

case eight

Harley-Davidson, Inc., February 2004

Robert M. Grant

You've shown us how to be the best. You've been leaders in new technology. You've stuck by the basic American values of hard work and fair play...Most of all, you've worked smarter, you've worked better, and you've worked together...as you've shown again, America is someplace special. We're on the road to unprecedented prosperity...and we'll get there on a Harley.

President Ronald Reagan, speech at Harley-Davidson plant, York, Pennsylvania, May 6, 1987

The recovery of this company since the 1980s has been truly remarkable. When you were down in the dumps, people were saying American industry was finished, that we couldn't compete in the global economy, that the next century would belong to other countries and other places. Today, you're not just surviving – you're flourishing, with record sales and earnings; and one of the best-managed companies in America. According to management and labor, one of the reasons you're the best-managed company in America is that you have a genuine partnership between labor and management, where all employees are valuable and expected to make good decisions on their own for the benefit of the common enterprise. And I thank you for setting that example. I wish every manufacturer in America would model it.

President Bill Clinton, speech at Harley-Davidson plant, York, Pennsylvania, November 10, 1999

It's one thing to have people buy your products. It's another for them to tattoo your name on their bodies.

As Harley-Davidson's chairman and CEO, Jeff Bleustein, reviewed the company's full year financial results for 2003, he realized that the past financial year would be a difficult act to follow. The 100th anniversary of Harley-Davidson's in August 2003 set the stage for a year-long program of festivities that would attract over a million participants—most of them Harley owners. Harley shipped 291,147 motorcycles—a 10.4% increase over the previous year—and sales and profits broke previous records for the 18th consecutive year. It was a far cry from the early 1980s, when as head of engineering, Harley was producing less than 40,000 bikes a year and struggling to remain solvent under a mountain of debt

During the early months of 2004, Bleustein had little opportunity to reminisce about the joys of Harley's centennial celebrations. His thoughts were fixed firmly on the future. Wall Street's expectations of Harley-Davidson's profit performance had been fuelled not only by the company's remarkable 18-year record-breaking run, but also by the strategic goals set by the company. On the basis of annual unit sales growth of 7%-9%, Bleustein set a target of 400,000 motorcycles to be sold in 2007. Profit targets were even more ambitious—with continuing productivity gains and increased sales of parts, accessories, general merchandise and financial services, Bleustein set the goal of annual earning growth “in the mid-teens.”

As Bleustein prepared for a strategy review with his top management team, he pondered the different forces that might throw Harley-Davidson off course. Bleustein's greatest concerns related to the world economy. Despite reviving economic prospects in both the US and Japan, combined federal and trade deficits together with record levels of consumer debt represented a continuing threat to the stability of the US economy. For any company selling leisure products priced between \$6,500 to \$22,000, any slowdown in US consumer spending represented a significant. Competition was not a primary concern. Harley had demonstrated its ability to hold its own against similarly-styled V-twins produced by rivals (including the big Japanese producers Honda, Yamaha, Kawasaki, and Suzuki). They might be able to replicate the look of the Harley Hog, but none could replicate the "Harley Experience." But what if motorcycle riders began to look for a different type of experience? H-D's share of the heavyweight market fell slightly in 2000. What if the appeal of the heavyweight cruiser waned and buyers became attracted to the European-styled sports models produced by Ducati, Aprilia, Triumph, and BMW, or the high-performance Japanese machines? The disappointing sales of Harley's Buell range of sports motorcycles suggested that Harley's potential to compete in other segments of the motorcycle industry was limited. Longer term, Bleustein was concerned over the demographic trends. Harley's popularity was closely associated with the baby-boom generation. As this generation aged, so did Harley's customers. How would Harley appeal to younger generations? Some of the threats were internal. Harley's success had been built upon a drive for success and a collaborative work culture that had been forged during the difficult circumstances of the 1980s, as Harley went from strength to strength and expanded its employee base, would complacency set in?

■ THE HISTORY OF HARLEY-DAVIDSON ■

1903–1981: From Birth to Maturity

Harley-Davidson, Inc. was founded in 1903 by William Harley and brothers William Davidson, Arthur Davidson, and Walter Davidson. Harley's 1903 model was made in the Davidson family shed and had a three-horsepower engine. In 1909 Harley introduced its first two-cylinder, V-twin engine, featuring the deep, rumbling sound for which Harley motorcycles. During the 1920s the US motorcycle consolidated. In 1910 there were some 150 US motorcycle producers, by 1929, Indian, Excelsior, and Harley accounted for the majority of US motorcycle sales. The Great Depression killed Excelsior, and Indian closed in 1953, leaving Harley the sole American manufacturer of motorcycles. Table 8.1 shows H-D's production over the century.

[Table 8.1 about here]

The post-war era was one of opportunity lost for Harley-Davidson. Growing affluence and the rise of youth culture created a growing demand for motorcycles. However, this was satisfied primarily by imports. By 1959, Harley was still market leader, but British imports amounted to about 30,000 bikes a year with BSA, Triumph, and Norton taking 49 % of the US market.¹ In 1959, Honda entered the US market. The result was the rebirth of motorcycling in the US. Although H-D initially benefited from the rapid expansion of the market, soon Honda and the other Japanese producers moved upmarket into the heavyweight sector. In 1969 Honda introduced its four-cylinder CB750, a huge technical advance on anything produced by H-D or the British. In the same year, H-D was acquired by AMF, which proceeded to expand production capacity with the building of the York, Pennsylvania assembly plant. Boosting capacity to 75,000 units annually had disastrous consequences for product quality. A company audit in the mid-1970s revealed that more than half the cycles coming off the line were missing

parts.² By the end of the 1970s, Honda had replaced H-D as market leader in heavyweight motorcycles in the US.

1981–2003: Rebirth

In 1981 H-D's senior managers, led by Vaughn Beals, organized a leveraged buyout. Harley emerged as an independent, privately owned company, but heavily laden with debt. The buyout coincided with a severe recession and soaring interest rates—especially troublesome for a highly leveraged business. Registrations of heavyweight motorcycles fell during 1981 and 1982 while Harley's own sales plummeted. By 1982 its sales of bikes were down by more than a third from 1979. During 1981 and 1982, Harley-Davidson lost a total of \$60 million. Redundancies came thick and fast: 30 percent of office staff was dismissed with similar cutbacks among hourly workers.

While battling to stay solvent, the new management team also devoted themselves to rebuilding production methods and working practices in order to cut costs and improve quality. Managers visited several Japanese automobile plants and carefully studied Toyota's just-in-time (JIT) system. Less than four months after the buyout, Harley management began a pilot JIT inventory and production-scheduling program called "MAN" (Materials As Needed) in its Milwaukee engine plant. The objective was to reduce inventories and costs and improve quality control. Within a year, all H-D's manufacturing operations were being converted to JIT: components and sub-assemblies were "pulled" through the production system in response to final demand.

The revolution in production methods and new spirit of cooperation between workers and management—plus help from the US government in the form of a temporary 49% tariff on imports of Japanese heavyweight motorcycles—soon fed through into both the top line and bottom line of Harley's income statement. To fuel the continuing development of the company, Harley-Davidson went public in 1986. Between 1986 and 1990, Harley's share of the heavyweight market expanded steadily from about 30 percent to over 60 percent, with demand outstripping production. During this time, management improved the quality and reliability of its product, and began to explore growth opportunities in retail clothing and international sales.

The 1990s saw year-on-year uninterrupted growth in the heavyweight motorcycle market and continued increase in H-D's market share. The company's biggest challenge continued to be balancing production capacity with surging demand for its products. In order to overcome this constraint, in 1996, the company announced the ambitious Plan 2003. Plan 2003 was a vision to dramatically increase production capacity over the eight years preceding the company's 100th anniversary. New production plants in Kansas City and York, Pennsylvania, the launching of several new models, and international expansion resulting in sales approaching 300,000 in 2003—an eightfold increase on 1983.

