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Trikke Tech Inc.

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Brazilian entrepreneurs founded Trikke Tech Inc. in the United States in 2000 after an unsuccessful attempt to market their product—a human-propelled vehicle similar to a scooter—in Brazil. By 2006, Trikke Tech was a new international venture with manufacturing in China, marketing activities in the United States, R&D in Brazil, patents pending in 35 countries, and sales in 17 countries. This case study describes the company’s initial steps and its strategy in the U.S. market and outlines the future challenges faced by the entrepreneurs. Specifically, the case addresses the question of how to position the new product to achieve market penetration in the United States, and which strategies and marketing programs to adopt, considering the firm’s limited resources.

Introduction

At the beginning of 2007, Trikke Tech Inc. CEO John Simpson and company Chairman Gildo Beleski were considering the best strategy to follow in the U.S. market for the Trikke, a human-propelled vehicle equipped with three wheels and a cambering¹ axle system, and the firm’s two more-recent additions to the product line, the Skki and the Bikke.

Trikke Tech, which had become operational in 2001, had been reinvesting all profits in product development and marketing. By 2006, company sales had reached \$4.5 million, 50% up from the previous year. Beleski and Simpson expected growth to continue, buoyed by increasing levels of consumer awareness and trial. However, they were still dissatisfied with this rate of growth. Early in February, Beleski and Simpson had a conversation at their headquarters in California. “After these three years of TV exposure using infomercials, it looks like we have achieved enough awareness of the product in the U.S. market. Yet sales are not growing as fast as we expected,” said Beleski. Simpson agreed, but reaffirmed his belief that the product had the potential of becoming “a truly new sport,” as in-line skates and snowboards had done in the recent past. He added: “Just think on how early you learned to play with a bicycle, and how important it was in your childhood. Now bicycle usage is declining and a whole set of new sports has emerged—the timing couldn’t be any better.”

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1. Cambering refers to “the outward or inward tilt of a wheel, called positive when the top tilts outward and negative when it tilts inward, measured as the angle, in degrees, between the vertical and a plane through the circumference of the tire” (dictionary.com).

Beleski completely agreed. He believed they had done a good job, given the limited resources at hand, but he was also aware of the need to move faster: “Our challenge is to develop the market for a new sport, first in the U.S. market and then abroad. I am not sure, however, how we can speed up this process.” They both recognized the risks involved in not moving ahead fast enough, including the risk of imitations and the loss of first-mover competitive advantages. Beleski was emphatic: “I fear that one of these big guys in the sports equipment industry may see the full potential of the Trikke before it gains a foothold in the market.” Simpson’s position was that their main challenges were to win consumer acceptance and sell to mass merchandisers. As such, Trikke’s fundamental marketing problem was a matter of moving consumers to trial. Also, he believed they needed to understand better how to use mass retailing to achieve company goals.

The next day, Beleski was in his office considering the new strategic directions the company should follow in the future. The United States was undoubtedly the most important market for the company. To be successful in the U.S. market was a requirement to achieve consumer acceptance in other international markets. He was unsure, however, about what would be the best strategy to follow in the U.S. market in the next years. In his mind, the critical question was whether the Trikke should be positioned as a new sport, fitness equipment, a family recreation product, a new form of transportation, or a combination of the above. Depending on the positioning selected, the firm would have to adopt a mass-market or a niche strategy. Moreover, each strategy would require different distribution and promotional programs, some of which might not align well with the company’s limited financial resources.

Background

At the end of the 1980s, Gildo Beleski, Luciano Araújo, and Ozório Trentini, three young middle-class Brazilians with newly minted degrees in Engineering and Physics, produced a small human-propelled prototype vehicle that looked very much like a scooter. It had three wheels and a cambering axle system (3CV—Cambering Vehicle). Dubbed the “Trikke,”² it utilized the physics principle known as “conservation of angular momentum,” reaching speeds of up to 18 mph without ever touching foot to ground for propulsion—even going uphill. By maintaining full-time wheel contact with the pavement, the vehicle was very stable.

The inventors’ initial intention in developing the Trikke was to provide users with a product for riding downhill on slopes and hills—people would just steer it like a tricycle. They were surprised to find, however, that the vehicle continued to move on flat ground if the rider continued to sway the body back and forth. They tested the first version of the Trikke in 1990 and have constantly refined it. The inventors implemented hundreds of design and engineering improvements until a final version of the product combined stability, efficiency, and maneuverability.

Essentially, the Trikke was an original product based on principles that were different from those used in its closest cousins—scooters, bicycles, and motor scooters. The product had no motor, chains, or pedals; nor did it need peddling or pushing. It used a similar principle to that used for skates: lateral body movements made by the user propelled the tricycle forward. The Trikke had a break on the handlebar, similar to

2. Pronounced “trike.”

Table 1

Social Classes Distribution in Brazil (1996)

Social classes	% of Brazilian population	Average monthly income (R\$)
A (upper class)	5	4000
B (upper middle class)	19	2000
C (lower middle class)	31	850
D (upper lower class)	33	450
E (lower lower class)	12	230

bicycles, and could reach speeds of up to 30 kph (18.64 mph). The product borrowed the dynamic suspension of a car, for a three-wheeled vehicle ridden standing up.

To operate the vehicle, the rider gave the initial impulse at the same time the tricycle was leaned to one side. In doing so, the center of gravity of the operator/vehicle would move to a point inside the curve. The rider then repeats the movement toward the other side, thus producing more speed. Repetition of the movement kept the vehicle moving, without the need to touch foot to ground. Enthusiastic about the idea, the three young men founded a small business in Curitiba, in the south of Brazil, with the intention to produce and sell the vehicle in the Brazilian market.

The Brazilian business environment in the late 1980s was hostile to new startups. Later labeled “the lost decade,” these years were characterized by severe turbulence, including rampant inflation and low economic growth. During the 1980s, the country had four different currencies, seven economic stabilization plans, 53 changes in price controls, 17 changes in exchange policies, 20 plans to deal with the external debt, and 18 projects to cut government expenses (Serra, 1990). Moreover, the Brazilian market for recreational products was still highly underdeveloped. During the 1980s, bicycles were still mainly used by workers with low spending power and the concept of fitness had not become widespread among middle-class consumers. Table 1 presents data on the distribution of social classes in Brazil in the mid-1990s.

Because of their scientific background and lack of business experience, the entrepreneurs were not aware of the need to develop a market for the new product. They believed it was enough to sell the product to retailers, hoping they would do the rest. Despite their initial sales efforts, the sales objectives of the undertaking were frustrated in a very short time.

The situation became even worse when the new Brazilian government, under the presidency of Fernando Collor de Mello, initiated a major economic reform known as the Collor Plan, with the intention of stabilizing the economy, restructuring industry, and opening the Brazilian market to foreign competition. The announcement, made in March, 1990, included the temporary freeze of 80% of private assets for a period of 18 months. Due to the subsequent liquidity crisis in the economy, the entrepreneurs were not able to receive payment for the initial sales. The new venture suffered from scarce financial resources and was strapped for cash; shortly thereafter, it was liquidated. The three friends abandoned the initiative and went to search for professional positions at other companies. Beleski and Araújo started an imported car service shop and Trentini went on to a career in engineering, becoming project manager in a multinational automotive company.

