Peddling Schwinn Bicycles: Marketing Lessons from the Leading Post-WWII US Bicycle Brand

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Arnold, Schwinn & Company started as a small private label bicycle manufacturer that refused to follow the peloton to join the bicycle trust in the late 1890s. Rather through innovation, it evolved from a private label assembler of bicycles to become the best known bicycle manufacturer brand in the United States. It was famous for its lifetime guarantee and its development of the independent bicycle shop channel of distribution in which it enjoyed the largest network of dealers of any brand in the US. It led the US bicycle industry out of the great depression and developed several innovative products from balloon tired bicycles that imitated motorcycles in the 1930s to high rise bicycles in the 1960s. In the US up until 1970, it consistently enjoyed higher market share than Raleigh --the largest bicycle producer and exporter in the world.

INTRODUCTION

Petty (1995) documents the contributions of the bicycle industry to the practice of marketing in the 1890s. This story of bicycle makers advancing the practice of marketing continues with the saga of Arnold, Schwinn & Company -- one of the few companies to break away from being a private label producer to become arguably the best known bicycle brand in the United States.

The story of Schwinn's success from prior to World War II through the early 1970s should be of interest to marketers today. Kumar and Steenkamp (2007) have written an entire book on how marketing firms can effectively address the private label challenge. Yet over fifty years ago, Schwinn successfully transformed from a private label manufacturer to a brand marketer. It did so following a strategy recommended today by Kumar and Steenkamp (2007, 167-184) –a continuing stream of innovative new products. However, Schwinn also went beyond current modern thinking by creating a new channel of distribution for name brand bicycles, the independent bike shop. Lastly, as if the challenges of being a newly created brand marketer and developing a new channel of distribution were not sufficient, Schwinn faced import competition after World War II from, Raleigh, the largest bicycle marketer in the world at that time. Raleigh was offering a high quality product at lower prices –the same sort of import competition faced by many firms today. Schwinn's innovations in both product and distribution allowed it to compete successfully in the US market.

The Schwinn bicycle story begins with the emigration of Ignaz Schwinn to the U.S. from Germany in 1891. He settled in Chicago, which was then a bicycle manufacturing hub and home of the 1893 World's Fair. He obtained a job managing the bicycle factory of the Hill Cycle Manufacturing Company, producers of the Fowler brand. In 1895, he teamed up with capitalist Adolph Arnold to form Arnold, Schwinn & Company, which Ignaz managed. When the U.S. bicycle industry collapsed after the bicycle boom of the 1890s, Schwinn was one of the few companies that refused to join the bicycle trust (Pridmore & Hurd 1995). By 1914, Schwinn made nearly 60,000 bicycles surpassing the trust's successor company Westfield Manufacturing Company that had made just over 40,000 bicycles in the first ten months of the year (Epperson 2001). During the Ignaz years, Schwinn would sell to whatever channel would buy. Some years as much as 75% of Schwinn production went to a national mail order company such as Sears or Montgomery Ward. In other years, bicycle or hardware stores would be the most significant channel (Arnold, Schwinn & Co. Post Trial Brief 1963, 41-42).

The seeds of Schwinn's post World War II marketing successes were planted in the 1930s. In 1931, Ignaz retired and his son, Frank W. Schwinn, took over leading Schwinn into an era of relative prosperity despite the Great Depression. F.W. was a capable engineer and shrewd businessman. After a 1933 trip to Germany, F.W. decided to adapt German balloon tire bicycles to the U.S. market. To appeal to children these bicycles were made to look like motorcycles. Schwinn managed to persuade US Rubber to make the balloon wire-beaded tires needed for the new design by threatening otherwise to import them (Pridmore & Hurd 1995, 49-54). This was particularly important at the time because US Rubber had acquired all of the bicycle tire manufacturers in 1911. US bicycles were uniformly sold with inexpensive and unreliable single tube tires. F.W. himself recognized that unreliable tires, although profitable for US Rubber's sale of replacement tubes, were making cycling unattractive to those seeking reliable transportation (Rubenson 2005).

In what ultimately proved to be a futile attempt to prevent others from imitating this innovation, Schwinn obtained several patents in the 1930s including: electric welding for frames, front fork suspension, the expander brake, and the cantilever frame with rear forks that curved up to form twin under-supports for the top tube often with an imitation gas tank between the supports and top tube (Pridmore & Hurd 1995, 49-54).

