grow!

REVENUE MODEL

Revenue Model Defined

In Maslow's well-known hierarchy of needs, air, food, and water sit at the base of the pyramid—signifying mankind's most primitive, most fundamental, most essential needs.¹ Revenue is to any business—and to most other organizations, too—as air, food, and water are to mankind. Without revenue, a business is as lifeless as a plant without water. As management guru Peter Drucker observed, if you don't have customers sending you money, at least eventually, you don't have a business, either.

By **revenue**, we mean money given to you by customers in return for whatever it is that you sell. And by **customer**, we mean the one who pays for whatever it is that you sell. In particular, we examine six key questions that underlie every revenue model:

1. Who will buy?
2. What will they buy?
3. What pain are you resolving for your customers, or what delight are you offering?
4. How soon, how often, and how much or many will they buy?
5. At what price will they buy, and on what basis will they pay?
6. With what effort and cost on your part?

Examining these questions isn't a simple form-filling exercise. For each of them, you'll need evidence that shows, to you and to others, where your cash from customers will come from and why. But a word to the wise, if your only source of cash is "investors" rather than customers, it's unlikely that you'll actually **get** any investors.

Case 1: Google's Plan A: Who Needs Revenue?

You don't need an exhaustive search to find one of the most impressive Plan A-Plan B stories in recent business history. At its inception, Google's founders wanted nothing to do with advertisers. Tracking the evolution of Google from its Plan A—with no revenue model—to its net income of \$4.2 billion in its 2007 fiscal year, uncovers a metamorphosis that every aspiring entrepreneur and every manager who wants to go places in an established organization should study³

With the Internet boom came the advent of the search engine. Search engines were (and continue to be) to the Internet what the Dewey decimal system was to turn-of-the-twentieth-century American libraries. In the mid- 1990s, there were plenty of search engines—Magellan, Info seek, AltaVista, Yahoo!, Excite, and HotBot, to name just a few—each boasting a slightly different way to find information on the Web. These search engines were good enough for most users. However, Sergey Brin and Larry Page were not fans.

In 1997, Brin and Page were pursuing PhDs at Stanford University. They lived in the heart of Silicon Valley during the hottest period in California economic history since the gold rush. Page and Brin set out to create a better search engine, more of an academic exercise than an entrepreneurial venture. It reflected their passion for organizing and delivering to Web users relevant and useful information on any topic in an easily accessible manner. Theirs was no small undertaking!

For the next year, along with a few Stanford buddies, they developed a new search engine to replace then-popular AltaVista. "We had to solve several problems. One was relevance: How do we determine if a web page relates to what you ask? Next, although many results may be relevant, which are the most relevant and the most useful?" Brin recalled. Their search engine differed because it used a new algorithm called "PageRank," a word play on Larry Page's last name. This algorithm weighted the importance or relevance of search results and displayed the results in their rank order. With PageRank, the "best answers" found their way to the top of the page. Page and his team also added brief summaries for each search result, plus bold fonts for key words and terms, and **void**, Google was born. "They didn't set out to build a company," Stanford professor Terry Winograd recalled, "but they did set out to do a better search."⁵ In so doing, they solved a pain—finding all kinds of information with far more ease and speed—that customers didn't know they had.

The result was a great search engine, initially available to a limited set of individuals, mostly Stanford graduate students. Through word of mouth and a bit of free publicity, the Google search engine became more widely used. By early 1999, Google was handling about one hundred thousand searches per day. But, as with anything else, there were costs associated with a search

engine. As their engine gained popularity, Brin and Page had to continue to build and maintain a hardware infrastructure. Some serious cash was required.

Google's Plan A was a great academic feat. It was award-winning, and was nurtured by some talented individuals. But it wasn't making a penny. There were users galore, but paying customers were another story. No venture—for profit or not-for-profit—can live for long without bringing in cash from somewhere.

Google's Plan B

Fortunately for Brin and Page, two venture capital firms in the San Francisco Bay Area saw a glimmer of brilliance in Google. Each invested \$12.5 million. Even though \$25 million is a sizeable chunk of change, the Google founders knew this funding wouldn't last forever. And the investors were banking on the hope that Brin and Page would devise a plan to generate, in the short term, at least enough revenue to cover their costs and hopefully—in the long term—much more.

Internet search had long been established as a free good, for which the user was not asked to pay. If not the searcher, who would be Google's paying customer? Answering the question became an urgent priority.

Google's answer, its first attempt at Plan B, was to license its search engine to other Internet businesses. Believing such companies would pay, and pay enough, for superior search, was a crucial leap of faith. Google targeted Internet companies such as Yahoo! and Red Hat, which licensed the Google search engine for their own sites. In 1999, Google would generate only \$220,000 in revenue and \$6.1 million in losses. While the Google guys had begun to turn the corner by finally making a bit of revenue, they did not have a revenue model that could support the costs of running their growing business. Their leap of faith had not really panned out, and all six of the revenue model points remained very much up in the air.

A Villainous Plan C?

Realizing that their licensing model was only marginally effective, the Google team set out to find a better customer. Who else might pay? What about advertisers, who had a problem that Google's technology could solve: namely, finding a way to serve up targeted ads to online consumers? Perhaps here was a set of customers with acute pain that Google could serve!

This new leap of faith, if it worked out, would be music to investors' ears. However, to Google's founders, it felt like marching to the dark side and dealing with the devil. From the outset, "advertising" had been considered evil by Google (see "Was 'Plan C' Evil?"). Brin and Page had been adamant not to include advertisements in their search. But with a rising cash flow shortfall,

they finally acknowledged that advertising was potentially the best way to attract customers' cash to support the growing costs of maintaining the world's fastest-growing search engine. It was another leap of faith that might lead to a more cash-rich Plan C.

But Google still needed to determine how to make money from advertisers, so Brin and Page looked to an analog for ideas. Overture Services was providing searches on a paid-listings basis, so inspired by Overture, Google incorporated the concept of paid listings into its search (and later paid Overture to settle a lawsuit in which Overture had charged Google with violating its patents. Using analogs is good, but watch out for patents!). When a user searched for information, relevant ads would show up on the search results page, and advertisers were charged for each ad impression. Later (Plan D) Google would switch to a cost-per-click model.

But unlike Overture, Google's ads appeared in rank order with the most relevant ads appearing at the top of the page. Sticking to their guns, another leap of faith, Google did not allow advertisements on their home page, nor did they allow unsightly, distracting banner ads. They were also careful to make sure that users knew which of their results were sponsored ads versus results that were unsponsored (i.e., purely informational). "There's a clear, large wall between the objective search results and the ads, which have commercial influence," said Brin. "At Google, the search results cannot be bought or paid for."⁷

Google also thought about how to make it quick and easy for advertisers to sign up. It automated the process, which lowered its operating costs. This also made the process more affordable, allowing smaller companies—which make up the bulk of the economy—to get into the Google mix. Once advertisers signed up, their ads appeared almost immediately. By combining the best ingredients from their PageRank algorithm and an analog, Overture, Google finally had iterated its way to a revenue model that popped. As things turned out, everyone won. Advertisers went gaga over Google's truly targeted, high-traffic medium for their ads. Users benefited from having both the most relevant information and relevant ads displayed prominently, with a transparent source. By the middle of 2000, Google was fielding 15 million searches per day. In 2001, Google had its first profitable year, with \$86.4 million in revenue and \$7 million in profits. By 2002, revenue had increased to \$439.5 million with profits of \$99.7 million.⁸

Google Looks for More

In 2002, things looked good for Google. The company's revenue far exceeded its costs. The founders were millionaires. Why not stop there? Is it pure avarice that motivates a company like Google to continue to look for revenue-making opportunities? Not really. Staying ahead of the pack ensures sustainability. The better you are at what you do, the harder it is for others to replicate

your product or surpass your performance. The more reach you have in the marketplace, the tougher it is for your competitors to catch up.

So Google reinvented its revenue model yet again. Who else might pay for Google's knack for searching and its deep pool of advertisers? The company took a close look at some of the companies displayed on their own results pages. These company Web sites often offered searches of their own. Might there be a way to incorporate Google's search technology and advertisers on other companies' Web sites?

Trip Advisor, an online travel community that provides information and customer reviews of hotels and tourist attractions worldwide, was among the first to see the potential. Here's how it worked. Say, for example, we were going to take our spouses to the Greek Islands for a weeklong vacation and some joint work on this book (a great idea in hindsight, but we've thought of it too late!). As we searched the Trip Advisor site for "Santorini," dozens of hotels and reviews would appear, alongside a few targeted, sponsored ads. Google served these ads. And if we chose to click the ad for bed-and breakfast listings in Greece, then Google would collect payment from the sponsoring advertiser. TripAdvisor and Google would split the payment.

How effective was this new partnership-based revenue model? In 2003, Google grew to \$1.5 billion in sales, more than triple the prior year's revenue, with a modest increase in profits to \$105.6 million. By 2004, according to Google chronicler David Vise, "Most of the growth and half of sales were coming from a growing network of websites that displayed ads Google provided." Further innovations on the Google model continued, and by 2006, Google surpassed \$6 billion in revenue with \$1.5 billion in profits.

Case 2: Silverglide Surgical Technologies: **Customers Love You, but Are Not Spending Much Money**

Silverglide Surgical Technologies is a story of an entrepreneur, Jonathan Thorne, who did not want venture capital funding and the restrictions that come with it. He wasn't based in Silicon Valley. And in the late 1990s, he wasn't focused on the Internet craze. Thorne's is an instructive story of a typical entrepreneur's journey toward a revenue model that works, and about listening to and acting upon early customer feedback. And his is a story that shows how the various components of a revenue model— bulleted at the outset of this chapter—can come together when your revenue model works.

Like many entrepreneurs, Thorne had tired of working for others. Ready to take his skills and experience out on his own, he founded Silverglide Surgical Technologies based on a patented product he had developed (and had since licensed) while working for his former employer. In this initial leap of faith, Thorne believed that his surgical probe would be particularly attractive to plastic surgeons. His device was reusable. And unlike most electrosurgical instruments, it would not stick to human tissue. As he put it, "Sticking tissue can cause complications that mar the final appearance of the surgical procedure."¹² The probe, with its proprietary nonstick technology, effectively cauterized bleeding at the point of incision, a crucial step in nearly every surgical procedure. And it did so without sticking, a significant source of frustration for plastic surgeons.