■ THE HEAVYWEIGHT MOTORCYCLE MARKET ■

The heavyweight segment (over 650cc) was the most rapidly growing part of the world motorcycle market between 1990 and early years of the new century, with the US accounting for a major part of this growth. Sales of heavyweight motorcycles in the major markets of the world increased from 322,400 units in 1991 to 877,400 in 2003. North America was the largest market for big bikes, representing 56 percent of the sales in the major world markets. Between 1999 and 2003, sales of heavyweight motorcycles increased by 14% annually in North America, compared to about 2% growth in Europe and Asia.

In North America, Harley increased its market share rapidly during the 1980s, between 1993 and 2003, its market share has been relatively stable, varying between 46.2% and 48.2%. Elsewhere, Harley has been unable to replicate the market dominance it achieved within its home market. During 2000-2003, Harley achieved the remarkable feat of becoming

heavyweight market leader in Japan, pushing Honda into second place. However, in Europe, Harley has lagged behind its Japanese competitors and BMW (see tables 8.2 and 8.3).

[Tables 8.2 and 8.3 about here]

The heavyweight motorcycle market comprises three segments:

- *Cruiser motorcycles* are “big, noisy, low riding, unapologetically macho cycles,”³ typically with V-twin engines and an upright riding position. Their design reflects the dominance of styling over either comfort or speed. For the urban males (and some females) in Los Angeles, New York, Paris, and Tokyo, the cruiser motorcycle is practical transportation in congested metropolises, but is primarily a statement of style. The cruiser segment was practically created by Harley and is the most prevalent in the US, representing over half of the heavyweight market. Most of Harley’s competitors in this segment have imitated the main feature of traditional Harley design: V-twin engines (many with engine displacements that exceed those of small family cars), low-torque power, an upright riding position, and a low center of gravity.
- *Touring bikes* include cruisers specially equipped for longer-distance riding and bikes specially designed for comfort over long distance (including the Honda Goldwing and the bigger BMWs). These tourers feature luxuries such as audio systems, two-way intercoms, and heaters. While Harley leads this segment on the basis of style and image, Honda and BMW have engineered their motorcycles for greater smoothness and comfort over long distances through the use of multi-cylinder, shaft-drive engines, and advanced suspension systems.
- *Performance models* are based upon racing bikes. These are high-technology, high-revving engines with a heavy emphasis on speed, acceleration, and race-track styling; minimal concessions are provided to rider comfort. The segment is the most important in the European and the Asian/Pacific market, representing 62 percent and 66 percent of total heavyweight bike sales respectively. The segment is dominated by Japanese motorcycle companies, with a significant representation of European specialists such as Ducati, and Triumph. Harley entered the performance segment in 1993 through its involvement in the formation of Buell Motorcycles, a company it fully acquired in 1998.

It is worth noting that the conventional segmentation into lightweight, middleweight, and heavyweight does not clearly define Harley-Davidson’s market. Harley’s strength lies not in the heavyweight motorcycle market, but in just one part of this: the *super-heavyweight* segment, comprising bikes with cylinder displacement of more than 850cc. The only motorcycle that Harley-Davidson produces with an engine size of less than 850cc range is the Buell Blast.

■ HARLEY-DAVIDSON IN 2001 ■

The Brand

The Harley-Davidson image and the loyalty it engenders among its customers are its greatest assets. Harley-Davidson is one of the archetypes of American style. The famed spread eagle signifies not just the brand of one of the world’s oldest motorcycle companies, but an entire lifestyle with which it is associated. Harley has been described as “the ultimate biker status symbol...a quasi religion, an institution, a way of life.”⁴ Together with a few other companies—Walt Disney and Levi Strauss—Harley has a unique relationship with American culture. The values that Harley represents – individuality, freedom, and adventure – can be traced back to the cowboy and frontiersman of yesteryear, and before that to the motives that brought people to America in the first place. As the sole surviving American motorcycle company from the pioneering days of the industry, Harley-Davidson represents a tradition of US engineering and manufacturing.

This appeal of the Harley brand has been central, not just to the company's marketing, but to its strategy as a whole. The central thrust of the strategy has been reinforcing and extending the relationship between the company and its consumers. Harley-Davidson has long recognized that it is not selling motorcycles, it is selling the Harley experience. Prominent in annual reports of recent years have been pictures and prose depicting the Harley Experience:

A chill sweeps though your body, created by a spontaneous outburst of pure, unadulterated joy. You are surrounded by people from all walks of life and every corner of the globe. They are complete strangers, but you know them like your own family. They were drawn to this place by the same passion – the same dream. And they came here on the same machine. This is one place you can truly be yourself. Because you don't just fit in. You belong.⁵

If the appeal of the Harley motorcycle is the image it conveys and the lifestyle it represents, then the company must ensure that the experience matches the image. To increase H-D's involvement in its consumers' riding experience it formed the Harley Owners' Group in 1983. Through HOG, the company became involved in organizing social and charity events, and employees, from the CEO down, were encouraged to take an active role in HOG activities. HOG's website describes the kind of emotion and atmosphere that the company is trying to deliver to customers through its HOG organization: "the feeling of being out there on a Harley-Davidson motorcycle links us like no other experience can. It's made HOG like no other organization in the world...The atmosphere is more family reunion than organized meeting."⁶ The continued growth of the Harley Owners' Group throughout the 1990s was particularly important encouraging repurchase and upgrading by Harley owners. During 1999-2003, about one half of all sales were to customers who had owned a Harley previously, while about 20 percent were first-time motorcycle buyers.

During the 1980s and 1990s, the demographic and socioeconomic profile of Harley customers shifted substantially. Traditionally, Harley owners were blue-collar men in their 20s and 30s. By 1999, the median income of a Harley owner was \$73,800, up from \$38,400 in 1987. The average age grew to 44.6 in 1999, up from 34.7 in 1987. Also, by 1999, 9 percent of Harley consumers were female, up from 2 percent in 1987. Harley-Davidson's ability to capture the imagination—and spending power—of the baby-boomers was critical to its financial success. As the prices of Harley principal motorcycle models rose towards the \$20,000 mark, middle-aged professionals became the most attractive target demographic for the company.

The Products

Broadening Harley's market appeal had major implication for product policy and design. The Harley image is linked closely to its big, throaty, V-twins. Ever since its disastrous foray into small bikes during the AMF years, Harley had recognized that its competitive advantage lay with super-heavyweight bikes. Here it stuck resolutely to the classic styling that characterized Harleys since its early years. At the heart of the H-D motorcycle is the air-cooled V-twin engine that was Harley's distinctive feature since 1909. Harley's frames, handlebars, fuel tanks, and seats also reflect traditional designs.

Harley's commitment to traditional design features may be seen as making a virtue out of necessity. Its smaller size and scale compared to its competitors limited its ability to invest in technology and new products. As a result, Harley lags far behind its competitors in the application of automotive technologies: its motorcycles not only look old-style, much of the technology is old-style. When H-D introduced its new Twin Cam 88 engine in 1998, *Motorcycle* magazine reported:

Honda comes out with an average of two new (or reworked) motors every year. The other Japanese manufacturers are good for about one. Count on Ducati and BMW to do something every few years.

That leaves only Moto Guzzi and Harley. So it goes to say that when either of these two old farts gets off the pot, they really raise a stink, so to speak.