Take Two

Despite the initial frustration, the group still believed in the idea and the product's potential. Early in 1999, Beleski moved to Los Angeles in the United States and took with him a prototype. The plan was to start over and develop the Trikke project on American soil with the help of his friends, who would stay in Brazil. They intended to manufacture the Trikke in Brazil and market it in the United States. They believed that, given the greater purchasing power of Americans, people would see the product and want to buy it right away. They dedicated their little savings to opening the company and patenting the product in the United States; this occurred at the outset of 2000. The patents covered the product's articulated cambering system, which enabled it to be easily balanced and steered. Having obtained the proper protection for their invention, the entrepreneurs then prepared to launch their new business.

Trikke Tech Inc. started out with the three Brazilian partners: Beleski, the majority partner, and Araújo and Trentini, who remained in Brazil providing support and developing prototypes to send to the United States, as needed. At that time, the Brazilian partners kept their full-time jobs, dedicating only their free time to the new venture.

During the first few months, Beleski worked nights delivering pizza and newspapers. By day, he went around by Trikke, making contacts and running a website to publicize the product. Meanwhile, the three Brazilian partners quickly realized that the difficulties were bigger than they had originally surmised. Despite the higher buying power of Americans, sales were not taking off, as expected. In the first place, the product was a new one and the company unknown; secondly, they realized that Americans are used to going everywhere by car and might never become aware of the product. Additionally, meager operating capital and the absence of investment limited their capacity to produce and ship the product to the United States. The situation took a turn for the worse when the first shipment of products manufactured in Brazil—representing most of the group's savings on—went astray in the United States, taking along with it all of their efforts and the business's financial reserves.

The cargo only showed up six months after being shipped, when it was finally delivered to Beleski's house. The shipment's delivery brought with it new enthusiasm; Beleski started to attend trade shows and events again, mostly in the bicycles sector. It was at one of these trade shows that the Trikke caught the attention of the owner of one of China's largest scooter manufacturers. Invited by the Chinese entrepreneur, Beleski went to see the company in China; there, partnering with a team of Chinese, he made changes to the product, taking advantage of the company's available production technology. They substituted aluminum for steel and polyurethane wheels for the rubber ones. A manufacturing partnership agreement was then established between Trikke Tech and the Chinese firm. Soon thereafter, the first samples of the new prototype were shipped to the United States. Although production difficulties seemed to have been solved with the new partnership, a new and even bigger challenge was looming: launching the product in the U.S. market. By this time, it was already the end of 2001.

The U.S. Market for Sporting Equipment Products in 2001

The sports equipment industry includes a range of activities, such as cycling, golfing, fishing, skiing, windsurfing, baseball, and fitness equipment. The U.S. market for sporting goods grew quickly during the 1990s, at an average rate of 4% per annum between 1989 and 1999. Growth was greatest between 1989 and 1994, when the sector reached average

Table 2

U.S. Youth Sport Participation (7–17 years old): Selected Data (1990–1998)

Sport	1990 (in millions)	1998 (in millions)	% Change 1990–1998
Baseball	15,576	15,856	1.8%
Basketball	26,315	29,417	11.8%
Bicycle Riding	55,245	43,535	-21.2%
Inline Skating	3,634	27,033	643.9%
Skateboarding	7,504	5,782	-22.9%
Snowboarding	1,455	3,635	149.8%
Soccer	10,920	13,167	20.6%
Softball	20,076	15,595	-22.3%

Source: NSGA, in *Sporting Goods Business*, June 21, 1999, p. 35.

annual growth rates of 6%. The subsequent decline in industry growth rates was attributed to the fact that the baby boom generation had reached the fifties age bracket and preferred recreational activities requiring less effort and equipment (National Technical Information Service, 2000). Another trend was the fact that adolescents and young people were spending more time playing video games and using the Internet, leaving them with less time for sports activities. In fact, a study by the National Sporting Goods Association showed that between 1990 and 1998, sports participation among youths had declined substantially in certain categories, while increasing in others (Agoglia, 1999) (Table 2). Innovation had helped propel the growth of the industry, offering a variety of new equipment and accessories for sports and fitness. Some of the innovations introduced over the previous decades had been mountain bikes, rollerblades, and snowboards. The commercialization of recreation equipment was becoming increasingly influenced by the Internet and TV home shopping channels, which enable manufacturers to publicize, promote and sell their products directly to the end-user. Total sales of sporting goods were around 45 billion dollars in 1998, with equipment accounting for some 42% of this amount (Troy, 1999). Beleski and Simpson believed the Trikke could compete indirectly in two of the sector's markets—fitness equipment and cycling.

The fitness equipment market—including treadmills, stationary bikes, steppers, and other commercial and home equipment—was estimated to be close to 2.3 billion dollars in early 2001 (“Increasing concerns,” 2002). The 1990s saw a substantial increase in the growth of health clubs with membership oftentimes more than doubling. This trend was associated to the growing consumer awareness of the benefits of physical fitness and manufacturers introduced many new products to meet the growing demand. According to the Fitness Council of the Sporting Goods Manufacturing Association, aerobics were the fad of the 1980s, while in the 1990s, Americans refocused on exercise machines such as cardiovascular machines and strength training equipment. Fitness equipment showed continued growth during the 1990s and older customers drove a good part of this momentum despite advertisers' emphasis on younger adults (“Increasing concerns,” 2002).

Table 3

Share of Bicycle Sales by Type, and Average Retail Price of Top Brands
(1999–2000)

Bicycle type	Share of bicycle sales (%)		Average retail price (top brands)
	1999	2000	
Mountain	46.4	43.1	\$449.17
Youth	27.5	25.1	\$205.94
Comfort	8.7	13.5	\$337.83
Hybrid	11.8	11.5	\$367.57
Road	2.6	3.9	\$1,108.66
Cruiser	2.6	2.6	\$296.76
Tandem	0.1	0.1	\$1,069.36

Source: *Outdoor Retailer*, May 2001, p. 28.

Notes: Mountain bicycles—designed for off-road cycling, with highly durable frames and wheels; Youth—designed for use by kids; Comfort—similar to mountain bikes, but with softer saddles and easier gearing; Hybrid—a combination of mountain and racing bikes; Road—designed for speed, with lightweight frames and components; Cruiser—designed for comfortable traveling, with balloon tires and padded seats; Tandem—a bicycle for two.

The U.S. bicycle industry was going through a period of change, with part of the production firms outsourcing manufacturing to other countries, particularly China, Taiwan, and Mexico. In just the first two quarters of 2001, exports of bicycles from the United States to other countries were down 24% (“Exports continue,” 2001). As a result of these changes, domestic manufacture of bicycles fell sharply, the majority of the market being served by imported products. The manufacture of high quality, high performance products remained in the United States—products for which the purchase decision was much less price-driven.

