QM 330 MIS COURSE
Running Case Study
USA Dirt Bikes Company
By
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Software requirements:  
Spreadsheet software (MS –Excel)  
Word processing software (MS- word)

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Dirt Bikes USA is a small company headquartered in Carbondale, Colorado that manufactures and sells its own brand of off-road motorcycles. It was founded in 1991 to produce dirt bikes that could be customized for racing and off-road recreational riding using the best quality components and parts from all over the world. The company has continued to grow and now faces a new set of challenges and opportunities.

You have been asked to serve as a consultant to apply your information systems knowledge to help Dirt Bikes solve some of the problems it is encountering.

Company history

Dirt Bikes USA was founded in 1991 by Carl Schmidt and Steven McFadden, two young but experienced bikers with engineering backgrounds who saw that dirt bikes were becoming very popular in the United States as both sporting and racing motorcycles. They developed frames for dirt bikes that were more suited to off-road handling and started using these frames to build their own dirt bike models using motorcycle engines manufactured by other companies, such as Honda and Rotax Motors of Austria. Riding on one of their customized dirt bikes, Steven finished first in the famous Barstow to Las Vegas race. There was so much interest in Carl and Steve’s bikes that they decided to open a production facility that could manufacture large numbers of their dirt bikes for the retail market. They opened a small production facility in Carbondale which has since expanded to house 120 workers involved in production, design, and engineering and a corporate sales and administrative staff of close to 20
employees. Over the years Dirt Bikes USA has enhanced and expanded its product line to include dirt bike models optimized for racing and for off-road recreational use. Its racing models have placed well—and often placed first—in the many dirt bike races staged throughout the United States, including the Barstow-Las Vegas race and competitions at Daytona Bike Week.

**Organization Chart and Employees**

Dirt Bikes USA is still privately owned with Carl serving as CEO and Steven as President and Chief Operating Officer. About 120 employees work in design, engineering and production, including 3 full-time product designers and 3 engineers. In addition to a 4-person parts department, Dirt Bikes maintains a ten-person service department to service warranties and customer problems with parts and motorcycle performance. Five employees work in Dirt Bikes’ shipping and receiving department. Dirt Bikes’ sales staff consists of a marketing manager and 5 sales representatives, two for the West coast and Western United States, one for the Midwest, one for the Northeast and one for the South. The corporate administrative staff consists of a controller, one accountant, one administrative assistant, two human resources staff members, three secretaries, and two information systems specialists to support systems servicing all of the business functional areas.

The company maintains a very friendly family atmosphere, encouraging teamwork, attention to detail and quality, and continual learning and innovation. Employees, distributors, and retail customers are urged to contribute ideas on how to improve Dirt Bikes’ products and service.

**Products and Services**

Dirt Bikes’ founders realized that the most popular dirt bikes were foreign brands and wanted to capitalize on their proximity to the dirt bikes racing circuit and market in the United States. Carl and Steve hoped they could develop bikes that performed and looked better than the competition by using the best custom parts available. Dirt Bikes does not
hesitate to use quality components from all over the world. The engines for Dirt Bikes are Rotax engines from Austria and tires are from Dunlop, but many of their parts, such as shock absorbers, front wheel forks, exhaust pipes, and headlights, are from the United States. Dirt Bikes makes its own frames, shaping them to give them the unique spirited style for which the company is noted. The company’s parts and service business accounts for about 15% of its total revenue.

Manufacturing and selling dirt bikes is a complex business. Dirt bike racing has many forms, including racing specifically for different size bikes, for short distances, long distance, and even for up to six days. Enduro bikes are for cross-country racing and motocross bikes are specially designed for racing in an enclosed dirt course that can consist of a variety of terrains; uphill, downhill, corners, jumps, and so forth. Dirt Bikes currently produces four models: the Enduro 250, the Enduro 550, the Moto 300 and the Moto 450. The two Enduros are endurance racers, while the Motos are for motocross racing. All four are very modern, with such technology as both kick and electric starters, steering stabilizers, and liquid cooling. The large majority of these bikes are sold in the United States for between $3,250 and $9000 retail. (The Enduro 250 retails for $3250, the Enduro 550 retails for $7600, the Moto 300 retails for $4295 and the Moto 450 retails for $8995.) Dirt Bikes has appealed primarily to serious trail and enduro riders, although it is making inroads into the motocross market.

