Dirt Bikes USA
Student Report

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Abstract

This report contains a multitude of reports, analyzes, and other useful aspects for a company called Dirt Bikes USA. This company was founded by two young men, Carl Schmidt and Steve McFadden. They produce and sell dirt bikes to serous racers, as well as recreational riders. In this report, the various reports provide insight into the financial part of the company, allowing them to see how much money is being made, and on which bike. Several reports deal with the customers and their preferences. Others deal with the competitors that Dirt Bikes USA face. Through this document, Dirt Bikes USA will be able to run and more efficient company and make executive decisions for the future of the company.

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Summary

Two men started Dirt Bikes USA, by the names of Carl Schmidt and Steven McFadden. They are both experienced dirt bikers, as well as engineers and took existing dirt bike frames and designed their own bikes. After winning a race, their company took off. The company's goals are similar to any company's goals. They aim to please customers by providing several different models of dirt bikes for every type of customer. Carl and Steven want to make sure the customer feels satisfied when they come to buy a dirt bike or any of their other products. Like other companies, Dirt Bikes USA hope to make a sizable profit over the products and services that are provided.

The products that the company provides are mostly made in the US. Carl and Steven realized, when first starting out this company that people prefer foreign made parts, so they designed their own based off foreign ones. Some of the parts made in the US are: front wheel forks, headlights, shock absorbers, and exhaust pipes. The actual engines are from Austria and made by the company, Rotax, and the tires are from Dunlop. The company, also, provides services to their customers. They offer four different models of bikes, depending on how the customer rides. There are different bikes designed for recreational riding and for racing. Bikes are designed based on the type of terrain they are going to be ridden over.

Over the years, Dirt Bikes USA's number of employees has grown, just as any successful company tends to do. Of these employees, there are the CEO and the COO, which are Carl Schmidt and Steven McFadden. Underneath them, there are three departments; production, administration, and sales and marketing. In production alone, there are over 120 employees. Of all the employees throughout the company, there are three managers. There is a marketing manager, production manager and administration manager. There are also two knowledge and information specialists for the company and their job is to work with the information systems throughout the company. As for levels of management, there are a couple. The employees report to the managers of their department who in return report to the CEO and COO.

Information systems are an essential part of any company. Dirt Bikes needs information systems for each part of the company. This includes sales and marketing, manufacturing and production, finance and accounting and human resources. Sales and marketing systems are important for the company because their main goal is to sell dirt bikes and other parts. By using this particular system, the trends of the sales can be monitored, helping the manager see what sells and what does not. Manufacturing and production systems are vital for the company because they deal with the production of the parts that go to the dirt bikes. Managers use the information from these systems to determine whether they need new manufacturing equipment and they deal with the costs and resources. Finance and accounting systems are important because they deal with the finances of the company. Managers use the information to deal with the investments of the company and the payroll of the employees, among various other things. Human resources systems are also important for Dirt Bike USA because they provide all the information for the employees, such as the allocation and the compensation.

Overall, the Enduro 550 was by far the best selling product. The sales increase every year, except 2005, which it declined some. This can easily been seen below in Figure 1.

Domestic vs. International Sales					
	2001	2002	2003	2004	2005
Domestic	$5,723.00	$6,843.00	$8,254.00	$8,889.00	$8,530.00
International	$528.00	$640.00	$911.00	$889.00	$762.00
TOTAL	$6,251.00	$7,483.00	$9,165.00	$9,778.00	$9,292.00
%International	8.4%	8.6%	9.9%	9.1%	8.2%

Table 1: Domestic vs. International Sales Chart

The worst selling model was the Moto 450, which increased everywhere, but still was always the worst selling, never reaching 1000 units. Domestic sales have always outnumbered the International sales. The biggest percentage of sales, which was International, was 9.9%, in 2003. In 2001, and 2002, International sales increased, and reach the peak in 2003. Then in 2004, and 2005 the sales decreased compared to Domestic. The ratio of Domestic sales to International is about 19 to 2. The chart below shows Domestic v. International Sales within the company.

The Dirt Bikes USA Company creates the most value through advertising. Just like for every firm, it is essential to advertise. The first step in advertising is to make sure to target the right group of people. The company therefore advertises at racing events and in magazines geared towards racing. Another aspect that adds to the value of Dirt Bikes USA is that they recently established a Dirt Bikes USA Owner's Group in order to create stronger relationships with customers. It is easier to share dirt biking experiences this way.