The bicycle market had already matured. Industry sources estimated that in 2001, U.S. retailers sold 19.6 million bicycles, of which 16.2 million were imports. The total value of bicycles sold in the United States was estimated at \$2.2 billion, with an additional \$2 billion in parts and accessories (Wiebe, 2002). The two segments having the highest growth were hybrid bicycles (which combined the lightness of racing bikes with the comfort of mountain bikes) and BMX bikes (for off-road use). The use of bicycles for traveling greater distances had decreased by about 20% during the 1990s, probably due to competition from other recreational sports and nonsports activities. In support of bicycle industry claims, U.S. Congress had earmarked \$3 billion at the beginning of the new millennium to support the expansion of transport using nonmotorized vehicles. However, forecasts suggested the bicycle market would grow no more than 1% per annum in years to come (Wiebe, 2002). Prices varied substantially according to the category and brand name. Table 3 presents information on bicycle categories and their percent of overall sales by category, as well as average prices at specialty dealers of the top brands in each category, for the years 1999 and 2000. In 2001, the turmoil in the U.S. bicycle industry was not over, although the transfer of production to other countries, especially China, was almost complete, with only three large manufacturers producing bicycles in the United States. In fact, by 2001, imports already accounted for 95% of the

U.S. bicycle market as China's share of the world bicycle continued to grow (Crenshaw, 2003; Wiebe, 2002).

The Strategy for Entering the U.S. Market

At the end of 2001, a major challenge facing the firm was just how to enter the U.S. market. Then, one day, Beleski was out on his Trikke when he almost knocked a man over. The man was John Simpson. As Simpson recalls, "I began to run after him." He later recollected how surprised he was to see the Trikke for the first time, but most of all, to witness its maneuverability. Simpson was an executive with a vast experience in the scooter industry, and an ex-distributor of the Razor brand in the United States. He was so enthusiastic, he wanted to become part of the company, and was swiftly accepted.

The new partner soon provided his own contributions, based mainly on his experience in the field and his network of contacts. This enabled the new venture to develop a strategy to enter the U.S. market and to define Trikke's long-term objective—to create a new category of products for the recreation equipment industry. As Simpson said, when referring to the 20 million unit-per-year American bicycle market "If we can get 5% of the bicycle market—a viable objective—we can proceed with our business plans." Industry specialists indicated, however, that despite Trikke eventually being able to capture a significant portion of the market, it would face stiff competition from the new motorized bikes.

Simpson outlined a promotional strategy for the product using Hollywood actors. The publicity stunt was to give Trikkies to 60 artists at the 2002 Oscar Awards. In short order, the investment produced results. Hollywood celebrities, including Jennifer Aniston, Brad Pitt, Jim Belushi, Jim Carey, Shannon Elizabeth, Timothy Hutton, David Spade, Ben Affleck, and James Gandolfini, adopted the machine and could be seen riding their Trikkies. Spontaneous references to the Trikke by the artists began to appear in the media. From then on, the product continued to receive good media coverage and appeared in several American newspapers and magazines, including *People*, *Playboy*, *National Geographic Kids*, *Maxim*, *Men's Health*, *InStyle*, *LA Marathon*, *Curves*, *Wired*, and the *Los Angeles Times*. Interest in the product grew significantly in 2002 and the product was elected "Best Invention of the Year" by *Time Magazine* (Figures 1 and 2). Media exposure of the product led to new partnerships for representing and marketing the product—not just in the United States, but worldwide. Trikke's distributors were typically fans who then had begun to distribute it.

Around the same time, because the product had become fashionable, the Trikke began to attract the interest of pirate manufacturers, mainly in China. By the beginning of 2003, over 50 factories were producing pirated Trikkies. Even Trikke Tech's original third-party manufacturer in China failed to respect its agreements. Besides promoting piracy (an engineer who had helped implement the Chinese production line built the first pirate plant) the third party sold the product without paying royalties. It even tried to patent it in the United States, where, fortunately for the company, it had already been registered. In the face of this, Trikke Tech canceled the contract and partnered with another Chinese manufacturer; the firm also increased investments earmarked for registering international product patents. The managers did not feel it would make sense at the time to file a law suit against the Chinese partner, since it would require too much time and money, and probably would not generate goodwill with other Chinese firms.

Because of the newfound publicity, and despite the piracy, sales reached \$1 million in 2002 (Barol, 2004), an increase of 200% over the previous year.

Figure 1

The Best Inventions of 2002 by Time Magazine



Source: <http://www.trikke.com>

Expanding in the U.S. Market: 2003–2006

The enthusiasm of the first 2 years of increasing sales was broken in the third, when sales waned during the first months of 2003. The entrepreneurs tried to investigate the cause of the problem. Part of the problem had to do with changes in the U.S. market for sporting equipment. Changes in consumer buying patterns, competition by low-end Chinese manufacturers, and the growing importance of mass merchandisers impacted the market and the industry (Wiebe, 2004). Another aspect had to do with the nature of the product, the Trikke—described by one industry observer as “the razor scooter meets the tricycle meets in-line skates” (Barol, 2004). A truly innovative product, it presented unexpected challenges to the entrepreneurs. Having sought information from retailers, they concluded it was not enough to sell the product to them and then hope for the end-user to buy it. It was necessary for the product to be tried out, for the consumer to be able to see how it worked. Simpson noted: “When you launch an innovation in an enormous market, you have a lot to explain.”

Figure 2

People Magazine Portrays the Trikke



Source: <http://www.trikke.com>

So, from the beginning of 2004, the firm redoubled efforts to promote the product. It made substantial investments in infomercials in the United States³ and promoted rallies and international competitions. Furthermore, Trikke produced support videos to teach potential riders how to use the product. A high point in the promotional effort was the voyage made by sports-enthusiast and adventurer Jimmy Evans, who traveled across the United States on a Trikke, from the West Coast to the East Coast and then on to Key West in Florida. The voyage got plenty of news coverage, both in the press and on TV. ABC El Paso celebrated the arrival of Evans in Texas, KATC3 did so in Louisiana, and Channel 3 First News in Pensacola covered the story there, too. Soon thereafter, in the summer of 2004, Evans traveled from the United Kingdom to Portugal and from Germany to Greece, traveling across practically all European countries on a Trikke. Evans got plenty of media attention on this voyage, too. Trikke sponsored the trips and also supplied equipment and other support.

3. Long commercials on cable TV demonstrating the product.

Table 4

Company Sales and Employees in the United States

Year	Sales (in U.S.\$ million)	No. of employees (average)
2002	1.0	4
2003	1.0	5
2004	2.0	5
2005	3.0	7
2006	4.5	9

An unexpected phenomenon was the way in which Trikke enthusiasts spontaneously formed several user clubs. The company then encouraged the formation of such clubs by organizing races and competitions, as well as providing information on similar events. Trikke also promoted international competitions. As a result, the firm was able to create a group of enthusiastic fans and practitioners, which produced very favorable comments in the press

In spite of all this, sales in the United States were still quite modest, reaching U.S.\$3 million in 2005 and \$4.5 million in 2006 (Table 4). Indeed, some believed Simpson's goal of reaching 50 million dollars annual sales in the next years to be too optimistic. Many saw his strategy of developing a new sport as being "the most difficult promotional route," while others recognized it might succeed, since other sports such as snowboarding and in-line skating had also "started out in nontraditional ways"(Barol, 2004, p. 70).

The U.S. Market for Sporting Equipment Products, 2006 and Estimates

The various segments of the sporting goods industry grew unevenly between 2001 and 2006.