The Twin Cam 88 is Harley's first new engine since the Evolution Sportster motor of 1986, and their first new Big Twin motor since the original Evolution, released in 1984. Fifteen years between engines is not really that long a span for Harley. The Evo's predecessor, the Shovelhead lasted 19 years (with a revision after five), and the Panhead lasted nearly as long.⁷

Yet, despite the fanfare, Harley's Twin Cam 88 engine was hardly innovative. It was a 1,450cc traditional V-twin with push rods and was air-cooled, a decade after Japanese manufacturers had introduced multi-valve, liquid-cooled, overhead camshaft engines. BMW's R1200C cruiser model (launched in 1997 with a starring role in the James Bond movie *Tomorrow Never Dies*) featured shaft drive; a multi-valve, fuel-injected engine; triple-disc, anti-lock brakes; and "road-hugging" cornering from its advanced suspension system. While BMW and the Japanese manufacturers apply the latest automotive technology to their new models, Harley has concentrated upon incremental refinements to its engines, frames, and gearboxes aimed at improving power delivery, reliability, increasing braking power, and reducing vibration. This continual upgrading of its technology and its quality has been an essential requirement of Harley shifting its customer base from blue-collar enthusiasts to middle-aged professionals who lack the time, inclination, and expertise to tune and maintain their bikes and need "luxuries" such as electric starters and vibration control.

Harley has sought out alliances as a means of accessing advanced automotive technologies. In 1997, it established a joint venture with Porsche AG to source and assemble motorcycle components and to access Porsche's expertise in engine emission compliance. For its VF1000 Superbike race team, H-D collaborated with Cosworth Racing, Ford, and Gemini Racing Technologies.

In recent years, Harley-Davidson made a greater commitment to innovation and more radical product design. The V-Rod introduced in October 2001 featured innovative styling and an all-new liquid-cooled engine. The Buell range also offered, Harley engineers opportunity to be more technically innovative. The 2002 Buell Firebolt featured a new engine, an all-aluminum frame, and the "naked" styling pioneered by Ducati.

Reconciling product differentiation with scale economies was a continuing challenge for Harley. Personalization is an essential requirement for the Harley owner. Hence, Harley must offer a wide model range, and a broad set of options regarding paint, accessories, and trim. At the same time, economies in engineering, manufacturing, and purchasing require standardizing components across the model range. The result is that H-D has continually broadened its range of models (its 2004 lineup offered over 30 separate models) and for each model offers a range of options. At the same time, it bases this range of product offerings upon three engine types (Evolution XL, Twin Cam 88, and Revolution), four basic frames, four styles of gas tank, and so on.

The Harley product line also covers a wide price range. The Sportster model is intended as an entry level bike, priced at a mere \$6,495, less than one third of the price of the Ultra Classic Electra Glide (with two-tone paint at \$20,405 (see table 8.4).

[Table 8.4 about here]

Buell

H-D's involvement in Buell represented an attempt to broaden its customer base and its market appeal—especially in overseas. In 1997, H-D set up a working group to explore ways of attracting new, younger motorcycle riders. Market research found that many potential riders were put off by motorcycles being "hard to learn," and big cruisers and touring bikes viewed as "intimidating" or "something an old guy would ride." Founded by ex-Harley engineer Erik Buell in the 1980s, Buell Motor Company developed bikes that synthesized the comfort and style of a Harley cruiser with the high-performance attributes of a sports bike. Harley acquired

complete ownership of Buell in 1998.. Buell bikes use Harley engines and other components, but mount them on a lighter, stiffer frame. The lighter weight and superior handling and acceleration of Buell models were seen as appealing to younger motorcyclists and also to the European market, where customers put greater value on sporty performance and a cheaper price tag. In the US, the typical Buell customer was seven years younger than that of Harley buyers and the price tag about \$10,000 compared to an average Harley price of \$16,000. As with Harley, Buell has attempted to foster close relations with its customers. The Buell Riders Adventure Group (BRAG) was modeled after HOG.

Buell's production rose from 4,462 units in 1997 to 10,943 in 2002(see table 8.5), boosted by new models. The Buell Blast, an entirely new model with a 490cc single cylinder engine and a price tag of \$4,595. With the Buell Firebolt, Harley moved even more direct competition with Japanese and European producers of high-performance, sports bikes. Despite, heavy investments in developing and launching new products, Buell's unit sales fell by about 9% in 2003 due to a fall-off in sales of the Buell Blast.

[Table 8.5 about here]

Distribution

Upgrading H-D's distribution network was a key aspect of Harley's development strategy during the 1980s and 1990s. Many of Harley's 620 US dealerships were poorly managed shops, operated by enthusiasts, with erratic opening hours, a poor stock of bikes and spares, and indifferent customer service. If Harley was in the business of selling a lifestyle and an experience, then dealers were the primary point of contact between the company and its customers. Moreover, if Harley's future lay with professionals who possessed the disposal income to lay out \$17,000 on a motorcycle for occasional leisure rides – then the retail environment had to be appropriate to the requirements of this customer group.

Harley's dealer development program increased support for dealers while imposing higher standards of pre- and after-sales service, and requiring better dealer facilities. The dealers were obliged to carry a full line of Harley replacement parts and accessories, and to perform service on Harley bikes. Training programs helped dealers to meet the higher service requirements, and encouraged them to recognize and meet the needs of the professional, middle-class clientele that H-D was now courting. Harley had taken the lead over other motorcycle companies in introducing new services to customers. These included test ride facilities, rider instruction classes, motorcycle rental, assistance for owners in customizing their bikes through dealer – based “design centers” and “chrome consultants,” and the supply of insurance policies. 81% of Harley dealerships in the US were exclusive—a higher percentage than for any other motorcycle manufacturer.

Given the central role of dealers in the relationship between Harley-Davidson and its customers, dealer relations continued to be a strategic priority for Harley. Its Retail Environments Group provides retail planning advice with a goal of bringing the same retail experience to customers everywhere in the world. Harley-Davidson University was established to “enhance dealer competencies in every area from customer satisfaction to inventory management, service proficiency, and front-line sales. Harley's relationships with its dealers are particularly important for the continued growth of Harley's sales of financial services, parts and accessories, and general merchandise. Harley believed that its dealer strategy was an important explanation for the fact that, despite a fivefold increase in production capacity since the beginning of the 1990s, demand for Harley motorcycles continued to outstrip supply. Every motorcycle that Harley made in 2003 had already been sold long before it came off the production line. For many models, would-be buyers must join a waiting list. One result is that used bikes frequently sell at higher prices than new bikes. More generally, the rate of price depreciation of used Harleys is very low.

Other Products

Sales of parts, accessories, and “general merchandise” (clothing and collectibles) represented 20% of total revenue in 2000 – much higher than for any other motorcycle company (see table 8.6). Clothing sales include not just traditional riding apparel, but a wide range of men’s, women’s, and children’s leisure apparel.

Only a small proportion of the clothing, collectibles, and other products bearing the Harley-Davidson trademark are sold through the H-D dealership network. Most of the “general merchandising” business represented licensing of the H-D name and trademarks to third-party manufacturers. For example, Nice Man Merchandising supplied Harley-Davidson children’s clothes; a giftware company supplied Harley holiday bulb ornaments, music boxes, and a Road King pewter motorcycle replica; L’Oréal offered a line of Harley-Davidson cologne; Harley-Davidson Cafés operated in Manhattan and Las Vegas.

Harley-Davidson Financial Services was established to supply credit, insurance, and extended warranties to H-D dealers and customers. Between 2000 and 2003 it was Harley’s most rapidly growing source of profits accounting for 15% of total operating income in 2003.

[Table 8.6 about here]

International Expansion

A key part of Harley-Davidson’s growth strategy is expanding its sales outside of the US. “A few years ago,” says Harley CEO Bleustein, “our prime focus was the domestic market, and the rest was gravy. That view had to change. If our growth is to continue, Europe will have to play a significant part.” A critical issue for international marketing is the extent to which the products and the Harley image need to be adjusted to meet the needs of overseas markets. Harley’s image is rooted in American culture, and thus seems central to their appeal to European and Asian customers. “The US and Harley are tied together,” says Hugo Wilson of Britain’s *Bike* magazine, “the guy who’s into Harleys here is also the guy who owns cowboy boots. You get a Harley and you’re buying into the US mystique.”⁸ At the same time, the composition of demand and the customer profile is different in overseas markets.