The only problem with this new bicycle style was that Schwinn's usual distributors, the big chain stores, refused at first to carry these slightly more expensive bikes. At this time, Schwinn made bikes for dozens of retailers, adding the B.F. Goodrich chain of auto stores in 1935. These bikes were sold using over 100 different brand names. So when these distributors refused to sell the balloon tired bicycles, Schwinn offered them exclusively to independent bike dealers under the Schwinn brand, giving this outlet a much needed boost and establishing Schwinn as a separate brand sold through bike shops. Nearly twenty years previously, Charles Coolidge Parlin (1916, 93), Manager of the Division of Commercial Research of the Advertising Department of Curtis Publishing had argued that selling branded merchandise rather than private labels was the quickest way for a retailer to obtain sales volume and profits. To assist dealers with financing, Schwinn developed the Schwinn Plan where the dealer could buy direct from Schwinn with Schwinn financing, and Schwinn would still pay a commission to the appropriate wholesaler. These bicycles soon became known for their durability so that by 1938, B.F. Goodrich and other chain stores asked for Schwinn "Seal of Quality" on their private label bikes made by Schwinn. The Schwinn Lifetime Guarantee in 1939 further distinguished Schwinn built bicycles from the competition. Durability was an important feature in children's bicycles because they would hop curbs and do stunts that would damage less durable bicycles and tires. This was such an important selling point that the chain stores requested their private label bikes be prominently labeled with the Schwinn lifetime guarantee (Pridmore & Hurd 1995, 48-56).

This new style of bicycle caused the market to double from 512,450 units in 1934 to 1.2 million in 1936. At this time, over 97% of all bicycles sold were balloon tire bikes. Schwinn sales jumped from 86,000 in 1934 to 107,000 in 1935 to 201,000 in 1936 but its market share only increased from 14 to 16% as others made their own balloon tire models (Pridmore & Hurd 1995, 48-56). The pre-war market peaked in 1941 at 1.8 million units with Schwinn selling nearly 20% of them. Import competition was negligible accounting for only 1.4% of the market in 1936 (Schwinn Reporter 1978). Schwinn innovation put the bicycle industry back on the road after the Great Depression.

Not only was Schwinn the only bicycle firm to offer a lifetime guarantee, but it also started national consumer advertising of the Schwinn brand at this time. Other bicycle makers did very little consumer advertising to avoid interference with their chain store customers' marketing of private label bikes (Arnold, Schwinn & Co. Post Trial Brief 1963, 45).

Despite Schwinn's pre-war market leadership, it was not selected to continue producing bicycles during the war. The War Product Board awarded this privilege to Westfield and Huffman to produce 10,000 "Victory" bicycles per month. These black bicycles were not allowed to include any trademarks for the duration of the war, so as not to allow the manufacturers an unfair advantage over other bicycle firms, like Schwinn, who were ordered to stop making bicycles in favor of munitions (Wall Street Journal 1942).

POST WORLD WAR II US BICYCLE MARKET AND THE "BRITISH INVASION"

After World War II, economies in continental Europe and much of Asia were in shambles, but ready to rebuild. The U.S. economy, in contrast, was robust with returning soldiers eager to purchase goods and start families. Pent up demand for bicycles from the war was strong, particularly from children --97% of all children surveyed in 1945 wanted a bicycle (Wall Street Journal 1945). But the eleven other U.S. firms began actively soliciting bicycle dealers, a

distribution channel that Schwinn developed and dominated before the War. Furthermore, they often sold direct to dealers, whereas Schwinn preferred dealing with wholesalers and jobbers, although it had pioneered direct to dealer sales in the 1930s, when a wholesaler went into bankruptcy. The Schwinn patents from the 1930s had expired and U.S. firms were largely producing bicycles close in quality to Schwinn according to F.W. (Schwinn 1948a, 1948b and 1949).

As if the increase in domestic competition was not enough challenge for Schwinn, imports unexpectedly increased tenfold from 1945 to 1946 totaling 46,840 units in 1946. Ninety-five percent of these imports were from Britain and over half were full size "English" lightweight three speed bicycles with the rest being children's bicycles. American soldiers had experienced the lightweight while in Europe and now wanted to purchase them at home. In 1947, domestic firms made less than 30,000 lightweight bicycles compared with over 1.6 million balloon tire bicycles (U.S. Tariff Commission 1952, 6). Post-war demand satiated for a couple of years, despite a tariff reduction for British lightweight bicycles in 1948 from 30%, generally $2.50 per bike, down to not more than 15% or $1.25 per bike (U.S. Tariff Commission 1952, 2-3). U.S. bicycle purchases peaked at over 2.8 million units in 1947, declining to 1.9 million in the early 1950s (Schwinn Reporter 1978).