The U.S. Fitness Equipment Market⁴

The fitness equipment market showed substantial growth, with the United States representing the largest market, worldwide, with sales estimates of almost \$5 billion in 2006. Income and the growing health awareness of Americans was driving demand. Around one third of U.S. consumers reported getting exercise at least three times a week while 10% reported only exercising occasionally. There were two market segments: the home-use equipment segment and the institutional-use segment (for use in health clubs, vertical market, etc.) In general, firms produced for one of these market segments with only a few serving both.

4. Data on the fitness industry and market were extracted from: <http://www.firstresearch.com/Industry-Research/Fitness-Equipment.html>; <http://www.hoovers.com/fitness-equipment>; <http://nbda.com>; and http://findarticles.com/p/articles/mi_m0EIN/is_2008_May_6/ai_n25383609/

The home-use market segment was substantially different from the institutional-use segment. The two main products sold to the home segment were treadmills and exercise bikes, while a larger variety of products were designed and marketed to the institutional-use segment. Home equipment was typically used for only an hour each day, compared with the equipment in the institutional-use segment, which had to be built to stand many hours of use per day. Cost considerations were much more important to the home-use segment, while durability was the major concern for health clubs.

Users of home equipment tended to be older and to have lower income than health club members. In fact, users of home equipment were typically over age 35. Men tended to buy fitness equipment that stressed muscular development, while women preferred equipment used for cardiovascular exercise (“Men, women,” 2004). Users of treadmills, dumbbells, and stationery bikes, as well as those practicing low-impact aerobics, preferred to do their exercise at home (SGMA, 2008).

The institutional-use market included several segments, of which the most important was health clubs. Health clubs were segmented into three categories: super-center fitness chains, medium-sized chains, and smaller-sized single units. The health club industry was undergoing concentration, with super-center fitness chains increasingly dominating the market. This meant a shift in bargaining power from manufacturers to institutional customers. More than 40 million Americans were members of health clubs. Members tended to be younger than home users. In spite of this, one of the fastest-growing segments was the 55 and over age group.

Nonhealth club institutions included hotels, universities, hospitals, rehabilitation centers, corporations, military facilities, and apartment complexes, among others. Hotels were one of the most attractive segments. Most luxury and business-oriented hotels had fitness centers, since this was a major criteria used by business travelers to choose where to stay.

Distributors had a smaller share (less than 5%) of the institutional-use market; they served mainly smaller-sized health clubs. Industry concentration, however, was reducing their share of industry sales; larger institutional buyers purchased their equipment directly from manufacturers.

The U.S. Bicycle Market

By 2006, cycling remained the number one recreational choice of Americans, but participation rates were dropping. The number of bicycles sold in the United States increased from 15.3 million units in 1992 to 18.2 million in 2006 (Table 5). Considering the growth of the U.S. population during this period, these numbers actually represent a downward trend in the use of bicycles. Imports have represented 99% of the U.S. market in recent years (Figure 3) with 96% of the products coming from China.

One major reason for the downward trend seemed to be competition from other sports activities. The diversification of sports activities and the interest in new sports, together with the impact of computer games and the Internet, were driving youngsters away from cycling. This trend was a major concern for bicycle manufacturers. According to a National Bicycle Dealers Association report:

43.1 million Americans age seven and older were estimated to have ridden a bicycle six times or more in 2005, according to the National Sporting Goods Association. This was up slightly from 2004, when 40.3 million rode a bicycle six times or more. The peak year was 1992, with 54.6 million participants. It should be noted that the age

Table 5

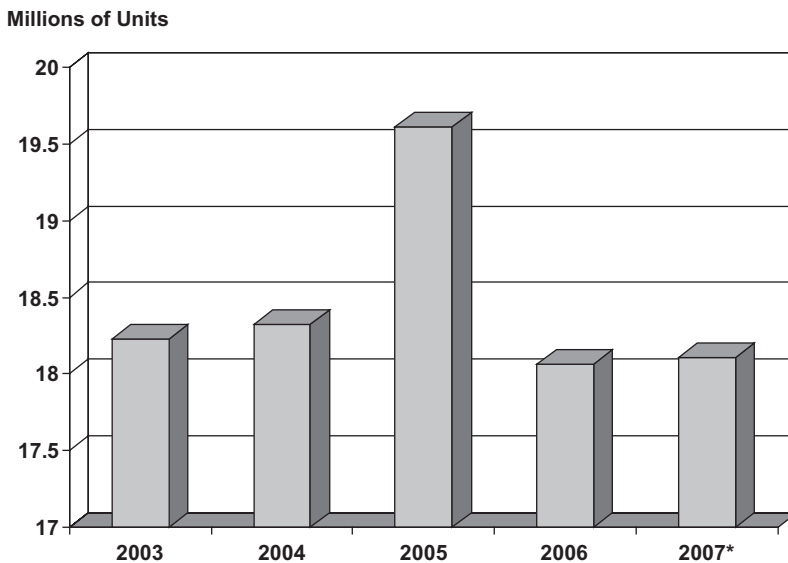
Bicycles Sold in the United States by Year

Year	Bicycles sold (Millions), 20" and above wheel sizes	Bicycles sold (Millions), all wheel sizes
2006	12.7	18.2
2005	14.0	19.8
2004	13.0	18.3
2003	12.9	18.5
2002	13.6	19.5
2001	11.3	16.7
2000	11.9	20.9
1999	11.6	17.5
1998	11.1	15.8
1997	11.0	15.2
1996	10.9	15.4
1995	12.0	16.1
1994	12.5	16.7
1993	13.0	16.8
1992	11.6	15.3

Source: <http://nbda.com/page.cfm?pageID=34> (access 23.05.2009)

Figure 3

U.S. Bicycle Unit Imports, 2003–2006



Source: *Bicycle Retailer & Industry News* (*2007, estimates)

Table 6

Share of Selected Retail Categories in the U.S. Bicycle Market, 2006

Retail category	Unit sales (%)	Retail dollar sales (%)
Mass merchandisers	77.4	38.7
IBDs and specialty stores	17.4	54.0
Sporting goods stores	4.4	4.7
Mail order and Internet	0.8	2.6

Source: NBDA 2006 Annual Bicycle Market Brief, in *Bicycle Retailer and Industry News*, August 1, 2006, p. 29.
IBDs, independent bicycle dealers.

limit on these numbers excludes millions of young people who ride bicycles with wheel sizes 19" and under.⁵

In 2006, according to the National Sports Goods Association, this trend intensified, with a drop of 17.4%, compared to 2005; 35.6 million Americans (seven years old or more) rode a bicycle at least six times in 2006, down from 43.1 million the previous year.

Several types of retail channels sold bicycles (Table 6), strongly dominated by mass-merchandise retailers in terms of unit sales, and independent bicycle dealers and specialty stores in terms of retail dollar sales. Manufacturers concentrated their promotional efforts on trade shows, print advertising, and sponsorship. The average store sold approximately 650 bicycles per year and carried five brands. Gross margins averaged 38% for the average store while the break-even point was 43.3%.