In early 1998, with \$80,000 worth of backing from family and friends, Thorne, the engineer, and his partner, Kevin Morningside, an expert in regulatory compliance for medical products, launched the company. By December, Silverglide had won approval from the Food and Drug Administration (FDA). In early 1999 Thorne and Morningside started making sales calls and presenting at surgical trade shows. They made some headway with a few plastic surgeons who raved about Silverglide's nonstick probe. However, they counted just \$5,775 in revenue by July of that year. And Silverglide had burned through \$54,000 of its initial capital. Plan A was not working.

Thorne's Quest for a Revenue Model That Would Work

Jon Thorne had simply assumed that if he built a better mousetrap, the mice would come. But the mice were not even sniffing the cheese! Why? There were several possible explanations for Silverglide's modest progress. One was that it had targeted the wrong customer. Another was that a reusable product line provided too little motivation—too few repeat sales—to interest surgical product distributors. Perhaps the surgical probe was to blame: a surgical instrument that few surgeons would use. Thorne and Morningside had been frugal with their cash—they rarely paid themselves that year—so runaway expenses were not the culprit.

Thorne realized that his revenue model was the problem. Revenue of \$5,775 might as well have been zero. And hemorrhaging (no pun intended) their friends' and families' investment was not the business model he or they had in mind.

Thorne took a careful look at his target customers, plastic surgeons. To make a sale, Silverglide had to "convince the surgeon that the probe doesn't stick, and that a probe itself is a useful surgical tool."¹³ But Thorne realized that the probe was not a tool that most of them had used before. He didn't have a good grasp of who was going to buy his product. What's more, few distributors wanted to flog his limited and reusable product line (only probes, in only five sizes). Thorne was forced to admit that there wasn't a pressing customer pain that his new tool actually resolved.

Time for Plan B, but Which Way to Turn?

Thorne and Moming star were convinced that nonstick instruments still made sense. A few early customers of the Silverglide probe had told them that forceps were tools for which sticking was also a problem. And forceps, unlike probes, were used in nearly every electrosurgical procedure. Said one surgeon, "If you can make nonstick forceps, I'll buy them."¹⁴ But developing forceps—a leap of faith—would take all of Thome's and Morningstar's time, as well as their remaining money. And raising more cash based on the meager results to date probably would not be easy.

There were other questions as well. As Thorne noted, "Plastic surgeons use forceps, as most other surgeons do. But there's another target market that could be attractive: neurosurgery. Sticking tissue is a problem in the brain (a few brain cells here and there really matter!) or near the spine, where they do most of their work. Electrosurgical forceps are one of the neurosurgeon's primary instruments."¹⁵ The Silverglide team wondered whether focusing on neurosurgeons would be a more fruitful route. Neurosurgeons did most of their operations in hospitals. In a given day, a busy hospital might see more than a dozen surgeries. And, since forceps were such a fundamental device for neurosurgeons, an average hospital would have to stock a large supply. Thorne and Momingstar were uncertain of which way to go. Probes or forceps? Plastic surgeons or neurosurgeons? Which strategy would start the revenue flowing? Or were they already on the right path and just being too impatient? After all, Rome wasn't built in a day!

Though Silverglide's founders had numerous analogs and antilogs from a variety of medical instrument makers serving a variety of markets with which to assess their options, at the end of the day their decision would be not one but two huge leaps of faith. There was no way to know whether one surgeon's statement that he would buy forceps was enough to go on. Thorne knew that what customers say is not always what they will do. He did not even know for sure whether he and Momingstar could apply their growing understanding of nonstick technology to surgical forceps in a way that would work. But he knew that Plan B and its revenue model would **have** to work.

Fortunately for Silverglide and for Thorne's investors, Thorne's Plan B— and then his Plan C— found traction. One step at a time, Thorne moved from probes to forceps, from plastic surgeons to neurosurgeons, and on to a wider range of other nonstick surgical instruments for use by an increasing range of surgical specialties. By 2002, with revenues north of \$700,000, at sharply higher pricing, Silverglide's cash flow turned positive. Thorne and Momingstar were out of the woods.

It took about four years for Silverglide to develop a healthy revenue model. But once Silverglide got there, surgeons had clear reasons to buy Silverglide's nonstick forceps. Frustration with sticking forceps proved to be a **real** customer pain. Better yet, the pain was sufficient to earn premium pricing. And with the range of sizes that were required, the money generated from each sale was attractive. Suddenly distributors, too, had reason to energetically sell the Silverglide line. Not long thereafter, other companies saw value in what Silverglide's technology offered. In 2006, Thorne and Momingstar sold the company to Stryker, a diversified medical technology company, for a price that could reach fifteen times revenue, assuming its future projections panned out.

GROSS MARGIN MODEL

Gross Margin Defined

Gross margin is simple in concept, but sometimes tricky to apply for those of you who have not picked up an accounting book recently, let's spend a minute reviewing what gross margin, sometimes called **gross profit**, really means.

Gross margin = Revenue - Cost of goods sold (COGS)

COGS includes all the expenses **directly related** to producing or delivering whatever it is that you sell. It is often expressed as a percentage of revenue, ranging from near 0 percent (for the virtual weapons and costumes to figures approaching 100percent (some manufacturing businesses incur very high COGS, in percentage terms, resulting in razor-thin gross margins).

For business model purposes, our suggestion is this. Simply draw a line that, in your particular business, most meaningfully separates the cost of **what your customer actually buys** from all the other costs, your operating expenses, of being in business, like buying or leasing some airplanes and airport gates. So COGS is the cost of the garment for the fashion boutique, the cost of flying you from LHR to SFO (however widely or narrowly you figure it), or the cost to Microsoft of duplicating a software CD and putting it in a fancy box. In some businesses, like many service businesses, COGS as a percentage of sales will be very low, and most of your expenses will be operating expenses. If you are in the haircutting business, the stylist's time is about all the COGS you'll have. Your gross margin percentage will be high. The same is true in the software industry. The cost of the CD and the pretty box that contains it is negligible compared with the cost of developing the software in the first place. Ditto for movies, whether made in Hollywood or Bollywood.

Case 1: eBay, Gross Margin Nirvana

What if you could create a company with no costs of goods sold at all? Recall our equation:

Gross margin = Revenue - Cost of goods sold

If there were no COGS, every \$1 in revenue would generate \$1 in gross margin. This is a very nice daydream, unattainable for most companies. Unlike most of our other case studies, which evolved their business models over time, eBay launched a revolutionary business model that came close to gross margin nirvana from day one.

What prompted Pierre Omidyar to start AuctionWeb (the eBay name came later) was not what most people think. He was not trying to find a way for his fiancée to get rid of unwanted trinkets in her basement. He was not even trying to strike it rich. As nerdy as it might sound, he wanted to create a "perfect market." In this market, buyers and sellers could interact freely. Buyers would have access to perfect information. Sellers would have equal opportunity to sell their goods. He thought the Internet would enable just such a market.

So, in 1995, over a fabled Labor Day weekend, Omidyar developed a little auction Web site. The site, AuctionWeb.com, allowed users to list, view, and place bids on items free of charge. As he described it, "Instead of posting a classified ad saying I have this object for sale, give me a hundred dollars, you post it and say here's a minimum price. If there's more than one person interested, let them fight it out. . . The seller would by definition get the market price for the item, whatever that might be on a particular day"¹ He proved to himself that his model worked by listing his own broken laser pointer on the site. The broken item even got him \$14, enough for a couple of lattes and scones at the nearest Starbucks. Omidyar proved that his concept had promise, receiving ten thousand individual bids by the end of 1995.²

Making AuctionWeb into a Business

By February 1996, Omidyar's Website was getting so much traffic that his Internet service provider (ISP) decided he must be doing more than just maintaining a personal Web site. The ISP started charging him \$250 per month. To pay his ISP bills, Omidyar started charging the site's users. Whether they would pay—and if so, how much—was a huge leap of faith. Omidyar decided that, for his new revenue model, it made sense to keep the service free to buyers and charge sellers if and only if they successfully made a sale. His "final value fee" to sellers was based on a percentage of the item's sale price. Later, listing fees were added when a seller listed an item, calculated on a graduated scale based on the cost of the item. These various fees were AuctionWeb's revenue.

Unlike other auction Web sites at the time, AuctionWeb never took possession of the goods being sold on its site. And AuctionWeb did not stand in between buyers' and sellers' exchange of money. Instead, the buyers and sellers were responsible for coordinating the payment and shipment of goods.

By the end of 1996, Omidyar quit his day job to focus on AuctionWeb. That year, AuctionWeb took in \$350,000 in listing and transaction fees. But AuctionWeb's costs were minimal, with COGS including only expenses for moving bids and responses—just electrons, really—over the Web and hosting and operating the Web site on which its customers' items were listed. The rest of its costs—office rent, salaries, computer hardware, and software development—were operating expenses and thus didn't impact gross margins. AuctionWeb's gross margin exceeded 80 percent. Compared with the complexity of a manufacturing business, this gross margin model is so simple—and so lucrative—it hurts!

By using the Web, AuctionWeb eliminated the need to set up a physical store, procure and ship goods, manage inventory, and deal with returns. At the time, Faye Landes, an e-commerce analyst at Sanford C. Bernstein & Co., said, "AuctionWeb is the only e-tailer that really fulfills the promise of the Web. And the key is its virtuality"

eBay's Gross Margin Revolution

Let's compare AuctionWeb's virtual business with its rival at the time, Onsale. In 1996, Onsale was the biggest online auction site. Onsale had a solid revenue model, charging sellers both for transactions and a percentage of the sale itself. But, unlike AuctionWeb, Onsale took possession of the auctioned goods to inspect and ship them. In doing so, Onsale had a lot of COGS that AuctionWeb did not: payroll for employees managing the inspection, shipping, and receiving, the shipping costs themselves, and so on. These expenses made Onsale far less profitable than AuctionWeb— while AuctionWeb's gross margins were hovering around 80 percent, Onsale's were just under 10 percent.⁶ Onsale was using the wrong gross margin model.