By doing some research online, it becomes apparent that the company has three major competitors: Honda, Suzuki, and Yamaha. The advantages that Honda has over Dirt Bikes USA are slimmed down fuel tanks, wide-ratio gearing, and electric start. The second competitor is Suzuki and the advantages are smooth power delivery and loads of mid-range and lightweight handling. Lastly, Yamaha provides their customers with features such as bikes that are the lightest on the market as well as having lightening quick handling.

There are also different competitive forces that can affect the industry. One force is pro-riders advertising for companies. The company that has the famous racer riding for the firm theoretically brings in more money. Giveaways, contests and apparel are also competitive forces. The company with the most enticing giveaways and apparel will attract more customers, making more money.

There are to things that Dirt Bikes USA can do to raise their comparative advantage. One would be to find famous riders to ride and advertise for their company. This way, there are famous faces associated with the company. This promises customers and racers that the company is a great investment. The second suggestion is to should branch out by making different types of vehicles like ATV's or on road motorcycles. By expanding the company, a wider range of customers are attracted. More products come with this expansion; therefore the amount of products sold goes up, making a better profit.

Honda

Advantages:

Slimmed -down fuel tanks
Wide-ratio gearing
Electric starting

Suzuki

Advantages:

Smooth power delivery
Loads of mid-range
Lightweight handling

Yamaha

Advantages:

Lightweight frame

	Lightening-quick handling

Table 2: Dirt Bike's Competitors

Total Cost of Ownership (TCO) of Desktop Software Assets

When running any business, it is important to have up-to-date software. Having the right software, it enables the company to keep essential records and documents organized. Dirt Bikes needs software that can help them compose word documents, construct spreadsheets, write emails, give PowerPoint presentations ,and manage databases. Option one is Microsoft Office 2007. This software package includes everything needed by the company, along with even more. The features of this software and the price are listed in Figure 3 below. Option 2 is Sun StarOffice. The features required by Dirt Bikes are all present in this software package, along with several others. The features and price are listed in Figure 4.

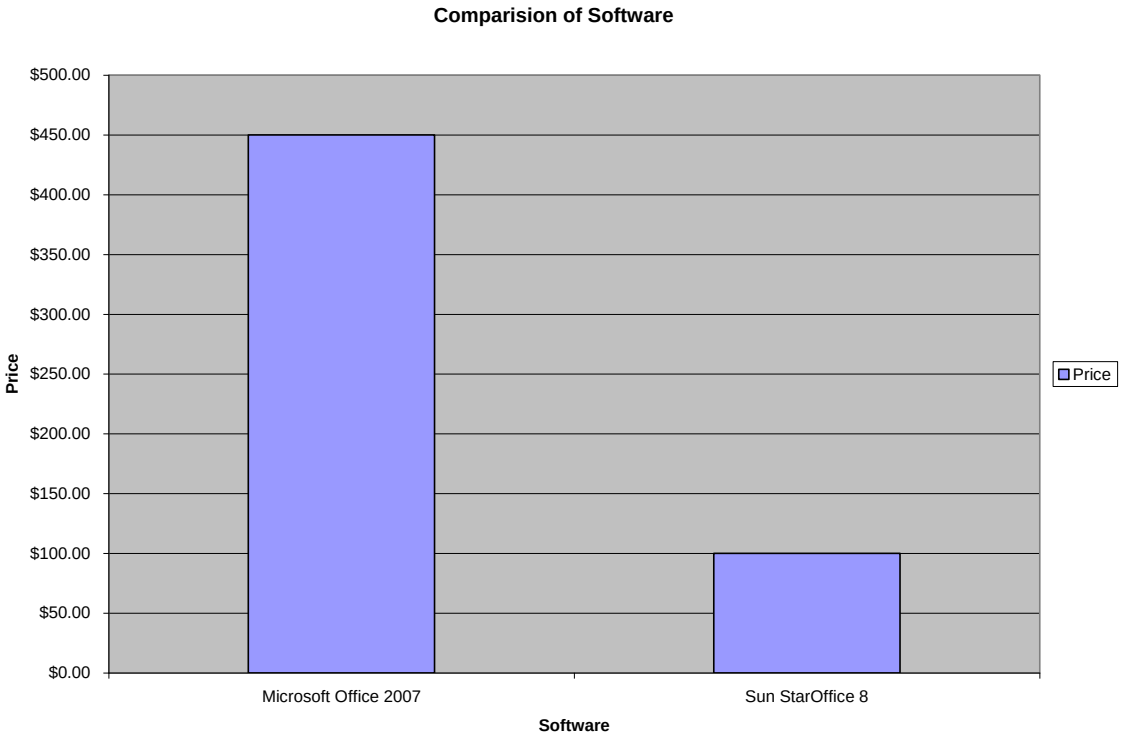
Microsoft Office 2007		
	Features	**Price**
	Office Excel	$449.95
	Office Word	
	Office PowerPoint	
	Office Accounting Express	
	Office Outlook	
	w/ Business Contact Manager	
	Office Publisher	
	Calendar/ Contacting Management	