Europe is the focal point of H-D’s overseas ambitions, simply because it is the second largest heavyweight motorcycle market in the world. Europe is also a huge challenge for H-D. Unlike in the US, H-D has never had a major position in Europe and it must fight to take market share from the established leaders in the heavy bike segment: BMW, Honda, Kawasaki, and Yamaha. The European motorcycle market differs significantly from the American market in that 70 percent of the heavy motorcycle market is for performance bikes (such as the popular Japanese high-power, racing-style bikes), while the touring/cruiser bikes such as those Harley makes account for only 30 percent. European buyers tend to be knowledgeable and highly style conscious. Also, European roads and riding style are different from the US. As a result, Harley has modified some of its models to better meet the needs and tastes of its European customers. The US Sportster, for example, has a straight handlebar instead of curled buckhorns and a new suspension system to improve cornering. The name has also changed to the “Custom 53.” The Harley Softail also received a new look, becoming the “Night Train.” As in the US, HOG plays a critical role in building brand image and customer loyalty. Harley’s anniversary celebration in Barcelona on June 2003 attracted some 150,000 people including Harley owners from all over Europe. Central to Harley’s international strategy is building its dealer network. Between 2000 and 2003, Harley expanded its dealership network in Europe and Asia, acquired several of distributors, and built a new European headquarters in Oxford, England. At the beginning of 2004, Harley had 383 dealers in Europe (including the Middle East and Africa), 221 in Asia, and 30 in Latin America. In the US there were 648 Harley dealerships and in Canada 75.

Operations

Since emerging as an independent company in 1981, Harley-Davidson has been continuously upgrading its manufacturing operations. This has involved continuous investment in plant and equipment, both to introduce advanced process technologies and to expand capacity. Even more important has been the development of manufacturing capabilities through total quality management, just-in-time scheduling, CAD/CAM, and the devolution of responsibility and decision making to the shopfloor.

At the beginning of 2004, Harley's engine and component manufacturing was clustered around its Milwaukee headquarters, with assembly concentrated at York, Pennsylvania and Kansas City, Missouri. (see table 8.7.)

[Table 8.7 about here]

Despite the enormous strides in implementing state-of-the-art manufacturing methods and expanding production to offset the problems of small-scale production, Harley's low production volumes relative to Honda and the other Japanese manufacturers imposed significant cost disadvantages. A key factor in this volume-related cost disadvantage was in the purchasing components. Bought-in, customized components account for a large proportion of manufacturing costs and H-D does not possess the same buying power as Honda or even some of the smaller manufacturers. Thus, despite its smaller volume of motorcycle production, BMW is able to leverage the buying power of its automobile business.

To meet this challenge, H-D placed purchasing managers at senior levels within its management structure and fostered close relations with its key suppliers. In 1992, Harley extended its program of quality improvement to encompass its suppliers. It established a supplier advisory council (SAC) to expose supplier executives to the best practices of other suppliers in the Harley network.¹⁰ Harley's director of purchasing, Garry Berryman, commented: "Through the SAC, we're able to take some of the entrepreneurial aspects of our smaller, privately held suppliers and inject that enthusiasm, spirit, and energy into those that may be larger, publicly held companies. In this way, the SAC serves not only to improve purchasing efficiency, but also provides a forum to share information, ideas, and strategy." The SAC, says Berryman, is a way "to leverage the successes that occur in one area across the broader organization."¹¹ Suppliers were also included in Harley's new product development process. Leroy Zimdars, Harley's director of purchasing development, noted: "We want suppliers to be deeply involved, at an early stage, in new product development. We'll use the SAC as a sounding board for how the supply base accepts the new structure, and we can react to it."¹²

People and Management Processes

A key feature of H-D's turnaround during the 1980s was the quest for a new relationship between management and employees. Following the management buyout, H-D's new management team systematically rethought management-employee relationships, employee responsibilities, and organizational structure. The result was a transformation in employee commitment and job satisfaction. "What other company has employees who tattoo the company name on their bodies? Or offers not just a job but a lifestyle?" observed an assembly-line worker at Harley's Milwaukee plant. Harley has a no lay-off policy, 12 weeks of paid maternity leave, and unlimited sick days for staffers.

The process of management innovation is a continuing one. When Harley's new Northland Plant went on-line in Kansas City in January 1998, the plant's management structure and working methods reflected the company's desire to make further advances in employee commitment and self-management. "I'm not aware of anybody anywhere doing anything that emulates this," said plant chief Karl Eberle.¹³ In contrast to the traditional layout of Harley's other plants, the Northland Plant does not have a management space that oversees floor production from a glassed-in office upstairs. Instead, the plant manager and other administrators work in a "bullpen area" on the floor and in the center of the 330,000 square-foot building.

In an effort to engage and motivate the entire plant workforce, management developed a novel operating structure different from anything else within the company. The structure comprised three types of teams:

- *natural work groups* – every worker belongs to a work group, with 8–15 people per group
- *process operating groups* – comprised of representatives from each work group, there are four process operating groups; each oversees the plant's four operating divisions: paint, assembly, fabrication, and engine production
- *plant leadership group* – a 14-member committee, responsible for governing the facility; comprised of the plant manager, the presidents of both unions representing the plant workforce, four elected representatives from the process groups, an elected representative from maintenance, and six administrators

Harley's belief in the effectiveness of non-hierarchical, team-based structures in improving employee motivation and accelerating innovation and learning is evident throughout the company. The Harley-Davidson Operating System is a philosophy and a methodology for continuous improvement involving team-based efforts to identify wasted steps, pare costs, and enhance quality throughout manufacturing..

The movement toward a flatter, more team-based organizational structure extended to Harley's corporate headquarters. "In our new organization," explained Clyde Fessler, VP for business development, "the Harley-Davidson Motor Company has been divided into three broad, functional areas called Circles. They are: the Create Demand Circle (CDC), the Produce Product Circle (PPC), and the Provide Support Circle (PSC). Each Circle is composed of the leaders representing the functions within it. The flexibility of the organization extends even to the decision of which functional areas are identified within a given circle. It is quite possible that Circle definitions may shift from time to time, depending on the demands of the business."¹⁴ Each Circle operated as a team with leadership moving from person to person, depending on the issue being addressed. Overall coordination is provided by the Strategic Leadership Council (SLC) comprising individuals nominated by each of the three Circles. Explained Fessler:

The role of the SLC is to resolve issues that have not been settled previously by consensus in Circle meetings. Leadership of the Council also rotates, shifting to Circle representative who "owns" the topic being discussed...The Circle format is especially valuable in that it facilitates systems thinking in our strategy implementation. If the marketing function plans to focus on a specific product, the Circles provide an opportunity to get feedback from manufacturing about timing and availability. If the Manufacturing function needs to shut down its operations to upgrade equipment, the Circle structure allows all the affected functions to be involved in the decision. ...Defining the roles and responsibilities of each functional Circle and each Circle member has brought clarity, which in turn stimulates dialogue, trust, and eventually, non-threatening confrontation...Collaborative interdependent teams may not be able to move as quickly as the single decisive leader in a hierarchy, but they can be more innovative and resourceful and, ultimately, more effective in today's complex business climate.¹⁵

■ COMPETITION ■

Despite Harley's insistence that it was supplying a unique Harley experience rather than competing with other motorcycle manufacturers, the more H-D took market share from other

manufacturers, the more it was engaged in a brutally competitive market. By broadening its market, Harley came into closer competition with its Japanese and European rivals – Buell’s mission was to compete directly with them. And the more successful was the Harley brand, the more it could expect its bigger competitors to target its own market niche. Honda, Suzuki, Yamaha, and Kawasaki had long been offering V-twin cruisers styled closely along the lines of the classic Harleys – but at lower prices, with more advanced technologies, and in some dimensions, superior performance. In competing against H-D, the Japanese manufacturers’ key advantage was their sales volume. H-D’s single-segment focus and concentration on the US market meant that it produced a much smaller volume of bikes than any of the Japanese producers. The most striking comparison was between H-D and Honda: H-D’s total of 291,000 bikes in 2003 was dwarfed by Honda’s 5 million bikes in the same year. These volume differences have important implications for Harley’s ability to access economies of scale and for its vulnerability to factors influencing its dominant market—the US market for heavyweight motorcycles.