In 1997, AuctionWeb received its first and only round of venture funding. Benchmark Capital invested \$5 million for 21.5 percent of the company, one of the best venture capital investments ever made. That year, the AuctionWeb name was retired and eBay (for Echo Bay Technology Group) was born. Growth took off—by the first quarter of 1998, eBay was collecting \$3 million per month in revenue!

Almost two years after Omidyar sold his laser pointer, eBay went public, valued at \$2 billion on the day of its offering (Omidyar wouldn't have to worry about the price of lattes anymore!). At that time, eBay had gross margins of 88 percent; Amazon.com, the other "big" Internet company,

had 22 percent gross margins. In 1999, three years after its inception, eBay employed fifteen hundred people and supported \$5 billion in transactions. By comparison, it took Microsoft nineteen years and sixteen thousand employees to generate that same amount of economic activity. Like any smart company, eBay continued to find new ways to generate revenue and a stellar gross margin. To increase its average selling price, eBay launched eBay Motors. Although it seemed hard to believe at the time, people felt comfortable buying and selling cars online. For \$25, a seller could list a vehicle on eBay. If it sold, eBay collected another \$25. Simon Rothman, who was in charge of eBay Motors, said, "Our profit margins are so high it's almost impossible to have higher margins."⁸ After all, it didn't cost eBay any more or less money if a seller was listing a toaster oven or a Lamborghini. However, the revenue generated from the two listings was totally different. eBay's gross margins, in both percentage and absolute terms, grew better still!

By the end of 2000, eBay's revenue—from listing and transaction fees—was \$431.4 million, a 92 percent increase over 1999. The company had 22.5 million registered users and \$1.6 billion in merchandise sales. And, unlike brick-and-mortar companies, eBay's COGS were minimal. The only costs eBay incurred to make a sale were for payment processing—which eBay had begun to facilitate—plus customer support and Website operations.⁹ As CFO Gary Bengier put it, "I've been in technology for nineteen years, and I've never seen a business model as simple or as elegant as this one. How many companies can say their business model is characterized by the things they don't have to do?"¹⁰

Case 2: Toyota Goes Upscale

Here's a quiz for you.

Question: What do the following terms mean?

- a) Kanban
- b)Jidoka
- c) Muda
- d) Kaizen

We wouldn't be surprised if those of you familiar with manufacturing or who have received an MBA in the last twenty years knew one or two of the four. These terms turned out to be a recipe for manufacturing acumen and a superior gross margin model. In this section, we explore how these four words formed the basis for Toyota Motor Company's success, in which a crucial element has been a gross margin model that far surpasses others in its industry. As a result, Toyota has become one of the automotive industry's star performers and the most profitable automaker in the world.

At the dawn of the twentieth century, Sakichi Toyoda formed a company to make looms for the Japanese weaving industry. In 1929, Toyoda sent his son Kiichiro Toyoda to Europe to sell the patent for the new power-driven loom his company had developed. The £100,000 raised in the sale of the patent funded the launch of the Toyota Motor Company.¹¹ Less than seventy-five years later, in 2003, Toyota Motor Company had become the world's most profitable automobile maker. And in 2007, Toyota became the world's largest seller of cars and trucks, outselling former leader General Motors.¹² How Toyota attained this leadership position is a lesson in how to be laser-focused on efficiency, productivity, and profitability, and how to seize a significant gross margin opportunity. The Toyota tale provides lessons for how to manage a business meticulously.

Toyota's Gross Margin Focus: Attacking Costs

In virtually any manufacturing company, there are two key components of cost of goods sold: parts and labor. Building a superior gross margin model often means, among other things, driving down these costs. Toyota followed this diet by designing efficient processes to minimize the direct costs of manufacturing automobiles. Toyota's efficiency objectives guided decisions for decades to come. In 1950, chief production engineer Taiichi Ohno still had the same focus. Ohno's Toyota Production System (TPS) focused, in his view, on "shortening lead time by eliminating waste in each step of a process."¹³

TPS had three pillars: **kanban**, the just-in-time system; **jidoka**, built-in quality; and **muda**, eliminating waste. Whether it was workers waiting around for the next process to begin, unnecessary transport (such as carrying raw materials or work-in-process items long distances), or workers having to walk from one place to the next to do their job, rooting out and eliminating waste, in all its forms, was key¹⁴

Measurable Results

Ohno and his successors delivered on their promises. By improving manufacturing processes, making them more "lean" and more productive, Toyota reduced overtime and improved worker productivity. By the 1980s, it took Toyota an estimated thirteen man-hours to assemble a car, compared with some nineteen to twenty-two hours for Honda and Nissan.¹⁵

But for gross margins to actually improve, you also need revenue that yields a growing spread between the selling price and your declining cost of goods sold. Fortunately for Toyota, the benefit of meticulous management and lean manufacturing was not just lower costs. Toyota was producing better, more reliable cars as well. Its twin focus on costs and quality allowed Toyota to sell cars at gross margins that exceeded their competitors', yet at prices that were both attractive to consumers and very competitive. Toyota's growth exploded. By 1984, Toyota had won a 40 percent share of the Japanese auto market. Nissan, in second place, held only a 27 percent share. Honda, a laggard at the time, had only 8 percent.¹⁶

So by the mid-1980s Toyota's Plan was really humming. Revenue was growing, COGS was managed effectively, and gross margin was continuing to improve. Shoichiro Toyoda, grandson of the founder and then Toyota's president, thought Toyota could do even better, as called for in the fourth of the company's guiding concepts—kaizen, to constantly improve. He saw that his company's successful car models were predominantly small to midsized vehicles. And those types of cars had lower overall profit margins than bigger cars, especially in Toyota's export markets, like North America, where it was also making steady inroads. Was there a Plan B that could take Toyota to new heights?

Toyota's Luxury Plan B

Toyoda decided that to reach its potential in the worldwide automobile marketplace, his company needed to turbocharge its growing penetration of the American market. He realized that Toyota had a growing army of loyal customers who had owned Toyotas for years, but were seemingly ready to move up to higher-priced luxury cars. But could Toyota, with its reputation for reliable but somewhat boring cars, complete in the luxury segment? It was a real leap of faith. Ichiro Suzuki

was charged with fixing Toyota's boring image. At the same time, he was asked to produce a luxury line of vehicles that could beat Mercedes and BMW in four predefined areas: fuel consumption, noise, aerodynamics, and vehicle weight. Ashe and his team got to work, word of Toyota's plans got out. As a writer for **Automobile** magazine put it, "The fox is about to find his way into the henhouse." **Car and Driver** added, "The long-awaited clash between the Japanese and the big-buck Germans is on the horizon."¹⁷

The sun rose in the form of Lexus. Suzuki was chief engineer of Lexus, but there wasn't much to engineer. The ES250, its sporty model, was based on the Toyota Camry but with leather seats, maple interior, and other luxury touches.¹⁸ The luxury elements added some cost, to be sure, but they permitted Toyota to go head-to-head with Mercedes and BMW at prices far higher than a mere Camry could command. Adding a bit of cost added much more to the car's price, hence widening gross margin.

The 1989 launch of Lexus was, by all accounts, an unbelievable success. At that time, Mercedes-Benz sold three models in the United States, the 300E, 420SE, and 560SEL. In its first year, with just two models, Lexus sold 2.7 times the number of all three of the Mercedes models combined. By 2000, Lexus was the biggest-selling luxury car line in America.¹⁹ With its efficient manufacturing processes, Toyota produced luxury sedans whose quality matched or exceeded its German rivals using one sixth the labor.²⁰ Toyota's Plan B was brilliant: less labor expense, skinnier raw material costs, fewer defects to contend with, and higher priced vehicles. Mercedes prices for a souped-up Camry? Talk about a killer gross margin model! In fact, partly as a result of the Lexus product line, Toyota's gross margins reached 20 percent by 2002, 25 percent mark by 2006, and 27.49 percent by 2007 (compared with General Motors' 16.36 percent).²¹ And in the first quarter of 2007, Toyota's worldwide sales passed those of General Motors, making Toyota the number one seller of automobiles worldwide. Generations of Toyodas have woven quite a record, indeed!

Your Operating Model

Operating Costs Defined

Operating costs are all the other day-to-day costs that must be incurred in addition to cost of goods sold. They are not glamorous. Together they comprise your operating model. They are "below the line" so to speak, getting less attention sometimes than they should. But operating expenses, if not kept in check, can bankrupt a company. Just look at the airline industry, constantly in the news for yet another bankruptcy.

The foundation for building your operating model is what accountants call a **chart of accounts**. Every industry has one, with operating expense categories that fit that industry. Mail-order marketers have an expense category called fulfillment, for example. Airlines have landing fees. Technology companies have research and development (R&D). If your company already exists, its financial statements will be structured with these expense categories.

With your chart of accounts in hand, there are three strategic questions that will drive your operating model:

- In order to deliver on your planned strategy and once revenue begins to flow, what level of cost, expressed in absolute or percentage of sales terms, will your company incur in each of the operating cost categories (that is, all day-to-day costs other than cost of goods sold)?
- Which of these costs can be reduced or eliminated entirely?
- Which of them should be increased in line with your planned strategy?

How will you address these questions? By now you know the answer. You'll look for analogs and antilogs and you'll start dash boarding as you identify any leaps of faith that you need to examine.

Case 1: Ryanair Takes Its Analog to New Heights

Let's recall how it was to fly circa 1995. You first called a travel agent to check flight schedules and book your flight. The agent then mailed you paper tickets. You arrived at the airport forty minutes before your flight and checked your baggage with ticket agent. Your spouse walked you to the gate to bid farewell. As you boarded the plane, you grabbed a pillow and a blanket. Midway through your three-hour flight, you were served snacks, beverages, and a multicourse meal by a flight attendant in her airline-issued uniform. My, how things have changed! Today, most flights are booked online, up from virtually none a decade ago. Post September 11, 2001, you can no longer arrive forty minutes before a flight and expect to check luggage. No longer can your spouse walk you to the gate. Onboard, you cannot expect to have the airline experience you once had. Lunch on a three-hour flight? Not a chance! A bag of peanuts and a Pepsi? You'll probably have to pay. Many of these amenities were cost of goods sold, now long gone from most airlines' cost structures due to the cost pressures inflicted on them by their no-frills brethren.