Table 3: Price Chart for Microsoft Office 2007

Sun StarOffice 8		
	Features	**Price**
	Word Processing	$99.95
	Spreadsheets	
	Presentations	
	Email	
	Databases	
	Drawing Contacts	
	PDF Export	
	X Forms Support	

Table 4: Price Chart for Sun StarOffice 8

Dirt Bikes USA should go with SunStar Office 8. This is the lowest-prices option, as well as the most practical all around. It has all the features it needs for the business to run smoothly. As shown in Figure 5, when compared, Sun StarOffice 8 is the better package to buy.



Graph 2: Comparison of Software

Although Sun StarOffice is by far less expensive, there is more to the final cost than just the cost of the software itself. Additional costs include: installation costs, training costs, annual technical support costs, and annual downtime costs. Since Dirt Bikes USA employees eight people who would need the software, Figure 6 below shows the total costs of the software. The training cost for one year is $800.00. The installation cost is $200.00. The annual tech support cost is $1,079.88. The annual downtime cost is $539.94. Sun StarOffice 8 software costs $799.60. The total cost over all is $6,219.42. After three years of using Microsoft Office, the total cost of three years is $18,658.26.

	Training Costs	Installation Costs	Annual Tech Support Costs	Annual Downtime Costs	Software Cost	Total
One Year	$800.00	$200.00	$1,079.88	$539.94	$799.60	$6,219.42
Three Year	$2,400.00	$600.00	$3,239.64	$1,619.82	$10,798.80	$18,658.26

Table 5: Total Cost Chart

Redesigning the Customer Database

The customer database needed to be updated. In order to reach more clientele, the new database needs to include tables and reports that allow the company to know certain information about the customers. The Marketing Department would also like to be able to keep the customers updated on certain events, such as races and sales, depending on their age, racing style, and their previous purchases. The database that we designed is very simple to use, yet very effective. From the main switchboard of the database, shown below in Figure 7, anyone using this database can add a customer, his or her order, change pricing, company information, and many other functions.