Two new trends in the bicycle market were folding bicycles and custom-built bicycles. While the former were used mainly as commuter transportation by progressive and environmentally sensitive consumers (Norman, 2007), customers who prized fit and craftsmanship favored the latter. This custom-build trend was facilitated by the Internet, which permitted easier access to custom bike manufacturers (Lesser, 2006). Electric bicycles were also a growing segment in the U.S. market. Despite the fact that in 2006, worldwide electric bikes sales were worth around \$18 million, industry estimates calculate that only 100,000 were sold in the United States—China had absorbed most of the world production of electric bikes. Nevertheless, some believed that electric bikes might become a worldwide trend, as the mountain bike had been in the 1990s. Indeed, industry observers expected the number of units sold in the U.S. market to double by 2010. In addition, a similar product, the electric scooter, had garnered wide acceptance in the U.S. market, with two million units sold in 2006.

A study carried out with independent bicycle dealers and specialty store buyers suggested the existence of different usage segments (Table 7), with 73% of buyers using their bike for recreational purposes and 53% for fitness activities. Half of the users were

5. Data on the bicycle industry and market were extracted from: <http://www.bike-eu.com/facts-figures/market-reports/>; http://www.interbiketimes.com/docs/Bicycle_Industry_Facts_Sheet-Fall2008-Final.doc

Table 7

Bicycle Sales by User's Primary Usage Segments

Purpose	%
Recreation	73
Fitness	53
Commute	10
Racing	8
Sport	6

Source: NBDA 2006 Annual Bicycle Market Brief, in *Bicycle Retailer and Industry News*, August 1, 2006, p. 29.

Table 8

Share of Unit Sales by Category (2004–2006)

Category	2004 (%)	2005 (%)	2006 (%)
Mountain	32.9	28.8	28.5
Comfort	15.5	14.2	14.0
Hybrid/Cross	12.5	13.9	15.0
Cruiser	3.9	5.5	6.0
Road	10.8	16.4	17.0
Youth	24.0	18.8	16.5
Other	0.2	2.4	3.0

Source: National Bicycle Dealer Association.

Note: Mountain bicycles—designed for off-road cycling, with highly durable frames and wheels; Comfort—similar to mountain bikes, but with soft saddles and easier gearing; Hybrid—a combination of mountain and racing bikes; Cruiser—designed for comfortable traveling, with balloon tires and padded seats; Road—designed for speed, with lightweight frames and components; Youth—designed for kids' use.

40 years old or more, with the largest group in the 50–59 bracket. There was also a renewed interest in commuter bikes, suggesting a change in consumer habits. Sales by category showed a substantial change in the last three years, with a decrease of unit sales of mountain bikes and an increase in hybrid, cruiser, and road bikes (Table 8).

In spite of the problems it raised for established sports, such as cycling, the search for new activities represented an opportunity for the introduction of new sports. In fact, according to a representative of the Outdoor Industry Association, “eight in ten active people [were] interested in starting a new activity” (Delaney, 2005, p. 52). This statement was supported by the fact that road cyclists also enjoyed hiking (49.3%), camping

(33.5%), trail running (28%), and canoeing (15.5%). Social networks seemed to be an important means of introducing future enthusiasts to a new sport: 41% cited family members as introducing them to a new sport, 33% mentioned friends and peers, and 30% clubs or organizations (Delaney, 2005, p. 53).

Competition in the United States

Beleski claimed that competition came from various industries, although the Trikke did not yet face direct competition: “Our competitors in the past were pirate products, but at this point they do not represent a threat, since we are protected by patents in the U.S and abroad. Our main competitors are bicycles, skates, skis, snowboards, and gyms!” Nevertheless, a number of large competitors could challenge the company in the future, if they decided to compete with the Trikke, developing and launching a similar product.

Competition in the U.S. Fitness Equipment Industry

The U.S. fitness equipment industry was highly fragmented, but was undergoing consolidation for more than a decade. Mergers and acquisitions permitted a number of firms to increase the breadth of their product line. China was the world’s largest producer of home-use fitness equipment, with a few Chinese companies also producing institutional-use models (“With a market,” 2006).

Profitability was a function of implementing differentiation strategies, including product design and brand name identification. In spite of this, smaller firms without a brand name could compete effectively in the industry if they offered unique products. According to a Hoovers report, in spite of holding patents on various features of their equipment, manufacturers were not too concerned with patents since there were many ways by which they could build equipment for the same type of exercise. The importance of product innovation lay in the fact that users of health clubs became easily bored with the use of the same equipment.

The most important competitors in the industry (Table 9) were ICON Health and Fitness, Nautilus, Life Fitness, Precor, Cybex International, BodySolid, Heinz Kettler, Johnson Health Tech, Keys Fitness Products, Magnum Fitness Systems, Paramount Fitness Corp., PowerSport International, Reebok International, Star Trac, Technogym, and Tunturi OY. These were very large firms with established brands and strong R&D and marketing capabilities; they aggressively pursued growth, by innovation or acquisition of other companies in the sports equipment industry.

ICON Health & Fitness, founded in 1977, was the world’s leading manufacturer of fitness equipment, with around 2,500 employees in 2006. It was a privately held company, with headquarters in the state of Utah and revenues estimated in U.S.\$852 million in 2006. During the 1980s and 1990s, the company acquired several well-known U.S. brands such as Nordic Track, ProForm, Weslo, Health Rider, and FreeMotion Fitness. It also licensed the Reebok and Gold’s Gym brands. ICON held around 200 patents for technological innovations. Next was Nautilus, Inc., founded in 1986, a publicly held company listed on the NYSE, with net sales of U.S.\$680 million and net income of 29 million in 2006. The company sold its Bowflex, Nautilus, Schwinn Fitness, and StairMaster brands to the home-use and the institutional-use segments.

Two other competitors in the industry were Life Fitness and Precor; both belonged to large diversified conglomerates serving several segments of the sports equipment market.

Table 9

Competition in the U.S. Fitness Equipment Industry

Competitor	Date of foundation	Head quarters	Product lines	Main brand names (fitness equipment)	Revenues 2006 (U.S.\$)	Other information
ICON Health and Fitness	1977	United States	Home-use and institutional-use fitness equipment	ICON Nordic Track ProForm Weslo Health Rider, FreeMotion Fitness Reebok (license) Gold's Gym (license)	852 million	Privately held Global market leader in fitness equipment
Nautilus	1986	United States	Home-use and institutional-use fitness equipment	Bowflex Nautilus Schwinn Fitness StairMaster Life Fitness	680 million	Publicly held (NYSE)
Life Fitness	1845 (parent company) 1977 (affiliate)	United States	<i>Life Fitness:</i> Home-use and institutional-use	Life Fitness	5.6 billion (parent) 650 million (affiliate)	Owned by the Brunswick Corp., leader in several categories of the global sports equipment industry
Precor	1950	Finland	<i>Parent Company:</i> Marine boats and engines, billiards, and bowling Skiing, cycling, running, hiking, diving, tennis, golf, football, soccer, and basketball equipment	Precor	770 million (parent) 110 million (affiliate)	Part of Amer Sports Corp., publicly held (HSE), one of the leading firms in the global sports equipment industry
Cybox International	late 1960s	United States	Home-use and institutional-use fitness equipment	Cybox	125 million	Publicly held (NASDAQ)

Life Fitness was owned by the Brunswick Corporation, a Fortune 500 company. The parent company, founded in 1845, had around 25,000 employees and sales of more than U.S.\$5 billion in 2006. It claimed to be the world leader in several product categories in the sports equipment industry, including pleasure boats, marine engines, fitness equipment, and bowling equipment. Life Fitness, with sales of U.S.\$650 million, competed both in the home-use and the institutional-use segments, and positioned itself, according to the company site, as “the world leader in providing industry-tailored solutions to world-class fitness facilities and training centers.” Precor was part of Amer Sports Corporation, one of the leading firms in the global sports equipment industry, with headquarters in Helsinki, Finland. The company, founded in 1950, manufactured equipment for several sports, including skiing, cycling, running, hiking, diving, tennis, golf, football, soccer, and basketball, and claimed to be “the no. 1 sports equipment company in the world.” Its ambition, according to the company site, was to “improve our strategic position by acquiring companies that fit within our chosen business strategy and strengthen our company as a whole.” Precor’s sales were around U.S.\$110 million. Finally, another large competitor, Cybex International, founded in the late 1960s, had undergone several mergers and acquisitions. It was listed on the NASDAQ, and had sales of U.S.\$125 million, and net income of U.S.\$20 million in 2006. Around 90% of the company revenue came from health and fitness clubs and the military.