But the real revolution in the airline industry goes deeper than peanuts and pop. It's what has happened to wipe out huge swathes of operating costs, many of them incurred on the ground. Beyond the cost of goods sold to take a passenger from one destination to another, there's an array of costs that are incurred before plane ever takes off: aircraft leases; labor at airports, in maintenance facilities, in call centers, and at headquarters; maintenance materials and repairs; marketing and distribution; and airport landing and gate fees, to name just a few. Such costs have run many large airlines into the ground. Just consider many of the top U.S. airlines from the 1980s. United, Delta, Continental, and US Airways have all been in and out of bankruptcy.

We have yet to see an industry that's more brutally competitive, with such consistently poor performance. Still, most people have heard of Herb Kelleher's Southwest Airlines. Kelleher made Southwest into one of the most consistently profitable airline companies in the world by ratcheting down operating expenses and doing some other things very well. Not as many people outside Europe are as familiar with Southwest's European protégé—Ryanair. Though it's hard to believe, Ryanair's improvements on Southwest's operating model have made the latter's operating-cost waist line look plump by comparison. Couple that with Ryanair's creative ways to enhance its revenue model and you have an airline with a truly impressive business model.

Ryanair's PlanA

Christy Ryan, Liam Lonergan, and Irish businessman Tony Ryan founded Ryanair in 1985.¹ Their Plan A for the airline was nothing special. They started offering service between Waterford, Ireland, and London with a goal of competing with the duopoly that existed at the time between British Airways and Aer Lingus, the then government-owned flag carriers. In 1986, they added a

route between Dublin and London. Harvard professor Jan Rivkin said, "In the early days the company was trying to be everything to everybody—they were trying to provide service and amenities comparable to Aer Lingus and British Airways, but at a lower price."²

By 1991, though, it was clear that the Ryanair Plan A was not working. With two routes and two airplanes, the company was not profitable. The Ryanair founders brought in new leadership—Michael O'Leary, an Irish accountant with a ferociously competitive streak. O'Leary was charged with fixing the unprofitable company. One of the first things O'Leary did was to meet Southwest founder Kelleher. Over dinner, Kelleher provided O'Leary with a few secrets to his success: "Fly one type of plane to keep down engineering costs; drive down costs every year; turn around aircraft as quickly as possible," and more.³ The meeting with Kelleher provided the inspiration O'Leary needed. Southwest would be O'Leary's analog. Aer Lingus and British Air would be antilogs.

Michael O'Leary's Plan B

O'Leary followed Kelleher's advice scrupulously, leading Kelleher to later dub Ryanair, "The best imitation of Southwest Airlines that I have seen."⁴ O'Leary returned the compliment: "Southwest set the example for disciplined growth by a low-fare, no-frills carrier. All we're trying to do is copy the master and pay homage to the Southwest model in Europe."⁵

Europe's evolving airline policies aided Ryanair, too. In 1997, carriers in the European Union were allowed to more freely operate across the borders of the EU states. That same year, Ryanair went public. With a new trove of cash, Ryanair ramped up its network, flying short-haul, point-to-point routes between Ireland, the United Kingdom, and continental Europe. Ryanair expanded its service and its low-price reputation across Europe, while keeping its costs, operating and otherwise, to a bare minimum. Let's look beyond the peanuts and Pepsi to see how Ryanair kept its operating model lean.

First, following Southwest's lead, O'Leary decided that Ryanair would fly only one model of airplane, a stripped-down Boeing 737. This way, Ryanair spent less to train its maintenance staff and simplified its inventory of parts for repairs. Then the September 11, 2001, tragedy put the airline industry into a tailspin, and many airlines cancelled their Boeing orders. O'Leary approached Boeing to negotiate a deal. Ryanair received massive discounts on one hundred next-generation Boeing 737-800s and on options for another fifty planes. The \$9.1 billion order tripled Ryanair's capacity and soon made it Europe's largest and most fuel-efficient airline. The outspoken O'Leary, understated for once, said, "This order eliminates some uncertainty which hung over Ryanair's growth plans."⁶ And, with fuel prices set to sky rocket, the attractive pricing on the planes was just part of the bargain.

Second, rather than flying in and out of large metropolitan airports, O'Leary believed passengers would accept flying to and from smaller, regional airports outside of major European cities in exchange for lower fares. It was a leap of faith that would reshape not only European air travel but economic development in some smaller communities for a decade or more. Many of these airports were former military bases with little commercial traffic—Charleroi, Belgium (south of Brussels), for example, rather than Brussels National.⁷ Eager for Ryanair's traffic, Charleroi charged Ryanair one euro per passenger (\$1.12 at the time) to land its aircraft, half the normal landing fee charged at other airports, plus another euro for ground handling, one-tenth the typical rate.⁸ The local government also spent millions in advertising and other support to help Ryanair grow its Charleroi traffic. By 2003, Ryanair was flying 1.7million passengers a year through Charleroi, an airport that had been all but deserted in 1997.⁹

O'Leary's second leap of faith counted on the growing Internet savvy of his customers. Customers would happily buy their tickets online instead of over the phone, O'Leary believed. In 2000, Ryanair launched its Web site, cutting out both the travel agent and the call center. Ryanair would save both commissions and operating costs. O'Leary, ever the promoter, promised the lowest fares or double your money back. Consumers voted with their feet, and distribution costs fell from €7 (about \$8) to €1 per booking. The Web site also saved the company marketing spending. "It [the Web site] is transforming the business model," O'Leary said in 2000.¹⁰ By 2003, more than 90 percent of Ryanair tickets were purchased online, compared to Southwest's 59 percent.¹¹ Ryanair's Plan B was not just mimicking its analog, it was bettering it!

Turning airplanes around quickly was O'Leary's next task. A Boeing 737 is a \$50million chunk of aluminum, and it's not making money when it's sitting on the tarmac. By using smaller airports that had less congestion, Ryanair was able to get its planes back in the air twenty-five minutes after landing, half the turnaround time at busy major airports. But O'Leary took two additional measures to ensure a quick turnaround. O'Leary saw that pushing shades up and cleaning out seat-pockets in preparation for the next flight was a waste of critical time for his ground staff. So he ordered his next batch of 737's without window shades and seat-back pockets. By 2006, Ryanair's aircraft were in the air for an average of eleven hours per day, compared with British Airways' eight hours. And no shades and no seat-back pockets meant slightly less weight, hence less fuel, an added bonus.

O'Leary was maniacal about keeping operating costs down. "We want to be known as the Walmart of flying," he said.¹⁴ Ashe said in 2006, "Our average fare has fallen by almost 20 percent from €50 in 1997 to just over €40 today. Ryanair will continue to pursue lower costs and pass on these savings in the form of lower fares to the traveling public of Europe. Ryanair is the only airline in Europe which commits to offer the lowest fares in every market in which we operate."

But offering the lowest fares did not necessarily mean that additional revenues couldn't be pruned out of its passengers' wallets, so O'Leary tinkered with his revenue model, too. Passengers could

pay, if they wished, for priority boarding, assigned seating, and checking a bag. Snacks and beverages, O'Leary reasoned, weren't free of charge on European trains, another analog. Why shouldn't passengers pay for peanuts and Pepsi on Ryanair? Not only did flight attendants sell food, but they also sold items like cameras, lottery tickets, and rental car and hotel reservations. And while passengers sat back and scratched their lottery tickets, they stared at seat backs plastered with ads. "Every chance they get, Ryanair tries to squeeze just that little bit of extra (revenue) out of its passengers," said Tim Jones, of London consulting firm Innovaro Ltd. And what, might you imagine, is Michael Ryan's latest revenue idea? Putting a coin slot on the toilet door!

Ryanair's Plan B not only revolutionized its own performance, but it is rewriting the rulebook on how to run a low-cost airline. In its 2007 fiscal year, Ryanair reported profit of €435 million on revenues of €2.2 billion, or 20 percent of sales, a profit margin practically unheard of elsewhere in the airline industry Southwest reported \$1.05 billion in pretax profit, or 10.6 percent of sales, half the Ryanair percentage, on \$9.8 billion in revenues. In 2008, Ryanair's passenger count surpassed the European traffic of Lufthansa and Air France/KLM, making it Europe's biggest short-haul airline, handling 57.7 million passengers.²⁰ "O'Leary and his management team are absolutely the best at adopting a winning strategy and sticking to it relentlessly," Ryanair's chairman David Bonderman says. O'Leary touted, "We weren't the first to figure this out. . . But we do it better than everybody else." O'Leary had learned the analog's lessons very well, indeed!

Case 2: Oberoi Hotels Raise the Bar

At an Oberoi hotel, a night's lodging involves much more than a bed and a hot shower. Oberoi's hugely successful operating model makes for a very different kind of travel experience than flying Ryanair.

Take the Oberoi Cecil in Shimla, India, for example. Perched at an elevation of seven thousand feet in the Himalayan foothills, the Cecil offers an extensive menu of relaxing and reviving massages and beauty treatments. Would you prefer an ayurvedic, Balinese, Hawaiian, or Thai massage? Specialists are on staff waiting to serve you. How about a Chakra head and shoulder massage to ease stress?

In the 1990s, Oberoi's designers saw extraordinary potential in Shimla. A dilapidated colonial hotel, dating to 1884, offered stunning views of the mountains and valleys. Oberoi decided to restore the Cecil, a part of Shimla's colonial history, to its original grandeur. A heated swimming pool, billiards rooms, and a children's activity center were added, complementing the customary assortment of fine restaurants, luxurious rooms, and virtually every amenity you can think of. And then some.

