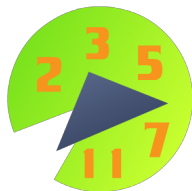


# ***System Recommendation for Blue Ribbon Sports Training and Practice***



PRIME SYSTEMS SOLUTIONS

February 20, 2014

## **1. Executive Summary**

- Brief Explanation of Report Contents 3
- Summary of Recommendations 4
- Summary of Problems, Opportunities, and Directives 5
- Statement of System Improvement Objectives 6

## **2. Background Information**

- List of Interviews and Facilitated Group Meetings Conducted 8
- List of Other Sources of Information that Were Exploited 9
- Description of Analytical Techniques Used 10

## **3. Overview of the Current System**

- Strategic Implications 11
- Current System Process Model 12

## **4. Analysis of the Current System**

- Performance Problems, Opportunities, and Cause-Effect Analysis 13
- Information Problems, Opportunities, and Cause-Effect Analysis 14
- Economic Problems, Opportunities, and Cause-Effect Analysis 17
- Control Problems, Opportunities, and Cause-Effect Analysis 19
- Efficiency Problems, Opportunities, and Cause-Effect Analysis 20
- Service Problems, Opportunities, and Cause-Effect Analysis 21

## **5. Detailed Recommendations**

- System Improvement Objectives and Priorities 22
- Solution Analysis 24
- Project Plan 32
- Project Timeline 33

## **6. Appendixes**

- Request for Services Memo 34
- Interview Questions 36
- Interview Meeting Notes 38
- Process Model 40

## ***Explanation of Report Contents***

- Overview of the Current System
  - Prime Systems Solution's synopsis of the current methods and technology used at Blue Ribbon Sports Training and Practice, including a model of how information currently flows throughout the business during normal operations.
- Background Information
  - This section provides a breakdown of the information gathering and analytics techniques used by Prime Systems Solutions to gain a full understanding of the current system used by Blue Ribbon Sports Training and Practice. Contained within is a list of interviews and team meetings, other materials used as sources, and a full description of the analytical techniques used by Prime Systems Solutions.
- Analysis of the Current System
  - An in-depth analysis of the current system, using the PIECES method, which breaks down the problems and opportunities that exist within the current system at Blue Ribbon Sports Training and Practice, ranging from day to day operations to upper management.
- Detailed Recommendations
  - A detailed breakdown of the options devised by Prime Systems Solutions for the improvement of Blue Ribbon Sports Training and Practice. Descriptions of the systems, their cost and feasibility, and a final recommendation from Prime is provided.

## ***Summary of Recommendation***

Prime Systems Solutions recommends that Blue Ribbon Sports Training and Practice revise their current system to streamline their scheduling, accounting, and safety procedures, and taking advantage of modern technologies to provide fast, efficient, and secure use of information. Based on the analysis done by Prime Systems Solutions, a detailed recommendation has been provided that outlines one central system that will control all the company's data and provide useful interfaces and reports to the employees to aid them in completing their jobs. This new system should provide easier access to information, improved communication within the company, simpler and more reliable billing, more efficient inventory management, and improved interactions with customers.

# ***Overview of the Current System***

## ***Summary of Problems, Opportunities, and Directives***

- All client information is currently not stored in a central location and is stored in spreadsheets. The new system will provide a central location for client information, preventing redundant or out-of-date information, as well as establishing proper access requirements so that those who require access, and only those who require access, can view the information.
- Blue Ribbon Sports Training and Practice contracts with each instructor personally for classes taught in Blue Ribbon facilities. The current system handles all of this manually, but the new system can keep in-depth records on all of the instructors and assist with billing.
- All scheduling is currently done manually. With the new system, scheduling can be handled in a central location that can be quickly accessed and changed when needed, whether this is for safety or simply to handle cancellations.
- The Blue Ribbon Sports Training and Practice store currently handles all of its sales and inventory manually. In the new system, inventory management can be dramatically streamlined. Additionally, the handling of employee uses of bottled water and refreshments can be monitored and controlled.
- Currently there is only manual tracking of coupons, their issuance, and their expiration dates.

## ***Statement of System Improvement Objectives***

- ***Scheduling***

- Scheduling should be greatly improved by the implementation of a new system. Currently, all reservations are done by hand and records are stored in documents on local machines. The new system will keep track of all reservations and facility activities in a centralized location that is accessible to all relevant employees.

- ***Accounting***

- Accounting can be greatly improved by the new system, allowing faster access to information and storing it in a central location that is both secure and always up to date, not suffering from the limited access of maintaining Excel files on employee computers.

- ***Inventory***

- Managing inventory is another area that can result in a large amount of time saved, as the new system can store and automatically track inventory information. This information can save management time by providing them with inventory reports, as well as show trends in items that sell either well or poorly. The new system can also take into account the needs of the business, including managing employee use of inventory.