Competition in the U.S. Bicycle Industry

The U.S. bicycle industry was a mature and fragmented industry. The National Bicycle Dealer Association estimated that around 2,000 firms were involved in the manufacturing and distributing of the product to retailers. At the largest bicycle industry trade fair in the United States, Interbike, around 730 firms participated, representing more than 1,000 brand names. Most firms only marketed their products in the United States. With a few exceptions, U.S. bicycle manufacturers were typically domestic companies, selling under their own brand names products that were developed, designed, promoted, and marketed by the company in the U.S. market, although not necessarily produced in their own facilities. Most U.S. manufacturers located their production in Asia, outsourcing to a third-party supplier. Often the same third-party supplier produced bicycles for several U.S. manufacturers (Randall & Ulrich, 2001).

Leading firms in the industry were Trek, Giant, and Specialized, often called the “Big Three” (Table 10). Most of these companies were privately owned and they did not disclose their financial data.⁶ Trek Bicycle Corporation was the largest U.S. bicycle manufacturer, with headquarters in Wisconsin, revenues of \$200 million in 1995 and around 1,600 employees in 2000, under several brands, including Trek, Gary Fischer, and Klein. It was founded in 1976. Most of its bicycles were produced in Taiwan and China. The Trek brand became famous in Europe thanks to its sponsorship of racer Lance Armstrong, who survived testicular cancer to win the Tours de France race seven times consecutively on a Trek bicycle. As to Giant Manufacturing, founded in 1972 in Taiwan, it was originally a contract producer for U.S. bicycle manufacturer Schwinn, as well as for other firms. In 1986, it started to sell under its own brand name. From then on, the company expanded worldwide, establishing subsidiaries in the United States, Canada, Japan, Australia, and China, to become the largest manufacturer of quality bicycles in the

6. Data on competitors was extracted from company sites, Bloomberg.com, LinkedIn, and Hoover’s Financial Reports (<http://www.hoovers.com/>).

Table 10

Competition in the U.S. Bicycle Industry

Competitor	Date of foundation	Head quarters	Main product lines	Main brand names (fitness equipment)	Revenues 2006 (U.S.\$)	Other information
Trek Bicycle Corp.	1976	United States	Bicycles (mountain, road, hybrid, street, cruiser, BMX, kids), gear	Trek Gary Fisher Bontrager Klein Giant	600 million (estimated)	Privately held
Giant Manufacturing	1972	Taiwan	Bicycles (mountain, road, hybrid, street, cruiser, BMX, kids) and gear, fitness machines	Giant	900 million (estimated)	Privately held
Specialized Bicycle Components	1974	United States	Bicycles (mountain, road, street, BMX) and gear	Specialized Globe Schwinn GT	Not available	Privately held
Dorel Industries	1987	Canada	Bicycles (mountain, road, hybrid, street, cruiser, electric, kids) and gear, jogging strollers, bicycle trailers <i>Cannondale</i> Bicycles (mountain, road, street, specialty) and gear <i>Dorel</i> Juvenile (infant car seats, strollers, beds, etc.), cycling, home furnishings	Mongoose Sugoi Cannondale	1.7 billion	Publicly held Acquired Pacific Cycle (Schwinn/GT) in 2004 and Cannondale in 2008.
Raleigh of America	1976	United States	Bicycles (mountain, road, hybrid, street, cruiser, women)	Raleigh	Not available	Privately held

world, with annual production of around 5 million units. Specialized Bicycle Components was another large U.S. manufacturer, with headquarters in California. In 2001 Merida Bikes, a Taiwanese company, bought a minority stake. Estimated revenues were U.S.\$200 million in the early 2000s. It produced 25 lines of bikes, targeting different uses and market segments.

The next three largest firms in the industry were Schwinn/GT, Raleigh of America, and Cannondale. Schwinn/GT was owned by Dorel Industries. The original Schwinn company was founded in 1895. The company conquered a large segment of the U.S. market, but was managed conservatively and failed to introduce new technologies and models. A series of bad managerial decisions in response to the competitive threats of low-cost Asian firms and of high-quality U.S. manufacturers forced the company into bankruptcy in 1992. The company ended up in the hands of a group of investors who also purchased GT Bicycles, creating the Schwinn/GT company, which subsequently went bankrupt in 2001. Pacific Cycle then purchased the assets and brand name and it, in turn, was acquired in 2004 by Dorel Industries, a U.S.-based distributor of bicycles made in Taiwan and China. Raleigh of America was originally a licensee of Raleigh of England. From 1988 to 2001, it was owned by Derby International, together with Raleigh U.K., Raleigh Canada, and Raleigh Ireland. These last three companies were the number one manufacturers in their respective countries. Following a series of financial problems, ownership of all the Raleigh companies changed in a management buy-out. Finally, Cannondale was another large U.S. manufacturer with headquarters in the state of Connecticut and assembly facilities in the state of Pennsylvania and in Taiwan. The company was founded in 1971 and went bankrupt in 2003, when its assets were purchased at auction by Pegasus Partners. In 2008, it, too, was acquired by Dorel Industries.

The 2006 Product Line

In 2006, Trikke Tech sold seven models of the original Trikke, with the following features:

- Trikke T12—oriented to athletes, ideal for longer trips, with suggested retail price of \$479.
- Trikke T8 air convertible—general-purpose use for adults, with a list price of \$349. Air tires provided better traction and a softer ride.
- Trikke T8 convertible PU—also meant for the adult segment, differing from the previous model only in its polyurethane wheels (easier for users learning to ride the tricycle); adaptable for use with air tires when the user became proficient.
- Trikke T7 coupe—the lightest and most compact model; highly portable; sold for \$199.
- Trikke T6 Teen—for adolescents over age 10, with a factory list price of \$169.
- Trikke T5 Kids Aluminum—for kids up to age 10. In 2004, this model, with its aluminum frame, won the Oppenheim Toy Portfolio Platinum Award, as well as the Seal of Approval of the National Parenting Center; sold for \$139.
- Trikke T5 Kids Steel—meant for kids up to age 10, this model differed from the previous one in three aspects: steel frame, different folding system, and lower price (\$99).

All the models were collapsible and would fit into a special carrier bag that riders could use like a backpack or over the shoulder.