Imports took off again when the British pound was devalued from $4.03 to $2.80 in September 1949. The average wholesale price for the six leading British models dropped to $36.62 compared to $45.00 one year earlier (U.S. Tariff Commission 1952, 5). As a result, the number of UK bicycles shipped to the U.S. rose dramatically from 15,000 units in 1948 (about 90% of all U.S. imports) to about 530,000 in 1954 (only 55% of all U.S. imports). Full size lightweights from the UK rose from almost 9,000 in 1948 to over 87,000 in 1951, nearly half of all the imports for that year (U.S. Tariff Commission 1952, 6).

From the British perspective, the 1948 US shipments represented about 10% of all UK bicycle exports but by 1954, US shipments represented one quarter of all UK bicycle exports (Lloyd-Jones and Lewis 2000, 195-95; 215-16). In the decade after World War II, Raleigh, Tube Investments, and BSA became the dominant bicycle exporters in the world and although other countries also began to export bicycles, the US market became increasingly important to these British firms.

British bicycle firms achieved their position of initial dominance in post World War II world bicycle production for two reasons. First, they were ready and able to resume production and exports when the war ended, whereas the competition from Europe and Japan was quite limited. In 1946, the British industry produced 2 million bicycles compared to 1.7 million produced in the U.S., 1 million made in Italy and about 0.5 million in France. By 1949, the Brits were making 3.5 million units compared to a U.S peak of 2.8 million in 1948 and French production of 1.3 million (Berto et al. 2000). Germany and Japan, two leading bicycle exporters before the war, together exporting about 4 million bicycles in 1938, were struggling to resume production, much less exports. This left a large opportunity in many markets for the British to replace German and Japanese imports with their own.

In addition, the British bicycle industry competed strongly against itself. During the last quarter of 1947, Raleigh was exporting nearly 50% of its output, but Tube Investments, producer of the less expensive Hercules brand, was exporting about 75% of its production. The share of total UK bicycle output going to exports, under government encouragement, rose from 23.5 percent in 1945 to 60% by the end of 1947 of total output of almost 3 million. Tube Investment, Raleigh, and BSA, dominated the post war cycle industry in Britain (Lloyd-Jones and Lewis 2000, 188-93).

The following table shows the number of bicycles sold in the U.S. for selected years, including the number of imports, UK imports, and Schwinn bicycles.

TABLE 1
U.S. Bicycle Market (selected years)

Year	US Mkt. (1000s)	Imports (1000s)	% Imp.	UK to US (1000s)	UK % US (% US imports)	Schwinn (1000s)	Schwinn % US Market
1946	1664.3	46.8	2.8%	44.4	2.6%(95%)	302.1	18.1%
1947	2800.8	19.7	0.7%	18.5	0.6%(94%)	486.8	17.4%
1952	2513.7	245.7	11.4%	191.7	7.6%(78%)	478.8	22.2%
1953	2695.6	593.0	22.0%	407.7	15%(69%)	501.4	18.6%
1957	2625.6	748.7	28.5%	265	11%(35%)	439.5	16.7%
1958	2930.1	823.6	28.1%	263	9%(32%)	451.2	15.4%
1963	4409.6	1294.9	29.3%	753	17%(58%)	655.7	14.9%
1964	5088.5	1010.0	19.8%	415	8%(37%)	849.8	16.7%
1969	7053.4	1970.5	20.5%	-	-	863.7	12.2%
1970	6891.1	1947.4	28.3%	375	5.4%(19%)	895.8	13.0%

Sources: Schwinn Reporter (1978), Roger Lloyd-Jones & M.J. Lewis (2000) and various U.S. Tariff Commission Reports

THE U.S. INDUSTRY AND SCHWINN RESPOND

The U.S. industry marshaled four responses to the British bicycle invasion. First, it sought import relief. This allowed it to implement the second response --modernize production thereby lowering costs. In addition to some modernization, Schwinn also improved its system of dealers and heavily promoted its brand to retain its lead in the quality bike market segment. Fourth and finally, the industry, under Schwinn's leadership, innovated and created the "middleweight" –a compromise bicycle between the balloon tire cruiser and the English lightweight. This innovation was followed in the early 1960s by high riser bikes for kids.

Import Relief

The Bicycle Manufacturers Association of America (BMA), including Schwinn, applied for "escape-clause" relief to the U.S. Tariff Commission in October 1951. In its report a year later, the Commission unanimously refused to recommend relief, finding that bicycles were not being imported in such increased quantities to cause or threaten serious injury to the domestic industry. The Commission based its conclusion on the facts that prices, employment and average wages in the bicycle industry had increased somewhat from 1948-51, while production was roughly stable and much higher than before the war U.S. Tariff Commission 1952, 3, 6-13).