- ***Instructor and Client Management***

- The new system can accommodate keeping track of detailed information about clients who make use of the facilities, as well as the information required to keep track of contracted instructors. The system can also make this information readily available to the accounting department, providing an increase in efficiency to billing. The system can also keep long term records of clients and identify problem clients when necessary, alerting employees or cutting off their future reservations, if needed.

- ***Marketing***

- The new system can provide support to Blue Ribbon Sports Training and Practice's marketing, keeping track of coupons and coupon codes used in advertisements. The system can also keep track of which coupons are used and correlate them with where the coupon was advertised, showing which methods of advertising were most successful in getting clients to use the coupon codes for Blue Ribbons' services.

# ***Background Information***

## ***List of Interviews and Meetings***

- January 28, 2014 [9:30-11:00AM] - Class meeting where project was received, group was established, and project was initially discussed
- January 30, 2014 [9:30-11:00AM] - Meeting to establish a valid time and set of questions for our contact person at Blue Ribbon Sports Training and Practice. The current system was assessed. Problems and opportunities were addressed and incorporated into questions for upcoming interview.
- February 6, 2014 [8:00-9:30AM] - Interview with Bruce Myers as representative for Blue Ribbon Sports Training and Practice, followed by post-meeting analysis and discussion regarding possible system options and improvements
- February 11, 2014 [8:00-9:15AM] - Group meeting to review our current information, including the answers provided from the previous interview, and adapt ideas for new system to match
- February 13, 2014 [8:00-9:15AM] - Group meeting to review current progress of Study Phase Report and address design and printing issues.
- February 18, 2014 [8:00-9:15AM] - Group meeting to revise the Study Phase Report and make any changes to the document as a whole as needed.



## ***List of Other Sources of Information***

Prime Systems Solutions researched other local businesses in the same market as Blue Ribbon Sports Training and Practice for a better understanding of the business climate.

- Nashville Baseball Training Academy  
491 Allied Dr.  
Nashville, TN 37121  
615.837.5858  
nashvillebaseball.com
- M3 Baseball Training  
1412 Antioch Pike  
Suite 103  
Nashville, TN 37013  
m3baseball.com
- The Doug-out  
1239 Dickerson Pike  
Goodlettsville, TN 37072  
615.663.9848  
thedoug-outtraining.com

## ***Analytical Techniques Employed***

Prime Systems Solutions sent representatives to Blue Ribbon Sports Training and Practice to gain firsthand knowledge and understanding of the current techniques applied during the everyday business procedures and practices incorporated by Blue Ribbon Sports Training and Practice. Currently, Blue Ribbon Sports Training and Practice predominantly employs the use of appointment books, Microsoft Excel spreadsheets to track inventory, and QuickBooks for billing and payments not currently handled in the accounting system.

Our representatives were able to observe and interview management, employees, contractors, as well as illicit response from approved clients. Practices observed during our on-site visits to Blue Ribbon Sports Training and Practice revealed the causes for areas of concern. Listening to the needs of the personnel, as well as the clients, provided insight for detailing major areas for improvements that could be provided to Blue Ribbon System Solutions.

Many areas for concern and improvement were discovered. Improvements could be advantageous in scheduling facilities and instructor services, controlling sales inventory and office supplies, ensuring fee schedules are appropriately applied and up to date, client account billing and receiving, promotional coupons, and retention of detailed customer information.

In addition to the observation of Blue Ribbon Sports Training and Practice, Prime Systems Solutions researched similar businesses online. We compared regional baseball training services and facilities such as the Nashville Baseball Training Academy, M3 Baseball Training, and The Doug-out. Reviewing these websites, Prime Systems Solutions was able to gain invaluable wisdom of techniques working for larger businesses in the same area of expertise.

Prime Systems Solutions primarily employed the PIECES framework to facilitate an analysis for Blue Ribbon Sports Training and Practice. The PIECES framework is an anagram of the objectives for the analysis. P =Performance, I = Information, E = Economics, C = Control, E = Efficiency, and S = Services. Utilizing the components of PIECES as a guide to determine the problems and opportunities for a software package, as well as the causes and effects of the problems and opportunities enables a thorough understanding of the issues and resolutions leading to a software solution.

The recommendations in this report are a culmination of the research with personnel, contractors, and clients measured against the PIECES framework to present Blue Ribbon Sports Training and Practice with an objective and a feasible solution to meet the needs of Blue Ribbon Sports Training and Practice.