Sales and Marketing

Dirt Bikes does not sell directly to retail customers, relying on a network of 40 distributors concentrated in the Western and Midwestern United States. A small percentage of Dirt Bikes are sold in Europe using independent distributors that sell other brands of dirt bikes and motorcycles as well as Dirt Bikes. Dirt Bikes’ motorcycles, parts, and service, including warranty repairs, can only be obtained through an authorized Dirt Bikes dealer. All motorcycle and spare parts sales, shipping and set-up must be handled by a certified dealer. If a potential customer lives more than 50 miles from the nearest authorized Dirt Bikes dealer, the customer can purchase a Dirt Bike or Dirt Bike parts through a certified independent motorcycle dealer. Retail customers can purchase spare parts directly from Dirt Bikes only by verifying that they live more than 50 miles from an authorized Dirt Bikes dealer.

Dirt Bikes’ sales department works closely with Dirt Bikes’ distributors. One of its key responsibilities is to aggressively promote Dirt Bikes at dirt bike racing and other events. Many Dirt Bikes employees are dirt bike racing enthusiasts themselves. Several are official company racers representing the company in dirt bike racing competition. Dirt Bikes recently established a Dirt Bikes USA Owners’ Group to promote stronger relationships with customers and to make it easier for them to share their Dirt Bikes USA experiences. Dirt Bikes also advertises in magazines devoted to motorcycle racing and dirt bikes. It uses a small public relations firm to place articles about new company products or racing victories in these magazines. Dirt Bikes also pays for ads in these publications.
Selected Financial Data

A spreadsheets with Dirt Bikes financial data for you to review is provided with this assignment. It is described as follows:

The income statement and balance sheet are the primary financial statements used by management to determine how well a firm is performing. The income statement, also called an operating statement or profit and loss statement, shows the income and expenses of a firm over a period of time, such as a year, a quarter, or a month. The gross profit represents the difference between the firm’s revenue (or sales) and the cost of goods sold. The gross margin is calculated by dividing gross profit by revenues (or sales). Net profit (or loss) is calculated by subtracting all other expenses, including operating expenses and income taxes from gross profit. Operating expenses are all business costs (such as expenditures for sales and marketing, general and administrative expenditures, and depreciation) other than those included in the cost of goods sold. Net margins are calculated by dividing net profit (or loss) by revenues (or sales).

A balance sheet provides a snapshot of a company’s financial assets and liabilities on a given date, usually the close of an accounting period. It lists what material and intangible assets the business owns and what money the business owes either to its creditors (liabilities) or to its owners (shareholders’ equity, also known as net worth). We have included here are only the most important pieces of balance sheet data for you to review. At any given time a business’s assets equals the sum of its liabilities plus its net worth. Current assets include cash, securities, accounts receivable, or other investments that are likely to be converted into cash within one year. Current liabilities are debts that are due within one year. Long-term debt consists of liabilities that are not due until after a year or more. If too much debt has been used to finance the firm’s operations, problems may arise in meeting future interest payments and repaying outstanding loans.

By examining a series of financial statements one can identify and analyze trends in the financial strength of a business. When examining Dirt Bikes’ income statement and balance sheet data, pay special attention to the company’s three-year trends in revenue (sales), costs of goods sold, gross margins, operating expenses, and net income (or loss). Pay attention to whether the company’s short and long-term liabilities are growing and whether they exceed assets. If a company has more current assets than current liabilities, it is a sign that it probably has enough working capital to fund investments in new equipment or information systems.

Dirt Bikes’ management has asked you to prepare a management analysis of the company to help it assess the firm’s current situation and future plans. Prepare a report that addresses these questions:

1. What are the company goals and culture?
2. What products and services does Dirt Bikes USA provide? How many types of products and services are available to customers? How does Dirt Bikes sell its products?

3. How many employees are managers, production workers, or knowledge or information workers? How “flat” or “hierarchical” is the company organizational structure?

4. What kinds of information systems and technologies would be the most important for a company such as Dirt Bikes?

5. Organizational performance: Is Dirt Bikes a profitable company? How well is the company performing financially?

To answer question 5, review Dirt Bikes’ selected financial data in the Introduction to Dirt Bikes: its income statement and summary balance sheet data from 2000-2002

- Use your spreadsheet software to calculate the gross and net margins in Dirt Bikes’ income statements from 2000-2002. You can also create graphs showing trends in selected pieces of Dirt Bikes’ income statement and balance sheet data if you wish.

Here are some questions to think about as you review the income statement and summarized balance sheet data:

- Are revenues (sales) growing and at what rate? What is the cost of goods sold compared to revenues? Is it increasing or decreasing?
- Are the firm’s gross and margins increasing or decreasing?
- Are the firm’s operating expenses increasing or decreasing?
- Is the firm heavily in debt? Does it have assets to pay for expenses and to finance the development of new products and information systems?

Download the Income statement and summary balance sheet data from 2000-2002 from the web site http://www.cba.edu.kw/abo