Let's consider the sort of operating model such a hotel experience requires. Rather than seeking ways to trim operating costs, as Ryanair does with relentless fervor, Oberoi constantly looks for ways to add more luxurious amenities to its guests' experiences. Each of these amenities adds costs to its operating model in at least two ways. First, many of them require a specially designed space—a spa, for example. Thus, there's the cost of the space that could be put to a variety of other uses, and the cost of keeping the space heated and cooled, well lit, and up to date. These day-to-day operating costs are fixed costs, incurred regardless of the number of guests who choose to have a massage.

Second, most of the amenities require trained staff to deliver treatments, all of which makes a stay at the Cecil quite special. These costs are variable, depending on the level of customer demand. Cecil's discriminating guests request such services and are willing to pay top rupee or dollar for the latest and most lavish treatments—so Oberoi does not cut corners.

Oberoi's luxuries have not gone unnoticed. **Condi Nast Traveler** rated Oberoi Hotels and Resorts as the best hotel chain outside the United States. In the magazine's 2008 Reader's Choice Awards for the best hotel in the world, Oberoi took three of the top ten places for its properties in India: in Ranthambhore (second), Udaipur (fourth), and Agra (eighth). Even the luxuries of the Oberoi Cecil were no match for Oberoi's even more extravagant properties!

Working Capital Model

Working Capital Defined

Working capital is the cash a company needs to have on hand in the short term to keep the business running—pay its employees, suppliers, and so on. The naked truth about working capital is that it doesn't matter how clever your products, or how keen your customers: if you haven't got cash on hand to keep your business moving, you'll be out of business, as numerous hedge funds and others learned the hard way in the financial crisis that began in 2007. In fact, running out of cash is what drives so many young companies out of business in their infancy. For that reason, we will spend a lot of time in this chapter talking about the **timing** with which cash comes in or goes out.

In a CFO's eyes, working capital at any particular point in time consists of two categories on your balance sheet: current assets and current liabilities, in accounting lingo.

- **Current assets** include money that is (or soon will be) readily available to the company. This includes cash, cash equivalents (like short-term deposits in a money market account), accounts receivable (cash owed by your customers who have not yet paid you), and inventories you can sell.
- **Current liabilities** are the organizational commitments that you will soon have to pay to others, typically in less than one year. These include accounts payable (to your suppliers for things they have delivered, but for which you have not paid), and short-term debt (bank loans, lines of credit, etc.). When you subtract current liabilities from current assets, you end up with working capital. Thus,

Working capital = Current assets - Current liabilities

In essence, working capital consists of piles of stuff—sometimes piles of paper representing obligations to pay or be paid, sometimes piles of more tangible items, like inventory—plus the cash in your bank accounts.

What we, and hopefully you, are particularly interested in is the **noncash** portion of working capital—in other words the various piles of goods and paper that tie up or free up cash. Some piles may be inventory, tying up precious cash that you've spent to buy it. Some piles, in effect, give you **somebody else's** cash to use for a while (your accounts payable to your suppliers do exactly

this). Some give somebody else **your** cash so you can't use it (your accounts receivable from customers who have not yet paid for what they have bought do this). As its name suggests, the noncash portion of working capital does not include any cash (or cash equivalents like money market accounts) you hold. It does, however, include all the rest of your working capital, all of which either frees up or ties up cash. When we say **negative working capital** later in this chapter, we are referring to the non-cash portion of working capital, as defined above, with the cash and cash equivalents netted out.

Case 1: The Costco Model Disrupts Retailing

Those of us in the United States are familiar with warehouse club stores. With names like Sam's Club, BJ's, and Costco, these enormous stores make their presence felt in or on the outskirts of every sizeable American city. Whereas DowJones relies on its subscription-based revenue model, the warehouse stores' working capital model relies on membership fees, quick inventory turns, and strict management of accounts receivables and payables.

Costco has become the preeminent warehouse club retail chain, largely because its management designed its working capital model to gain competitive advantage. In so doing, Costco has taken a chunk out of the hides of other general merchandise retailers.

Let's first examine Costco's roots. While Costco's working capital model was revolutionary, it was by no means original. It followed an analog nearly lock, stock, and barrel. Its model was based largely on Price Club, its pro genitor. Price Club was created in 1976 by Sol Price in San Diego, California. Price's original and prescient leap of faith was that, by changing the working capital model in retailing to permit vastly lower prices, he could charge customers for the privilege of shopping at his stores. Audacious? In spades. By 1982, Price had begun to roll out his strategy. It was Plan A for him, but it would take retailing by storm, serving as the industry's disruptive Plan B. He'd opened ten warehouse club stores, each doing an average of \$36 million in revenue, several times the volume of a typical Walmart back then and more than ten times the volume of a high-volume supermarket.¹² The key to Price's early success was his counterintuitive credo, his refusal to try to squeeze an extra dollar out of his customers.

As Goldman Sachs retail analyst Stephen Mandel Jr. would later describe its model, Price Club was the industry's best practitioner, turning its inventory about twenty times annually, while possessing negative working capital of about \$3 million per warehouse.¹³ Move inventory quickly and charge a membership fee? It held the makings of a working capital model that was little short of spectacular!

Costco cofounder and CEO James Sinegal recalls—and lives by—Sol Price's principles. "Many retailers look at an item and say, 'I'm selling this for ten bucks. How can I sell it for eleven?' 'We look at it and say, 'How can we get it to nine bucks?' And then, 'How can we get it to eight?' It's contrary to the thinking of a retailer, which is to see how much more profit you can get out of it. But once you start doing that, it's like heroin." There was another element, too. "You had to be a member of the club. People paid us to shop there."¹⁴

Price Club Begets Costco

Enter Jeffrey Brotman. In 1981, Brotman recruited James Sinegal away from Price Club, where Sinegal had worked since his teens, rising rapidly through Price Club's ranks. In 1983, they launched Costco Warehouse in Seattle. At the heart of the Costco strategy was the Price Club working capital model, an analog Sinegal knew intimately.

First, there was the membership fee. Customers had to pay for the privilege of shopping at Costco. For families the fee was \$50 per year; corporate customers paid up to \$100, collected before the customer ever started shopping.¹⁵

Second, Costco collected cash from its customers almost immediately—no credit cards, thank you, but cash, a check, or your debit card (which gave Costco instant cash)—maintaining just three days of accounts receivable.¹⁶ And, as Costco later proclaimed, "Because of our high sales volume and rapid inventory turnover, we generally have the opportunity to sell and be paid for inventory before we are required to pay many of our merchandise vendors, even though we take advantage of early payment discounts. As sales increase and inventory turnover becomes more rapid, a greater percentage of inventory is financed through payment terms provided by vendors rather than by our working capital."¹⁷ With its customers providing the cash it needed to grow, Costco took off. By 1996, Costco was generating \$19 billion in sales and \$423 million in pretax net income.

Let's look at the working capital numbers that were making this possible:

- Current assets (other than cash) = 35 days
 - Inventory: 32 days
 - Accounts receivable: 3 days

- Current liabilities = 41 days
 - Accounts payable: 27 days
 - Membership dues: 14 days (half of membership dues was taken in income in the current year, and half stayed on the balance sheet to be taken in year two)

- Net of these elements = -7 days¹⁸

Sinegal wanted to have more than his working capital cake, however. He wanted to eat it too. Costco's working capital model let it get away with razor-thin overall profit margins, since earning an attractive return on investment when your investment is near zero (thanks to negative working capital) can be accomplished with very modest profits (recall the ROI formula at the outset of this chapter). So Sinegal passed on to his customers the benefit—in lower prices—of the lower margins he could afford. He was underselling his competition, all the while growing the business on its customers' cash. How did Sinegal and his team take the fat out of margins?

The Rest of Costco's Story

Sinegal pulled no punches: "We'd like it to be known that we are the toughest negotiators in the business. And that we're gonna come after [vendors] for every nickel we can, and we won't let up until we think we've got the price right on the merchandise." Costco negotiated better pricing from its suppliers by ordering in very high volume. In 1998, for example, Costco sold skin-on, bones-in salmon fillets for \$5.99 per pound. At this price, Costco sold \$100,000 worth of salmon per week. With such high volumes, Costco's buyer had leverage over his vendor, convincing the salmon supplier to remove the skin and debone the fish and charge even less for the fillets. In 2003, the fillet was sold for \$4.39 per pound, spurring sales to \$2 million per week!

Costco also convinced its vendors to package things in volume (e.g., a half-gallon jar of mayonnaise and a twenty-four-pack of toilet paper rolls). By packaging in volume, vendors could bring their wholesale prices down further still. Oh, and one more thing, said Costco to its vendors, "We need better payment terms, too."

But getting low prices from vendors didn't mean that Costco would fat ten its margins. On the contrary. Sinegal insisted that no item could be marked up to a gross margin over 14 percent (contrast that with super markets and department stores, which carried 20 to 50 percent gross margins across their various categories of merchandise, maintaining average gross margins between 20 and 25 percent).²¹ Discount stores like Kmart and Target had even greater average gross margins across their product mix, ranging from 25 to 30 percent. These were the antilogs Sinegal wanted to beat.

To turn inventory quickly, Costco carried just 4,000 items. A typical supermarket, Sinegal explained, carried 40,000 items, while a Walmart super center would stock some 150,000.²² With only 4,000 items at rock bottom prices, Costco could pick items that it knew would move off the floor quickly.²³ Items were transported straight from the vendor to the sales floor. No costly warehouses full of expensive inventory tying up precious cash.