When exports continued to skyrocket from 176,644 units in 1951 to 963,667 in 1954, BMA tried again. After investigating, on March 14, 1955, the Commission recommended that the President increase in bicycle tariffs to 22.5%, amounting to about $1.87 on children's bicycles and $3.75 on adult lightweight bicycles (*Schmidt Pritchard & Co. & Mangano Cycles Co. v. United States* 1958). This recommendation was not unanimous. Commission Sutton dissented, arguing that since the 1952 decision, the increase in imports had not been of sufficient magnitude or duration to warrant relief. He blamed the 1954 reduction in domestic production on a general economic recession, not import competition, which was largely from lightweight bicycles that the domestic producers, believing them to be a fad, refused to make in any substantial quantities (only 122,000 in 1953 compared with 1.9 million balloon tire bikes). Commissioner Edminster concurred in the result, but suggested that "imaginative and skillful merchandising by the British of lightweight bicycles having special features that have proved especially attractive to many American consumers, at prices which the domestic industry has not successfully matched" caused an overall increase in bicycle consumption more than injury to the domestic industry. He recommended an increase in duty on lightweights of only 15% as opposed to the cross-the-board recommendation of the majority of 22.5% for all bicycles (U.S. Tariff Commission 1955).

The President sought additional information and ultimately adopted the 22.5% rate for three out of four categories of bicycles. The President only increased tariffs for the most popular category, lightweights to 11.25% noting that the U.S. industry offered no direct competition in this category and these bikes competed only indirectly with balloon tire bicycles (Golding 1984). Affordable bicycles may have been an issue near and dear to President Eisenhower since after he had suffered a heart attack, his personal physician Dr. Paul Dudley White, recommended cycling to him and all Americans in order to strengthen their hearts (Berton 1963; Crown & Coleman 1996, 66).

While importers challenged the President's decision as illegal arguing the law only allowed acceptance or rejection, not modification, of the Commission recommendations, domestic producers returned to the Tariff Commission in 1957 arguing that the 1955 relief was inadequate. The Commission rejected the request for additional relief (U.S. Tariff Commission 1957). The Court of Customs and Patent Appeals upheld the importers' contentions, so in 1961, President Kennedy was forced to declare new bicycle tariffs, which he did at the same rate as those set by President Eisenhower (*United States v. Schmidt Pritchard & Co. & Mangano Cycles Co*. 1960; Golding 1984, 157-58).

Thus, while tariffs on lightweight bicycles increased only 50% rather than 300%, this, coupled with UK price increases, was enough for importers to shift from UK to German and Dutch firms. German market share of imports into the U.S. market increased from 26.6 % in 1954 to 53.5 % in 1956, while U.K. imports dropped from 55.4% to 22.7 % during the same period. The continental producers also offered delivery within seven days of the order in stark contrast to the difficulties experienced by British firms in maintaining an adequate supply of components to deliver completed bicycles in a timely fashion (Lloyd-Jones and Lewis 2000, pp. 195-216). However, by 1959, the UK regained the lead, taking advantage of new Raleigh and Sturmey-Archer plants to sell 34% of all bikes imported in the U.S. followed by West Germany with 33% and other countries including Japan (1%) (U.S. Tariff Commission 1959). U.S. bike retailers were buying from many sources, but the UK was still competitive and the quality leader.

Modernized Production

The tariff increase bought the domestic industry a little breathing room with which to modernize. The major U.S. producers realized that they were not competitive on a cost/price basis with imports. They used the tariff increase to increase their investment in automatic production, substituting capital for labor and several relocated to lower wage, non-union areas so that they could price bicycles more competitively. For example, Huffy left its undersized

Dayton Ohio plant in 1956 for a new efficient plant in Celina Ohio. In 1959, it purchased the Monarck Silver King Bicycle Co. to obtain a west coast plant reducing its shipping costs to that important area. Murray-Ohio left Cleveland for Lawrenceburg Tennessee in 1954 where productivity increased 15% and employment rose from 1,700 to 2,000 from 1954-1963. Roadmaster, now AMF, left its Cleveland plant after a prolonged strike in 1953 and build a $1.25 million factory in Little Rock Arkansas. The new plant was heavily automated with more than a mile of conveyor belts, in 6 separate systems including an electro-static painting system. Schwinn also invested in newer production methods and more than doubled its production from 1955 to 1970 (Golding 1984, 168-172). Of the five industries studied by Golding (1984), only the US bicycle industry successfully used import relief to modernize production facilities in order to reduce costs. However, Schwinn factory upgrades were only modest. Its main emphasis seemed to be rationalizing its system of dealers and building its brand as discussed below.