In addition, Harley lacked the diversification of its rivals. Honda, BMW, and Suzuki are important producers of automobiles and more than one-third of Yamaha’s turnover comes from boats and snowmobiles. These companies could benefit from sharing technology, engineering capabilities, and marketing and distribution know-how between their automobile and motorcycle divisions. In addition, sheer size conferred greater bargaining power with suppliers.

Also, Harley was facing competition from other specialists producing retro-styled cruiser bikes. In recent years Excelsior, Polaris (Victory) and Big Dog had all entered Harley’s markets during the late 1990s, but with only limited success to date.

Appendix 2 gives profiles of several competitors of Harley, while table 8.4 shows price comparisons.

■ MEETING THE CHALLENGES OF TOMORROW ■

As Bleustein reviewed Harley’s Strategic Plan for Sustainable Growth which was the roadmap for the company’s continued development for the remainder of the decade, he was satisfied that the plans for capital expenditure, investments in new product development, and proposals for strengthening Harley-Davidson’s brand represented a cautious and well-judged approach to Harley’s future development that was firmly grounded in the experience accumulated over the previous two decades. In terms of a systematic approach to developing Harley’s differentiation advantage, while working strenuously to contain costs, Bleustein saw the company as having all its bases covered. What concerned him were the possible potholes that the company might encounter on the road forward. In Donald Rumsfelt’s words, what were the “unknown unknowns” that might throw Harley-Davidson off course?

In thinking through Harley’s possible vulnerabilities, he grappled with some of the implications of a strategy that emphasized selling an experience rather than selling a product. The problem of selling experiences was that they were dependent upon the social and psychological identity and aspirations of the customer. Were the values embodied in the "Harley Experience" universal and enduring or were they the result of a cultural, social demographic phenomena that were particular to the United States during the past two decades? To date, the market had absorbed Harley’s additional production with no signs of indigestion. Would an additional 100,000 motorcycles per year be absorbed just as willingly, or would the very ubiquity of Harley bikes undermine the individuality that was closely linked to “The Experience”? While H-D’s marketing emphasized the experience of motorcycling, Bleustein was acutely aware that purchasing a Harley was, for many of its owners, more a statement of style than a desire to ride the great American wilderness.

With the baby boomers graduating from motorcycles to retirement homes, the US market for heavyweight motorcycles looked vulnerable. In a declining market, not only would the intensity of competition increase, but Harley’s ability to maintain its market share would depend

increasingly on its ability to recruit new and younger customers. To date, Harley had had little success in selling to younger markets. Similar, comments could be made about Harley's other potential growth market—overseas. For all its efforts and building distribution and marketing efforts outside the US, Harley's overseas performance had been patchy: very successful in Japan, but only modest sales growth in Europe.

APPENDIX 1

Harley-Davidson, Summary of Financial Statements, 1994–8

APPENDIX 2

Harley-Davidson's Competitors

■ HONDA ■

Honda Motor Co. has been manufacturing motorcycles since 1947 as a second tier player in an expansion cycle of the Japanese motorcycle industry given the need for cheap transportation means after World War II. The company entered the US market in 1959, first with cheaper, lightweight bikes, before quickly moving into the higher-priced segments such as performance and touring bikes. The company leveraged the experience obtained in its domestic market in advertising and distribution in its entrance to the US. Given its initial dependency on an exclusive dealership network in Japan, it decided to go directly to retailers. Moreover, it invested heavily in advertising directly to consumers, which gave Honda excellent results in its domestic market.²⁸ It achieved an extraordinary growth in the US market, increasing sales from \$500 million in 1960 to \$77 million in 1965 and shared with Yamaha and Suzuki 85 percent of the US market by 1966.²⁹ Honda has been the world's largest motorcycle manufacturer since 1959, with 5,190,000 bikes produced in 2000 (vs. 54,000 made by BMW and 204,592 made by Harley).³⁰ The company holds 26.5 percent of the total US motorcycle market, and enjoys the number one market share position. The firm's motorcycle sales have grown by 20 percent in 1999, reached 296,479 American Honda units sold in the US in 1999 (20 percent increase) compared to 158,817 sold by Harley, and 174,376 motorcycles in year 2000 (a record 34.5 percent increase) in an industry in which sales grew 27.3 percent.

Honda Motor's worldwide sales reached 5.16 million motorcycles in year 2000 and the company has the objective of achieving the 7 million mark by March 2004.³¹ Worldwide sales have increased by approximately 20 percent and the decline in unit sales in Japan and Europe has been more than offset by the volume growth in Asian countries (specially India, Indonesia, and Thailand), as well as in North America.³² Honda is the Japanese car and motorcycle manufacturer most dependent on the US market. Above 50 percent of its consolidated revenues in year 1999 derived from its US operations.

Honda is a superior engineering company and its motorcycles have traditionally been "on the leading edge of technology."³³ "Honda is, above all, an engine company,"³⁴ and the world's leader in four-stroke technology. The firm was capable of transferring these capabilities into a broad product offering (motorcycle, automobiles, and power products). Its performance bikes have dominated motorcycle racing for decades and are associated with the world's greatest racers. The innovations achieved from racing were adapted to its motorcycle products. In the early 1970s the company also had great success with street and touring bikes with the introduction of the style-setting CB750K0 in 1969 and the Goldwing, the world's first long-distance touring bike, in 1975.³⁵ Honda's capabilities of product innovation together with heavy investment in R&D, economies of scale, and efficient distribution enable it to develop technical superiority at a lower price. The firm has also committed the largest advertising budget in the industry and established, from early on, the largest dealership network in the US.³⁶ Its scale advantage together with high growth rates resulted in superior productivity that was translated into lower prices. Honda has experienced steep

learning curves of 75–87 percent that enable the company to achieve real price reductions of around 50 percent or more over time.³⁷

■ YAMAHA ■

Yamaha Motor Company was established in 1955. Its first product was a 125cc two-stroke motorcycle. By 2003 it was producing 2.6 million motorcycles a year—with scooters forming a major portion of its sales. Motorcycles made up about 55% of sales revenue, Yamaha other products were watercraft, power products (including all-terrain vehicles and marine engines), and swimming pools. Yamaha's biggest market was south-east Asia where it owned motorcycle manufacturing plants in China, Indonesia, Vietnam, Thailand, and India. Yamaha has a long history of designing and manufacturing V-twin heavyweight cruisers. Its Virago 750cc V-twin was introduced into the US in 1981 and was a leading seller for almost 20 years. Model. The Yamaha Road Star is designed to compete directly with Harley's retro-look cruisers. The Road Star 1600 with its 1600cc V-twin engine has the biggest engine in this category of motorcycles. Yamaha is known for its advanced motorcycle technologies. It introduced the first 5-valves per cylinder motorcycle engine, the first 4-stroke mass-production motocross bike, and the Yamaha Induction Control System for increased fuel efficiency.