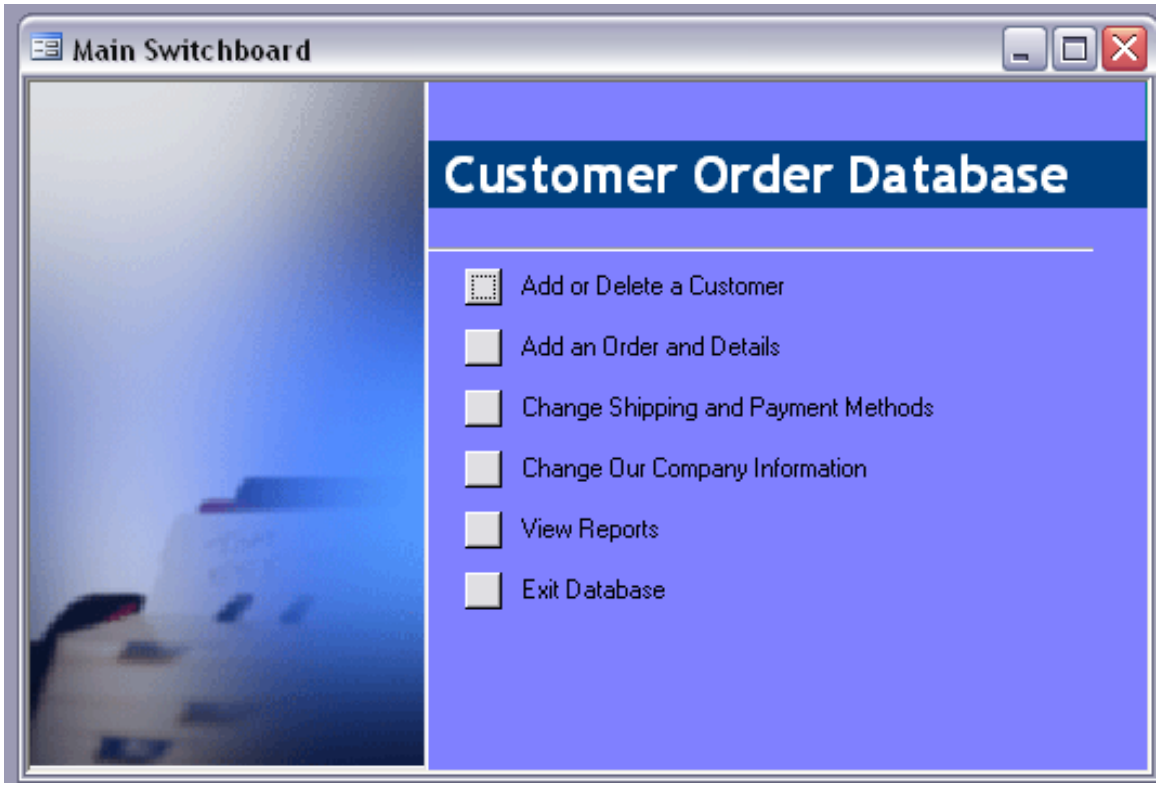


Figure 1: Main Switchboard, Customer Database

A vital aspect to this customer database is being able to view reports. By clicking on the “View Reports” portion of the database, several options are available, as seen below in Figure 8.

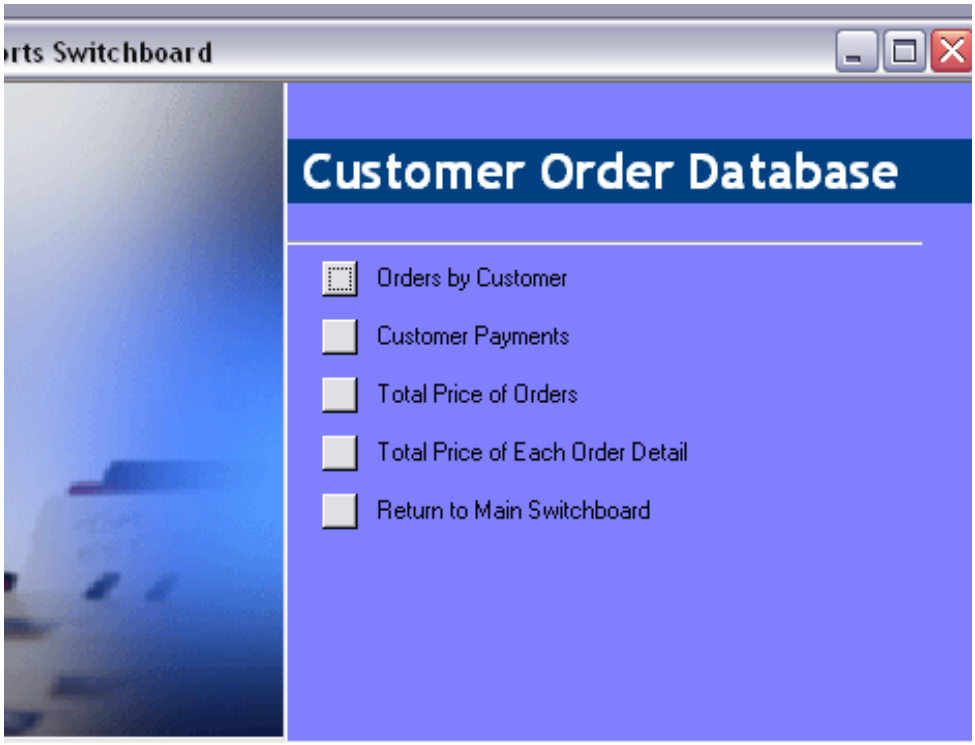


Figure 2: Report Switchboard, Customer Database

Additionally, more reports can be added to better suite the needs of the company. Several reports that may be of need to Dirt Bikes USA are repeat customers, which customers are avid racers, as well as the ages of the customers. Below are some examples of the reports needed by the Marketing Department at Dirt Bikes USA.

Figure 3: Orders by Customers

This report would be a great asset to the company because it is an easily accessible chart that the company can see what was ordered and which customer ordered it. By having this report on hand, any employee of the company can tell right away which is the most popular bike, as well as frequent customers.