The original Trikke line was extended with two new products. One was an adaptation of the Trikke for snow use (the Skki). The other was similar to a motor scooter or

Figure 4

The Trikke Skki



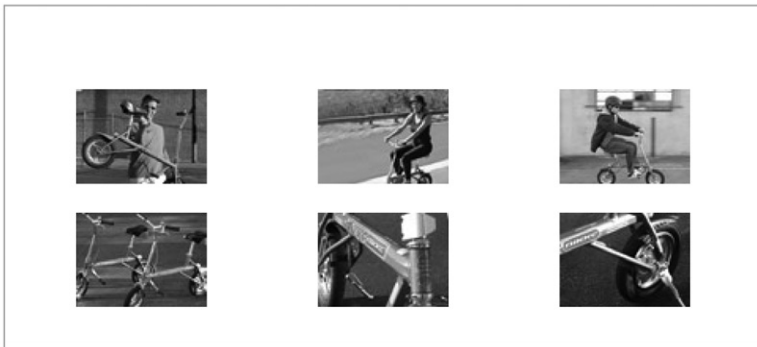
Source: <http://www.trikke.com>

motorized bicycle and featured a small electric motor (the Bikke). The Skki Trikke took 4 years to develop. The company tested the product at several different American and European ski slopes before its launch at the end of 2004 (Figure 4). On March 13, 2005, the first competition using the Trikke Skki was held; Beleski himself took part and finished up winning the competition. All the participants had already used the traditional wheel-based Trikke. The competition was organized by the 3CV World Sports Federation. In general terms, the product was considered to be easy to learn and quite safe, even for beginners. The Bikke was an ultralight scooter with an electric motor attached (Figure 5). The company claimed it was the only product in its category to use technology based on cell phone batteries and that it represented the latest generation of electric motors. The product had a list price of \$449.

Trikke was an essentially innovative company, with each of its owners on their first business foray. In Brazil, in 2003, Luciano and Ozorio started R&D Brazil, the company to be responsible for Trikke research and development. However, it soon closed in 2005: Trikke Inc. absorbed the R&D activities, keeping them in Brazil, under the responsibility

Figure 5

The Trikke Bikke



Source: <http://www.trikke.com>

of Luciano Araújo. The constant search for new ideas has continued to sustain the firm's innovative posture: "Today we are planning products that are three generations ahead of current production," one of the Brazilian partners observed.

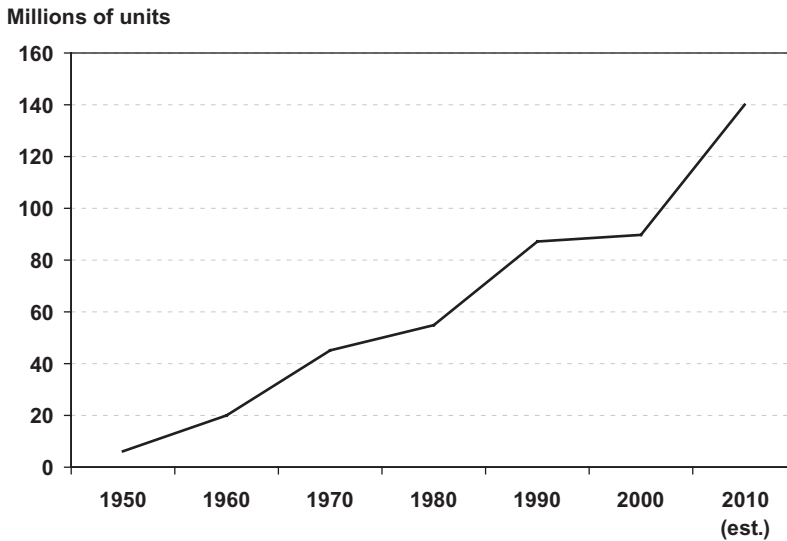
New Markets

Trikke management believed that other markets might offer new opportunities for the product. Although the Trikke was sold in 17 countries around the world, the company relied on local partners and the firm made very little effort to develop these foreign markets themselves.

The global sports equipment market was growing and management attributed such growth to consumers' interest in new sports and physical fitness—as well as ecological

Figure 6

World Production of Bicycles (in units)



concerns—in developed countries and to the massive entrance of new consumers into the middle classes of emerging countries. Bicycle use was steadily increasing worldwide, with 82% of all bicycles being manufactured in China (72%) and India (10%). Figure 6 presents the evolution of bicycle production since the 1950s and projections for 2010.

The 2002 European rollout of the Trikke quickly garnered positive media coverage, mirroring the earlier U.S. experience. A U.K. business magazine commentator expressed his enthusiasm as follows:

Riding a Trikke is like nothing I have ever done before. It is comparable to in-line skating or skiing on the road because the entire vehicle leans over due to its finely co-ordinated cambering. [. . .] It was invented by a Brazilian automotive manufacturing engineer about 12 years ago. It's therefore no surprise that it's engineered to look good, being made from durable but stylish aircraft-grade aluminium. The Trikke is massive in the U.S. already and I predict that it is going to be one of the top big-boys' toys of the year over here. Go on, you know you want one. (Marshall, 2004, p. 12)

Trends in Europe seemed quite favorable to the development of the Trikke. Most countries showed stable demographic trends; bike sales were increasing in the European Union. Imports into the European Union came from several countries, with Taiwan in the lead, followed by Thailand and China. The EU industry had also experienced much turmoil, with a number of manufacturers going bust, and others transferring their production overseas. One European trend was the development of city cycling. According to a market report:

A growing number of people start using a bike for commuting, shopping, for bringing their children to school . . . They are fed up with traffic jams and swap to a faster means of transport that is quite a bit cheaper than a car and that also contributes to their health. More and more governments are supporting this choice by implementing cycling policies. (<http://www.bike-eu.com/facts-figures/market-reports/>)

In Japan, PIAA Corporation of Tokyo (the local authorized distributor) launched the Trikke in that country in 2003. For the Japanese market, the product's ergonomics had to be adapted. The Trikke 7 was specially made for adult consumers in that region and was made in slightly smaller dimensions. Besides Japan, the company also marketed the Trikke in Korea, Taiwan, and Hong Kong. Although the Japanese market for sports equipment was also expanding, Japanese domestic bicycle production declined in the 2000s, with a flood of imports from other Asian countries. Japanese manufacturers, however, introduced new technologies, more advanced designs, and higher quality products, such as electric bikes; companies such as Panasonic and Sanyo were also adding advanced technologies such as regenerative brakes and in 2006, sales of electric bikes in Japan reached some 250,000 units.

In Brazil, the inventors' country of origin and where the initial attempts to sell the product had failed, sales began slowly in a more structured way at the beginning of 2006. Ozorio Trentini, one of the three Brazilian partners and inventors, used Prospera Comercial, a company he already had founded, to be the exclusive distributor of Trikke in South America. By 2007, the Brazilian public could find the Trikke product line in shopping centers and airports in large cities. The Trikke was also introduced in other countries, including Canada, Mexico, Argentina, in the Americas, and Australia and New Zealand.

Future Challenges

Since 2003, the main Trikke shareholders had been Gildo Beleski (majority shareholder), John Simpson, Luciano Araújo, and Ozório Trentini, as well as other minor shareholders (three Americans and one Brazilian). As one of the Brazilian partners observed:

Today, our objective is to have a business without borders, beginning with the company: there are eight partners, four Brazilians and four Americans, but we are planning on including Chinese, Europeans—in sum—people from all over the world.