■ EXCELSIOR HENDERSON MOTORCYCLE MANUFACTURING COMPANY (EXCELSIOR) ■

In the early 1990s two brothers, Dave and Dan Hanlon, bought the trademarks to a pre-war motorcycle manufacturer, Excelsior and Henderson. Formed in 1876, Excelsior Supply Co. was one of the top three US motorcycle manufacturers at the turn of the century along with Indian Motorcycle and Harley-Davidson. Its motorcycle was the first to break the 100 mph barrier. The company was liquidated during the Depression in 1931 and ever since the Hanlon brothers have been trying to resuscitate its image by manufacturing, marketing, and selling cruisers and touring bikes under the Excelsior brand name evoking "an authentic American motorcycling heritage and lifestyle".¹⁶

The Hanlons have developed a prototype of a retro-style cruiser with the latest technology and accessories, such as electronic fuel injection, a four-valve cylinder, and an overhead cam engine, named The Super X, to be sold at a sticker price between \$17,000 and \$20,000.

With no revenue generation and with reported losses of \$5.9 million and \$2.5 million in 1997 and 1996 respectively, the firm went public in 1997, raising \$28 million in proceeds. These IPO funds, together with a \$1.7 million State of Minnesota equipment financing bond, financed the construction of the company's new administrative and manufacturing facility in Belle Plain, Minnesota. Production started in 1998 (with 5,500 units of backorders), to be stopped in late 1999 when the firm filed Chapter 11 bankruptcy protection.

E. H. Partners, Inc. acquired the firm from Chapter 11 in September 2000 (the firm's public stockholders and founders did not retain an equity interest) and announced a reorganization plan that consisted in its restructuring, no manufacturing during 2001, and resuming motorcycle production for the 2002 year with the complete re-launch of the firm. Moreover, its dealership networks, owing to lack of support from the firm, have lost huge amounts in warranty repairs not reimbursed and the current availability of parts is almost terminated.

■ POLARIS ■

A leading snowmobile (world's largest manufacturer), ATV (all-terrain vehicle), and personal watercraft maker since the 1950s, and currently one of the largest US manufacturers, the firm has past success with taking on Japanese competitors. In the early 1990s, Polaris entered the personal watercraft and the ATV markets, both dominated by Japanese competitors – Kawasaki and Honda respectively. Since then, Polaris has gained the number two market share in ATV sales (37 percent of revenue), and challenged Kawasaki's dominance of the personal watercraft market by gaining significant market share and brand recognition.

Polaris launched a new cruiser, the Polaris Victory, in the spring of 1998 with a retro look and new technology, and targeting the high-margin, high-growth cruiser market dominated by Harley. High-tech

engineering has “eliminated some of the noise and vibration associated with a Harley.”¹⁷ The Victory was positioned to compete with technologically advanced Honda, Suzuki, Kawasaki, and Yamaha cruisers on a price level above Japanese models. Polaris “competes with Japanese on price, quality, and technology.” The company stresses its “made in the USA” appeal to attract customers away from these foreign competitors and is counting on its previous experience making personal watercraft and ATVs to beat the competition. According to CEO Wendel, “We met these guys in snowmobiles and ATVs and we beat their asses off.”¹⁸

Polaris is a very efficient and aggressive company with high-tech manufacturing capabilities and a combined distribution network of 2,000 dealers for all of its products (Victory Motorcycles are available at 300 dealers in the US, Canada and the UK). It reported a twelfth consecutive year of record net income. Net income for 2000 totaled \$82.8 million (8 percent increase) and sales totaled a record \$1,425.7 million (7 percent increase).

The firm entered the motorcycle industry leveraging its resources and capabilities: large distribution network, cross-selling opportunities, engineering and manufacturing capabilities, and low production costs. Engineering of the new cruiser was performed in-house, lowering development costs. Production and assembly takes place at two plants that had extra capacity, and the firm reaches break-even at 4,000 motorcycles per year (3 percent of the current cruiser market). Victory motorcycles sales more than tripled in 1999 and grew by 50 percent in year 2000.

Polaris anticipates becoming a significant player in the motorcycle market, developing a line of touring, cruiser, and performance bikes with projected sales of \$500 million by 2003 and expanded capacity of 40,000–50,000 per year.¹⁹ Polaris is known as an efficient, low-cost manufacturer.

■ TRIUMPH ■

Triumph,²⁰ a British manufacturer, began motorcycle production in 1902. By 1909 the company was producing 3,000 bikes per year and by the 1950s became one of the world’s most renowned motorcycle brands (in part thanks to its appearance as Marlon Brando’s bike in the classic movie *The Wild One*).

However, by the 1970s the company faced financial problems and was forced to liquidate in 1983. Primarily due to the efforts of its current head, John Bloor, the company revived in the early 1990s and began development and production of new models. In 1996 the company surpassed the 50,000 bikes production level (touring, cruisers) and unveiled plans to introduce a new performance motorcycle.

“Triumph is the greatest name, and only survivor, of the once internationally dominant British motorcycle industry.” Triumph is about glamour and rebellion, about speed and performance. The company’s most popular model (25 percent of production capacity) is a cruiser, Thunderbird. Thunderbird’s styling is similar to that of the 1960s Triumph model with the same name and the bike is positioned to capture a part of the lucrative heavyweight cruiser market.

■ BMW ■

Even though motorcycles made only about 2.6 percent of total BMW sales income in 2000,²¹ the company is committed to supporting and developing its line of bikes. With annual 2000 sales of 74,614 bikes, the company exported 69 percent of its motorcycles abroad, comparing to the 66 percent in 1999.

BMW Motorcycles celebrated its 75th anniversary in 1998 and its bikes have led the way to technical innovation, pioneering such things as advanced suspension systems, anti-lock brakes, and fuel injection.²² Because of these technological innovations, BMW motorcycles have lower operating costs than the competition. In a comparison of Kawasaki and BMW touring bikes, the California Police Department estimated an operating cost of 1.9 cents per mile for the Kawasaki model tested, compared to an operating cost of 1.7 cents per mile for the BMW model tested.²³ The company has always been associated with a high technical and quality standard, and its motorcycles are also known for reliability, safety, and comfort.

BMW offers a full line of performance, touring, and cruiser bikes. Recently it has introduced its new concept model C1, which is designed to unite the mobility of the bike with safety of the car. The first cruiser, BMW R1200C, was introduced in 1997 as part of the latest James Bond movie, *Tomorrow Never Dies*,²⁴ and became BMW’s best-selling bike in its first model year.²⁵ R1200C includes the latest technological innovations and safety features; however, it departs from the retro look favored by other producers. In creating the bike, BMW assumed that in the future “high performance cruisers will replace

retro-look customs with a sportier look and feel.”²⁶ The R1200C was the first in this category. At a price of \$14,500, the cruiser is priced about \$1,000 below the range of comparable Harley models providing superior features such as anti-lock disk brakes, superior acceleration technology, and liquid-cooled engine.²⁷ Half of R1200C buyers are those who already own a Harley, and the other half are those who own a Japanese motorcycle.

BMW introduced the new luxury touring model K1200LT in 1999. This model also represents the “new” design concept of the modern look. Comparing to the competing models it offers superior comfort and user friendliness.

BMW motorcycles are positioned as a source of “undeniable pleasure and excitement of riding”. The underlying idea is that BMW should provide the functionality of the bike with improved comfort and reliability features. In order to achieve this goal the company leverages the innovative car-building technologies of its 70,000 sq. feet R&D campus in Munich. As a result, BMW motorbikes have anti-block braking system (ABS), close-to-car comfort seats as well as enhanced cooling and battery systems to increase reliability of the engine during various riding conditions. Most of the BMW motorcycles are manufactured in the single plant located in the vicinity of Berlin. During the last year the plant was expanded to 2,400 workers (additional 320) to achieve the capacity of 400 items per day. A new C1 model is currently being built in the Carrozzeria Bertone factory.