There was one key element, though, on which Sinegal parted ways with Price Club. Price Club targeted small businesses and working-class families—something that rival Sam's Club mimicked. For Costco, Sinegal targeted small businesses and more upscale families, more than a third of which had household incomes greater than \$75,000.²⁴ As retail consultant and author Michael Silverstein explains, these consumers are happy to pay for upscale items that "make their hearts pound" and for which they don't have to pay full price. Then they trade down to cheaper private labels for things like paper towels, detergent, vitamins, and other household staples. "It's the ultimate concept in trading up and trading down," says Silverstein. "It's a brilliant innovation for the new luxury."²⁵ As Berkshire Hathaway vice chairman Charlie Munger—a Costco shopper,

investor, and director— notes, there are lots of people who don't have to pinch pennies who shop at Costco. "I like bargain securities, why shouldn't I like bargain golfballs?"²⁶

Three-quarters of Costco's assortment was basic, from twenty-four-count packages of toilet tissue, Costco's top-selling item, to a lifetime supply of panty shields. The excitement that brought customers back, however— returning once every seventeen days on average, lest they miss out on a bar gain²⁷—came from the other 25 percent. From \$800 espresso machines this week to \$29 Italian-made Hathaway shirts next week to \$1,999 digital pianos the week after, Costco's stores offered something for everyone, and at bargain prices other merchants simply could not touch. "We always look to see how much of a gulf we can create between ourselves and the competition," says Sinegal. "So that the competitors eventually say, 'F*** 'em, these guys are crazy. We'll compete somewhere else.'"²⁸ He also notes, "Our customers don't drive fifteen miles to save on a jar of peanut butter. They come for the treasure hunt."²⁹

Costco Takes Its Toll on the Retailing Industry

By 2006 Costco had 48 million members and its stores were generating an average of \$120 million in sales per year. Best of all, its working capital model had grown even better:

- Current assets = 35 days (no change from 1996)
 - Inventory: 32 days (half that of Target, its discount store competitor)
 - Accounts receivable: 3 days

- Current liabilities = 46 days
 - Accounts payable: 32 days (improved by 5 days against 10 years earlier)
 - Membership dues: 14 days

- Net of these elements = -11 days³⁰

Costco's eleven days of free customer cash amounted to nearly \$3.6 million per store, more than enough to build another store for each one currently open. With cash like this to fund your growth, who needs outside investment, a topic we address in the next chapter? Given a choice between cash from your customers and suppliers and cash from investors, which would you prefer?

What was the impact of Costco and its warehouse club brethren on the rest of retailing? Long-suffering Kmart went into bankruptcy in 2002, and its 2004 merger with Sears held out little hope that either chain could compete with the likes of Costco, or with Target and Walmart, which continued to thrive. But discount and department store chains weren't the only retailers to feel

Costco's bite. Costco's \$2 million per week in fresh salmon sales took a chunk out of supermarkets' fresh seafood sales and brought shoppers to Costco for more groceries than seafood or toilet tissue. Its fast-changing assortment of durable goods—from apparel to electronics—helped slam the brakes on retailers in other categories, too.

For Costco, though, the results were as impressive as a 64-ounce jar of mayonnaise. In 2006, the average Costco store generated almost twice the revenue of Walmart Sam's Club stores. Compared with Sam's Club, Costco had eighty-two fewer outlets, but generated about \$20 billion more in sales—some \$59 billion. Its pre-tax profit of \$1.7 billion, of which nearly \$1.2 billion was membership fees, was a slim 3 percent of sales.³¹ With customers paying for the privilege of shopping, thereby providing the cash needed for running and growing the business, who needed high profit margins? It's exactly how Sinegal wanted it. "I hate to sound so simple," he says, "but all we're trying to do is sell the best quality merchandise for a better value than anyone else."³² Costco was ranked number 29 in the **Fortune** 500 in 2008 and was the world's fifth-largest retailer.³³ Do working capital models matter? Costco's story speaks for itself.

INVESTMENT MODEL

Investment Model Defined

As we noted in the introduction, your investment model is all about figuring out two things:

- First, how much cash you'll need to get into business, including— we hasten to add—a modest cushion of spare cash to make one or more transitions from Plan A to Plan B or Plan Z.
- Second, your investment model also aims to take your company through the rocky period until it can consistently generate enough cash to achieve break-even cash flow, so that you don't need to invest any more, except, perhaps, to grow the business, which, by then, has already been proved viable. More crucially, for savvy entrepreneurs, the investment model is all about figuring out how to get started with as little investment as possible. Less investment means giving away less of the business to investors, if you need them at all. Less investment means less credibility lost when you, almost inevitably, declare that Plan A is not working—Sony, dear investor!—and you're switching to Plan B. And less investment means fewer sleepless nights, if you've mortgaged your house to pursue your surefire entrepreneurial dream!

Case 1: Skype Reinvents the Telecom Industry

Let's start with a short quiz about two recent start-ups in the telecom industry, both of which set out to exploit the power of the Internet and undercut existing pricing on long-distance telephone calling.

Question 1: During the thirteen months from its inception in August 2003 to September 2004, Skype signed up 7 million users. How many marketing dollars do you think Skype spent to attract these users?

- Zero
- \$1-\$1 million
- \$1 million-\$10 million
- More than \$10 million

Question 2: Now, how much do you think New Jersey-based Vonage spent on marketing to attract the 1.4 million subscribers it had not one, but four years after its inception?

- Zero
- \$1-\$1 million
- \$1 million-\$10 million
- \$246 million

Let's begin with the answer to question 2. In its first four years of existence, Vonage spent some \$246 million on marketing alone. In that time, it attracted nearly 1.4 million users and posted an operating loss of \$192.9 million.

If you chose zero for question 1, you are correct. And contrary to what one might expect, the company that made less up-front investment was—dramatically!—the more successful of the two. In its first year of operation, Skype didn't spend a single penny on marketing. Yet it attracted 7 million users.² That's a big difference in marketing spent for lopsided results. Indeed, Skype and Vonage had very different investment models for starting their businesses—one required very little investment, the other quite a lot.

Investment? Who Needs It?

Is it possible to start a company with almost no initial investment? Just ask Niklas Zennstrom and Janus Friis. They've made a career out of it. Their biggest hit, Skype, was sold to eBay for \$2.6 billion. Hmmm. . . Little initial investment, leading to a \$2.6 billion sale. That sounds like a pretty good ROI and an outstanding investment model!

Zennstrom and Friis met in 1991, while working on a European telecom project called Tele2. The two Scandinavians (Zennstrom is Swedish, Friis is Danish) were fascinated by peer-exchanged data, otherwise referred to as Peer-to-Peer or P2P. The concept behind P2P was that individuals could share information directly with one another over the Internet. As Zennstrom recalled, "We realized that P2P, with a distributed base, could be used for lots of applications, so we decided to create the technology and build the business from there."³ His and Friis's first such venture, KaZaA, was founded on technology that gave users the ability to exchange files—music or otherwise—from one personal computer to another. The exchange didn't require an intermediary server or other hardware in the middle. They had the skills to develop the software. Hence, there was no up-front investment to start KaZaA.

Launched in 2000, KaZaA soon became the world's largest P2P file sharing site. While highly successful at attracting users, KaZaA became famous, like Napster in the United States, for allowing users to illegally swap music. With the recording industry chasing KaZaA for copyright infringement, Zennstrom and Friis sold the company in early 2002 for a very modest \$500,000. Small change, given their grand ambitions. But the two entrepreneurs weren't finished with P2P. In fact, they had only just begun. They set out to find a use for their P2P technology that would not land them in jail. A legal Plan B, based on the illegal KaZaA analog!

Zennstrom knew what they wanted to accomplish: "The question we were asking was: how can we disrupt existing business models and create sustainable competitive advantage?" They decided

to "do a KaZaA" on the long-distance telephone industry allowing users to make calls over the Internet using P2P technology.⁴ The two started developing Skype in the summer of 2002, finishing the first phase of their product by February 2003.

Skype's first beta version was made available to the public in August 2003. Zennstrom described the new venture as, "... a peer-to-peer telephony company which enables people worldwide to make free, unlimited, perfect-quality telephone calls over the Internet and to make calls to any other user who is using Skype as well."⁵

The duo's Plan B was revolutionary. Like KaZaA, Skype used P2P technology. And, like KaZaA, Skype required very little initial investment. The Skype software application allowed computers—when connected to the Internet—to talk to one another and to share voice data in almost the same way that KaZaA retrieved a file from another person's PC.⁶ After downloading Skype to their computers, users needed only speakers and a microphone, as well as access to a high-speed Internet connection. Users could then make calls worldwide to anyone else that had Skype, absolutely free! By relying on its users' computers and broadband bandwidth, the company required no centralized servers and no dedicated network that telecom companies like AT&T and British Telecom had taken a century to build.

Zennstrom's and Friis's Plan B and Plan C

Skype's plan was to offer a free telephony service, allowing users to make calls from one Skype user to another—computer to computer, instead of using a telephone, Skype's key leap of faith—without charge. As we know from studying Google, free won't generate revenue. But, Zennstrom and Friis had good reason to make their initial service free. At the time Skype launched, it was founded on a closed Internet protocol, meaning it was not interoperable with other telephony services or technologies. That meant that Skype users could talk only with other Skype users. As a result, the only way Skype would be perceived as valuable to future users was if it had an enormous user base. What's the use of downloading Skype if the people you want to call haven't done so as well?

So, the goal was to attract as many people to use Skype as possible. The strategy for doing so was simple: making their calls totally free. Thai students studying in London, for example, would tell their families in Bangkok to download the Skype software and—poof!—long distance calls to and from their families back home became free!

Zennstrom explained, "The marginal cost to us of each call is zero because everything is peer-to-peer communication. We can provide free communications without losing money on it."⁷ Behind the scenes, Zennstrom and Friis spent very little on infrastructure. What few operating costs Skype had were almost exclusively R&D and payroll, easily funded through the first several months from

their KaZaA proceeds. They let word of mouth from callers to intended recipients drive their marketing efforts. Their leap of faith was that they could get millions of users signed up for the free service, then worry about revenue. Google, an analog, had shown this to be possible. Plan C could come later, since getting into business Costco little. The good news was that in three short months, by November 2003, with 2.6 million users already on board, Skype's initial leap of faith was borne out.⁹ Customers were signing up in droves.

Time for Plan C, and Some Investment!

Skype's first material need for investment would hit when Skype Out, a service that would let subscribers make cut-rate calls from their Skype enabled PC to a traditional phone, would be launched. At that point, Skype would have to invest in some telecommunications infrastructure. Since Skype Out would interact with traditional phone users, Skype would have to purchase gateways and other hardware to convert its VoIP traffic to telephone signals. The company also needed to start paying connection and termination fees to the telephone companies. The goal of all this investment? Begin generating revenue.