Schwinn's Distribution and Branding Strategy

Schwinn's initial postwar strategy was to give up all private label bike sales in 1948, so that it could concentrate on advertising and building the Schwinn brand. Nearly half of all Schwinn bicycles were sold through specialty bike stores and another 25% were sold through the B.F. Goodrich chain, which was willing to sell the Schwinn brand rather than their own private label brand like the other large chain stores (Arnold, Schwinn & Co. Post Trial Brief 1963, 45-6).

Schwinn had a total of 15,000 dealers in 1950. Frank W. and Sales Promotions Manager, Ray Burch calculated that Schwinn's top 15% dealers sold 90% of its total volume, so Schwinn began eliminating small dealers, often hardware stores or barbershops, and developed its best dealers into "Total Concept" stores (Pridmore & Hurd 1995, 93-96). These dealers became Schwinn authorized and had to exclusively sell Schwinn bicycles. This latter policy was developed after one dealer had tried to convince the unidentified Schwinn executive posing a shopper to buy a Raleigh instead of a Schwinn. The dealer argued that the Raleigh was lighter and a few dollars cheaper (with a higher dealer mark-up) than Schwinn. Based on this incident, Schwinn was convinced that its advertising brought customers into bike dealers who then tried to make a bit more money by selling Raleigh bikes (Pridmore & Hurd 1995, 101-105).

For its "Total Concept" stores, Schwinn also carefully controlled store location and layout and established service standards for maintaining quality. It imitated franchising approaches that had already been started with the auto supplies chains to which it had sold bikes. Schwinn encouraged "dark and dirty" bike shops as well as variety stores to emulate its model stores. Schwinn also would teach its dealers how to service bicycles, including the complex Sturmey-Archer three speed hubs (Crown & Coleman 1996, 59-69).

By the end of 1960, Schwinn had eliminated marginal dealers as well as its largest customer the B.F. Goodrich chain that discounted Schwinn bicycles and did not perform service. Schwinn was down to just 2,000 dealers (Pridmore & Hurd 1995, 93-105). In 1960, independent bicycle dealers sold 85% of all Schwinn bicycles with hardware store accounting for 4% and BF Goodrich for 11%, the latter two before termination (Arnold, Schwinn & Co. Post Trial Brief 1963).

Schwinn supported its dealers with a monthly newsletter, dealers meetings and materials on how to be an effective dealer, set up and run an effective and profitable store. Schwinn created demand for its brand of bicycle through national advertising and promotions. In order to prevent harmful competition among wholesalers of Schwinn bicycles, Schwinn assisted its wholesalers in dividing up the national market. The Department of Justice filed a massive antitrust case against Schwinn, twenty-two independent distributors and B.F. Goodrich (before termination by Schwinn) in April 1957. While Goodrich settled, the case continued in litigation for ten years until the Supreme Court affirmed Schwinn's liability for a conspiracy to divide the market among its wholesalers (*United States v. Arnold, Schwinn & Co.* 1967). The case was essentially overturned ten years later, when the Court announced such vertical market divisions would be judged under the rule of reason (Crown & Coleman 1996, 60-1). The district court decision clearly sympathizes with Schwinn's struggle against mass marketers of bicycles and likely would have absolved Schwinn of liability under the rule of reason had that option been available to it (*United States v. Arnold, Schwinn & Co.* 1965).

The case had no effect on Schwinn's aggressive marketing to consumers. It had advertised in comic books since the 1930s and its ad filled the back cover of *Boys' Life* every other month. In the 1940s, a California dealer and wholesale started the practice of persuading film stars to pose for a photograph with a Schwinn bicycle in exchange for the bicycle (Pridmore & Hurd 1996, 96). While celebrity endorsements had been used to sell bicycles since at least the 1880s, prior celebrities used by the bicycle industry had been primarily royalty, the rich and of course bicycle racing stars (Petty 1995). Schwinn was the first in the bicycle industry to use photos of movie and television stars such as Lana Turner, Bing Crosby, Bob Hope, Rita Hayworth and Ronald Reagan with Schwinn bicycles. Schwinn even had President Eisenhower's physician, Dr. Paul Dudley White, pose with a Schwinn in the 1950s (Crown & Coleman 1996, 66). The use of such celebrities could not only attract attention to the brand, but enhance advertising credibility (Erdogan 1999).