NOTES

1. Boston Consulting Group, “Strategy alternatives for the British motorcycle industry,” Her Majesty’s Stationery Office, London, July 30, 1975; quoted in Richard T. Pascale, “Perspectives on strategy: the real story behind Honda’s success,” *California Management Review*, March 23 (Spring 1984), 47–72.
2. Peter Reid, “How Harley beat back the Japanese,” *Fortune*, September 25, 1989.
3. Gary Strauss, “Born to be bikers,” *USA Today*, November 5, 1997.
4. Marc Ballon, “Born to be wild,” *Inc*, November 1997, p. 42.
5. Harley-Davidson, Inc. Annual Report, 2000.
6. <http://www.harley-davidson.com/experience/family/hog>.
7. *Motorcycle* magazine, 1998.
8. Marco R. della Cava, “Motorcycle maker caters to the continent,” *USA Today*, April 22, 1998.
9. *Ibid*.
10. Kevin R. Fitzgerald, “Harley’s supplier council helps deliver full value,” *Purchasing*, September 5, 1996.
11. Ann Millen Porter, “One focus, one supply base,” *Purchasing*, June 5, 1997.
12. Kevin R. Fitzgerald, “Harley’s supplier council helps deliver full value,” *Purchasing*, September 5, 1996.
13. Stephen Roth, “Harley’s goal: unify union and management,” *Kansas City Business Journal*, May 16, 1997.
14. Clyde Fessler (H-D VP for Business Development), “Rotating leadership at Harley-Davidson: from hierarchy to interdependence,” *Strategy & Leadership*, July 17, 1997.
15. *Ibid*.
16. “Excelsior Henderson selects J. D. Edwards to provide smooth ride to growth,” *Business Wire*, March 24, 1998.
17. Macario Juarez, “City business to help debut American Harley rival,” *Albuquerque Tribune*, December 18, 1997.
18. Paul Klebnikov, “Clear the roads, here comes Victory,” *Forbes*, October 20, 1997.
19. Strauss, “Born to be bikers.”
20. <http://www.georgian.net/rally/triumph>.
21. <http://www.bmw.com>.
22. Richard Truett, “Motorcycling has long run in the BMW family,” *The Orlando Sentinel*, March 5, 1998.
23. John O’Dell, “Giving chase: BMW wants to break Kawasaki’s and Harley’s hold on the police market,” *Los Angeles Times*, September 21, 1997.
24. “BMW in control with Bond bike cruiser,” *The San Diego Union Tribune*, March 14, 1998.
25. Truett, “Motorcycling has long run in the BMW family.”

26. Adrian Blake, "Two motorcycle giants celebrate anniversaries," *The Toronto Star*, April 11, 1998.
27. Comparison of dealer suggested retail prices in the table 8.4.
28. Honda (B) Harvard Business School.
29. Honda (A) Harvard Business School.
30. <http://www.honda.com>; <http://www.bmw.com>; and table 8.1.
31. American Honda Reports Record Motorcycle Sales For 2000, February 2, 2001 (www.americanmotor.com).
32. Honda's Q2 2000 Motorcycle Sales Up-Overall Net Income Down November 16, 2000 (www.americanmotor.com).
33. Blake, "Two motorcycle giants."
34. American Honda Reports Record Motorcycle Sales For 2000, February 2, 2001 (www.americanmotor.com).
35. Ibid.
36. Honda (A) Harvard Business School.
37. Ibid.
38. Valerie Morris, "Ducati's market challenge," *Business Unusual*, CNN, April 17, 1998.
39. <http://www.bigdogmotorcycles.com>.

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Table 8.1 Annual production of motorcycles by Harley-Davidson

<i>Year</i>	<i>Production</i>	<i>Year</i>	<i>Production</i>
1901	3	1990	62,500
1903	150	1992	76,500
1913	12,904	1994	95,811
1920	28,189	1995	105,104
1933	3,700	1996	118,771
1936	9,812	1997	132,285
1948	31,163	1998	150,818
1953	14,050	1999	177,187
1966	36,310	2000	204,592
1975	75,403	2001	234,500
1981	41,586	2002	263,700
1986	36,700	2003	291,147

Source: www.harley-davidson.com.

Table 8.2 Harley-Davidson's motorcycle registrations (1993–2003)*

	1995	1996	1997	1998	1999	2000	2002	2003
<i>United States</i> (total)	163,100	178,500	205,400	246,200	297,800	363,400	442,300	461,200
Harley-Davidson	77,800	86,800	101,200	119,400	146,000	168,300	209,900	228,400
Market share (651+cc)	47.7%	48.6%	49.3%	48.5%	49.0%	46.3%	47.5%	49.5%
<i>Europe</i> (total)	207,200	224,700	250,300	270,200	306,700	293,400	331,800	323,100
Harley-Davidson	15,400	15,300	16,100	17,300	19,900	21,800	23,500	26,300
Market share (651+cc)	7.4%	6.8%	6.4%	6.4%	6.5%	7.4%	7.1%	8.1%
<i>Japan/Australia</i> (total)	39,400	37,417	58,880	69,200	63,100	62,700	63,900	58,900
Harley-Davidson	7,900	8,400	10,100	10,800	12,300	12,900	13,600	15,200
Market share (651+cc)	20.1%	22.4%	17.2%	15.6%	19.6%	20.5%	21.2%	25.8%

*Includes Buell.

Source: www.harley-davidson.com.

Table 8.3 Market shares in heavyweight motorcycles (651cc+), 2000 and 2003 (%)

	North America		Europe		Japan/Australia	
	2003	2000	2003	2000	2003	2000
Harley-Davidson	48.1	46.3	8.1	7.4	25.8	20.5
Honda	18.6	19.1	16.7	21.8	17.8	21.8
Kawasaki	7.1	9.1	10.0	9.4	13.8	18.9
Suzuki	10.3	9.5	15.5	14.3	10.7	10.4
Yamaha	9.1	9.0	16.0	17.3	11.4	17.0
BMW	2.8	3.2	15.3	13.0	6.2	4.0
Ducati		1.9	6.0	6.3	6.6	4.6
Triumph		—	3.7	4.2	—	—
Other	4.0	1.9	8.7	6.3	7.7	4.2

Source: Harley-Davidson *Annual Report*, 2000, 2003.

Table 8.4 Heavyweight motorcycles: price comparisons, 2004

Manufacturer and model retail price (\$)	Engine	Recommended
<i>Harley-Davidson</i>		
XL 800 Sportster	V-twin, air-cooled, 883cc	6,495
Fat Boy FLSTF	V-twin, air-cooled, 1,540cc	16,245
V Rod VRSCB	V-twin, liquidr-cooled, 69 cu. in	17,295
Heritage Softail Classic	V-twin, air/c, 1,450cc	17,580
(tone)	H-D Ultra Classic Electra GlideV-twin 1,450cc, injection (2-	20,405
<i>Honda</i>		
Shadow Spirit	V-twin, OHC, 705cc	5,999
VTX1300	V twin, liquid cooled, 1300cc	9,199
VTX1800	V twin, liquid cooled, 1800cc	12,599
<i>Suzuki</i>		
Marauder 800	V-twin, liquid-cooled, OHC, 805cc	5,999
Intruder 1400	V-twin, air-cooled, 1,462cc	8,399
Marauder 1800	V-twin, liquid-cooled, OHC, 1800cc	10,999
<i>Kawasaki</i>		
Vulcan 800	V-twin, 8-valve, OHC	6,499
Vulcan Classic	V-twin, air-cooled, 1,470cc	8,999
<i>Yamaha</i>		
V Star Classic 1100	V-twin, OHC, 1100cc	8,349
Road Star Warrior	V-twin, OHC air cooled, 1670cc	12,099
<i>BMW</i>		
R1200 Classic	Liquid-cooled, double OHC, injection 1,170cc, horizontal twin, air-cooled	8,100 14,650
BMW R1200 Tourer	1,170cc, horizontal twin air-cooled	16,250
<i>Polaris</i>		
Victory Classic Cruiser	V-twin, 4-valve OHC, 1,507cc	13,699