Customer Ages and Years in Schooling

First Name	*Last Name*	*Age*	*Years in School*
Luis	Delgado		
Daniel	Higgins		
Howard	Langan		
Mark	Lowe		
Dwight	Mann		
Paul	Mickel		
James	Podell		
William	Porter		
Philip	Stratman		
Gerry	Yates		

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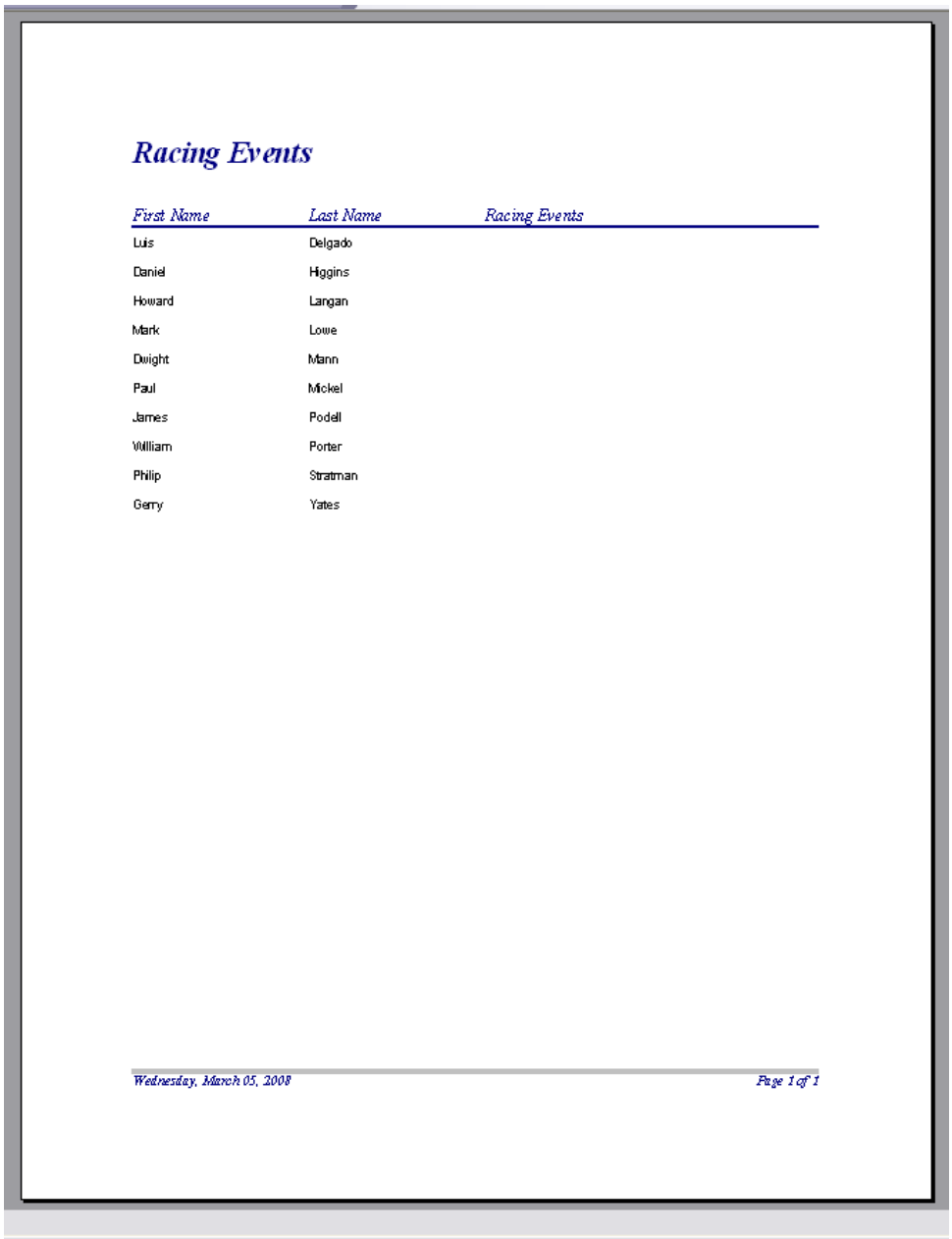
Figure 4: Customer Ages and Years in School

This report of the customer's ages and years in school is important for the company. It enables the company to see where their products are going and see which age groups are doing most of the buying,



Racing Events

First Name	*Last Name*	*Racing Events*
Luis	Delgado	
Daniel	Higgins	
Howard	Langan	
Mark	Lowe	
Dwight	Mann	
Paul	Mickel	
James	Podell	
William	Porter	
Philip	Stratman	
Gerry	Yates	

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Figure 5: Customers' Racing Events

This report allows the viewer to see which races the customers are attending. This information is useful to Dirt Bikes USA because it enables the company to notify customers of when certain racers are being held. This way, customers are aware of races and events that they are interested in attending or racing in.