All of these things would come at a cost. That investors would open their wallets for this change in their business model was another leap of faith. That November, with risk considerably lower because milestones had been met, Skype won \$9 million of funding from DraperFisherJurvetson, a venture capital firm. Other venture capital investors, including Bessemer Venture Partners and Mangrove Partners, chipped in. By January of 2004, the company had raised \$19 million in venture funding, which, Zennstrom said, "should be enough fours to get to breakeven and be self-financing."

With investment in hand, Plan C kicked into gear. Skype started offering its premium services, initially Skype Out, for which users were charged by the minute. Skype In was next, allowing Skype subscribers to receive inbound calls from ordinary phones. Soon after these services launched, Skype started offering voice mail, instant messaging, videoconferencing, webcasts, and text messaging, each for a fee. By August 2005, some 2 million of Skype's 40 million users were taking advantage of one of its premium services. Revenue generation had begun, at least among 5 percent of Skype's customers. Plan C was working!

Let's compare Skype to Vonage, its American counterpart. By early 2005 Vonage had raised \$408 million in financing (compared with Skype's \$19 million) to support marketing and other costs in its American rollout. Vonage was not P2P, so Vonage needed network equipment, computers, and all kinds of other fancy telecom gear before it could complete its first call. And with the cost of all that gear, there was no way Vonage could offer its calls for free, not nearly the compelling proposition that Skype offered. Skype's early users had spread the word virally—free calls were a

powerful incentive—but Vonage had to buy its customers one at a time. So Vonage spent massive amounts of money—more than half of its \$533 million in operating expenses in 2005—to acquire customers. It's no wonder that the Vonage investment model required so much money up front, unlike that of Skype. "Typical customer acquisition cost in the phone industry is several hundred dollars (per customer)," Zennstrom said. "We believe in zero."

"When we started Skype, our vision was to create a business that could fundamentally transform the telecommunications industry and have a big impact, by letting the whole world talk for free," Zennstrom said. "We wanted to create a great, sustainable communication business." Federal Communications Commission chairman Michael Powell said, "I knew it was over when I downloaded Skype . . . When inventors are distributing . . . a program to talk to anybody else, and the quality is fantastic, and it's free, it's over. The world will change now inevitably" With revenue starting to come in, Skype was on its way. By the end of 2004, with very little capital investment, Skype had generated \$7 million in revenue. In September of 2005, eBay purchased Skype for \$2.6 billion (plus \$1.5 billion more if the company met certain milestones; though as things turned out it did not). The two founders and their investors made boatloads of money, as did their two hundred employees. But did eBay? Its leap of faith was that Skype could transform its rapidly growing user base into a revenue and cash-flow-generating money machine.

In the first quarter of 2006, Skype brought in revenue of \$79 million for eBay. By the first quarter of 2007, Skype had 196 million registered users. Only a small fraction of them, however, were placing calls of the revenue generating variety—disappointing news for eBay, and the reason that Skype's founders and investors never collected the extra \$1.5 billion that was contingent on performance. Still, thanks to their Spartan investment model, the original \$2.6 billion in proceeds provided them and their investors with a very nice return! Was the Skype acquisition a good deal for eBay? By 2008, Skype was generating revenue at an annual rate of nearly \$600 million and was expected to contribute \$100 million of cash flow to eBay's coffers. "As five-year-old companies go, this is in the upper echelons of success," said Josh Silverman, Skype's president.¹⁹ But rumors abound that eBay overpaid and that Skype is being dressed for sale. Whether a buyer will emerge, and at what price, remains to be seen.

Case 2: Go Gets Going

Let's take another short quiz.

Question: In 1997, how much did it cost to buy a brand new 737 airplane from Boeing?

- \$5 million
- \$10 million
- \$25 million
- \$50 million

If you guessed \$50 million, you are pretty close. So how was it possible for Barbara Cassani to start budget airline Go (officially named Go Fly), with only £25 million (equivalent to about \$40 million at the time) and make the company profitable within just three short years? The answer provides a good example of an impressive investment model in a corporate setting.

In 1987, not long after she finished her graduate work in international relations and embarked on her career, Cassani left Coopers & Lybrand to join British Airways (BA). Ten years and seven jobs later, Cassani was offered the chance to work on Project Hyacinth, BA's code name for a low cost airline venture. BA, with pricing on its European routes under siege from Ryanair and others, thought it could play their game.

But the challenge didn't look easy. For one thing, BA expected at least an 18 percent return on its investment. And the concept of doing anything low-cost was completely foreign to BA's modus operandi and culture.

Project Hyacinth Gets Its Money and Gets Started

Cassani presented her Plan A proposal to the BA board in October 1997. The plan laid the framework for how a new airline could compete with the three existing, low-cost carriers in Europe. The premise was to keep start up and operating costs to a minimum, offering competitive pricing (like the analog discount carriers already in business) but also good service, something that, in Cassani's view, the European no-frills carriers lacked (antilogos, in this respect), but Southwest Airlines (an analog) did much better.

Cassani and her team went to work on her plan. Finding an analog outside her industry, she modeled her proposed airline after the telephone banking company First Direct.²⁰ Cassani liked First Direct's customer friendly business. She also liked First Direct's cost model. First Direct had no branch offices. Rather, the company relied exclusively on telephone banking. From Cassani's perspective, First Direct's agents provided exceptional service to customers 24 hours a day, 365

days a year. And First Direct didn't have to invest a lot of money in office space. She said, "This is what I wanted to do with my company... At the heart of what we are trying to do is make it really, really low price and then surprise people with the service being just that little bit nicer or our people being that bit friendlier."²¹

Cassani's team figured each flight would cost £5,000 for plane, pilots, crew, fuel, check-in, baggage handling, and maintenance. They believed sales and marketing costs would come to about £22 per passenger in the first few years. With these cost estimates, Cassani's leap of faith was that £25 million would suffice to bring the new airline to market and to breakeven in just three years. In November of that year, Cassani's wish was granted. She got approval from the board to proceed and was given a £25 million investment. She also received the independence she needed from BA for Go to be an autonomous subsidiary—able to make its own decisions with little input from BAs executives. Cassani said, "I requested complete independence to achieve the results and be judged by them."²²

Building Go's Investment Model

Cassani and her team were thrifty, spending no more than necessary to get things done. The £25 million, Cassani knew, wouldn't last long. She rented office space from BAs pensions department, "then we begged and borrowed some bashed equipment and sorted a single telephone line. We were able to get the secondhand desks and chairs from another British Airways subsidiary, Air Miles, for almost nothing."²³ Cost containment was paramount: "Between cramped offices, secondhand furniture, no company cars, no free parking, outsourcing and general penny-pinching, we developed an enduring low-cost culture in Go."²⁴ Following Southwest's and Ryanair's analogs, Boeing 737 aircraft would comprise the entire fleet.²⁵

Cassani had a target launch date of April 1998—just six months after having been handed the Hyacinth project and four short months after getting her funding. She was given three years to reach breakeven. The clock was ticking. Her biggest effort to limit her investment requirement was to lease aircraft rather than buy them outright. Initially, Go leased two used planes for just £235,000 per month. Copying easyjet, another low-cost airline analog, check-in staff and engineering/maintenance services were out sourced, saving recruitment, hiring, and training costs. She bought crew uniforms on the cheap for approximately £200 each (compared with the £2,000 spent by BA on its uniforms). And, the team bought a simple, low-cost system for reservations. BAs existing system was simply too costly.

Go Takes Off

In a matter of months, Cassani and her team had created a brand, chose routes, sold seats, found and secured planes, recruited and trained crew, received an Air Operator Certificate; all on a shoestring budget.

Go's inaugural flight, for Rome, departed on May 22, 1999, from London's Stansted airport, where Cassani had negotiated a good deal for landing rights. At that time, Go had ninety employees and two aircraft, and was officially in last place in a race with three other European low-cost airlines: easyJet, Ryanair, and Debonair. Fast, but penurious, growth would be critical to success in this already highly competitive industry segment.

Cassani's team knew that they had to get the absolute most out of every penny spent. There had to be extraordinary efficiency and utilization on every capital and operating expense they made. As Cassani pointed out, "In no-frills airlines, costs don't increase directly in line with revenue. Full or empty, the cost of operating a plane stays about the same."²⁶ But all this attention to budget became a balancing act. Go wanted to differentiate itself from its competition by being low cost but high quality: "The trick was figuring out how to have good service without undermining the low cost structure."²⁷

By the end of its first year, Go had brought in £31 million in sales—well below what Cassani had forecasted. And its costs were too high. Plan A was not working. The company lost nearly £7 million in the three months of April, May, and June 1999.²⁸ Go had routes from Stansted to six destinations—Rome, Milan, Copenhagen, Lisbon, Bologna, and Edinburgh, with direct, no-frills competition on Rome and Edinburgh. There was only one way out of the red and into the black, in Cassani's view: grow some more, and fly to new and less-competitive destinations. She needed a Plan B.

Cassani and her team made a decision to no longer grow as a "me-too" company, constantly mimicking the other low-fare carriers. Slightly better service to the commonly served destinations wasn't enough. Go had to do something different.

Go's Plan B Reaches Altitude

While it was still focused on low-cost travelers, Go decided to fly where no other low-cost European carrier had gone before. Operation Summer Sun launched in 1999, adding routes to underused airports serving some of Spain's most popular coastal vacation spots, such as Alicante, Ibiza, and Palma. The company then became the first low-cost carrier to fly into Prague, and in the winter added flights to ski destinations such as Lyon and Zurich. Cassani wrote, "We had found a new market for low-cost travel that hadn't been tapped."³⁰

The new plan seemed to work. After two years of existence, Go had six hundred employees and £100 million in sales.³¹ By September 2000, Go had achieved five straight months of profits, thanks to sun-seeking Brits. The company had posted a loss of £21.8 million in fiscal 1999-2000, but it was on the road to profitability at last, provided traffic held up during the coming slower winter months.³²

Then, with almost no warning, BA got cold feet. It decided to put Go up for sale. On November 6, 2000, BA made a public announcement, "Following the successful establishment of Go as a leading no-frills airline in Europe, British Airways intends to realize the value created and offer the subsidiary for sale."³³

Outside Investors Jump In

Instead of letting another low-cost carrier purchase the airline, Cassani led a management buyout (MBO) of Go. She and eighteen other top execs invested their own money. Aided by cash from 3i, a London-based private equity firm, they acquired Go for £110 million. In June 2001, BA's chief executive, Rod Eddington, said in a statement, "The deal represents an excellent return on our initial £25 million investment in the airline three years ago."³⁴ From Cassani's perspective the MBO was a win. She now had the chance to prove her chic but cheap model could work.