In 1958, children's television character, Captain Kangaroo began pitching Schwinns to the under six set. While these kids were generally too young for two wheeled bikes, when they got older they asked for a Schwinn (Crown & Coleman 1996, 66-7). Schwinn repeatedly reminded its dealers that Captain Kangaroo reached ten million children over the 79 CBS stations and that it was the only bicycle marketer with such an effective campaign (Schwinn Reporter 1958). In 1971, Federal Trade Commission Guidelines on Advertising to Children recommended against this practice, so "Mr. Schwinn Dealer" started making the Schwinn sale pitches on the Captain Kangaroo show in April 1972. It was felt that young children had difficulty understanding the difference between the sales pitch and the show (Schwinn Reporter 1973). During the later 1950s and early 1960s, Schwinn's market share averaged around 15%, while its sales grew from under one half million bikes in the mid 1950s to over 600,000 by 1963 (Schwinn Reporter 1978).

Innovative Products

In 1949, Schwinn introduced the epitome of balloon cruiser bicycles, the Black Phantom. This bicycle was similar to pre-war balloon cruisers, but with more aerodynamics and more chrome. At the time, it allowed Schwinn to capture about 25% of the domestic market (Pridmore & Hurd 1995, 90-1).

However, U.S. manufacturers continued to struggle to compete with British lightweight three speed bicycles that had hand brakes rather than coaster brakes, a three speed gear hub, 26 inch narrow wheels and a lightweight lugged frame. The use of lugs at tubing joints allowed lighter weight tubing to be used, but required more expensive hand welding. In 1954, less than 5% of U.S. produced bicycles were in the lightweight category (U.S. Tariff Commission 1955).

To challenge the lightweights, Schwinn developed the middleweight bicycle, such as the three-speed Corvette in 1954 (for the 1955 model year), named after the GM sports car that was introduced in 1953. The domestic middleweight bicycle duplicated most of the features of the British lightweight but with slightly wider rims and tires. The higher air pressure of the middleweight tires decreased rolling resistance and made these bikes feel more responsive than balloon tired bikes (Mitchell 2004, 72). The middleweight seemed sturdier than a lightweight and therefore was a smaller transition for consumers than from a balloon tire heavyweight to lightweight (Pridmore & Hurd 1996, 105).

Domestic producers had invested in plants that used electric frame welding so middleweight bikes did not have the lightweight lugged frames of the imported British lightweight bicycles (Golding 1984, pp. 163-66). However, because of Raleigh's policy to supply all customers with Sturmey Archer components, US made middleweights, such as the Schwinn Corvette introduced in 1955, sported a Sturmey-Archer three speed hub, thereby eliminating an important competitive advantage of British bikes and Raleigh in particular (Mitchell 2004, 72).

The middleweight strategy proved successful. Middleweight sales for Schwinn doubled in 1955 over the prior year and by 1956, middleweights out sold all other Schwinn models (Pridmore & Hurd 1996, 105). Indeed, the Schwinn Jaguar, introduced in 1954 as a new model heavyweight was re-introduced in 1956 as the Jaguar Mark II middleweight bicycle (Mitchel 2004, 77). In 1954, 91% of all domestic bicycles were balloon tire, but by 1958, over 94% of domestic production was of the new middleweight with only 3.4% of domestic production consisting of balloon tire heavyweights and a mere 2.5% of U.S. production dedicated to lightweights (U.S. Tariff Commission 1959, 9). Imports peaked at 40% of the U.S. market in 1955-1956 and then declined to 28% through 1959 (Schwinn Reporter 1978).

With a strong system of advertising and Schwinn franchise dealers performing both personal sales and service, Frank W. Schwinn again was ready to try interesting US consumers in derailleur bicycles. He had tried without success in the 1950s and before World War II. When the 1959 Pan American Games were held in Chicago, the American four man pursuit team won the gold medal, mostly riding Schwinn Paramounts. These same athletes competed the following year in the Rome Olympics. By then racing and touring was becoming fashionable in California (Pridmore & Hurd 1995, 111). A few derailleur bicycles were being imported to the west coast at high prices.

This time, the eight speed Schwinn Varsity, introduced in 1960, took off, outselling, for several years, all other derailleur bikes in the U.S. combined. Initially the European freewheel of the Varsity, designed for road use in Europe rather than sandlot use by kids in the US, became contaminated by sand and grit and sounded noisy. When the European suppliers were not responsive to this concern, one of the Shimano brothers offered to design a freewheel with better sealing. Soon Schwinn placed a large order for Shimano freewheels thereby starting that company's successful sale of components on a global scale (Pridmore & Hurd 1995, 113). By 1964, Schwinn dealers carried six different derailleur bicycles from the Varsity at $70 up to the $237 Campagnolo-equipped Paramount (Berto et al. 2000, 186).