Using Internet Tools to Increase Efficiency and Productivity

Communication is a vital aspect with any company. Without good communication between employees, the company will not run smoothly, it at all.

This all applies to the Dirt Bikes USA Company; communication is a key way to obtain information more efficiently. There are several internet tools that can assist the employees is making communication more efficient.

One important tool is email. Email is a tool that can be utilized for free. It is fast and simple to use. It is easier to email a large group of people. Since contrast groups can be created. Also, a soon as an employees sends an email, the person on the receiving end can read it almost immediately. Email can be sent anywhere, therefore eliminating any long-distance phone charges. Attaching word documents and forwarding messages are two more advantages to email. Every employee would benefit from email, especially the owners and managers when it is necessary to communicate information to the whole company.

An online chat service is another internet tool that enables more efficient and cost effective communications, both inside and outside of the company. Chat services, such as Instant Messenger, allow two or more people to hold live conversations. Today, most chat services come with video chatting options. This way, two people can almost hold a conversation face-to-face. Again, this is an internet tool that everyone can use and it is a free services. Groupware is a very convenient tool for business conferencing. It allows presentations, meetings, and conferences to be done online. By doing so, not everyone has to be in the same room, or even in the same country. This allows the travel time and cost to decrease sufficiently.

Email

Advantages:

Free
Fast and simple
Instant Receiving
Reaches large groups of people
Sent anywhere
Able to send attachments

Instant Messenger

Advantages:

Free
Simple to use
Face-to-face chatting

Groupware

Advantages:

Online Conferencing
Online Presentations
Less Travel Expenses
Less Travel Time

Table 6: Online Tools

Dirt Bikes USA should take advantage from all three of these internet tools. Instant Messenger does come with some risk though. In the past, it has come up that employees that are given the privilege of using Instant Messenger do not use it strictly for work. Some have been caught using it for personal use. However, when used the correct way, it can be a very helpful tool. Email and Groupware are great assets for the company.

Dirt Bikes USA would benefit greatly from using an intranet. They are more private and secure than just using the Internet alone. Networked applications are created by intranets. These are able to operate on all kinds of computers throughout the company. Firewalls are used to prevent outsiders from entering the network. All departments could benefit from intranets in several ways.

For instance, the sales and marketing department would be able to utilize intranets in a couple different ways. One advantage would be providing important data such as sale leads and statistics. Besides email and search tools, the intranet also allows collaboration within the network. Lastly, the sales and marketing department could use an intranet to provide information and figures on how the company is performing.

Developing a Disaster Recovery Plan

There are always threats to the continued operations of Dirt Bikes's systems, just like with every other company. Threats propose hazards and real problems for everyone in the company. They can even go as far as to completely jeopardize the future of the company. Some of the threats that could potentially harm this company are hackers, viruses, worms, and Trojan Horses.

Hackers are people who gain unauthorized access to a computer system. They are able to do so by finding the weaknesses in the security protection. Hackers steal goods and information, as well as damage the systems. Some of these damages include: intentional, defacement, or destruction of the system. A computer virus is a software program that will attach itself to another software program or data files. By doing so, it enables to virus to work, which can range from minimal damage to highly destructive damage. One example of minimal damage is the repeat display of instructions to display a message. An example of highly destructive damage is completely wiping out a computers hard drive, causing it to be restored. Worms are similar, but do not need to attach themselves to other programs in order to work. Trojan horses will appear to ne harmless, but once downloaded, act completely unexpected and are highly dangerous.

A couple of Dirt Bikes's essential systems are the customer database, ordering database, and the finance system. If these systems could not function like they are suppose to, the whole company would be thrown into complete chaos. All of these systems comprise a huge portion of the company. Without any of the systems, day to day activities and management will be hard to do.

There is no way to know exactly how long the company will survive with the systems down. However, we do know that is just a matter of time until the problems catch up on each other. Therefore, the customer database, ordering database, and the finance system are the most important to have backed up.