As promised, Go quickly reached full-year profitability. For the year ending March 31, 2001, Go posted pretax profits of £4 million on £159.7 million in revenue. Traffic was up 46 percent over the previous year.³⁵ In the summer of 2001, Go really took off, earning £10 million in profits in July and August alone.³⁶ Even in the aftermath of the terrorist incidents in New York on September 11, Go proved its staying power. Despite higher insurance rates and fewer passengers, Go made it through the fall of 2001 unscathed, selling 83 percent of its seats.³⁷ With its low fares and good service, Go received one accolade after another, winning **Business Traveler** magazine's top low-cost airline award and best low-cost airline in Britain from the U.K.'s **Daily Telegraph**. To Cassani and her team, the future looked bright.

Then, in December 2001, came a surprise. Easyjet, Go's U.K.-based nemesis, approached 3i with an interest in buying Go. The proposed offer was too good for 3i to pass up, equating to a 280 percent return on investment—nearly three times its money—in less than one year.³⁸ The transaction was done quickly, over the protests of some of Go's owner managers, who thought there was still plenty of runway ahead as an independent airline. By the spring of 2002, the deal was completed. Go was sold to easyjet for £384 million, making easyjet Europe's biggest low-cost airline at the time and putting sizeable chunks of change into 3i's and Cassani's teams' pockets. But the fun of running a fast-growing independent venture was over.

MULTIDIMENSIONAL BUSINESS MODEL

Companies are successful when the five elements of their business models work together, like the different instrumental parts strings, brass, reeds, percussion, and so on—in a Mozart symphony.

Case 1: Zara Invents Fast Fashion

In 2008, Inditex, the Spanish-based retailer, operated more than one thousand Zara stores and nearly three thousand others in over seventy countries. Its flagship chain, Zara, sold women's, men's, and children's clothing and accessories. Daniel Piette, the fashion director of the French luxury goods group LVMH, described Zara as "possibly the most innovative and devastating retailer in the world."¹ Chic: yes. Profitable: yes. High-priced: no.

Zara's is a story of how a carefully crafted combination of sourcing, merchandising, and distribution strategies created a unique new pattern of revenue, gross margin, and working capital models that enabled Zara to grow like wildfire and take its young fashionista customers by storm. Early in his life, Amancio Ortega worked in a small retail shop in his hometown of La Coruña, Spain. In the early 1960s he started designing and producing garments on his kitchen table, opening his own store in 1963.² His goal was to make and sell garments—housecoats in particular—for "cheaper than anyone else."³ Twelve years later, espousing the same mission, Ortega opened the first Zara store, offering fashionable clothing at affordable prices. Throughout the 1970s and 1980s Ortega opened Zara stores across Spain. International expansion followed, throughout Europe, the Americas, the Middle East, and Asia in the 1990s. In its public offering in May 2001, Inditex, Zara's parent company, raised \$2 billion for 26 percent of the company. By fiscal year 2006, Inditex passed the €5 billion mark in sales and was highly profitable. How did Zara do it? Let's explore its strategy in light of its gross margin model first, in contrast to that of another apparel retailer, Gap.

Zara's Fast Fashion Strategy Boosts Gross Margins

To get a sense of just how dramatic Zara's entrance into the retail market was, consider fashion retailer Gap (founded in 1969). If you have never been to a Gap store, let us describe what you would see. Usually you'd find yourself in a fairly spacious store chock full of clothing for men, women, and sometimes kids. Typically, the back quarter of the store would be reserved for sale racks, and it would seem as though literally 25 percent of the clothing was marked down.

In contrast to its Gap antilog, markdown merchandise will rarely be found at Zara. How does Zara avoid marking down its merchandise? First, it prices its apparel affordably from day one, not at some higher price that will then go on sale. However, what is "affordable" varies by country and city. If Parisian customers are willing to pay higher prices than those in Barcelona, Zara sets its pricing accordingly.

Second, and more importantly, Ortega's fast fashion strategy gets the credit. His company's strategy revolves around four processes, all tailored for speed: design, production, distribution, and sales. These processes run so smoothly that it takes Zara as little as two weeks for a new item of clothing to go from design to the store (as much as twelve times faster than its competition).⁵ Inditex CEO Jose Maria Castellano says, "We can create a new fashion line in days. Our competitors manufacture most of their collections in advance. But that involves guessing what customers will want six or nine months down the line. Our model minimizes the risk of being saddled with lots of unsold stock, and it maximizes full prices because very little gets remaindered." Adds Zara's Carmen Melon, "We only send our stores what they need. There is no stock that doesn't move; we have no extra inventory"

From the start, as part of its strategy, Zara designed its own fashions, often copying a designer garment that, say, Britney Spears or another celebrity had just worn. It treated each new style as a leap of faith, starting with a small production run, rather than placing a bold bet, and testing this small quantity of merchandise in the marketplace. The small runs that Zara created reduced its exposure to fashion faux pas and kept "margin stripping markdowns to a minimum," said Kris Miller, a New York-based retail analyst with Bain & Co.⁸ If the merchandise sold well, as hypothe

sized, Zara produced more, but not so much more that it would have an overabundance—just enough to sell through the items quickly. If an item didn't do well immediately, the company halted production. "It is our way of minimizing fashion risk," Castellano said. As a result of its limited production runs, Zara rarely had to mark down its goods. In fact, Zara held but two sales each year.

There was one more piece in the Zara tapestry that completed the pattern. While it bought some staples in the Far East—for instance, black T-shirts, which are unlikely to ever go out of style—Zara didn't use low cost countries, such as China or Bangladesh, to produce its fast fashion production runs. Doing so would have made it impossible to get new styles—some eleven thousand each year¹⁰—to stores quickly. Instead, the company contracted the assembly of most of its goods to companies in neighboring Spanish and Portuguese towns. By producing its merchandise in Europe, Zara spent about 15 percent more on labor than its rivals did by manufacturing in low-cost labor markets. But the slightly higher manufacturing cost was more than offset by other benefits. Mike Shearwood, managing director of Zara UK, explained why: "The extra margin is superior because there is no wastage, no markdowns, and no problem of getting a collection wrong."¹²

Zara's Revenue Model Lures Shoppers to Return for More

Fast fashion had implications for Zara's revenue model, too. It meant that some items disappeared within a week of entering a store. For Zara shoppers, this created a feeling of scarcity, as the shopper knew that the item may not be in the store the next time they shopped. "They've built up an excitement around snapping up new clothes before they go," according to Bain's Miller. Scarcity made shoppers more apt to buy an item when they saw it for the first time and it made them more likely to go back to the store often to see what was new. And, for fashionistas who would die if they saw someone else wearing the same outfit, the chances of that happening were considerably reduced.

Zara's Working Capital Model

Manufacturing close to its principal European market and turning inventories quickly was good for Zara's working capital model too. The processes of the Spanish and Portuguese suppliers Zara used were tightly integrated with Zara's systems.¹³ This meant that, in return for predictable high-volume business with Zara, these suppliers gave it favorable sixty day terms. With customers buying their clothes with cash or credit cards, Zara had its customers' cash in hand in less than a week. Fast-turning inventory paired with quick customer cash and slow pay for its merchandise: an attractive working capital model, indeed!

Fast Fashion versus Slow Fashion

Let's return to Gap to see what all of this means in a competitive sense. Buying most of its apparel in Asia, Gap buyers placed bold bets on which fashions would sell in the upcoming season, still months away Bell-bottoms or straight legs? Short skirts or shorter? Fuchsiablouses or tangerine? Leaps of faith, all! These big bets were difficult to test, too. Further, Gap was required to pay some of its vendors in advance, before its inbound merchandise was shipped. It used letters of credit to ensure payment to these vendors, tying up cash. In 2006 Gap showed \$55 million in "restricted cash" on its balance sheet, representing the letters of credit it needed to pay its suppliers. And once the garments arrived in the United States or Europe in container-sized lots, some sat in Gap warehouses from which store inventories were then replenished. What a difference! Compared with Zara, Gap had more precious cash tied up in letters of credit. More Gap merchandise was sitting in inventory. As a result, Gap suffered far more exposure to the vicissitudes of always-fickle fashion trends. No wonder the back quarter of a Gap store always seems to be on sale!

Ortega's fast fashion strategy and Zara's results speak for themselves. In 2006, Zara parent Inditex became Europe's largest clothing retailer, over taking Swedish fashion retailer H&M.¹⁵ Gap, whose performance had steadily slipped since 1999, was left in the dust. John Thorbeck of Supply

Change, an Oregon consulting firm, puts it succinctly: "Zara has proven that speed and flexibility matter more than pure price. They've turned the old way of doing business on its head."¹⁶

Growing fast and profitably when times are good is one thing. Perhaps a more stringent test of a robust business model is how fast-growing companies perform when times get tough. As the global credit crunch hammered many retailers' performance in late 2008, Inditex continued to outperform its competitors. For its year ended January 2009, Zara's revenue was up again, to €10.4 billion (\$14 billion), up from €9.4 billion in 2007-2008, though earnings were flat at €1.25 billion. Gap, on the other hand, reported an eight percent decline in its full-year 2008-2009 revenue, to \$14.5 billion. While many of its competitors resorted to deep discounting to keep the cash registers ringing, Inditex chose not to. "We prefer to stick to our commercial policy even in the current environment," reported Marcos Lopez, Inditex director of capital markets. "The key driver in our stores is the right fashion. Price is important, but it comes second."¹⁷ And a superb business model sure doesn't hurt!.

THANK YOU