Not resting on its laurels, Schwinn learned in 1962 that California kids were buying up 20 inch bike frames and outfitting them with "longhorn" handlebars and polo seats. These "pig bikes" became the rage in Orange country. By late 1963, Schwinn introduced the Stingray, the first of many high riser model bicycles, which included not only hi-rise handlebars and a banana seat, but front suspension as well.

The introduction had been delayed by the death of Frank W. Schwinn in April 1963 (Pridmore & Hurd 1996, 111-121). Sales of high riser bicycles peaked in 1968 when five million were sold. This also was the year that Schwinn introduced its Krate series that looked like a drag racer with its 20 inch rear wheel and 16 inch front wheel. By 1970, three quarters of the almost 5 million bicycles sold were still high risers (Berto et al. 2000, 209).

RALEIGH IMITATES SCHWINN

Tube Investments merged with Raleigh in 1960 adding a number of mass market brands to the more prestigious Raleigh brand. By 1963, Raleigh exported almost 802,000 bicycles to the U.S. (63% of all imports), but only 60,000 under the Raleigh brand. However, the firm lost money on the mass market sales because of heavy price competition. In 1964, consultants Booz, Allen and Hamilton recommended it follow the Schwinn concept –drop all direct sales to mass buyers and build up a network of exclusive dealers selling Raleigh brand bicycles. Mass market sales were rapidly curtailed, while dealers were courted by offering exclusive rights to all Raleigh special features such as the dyno-hub, fork lock and special colors. Dealers also were offered attractive financing and service by a sales force that increased from four to 28. Warehouses were added in New Jersey and Florida in 1965, California in 1968 and Chicago in 1969 (Bowden 1975). By 1966, the number of Raleigh brand bicycles doubled from 1963 levels to 132,000. In 1967, 153,000 were sold and by the end of the decade over 200,000 Raleigh brand bicycles were imported into the U.S. annually (Bowden 1975, 170-71).

Raleigh developed its own high riser model called the Chopper based in part on small wheeled bikes that had become popular in the UK. This exciting machine completely outsold all the small wheeled bikes in the UK but was introduced in the US at the end of 1969, when high risers as a category were mature. Its differing wheel sizes looked like an imitation of Schwinn Krate models. Its sales in the US also were hindered by its high tariff, for having two different wheel sizes, and resulting high price (Bowden 1975, 172).

Notwithstanding its lack of a high riser until the end of 1969, Raleigh did fairly well in the important U.S. market while implementing a difficult change in strategy. By 1972, Raleigh sold nearly 600,000 bicycles in the U.S., a number equal to the size of the entire UK bicycle market (Mansell 1973). Raleigh enjoyed the services of about 1400 U.S. dealers, second only to Schwinn with about 1700 dealers (Bowden 1975, 176; Crown & Coleman 1996, 231). Schwinn was outselling Raleigh with sales amounting to between 850,000 and 1 million bicycles in the late 1960s, shooting up to 1.4 million in 1972. To put these numbers in perspective, 5-6 million bikes were sold annually in U.S. from 1967-69 and 1.1-1.9 million of them were imported (Schwinn Reporter 1978). If three quarters of these are high risers, then Raleigh is selling about 40% of the non-high riser imports. Thus Raleigh's late and expensive entry into the high riser category coupled with its shift from mass market to independent bicycle dealers left an opening for other importers to serve the mass market. This opportunity was exploited by Asian firms, but that is another story (Petty 2001).

DISCUSSION

Lloyd-Jones, Lewis & Eason (1999, 99-103) suggest that Raleigh was successful because its company culture was dominated by three core values: (1) a family style organization that rewarded longevity and loyalty, (2) a belief that Raleigh products should be high quality emphasizing durability, longevity, and reliability, and (3) a policy that meeting customer needs should be given high priority.

Despite Raleigh's success in the UK and much of the world, it was only the number two quality brand of bicycles in the US from 1945-1970. Schwinn's focus on that single market and company values similar to those of Raleigh allowed it to be the first to innovate in product design as well as marketing practices such as developing its network of exclusive dealers. In contrast to Raleigh, Schwinn was an actual family run business that recognized loyalty and longevity. In the US, Schwinn outperformed Raleigh in producing durable products both with the heavyweight and later the middleweight bicycles. The legendary durability of these bikes led to the "Schwinn Lifetime Guarantee," introduced in 1939, which covered not only the frame and paint, but all parts made by Schwinn suppliers. As good as Raleigh bikes may have been, they lacked the sheer indestructibility of a Schwinn balloon tire cruiser. Even the middleweights of the 1950s felt more solid and durable than Raleigh lightweights.