Bancorp Recovery Services, Inc.	
	Features: Plan Prepare Test Respond Recover
Sun Microsystems	
	Features: Business Impact Analysis Business Continuity Planning Disaster Recovery Plan Audit Test Configuration Planning

Table 7: Sun Microsystems vs. Bancorp Recovery Services, Inc

As shown in the figure above, there are two disaster recovery systems that Dirt Bikes USA can choose from. Both provide great services. Bancorp Recovery Systems, Inc. has been helping small businesses for years and has excellent customer service. The website, along with the over the phone service are very helpful and easy to use. However, Sun Microsystems is still the better choice for the company. The services are more in depth and provide better customer help.

Identifying Supply Chain Management Solutions

Fulfilling orders on time is becoming increasingly harder for Dirt Bikes. This is due to the delays of obtaining certain parts to the motorcycles, especially their fuel tanks. This is a serious issue because this could lead to loses in sales since customers do not want to wait so long for their orders to be filled. One way to go about this is to find a different fuel tank supplier. Below is a chart comparing two alternative fuel tank suppliers.

JustGasTanks.com	
	Universal Motorcycle Fuel Tank **Features:** 2-inch tunnel 17-inches overall Duel fuel outlets 3.7 gallons All necessary hardware included Shipping Weight: 6lbs. **Cost:** Fuel Tank: $194.79 Shipping: Free **Shipping Time:** Up to one week
JC Whitney	
	Features: All necessary hardware included 1.6 gallons Shipping Weight: 3.5 lbs. **Cost:** Fuel Tank: $130.89 Shipping Cost: $15.49 Total: $146.38 **Shipping Time:** 7-10 Business Days

Table 8: JustGasTanks.com vs. JC Whitney

From the chart above, it is easy to come to the decision to choose the JustGasTank.com as the best supplier of the fuel tanks needed for the motorcycles. The fuel tanks that they offer are better quality than the fuel tanks provided by JC Whitney. The chart above also shows just one of many different kinds of fuel tanks offered by JustGasTank.com. Although theirs way more, they provide much more room than the other one. The shipping time is less than JC Whitney. However, these ones are more cost effective. Based on quality, the higher price is a good trade-off for the better fuel tank.

A great way to incorporate all of this into one place is for the company to invest in good supply chain management software. The figure below compares the features of The Logility Company's Voyager Supply Planning software with Wolin Design Group's da Vinci software.

Logility: Voyager Supply Planning	
	Features: Maximize Probability Cost Effective Solutions Optimizes Sourcing and Decision Making Helps Balance Resources, Constraints and Customer Service Levels Analyses of Customer Orders Evaluate Costs and Revenues
Wolin Design Group: da Vinci	
	Features: Easy Reporting Cost Effective Solutions Free Training Allows Implementation of all or one Applications Optimizes Resources Helps Balance Resources, Constraints and Customer Service Levels Analyses of Customer Orders

Table 9: Voyager Supply Planning vs. da Vinci

The best option between the Voyager Supply Planning software and the da Vinci software is the da Vinci software. First of all, the company does not require the purchase of all the components of the software; a company can choose to buy only certain applications. There are even add-ons to the standard software package. Before the company purchases the product, they are allows to do a demo with employees from Wolin Design Group. If the company is not happy, then they do not have to purchase the software. Once the demo is complete and the company purchases the software, the implementation process begins. The Wolin Design Group comes in and trains all employees on the new software. Once the process is complete, there is still a Help Desk that can answer any questions or fix any problems that may arise.

The actual software package itself provides Dirt Bikes with great services. Da Vinci is a whole database where every part of the ordering, financing, and inventory side of the company can be kept. It allows tracking of the products and shipping aspects. Inventory Management and other reports are easy to access because of the tracking. There are reports for the profit, revenue and costs of Dirt Bikes, as well as management reports. The reports help with the decision making and the everyday success of the company. The software also tries its best to minimize the cost of building the bikes and the all around costs in general. The

Voyager Supply Planning software is a great option, too, but da Vinci provides more services better suited for Dirt Bikes USA.

Developing an E-Commerce Strategy

Dirt Bikes USA would benefit greatly from e-commerce. The internet these days is very widespread. Almost everyone has a computer with internet connection. By having a website, Dirt Bikes would be able to advertise better because it will reach out to many people. Customers will also find it more enjoyable to do their shopping online. There is no pressure to decide right away, and the shopper has a chance to read about all the different kinds of bikes. It also enables them to compare bikes to one another, as well as see pictures of all of them.