Source: [Company](#) websoted

Table 8.5 Harley-Davidson shipments 1997–2003 (thousands of motorcycles)

	1997	1998	1999	2000	2001	2002	2003
<i>Motorcycle shipments</i>							
United States (,000s)	96.3	110.9	135.6	158.9	188.3	215.7	242.9

Export (,000s)	36.1	39.9	41.6	45.8	46.2	48.0	48.2
<i>Motorcycle product mix</i>							
Sportster	23.8%	22.5%	23.6%	22.6%	21.7%	19.4%	19.7%
Custom	53.5%	51.3%	49.6%	49.3%	49.8%	46.9%	46.7%
Touring	22.8%	26.2%	26.8%	28.1%	27.9%	26.8%	28.4%
VRSL	--	--	--	--	0.7%	6.8%	5.3%
<i>Buell motorcycle shipments</i>							
Worldwide (,000s)	3.1	5.5	6.8	6.9	9.9	10.9	10.0

Source: Harley-Davidson Annual Reports **Table 8.6** Harley-Davidson's sales of parts, accessories, and general merchandise, 1990–2000 (\$ million)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Parts and accessories	103.6	127.8	162.0	192.1	210.2	241.9	297.1	362.6	447.9	509.6	629.2	712.8
General merchandise	52.1	71.2	94.3	100.2	90.7	95.1	114.5	132.7	151.4	163.9	231.5	211.4

Source: Harley-Davidson financial statements (www.harley-davidson.com).

Table 8.7 Harley-Davidson's main facilities, 2004

Location	Function	Square feet
<i>Wisconsin</i>		
		Milwaukee
	Corporate headquarters	515,000
Milwaukee sales, R&D	parts/accessories	
Wauwatosa	Product Development Center	397,000 Wauwatosa
	Engine manufacturing	422,000
Menomonee Falls	Engine/transmission	
	Production	479,000
Franklin	Parts/Accessories	
	Distribution Center	250,000
Tomahawk	Fiberglass parts	
	production/painting	
<i>Pennsylvania</i>		
assembly plant, parts		York Final
	and painting	1,331,000
<i>Missouri</i>		
Kansas City	Manufacturing, painting	330,000
<i>Brazil</i>		
Manaus	Manufacturing	30,000

Source: Harley-Davidson 10K I Report, 2003

Table 8.A1 Harley-Davidson: Selected items from financial statements, 1994–2000 (\$ million, except per-share data)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<i>Income statement</i>										
Net sales 1,159	1,350	1,531	1,762	2,064	2,453	2,906	3,407	4,091	4,624	
Gross profit	358	411	490	586	691	836	991	1,153	1,418	1,666
R&D	28.1	30.3	37.3	53.3	58.7	70.3	75.8			
Selling, admin., engineering	204	234	269	329	377	448	513.0	552	639	684
Operating income	153.6	180.8	228.4	270.0	333.6	415.8	515.0	663	883	1,149
<i>Of which:</i>										
Financial services	—	3.6	7.8	12.4	20.0	28.0	37.2	61	104	168
Interest income	1.7	0.1	3.3	7.9	3.8	8.0	17.6	17	17	23
Other	1.2	(4.9)	(4.1)	(1.6)	(1.2)	(3.1)	16.0	(7)	(13)	(6)

income/(expense)										
Income before taxes	156.4	176.0	227.6	276.3	336.2	420.8	548.6	673	886	1,166
Provision for income taxes	60.2	64.9	84.2	102.2	122.7	153.6	n.a.	236	306	405
Net Income	104	112	166	174	213	267	348	438	580	761
Earnings per share (diluted)	\$0.62	\$0.73	\$0.94	\$1.13	\$1.38	\$1.73	\$1.13	\$1.41	\$1.90	\$2.50
<i>Balance sheet s</i>										
Cash and cash equivalents	59	31	142	147	165	183	419	n.a.	281	812
Finance receivable (current portion) net	—	170	184	249	319	355	581	n.a.	856	1,002
Accounts receivable, net	143	134	141	103	113	102	98	n.a.	109	112
Inventories	173.4	84.4	101.4	117.5	155.6	168.6	191.9	n.a.	218	208
Total current assets	406	337	613	704	845	949	1,297	n.a.	2,067	2,729
Property, plant, equipment	263	285	409	529	628	682	—	n.a.	1,033	1,046
Total assets	739	1,001	1,230	1,599	1,920	2,112	2,436	n.a.	3,861	4,928
<i>Liabilities & stockholder's equity</i>										
<i>Current liabilities</i>										
Current portion of debt	18	3	9	91	147	181	89	n.a.	383	324
Accounts payable	64	103	101	106	123	138	—	n.a.	227	224
Total current liabilities	216	233	251	362	468	518	498	n.a.	990	956
<i>Non-current liabilities</i>										
Debt	0	164	258	280	280	280	355	n.a.	380	670
Other long-term liabilities	90	109	70	62	67	65	97	n.a.	123	86
Post-retirement benefits	n.a.	n.a.	66	68	72	76	81	n.a.	105	127
Total stockholders' equity	433	495	663	827	1,030	1,161	1,406	n.a.	2,233	2,958
Total liabilities & stockholders' equity	739	1,001	1,230	1,599	1,920	2,112	2,436	n.a.	3,861	4,923
<i>Cash flows</i>										
Operating activities	81	169	228	310	318	416	565	750	776	936
Capital expenditures	(95)	(113)	(179)	(186)	(183)	(166)	(204)	(290)	(324)	(227)
Total investing activities	(97)	(188)	(214)	(406)	(340)	(300)	(171.0)	(764)	(1,014)	(485)
Financing activities	(3)	(10)	96	102	40	(98)	(158)	34	80	81
Net increase in cash	(18)	(26)	(111)	5	(18)	18	236	20	(158)	532

Source: Harley-Davidson financial statements (www.harley-davidson.com).

Table 8.A2 Comparative financial data for Harley-Davidson, Honda and BMW (\$ million, except per-share data)

	HONDA	YAMAHA MOTOR	BMW	HARLEY-DAVIDSON
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	2003	2002	2003	2002	2003	2002	2003	2002
Revenue	67,479	55,253	8,454	7,138	52,122	44,316	4,624	4,091
Gross profit margin	34.9%	34.2%	28.3%	25.9%	22.7%	25.4%	40.3%	39.0%
SGA expense	15,845	12,660	1,825	1,571	7,634	7,716	774	725
Operating income	5,837	4,798	565	281	4,209	3,541	892	693
Net income after tax	3,614	2,722	216	61	2,444	2,117	761	580
Net margin	5.4%	4.9%	2.5%	1.0%	4.7%	4.8%	16.5%	14.2%
Operating income/total assets	9.0%	9.2%	9.7%	10.5%	5.5%	8.2%	18.1%	17.9%
Return on equity	16.2%	14.1%	13.3%	5.8%	12.1%	14.6%	25.7%	26.0%
Operating cash flow	5,825	5,628	703	591	9,880	7,599	936	780
Cash flow from investing activities	(9,088)	(6,653)	(329)	(352)	(14,097)	(10,182)	(485)	(1,018)
R&D expenditure	3,698	n.a.	486	n.a.	2,694	n.a.	150	n.a.
Advertising expenditure	1,987	n.a.			n.a.	n.a.	51	n.a.
Employees	126,900	n.a.	32,066		104,342	n.a.	8,800	n.a.

Source: www.hoovers.com