Although Raleigh valued customer needs, it is not always clear whether it considered its customers to be bicycle distributors or the cyclists themselves. Until 1964, it largely made bicycles to satisfy chain store requirements. Furthermore, it never seemed to fully accept the fact that in the US, bicycles were predominantly sold to children. Raleigh's three speed lightweights were less able to handle the abuse of riding from kids than were Schwinn models. Schwinn recognized that its customer was the cyclist. For this reason F.W. Schwinn refused to accept the refusal of the large chains to carry its balloon tired cruisers and began to cultivate a new set of distributors, the independent bicycle dealers. This step was taken, not to satisfy the bike shops as customers, but rather to break the power of Schwinn's more important customers, the large chain retailers. The large chains contracted directly with component suppliers to design bikes, so that the bike manufacturer had become a mere assembler.

With its balloon tired cruisers, Schwinn became so well known for quality that retailers, including tire giant, B. F. Goodrich, whose third largest selling item was the 25% of Schwinn annual output it sold under private label, touted their private label bikes as Schwinn Built and covered by the Schwinn Lifetime Guarantee (Crown & Coleman 1996, 30-34, 41). After World War II, B.F. Goodrich proudly sold the Schwinn brand. Schwinn re-created the importance of the manufacturer brand in the minds of both customers and dealers.

Schwinn did seek to merely to meet customer needs, but rather sought to innovate and excite customer passions. The balloon tire cruiser motorcycle imitations touted cantilever frames, a full floating saddle, the knee action spring fork and even a built in cycle lock. Schwinn obtained more than 40 patents on these innovations during the 1930s (Crown & Coleman 1996, 34). These bikes were imitated to some degree by others but still stand as classic example of a seemingly modest innovation that dramatically stimulated sales even during the Great Depression.

Contrary to Lloyd-Jones, Lewis & Eason thesis, Raleigh corporate values of quality/durability and meeting customer needs did not appear to substantially influence its U.S. strategy. In the U.S. Raleigh bikes were known as lightweights whose durability could not match "curb-proof" balloon tire Schwinns. While Raleigh initially met the needs of returning U.S. soldier who wanted an "English" three speed, it failed to compete in the heavyweight balloon tire children's market. It also missed the chance to meet customer needs by developing a middleweight bike and almost missed the hi-riser market in the U.S. completely. Raleigh initially focused on the needs of the large retail chains, but that business was driven by price competition, rather than innovation and often did not promote the

Raleigh brand. Thus, it is not surprising that Schwinn in attempting to continue building its reputation for innovation, rather than Raleigh, developed the compromise middleweight bicycle and was the first with hi-riser bicycles for children. The promotion of the Schwinn Paramount as a serious racing bike also paved the way for Raleigh (and other brands) of derailleur racing bicycles.

Finally, Raleigh failed to fully exploit its world-class brand in the US whereas Schwinn created its brand from innovative products and promoted the brand heavily with both consumers and dealers. Raleigh eventually imitated this strategy, but by then the market was changing to emphasize components rather than bike manufacturers and low cost Asian manufacturing meant that both Schwinn and Raleigh had to struggle to maintain price competitiveness. A struggle both companies ultimately lost leading to the closure of their plants in the US and UK.

CONCLUSION

The story of Schwinn's failure after F.W. Schwinn passed away is well known. Schwinn focused on developing in-house wholesaling to avoid further antitrust issues and failed to promptly commercialize both BMX in the later 1970s and mountain bikes in the 1980s. Ironically, both of these phases in bicycle development arose from tinkering with old Schwinn bikes –hi-rise Stingrays and balloon tire Excelsiors, respectively. After a labor strike in 1980-81, the Chicago factory was closed in 1983. Schwinn outsourced manufacturing to firms such as Giant in Taiwan that it trained to become competitors. Ultimately, Schwinn went into Chapter 11 bankruptcy (the first time) in 1992 and was sold from the family in January 1993 (Crown and Coleman 1996). This sad modern story tends to overshadow the story told here of Schwinn's earlier successes. Even today, marketers can learn from Schwinn's transformation from a simple private label manufacturer to a brand marketer of innovative and durable products. This transformation was also aided by the development of a previously marginalized channel of distribution, its industry-leading lifetime warranty, and innovative advertising techniques using celebrities and a children's television show host. Schwinn's focus on the customer and consumer needs brought it success. When it lost that focus, it ultimately failed.

NOTES

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