In 2006, 6 years after its founding in the United States, the company acted through partnering and outsourcing of sales and distribution in more than 17 countries on five continents, as well as conducting direct sales over the Internet. It had patents pending in 35 countries. Production was concentrated in one outsource plant in China. Product development was conducted in Brazil, while marketing and sales were concentrated in the United States. Profits were reinvested in product development and marketing. The Chairman of the Board of Directors was Beleski, who was also the technical manager. His responsibilities included new product launches, website updates and maintenance, and customer service. Simpson acted as CEO.

Despite having an optimistic view of the future, Beleski and Simpson have not let themselves be dazzled by their success so far: "We had then and we have now few resources and much uncertainty." The company's biggest challenge was to avoid its products following a simple fashion cycle, which could easily lead to its decline and disappearance. In years to come, Trikke must transform its line into a new category of products and create a permanent market for them. In addition, assuming the company is successful in creating a market for the Trikke, it must establish the Trikke brand name before the market opportunity attracts larger firms.

As they reviewed plans for 2007, Beleski and Simpson were aware of the opportunities and challenges faced by the firm. One key remaining issue was how to position the

product in the future. Although their expectations were to develop a completely new sport, this ultimate goal did not mean they had to position the product as such from the start. Should they position it as a new sport, fitness equipment, a family recreation product, a new form of transportation, a substitute for the bicycle, or a combination of these approaches? Depending on the positioning adopted, different marketing strategies were implied.

A niche strategy was more in keeping with the firm's resources and capabilities, but market growth would require a mass-market approach. A related issue was the choice of retail channels. The use of specialty retailers made sense because of the need for demonstration. Nevertheless, Beleski considered the use of mass retailers as a necessary step for market development.

Beleski and Simpson were also aware of the limitations faced by the company to invest simultaneously in several markets. Therefore, they were inclined to concentrate their efforts in the U.S. market, where they believed there was still more potential for the product. The United States was the place where new sports had developed and new sporting equipment adopted in previous decades. Once the product was successful in the U.S. market, it would be much easier to penetrate and expand in other world markets.

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Note to Instructors: Trikke Tech Inc.

Introduction

This case describes a company called Trikke Tech Inc., founded in the United States in 2000 by Brazilian entrepreneurs. In just a short time, the company had manufacturing facilities in China, marketing activities in the U.S., product development in Brazil, patents pending in 35 countries, and sales in 17 countries on five continents. Nevertheless, despite early enthusiasm for the product, it reached only a small segment in each country and was still a relatively small company at the beginning of 2007. Central issues in the case relate to i) how an entrepreneurial firm with very limited resources can develop a new product category in the U.S. market, and possibly abroad; ii) what the opportunities and risks faced are; iii) how to access resources to implement the chosen strategy.

Key Issues and Discussion Points

The case enables the study of how an entrepreneurial firm introduces a new product category in the U.S. and, subsequently, in world markets. The key issues in this case are:

- Decision-making on how to position a truly new product.
- Risks faced by a start-up in developing a new product category.
- Resources and competencies required to market a truly new product.
- Strategy to promote the adoption and diffusion of a new product.
- Challenges faced by a new international venture currently catering to a narrow global market niche with a truly innovative product.

Questions we can ask students include:

1. What are the main strategic problems faced by the company?
2. What are the main characteristics and trends of the sports equipment industry? Consider specifically the fitness equipment segment and the bicycle segment of this industry.
3. What are the risks presently faced by Trikke Tech? Is there a risk of the product becoming a mere fad? What are the risks of piracy at this point?
4. Was it a good decision to position the Trikke as a new type of sports equipment? Why? How difficult is it to market a radical innovation in the sports equipment industry in the U.S.? What other positioning strategies could be considered and what are the pros and cons of each?
5. Should the firm use a niche strategy or a mass-market strategy to market the Trikke? What are the implications of each strategy? How to implement distribution and promotional programs of each strategy?

Potential Audiences and Uses

This case can be used in courses on entrepreneurship, international entrepreneurship, small business management, and strategic marketing management. Its major focus is on marketing and growth decisions faced by the firm. It portrays the classic challenge of a small entrepreneurial firm with a truly innovative product: to develop a market for the product.

Suggested Teaching Approach

The case can be discussed using a combination of four theoretical approaches or one approach independently:

1. from a consumer behavior perspective, analyzing the process of diffusion and adoption of innovations;
2. from a strategic marketing perspective, discussing niche versus mass-market strategies, the launching of new products, and the issues associated with the role of pioneer;
3. from an entrepreneurship perspective, discussing the difficulties faced by entrepreneurs and inventors in marketing radical innovations, including liabilities of newness and liabilities of smallness; and
4. if the instructor also uses the case to discuss entry into international markets, certain theories of firm internationalization, such as international entrepreneurship and the born-global approach, can provide a useful framework for understanding a new breed of small entrepreneurial international ventures.

The theoretical approach chosen depends, of course, on the teaching module in which the case is used; however, all these issues will typically surface one way or another, with more or less emphasis, in classroom discussions.

When preparing the case, students should be encouraged to visit the company website (www.trikke.com) in order to see the product in motion. The company site features both videos and infomercials. Without the website, it is very difficult to understand what the

product looks like. The instructor can also begin the case discussion with an examination of the Trikke Tech website, showing the product in motion.

Supplementary Readings

Supplementary readings are organized in four sections, following the four theoretical approaches suggested for discussing the case.

Diffusion and Adoption of Innovations

A classic text is Everett Rogers' seminal work, *Diffusion of Innovations*. The fifth edition is referenced below. Most textbooks on marketing will also have a section on the adoption and diffusion of innovations and can serve as a basic reference.

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Strategic Marketing

While the literature on the diffusion and adoption of innovation focuses mostly on the way consumers behave towards innovations, the strategic marketing literature addresses the same issue from the perspective of the innovative firm. Specifically, the issues of market pioneer versus follower, first-mover advantages, and the challenges associated with introducing a product and developing a market for it are well covered by this literature. In addition, the issue of whether to go direct or to use intermediaries can be relevant to the case discussion. We provide below a few references that could be of assistance to instructors.

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Entrepreneurship/Small Business Management

The extant literature on entrepreneurship and small business management is a natural resource to use in this case analysis. Specifically, issues such as liabilities of newness and liabilities of smallness could be addressed in the context of the challenges faced by the entrepreneurial firm.

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International Entrepreneurship and Born Globals

Trikke Tech is a “new international venture”, as defined by Oviatt and McDougall, and a “born global” firm. A number of topics discussed in this literature can help understand and explain various issues in the case, including the internationalization of certain transactions, unique resources, and focus strategies.

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Role of the Authors

The opportunity to write this case was identified by one of the authors, who personally contacted the original entrepreneurs in the state of Parana, Brazil. The unusual aspects of the case are not restricted to the innovativeness of the product, but also include how a young Brazilian entrepreneur travels to the U.S. without any connections, in search of opportunities for developing a new sports category. Just after finishing the case, one of the authors happened upon the first Trikke model being ridden at a recreation area near Rodrigo de Freitas Lagoon in the city of Rio de Janeiro!