It would be a great idea for Dirt Bikes to sell motorcycles and parts online. This way the company has a broader range of products easily available for their customers. Customers will like being able to access all the products right at their finger tips. However, the company should not limit their advertising to the internet. Dirt Bikes should also advertise other places, such as on TV or at racing events. The company would benefit from using the web for customer service, too, but should have a phone number that works. By using just the internet, any customer without access to the website is at a disadvantage. On the other side of the spectrum, some customers will be glad to not have to deal with a phone. By having both forms of customer service, every customer will be satisfied.

Along with the reasons stated above, the value that a website would provide for Dirt Bikes is the added profit it will bring in. Of course there is a cost to using e-commerce, but overall, it should bring in a profit. It allows the company to be more competitive. All big firms have websites for their customers and work really well of it. One e-commerce company that provides excellent services is called NetSuite. It allows a small to medium company to be managed completely on this one software. Some of the services proved include: website and web store building and hosting, built-in analytics and reporting, low-cost customer service, and superior e-commerce marketing tools. In order for the e-commerce software to be a profitable investment for Dirt Bikes, the cost savings need to increase. The increase should be more than the company has made in the past, and then some because of the cost of the e-commerce software.

NetSuite	
	Advantages:
	Managed Completely on on Software
	Website and Web store building and hosting
	Built-in analytics and reporting
	Low-cost customer service
	Superior e-commerce marketing tools

Table 10: Advantages of NetSuite

Analyzing the Impact of Component Price Changes

With the economy in the current state that it is, inflation is becoming an ever increasing problem. The price of the products to build a motorcycle is going up. Below is the Bill of Materials for the Moto 300 Brake System. The prices in the table are the current prices without the costs increasing.

Bills of Materials: Moto 300 Brake System

Component	Component No.	Source	Unit Cost	Quantity	Extended Cost
Brake Cable	M0593	Nissin	$27.81	1	$27.81
Brake Pedal	M0546	Harrison Billet	6.03	2	12.06
Brake Pad	M3203	Russell	27.05	2	54.10
Front Brake Pump	M0959	Brembo	66.05	1	66.05
Rear Brake Pump	M4739	Brembo	54.00	1	54.00
Front Brake Caliper	M5930	Nissin	105.2	1	105.2
Rear Break Caliper	M7942	Nissin	106.78	1	106.78
Front Brake Disc	M3920	Russell	143.80	1	143.80
Rear Brake Disc	M0588	Russell	56.42	1	56.42
Brake Pipe	M0943	Harrison Billet	28.52	1	28.52
Brake Lever Cover	M1059	Brembo	2.62	1	2.62
				Total Materials Cost:	$657.36

Table 11: Bill of Materials: Moto 300 Brake System

When prices increase on an individual piece of the brake system, the Total Materials Cost will increase as well. If the front brake caliper increased to $107, the extended cost would increase, too. If the brake pipe increases to $30, the same thing will happen. Prices will often range, fluctuating slightly every time a person goes to purchase the product. When the product price ranges, the company, like Dirt Bikes, has to be able to account for that. Below is a table with just the cost increase and the effect it has on the Total Material Cost.

Bills of Materials: Moto 300 Brake System

Component	Component No.	Source	Unit Cost	Quantity	Extended Cost
Brake Cable	M0593	Nissin	$27.81	1	$27.81
Brake Pedal	M0546	Harrison Billet	6.03	2	12.06
Brake Pad	M3203	Russell	27.05	2	54.10
Front Brake Pump	M0959	Brembo	66.05	1	66.05
Rear Brake Pump	M4739	Brembo	54.00	1	54.00
Front Brake Caliper	M5930	Nissin	107.00	1	107.00
Rear Break Caliper	M7942	Nissin	106.78	1	106.78
Front Brake Disc	M3920	Russell	143.80	1	143.80
Rear Brake Disc	M0588	Russell	56.42	1	56.42
Brake Pipe	M0943	Harrison Billet	30.00	1	30.00
Brake Lever Cover	M1059	Brembo	2.62	1	2.62
				Total Materials Cost:	$660.64

Table 12: Price Increase on Brake System

The brake system represents thirty percent of the total materials cost for one complete Moto 300 motorcycle. Therefore, not only does the cost of the brake system increase, but the whole motorcycle price.