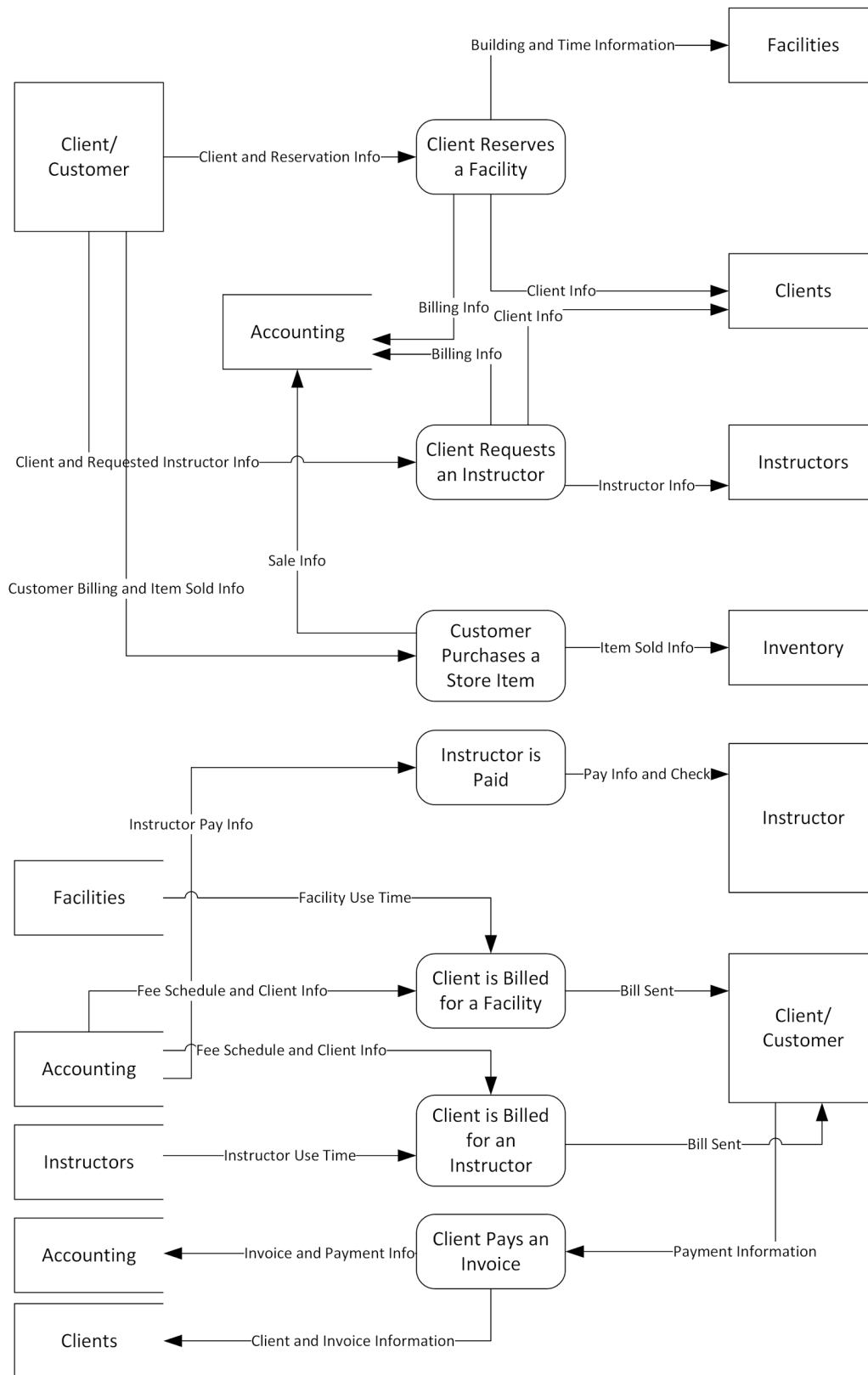
## ***Strategic Implications***

The current system is filled with processes that would be improved by a computerized system. By streamlining internal processes and simplifying the ways clients interact with Blue Ribbon Sports Training and Practice, customers will be happier and the services provided will be improved.

A computerized system also contains a wide variety of information about the business that can be used to generate meaningful knowledge about inventory, clients, and their use of services. This information provides the ability for management to evaluate opportunities backed by historical evidence.

Combining the data about the business's history with the plan for the future, management can establish a comprehensive overview of the business, granting them previously unattainable levels of control over the future of their enterprise.

## Process Model



# ***Analysis of the Current System***

## ***Performance***

1. Management not up to date on scheduling issues creating stress and poor customer service. An opportunity to improve managements' ability to bolster customer satisfaction can be developed utilizing a software package to maintain scheduling.
2. Accounts receivable must manually track payments and past due payments generating a bottleneck in the flow of income. An opportunity to save in overhead can be created through the use of an automated billing system vastly decreasing the amount of time to generate and update account receivable records.
3. Clients expressed disapproval rating in relation to timely notification of past due payments. Client retention and satisfaction are optimal to the success of the business, therefore, a prime opportunity exists in timely notification of billing.
4. Employee time is wasted finding appointment book and writing down appointments taking time away from serving the customers. Computer generated scheduling will allow optimization of employee time.
5. Employees manually inventorying sales stock. Incorporating an inventory program will decrease overhead and direct employees' time to more beneficial duties requiring manual work, such as cleaning stores and waiting on customers.
6. Reservations are taken over the phone or in person. Creating an online presence to advertise and allow customers to book appointments will generate a substantial boost in income.

## ***Information***

### ***1. Scheduling***

- Reservations not accurately recorded creating issues with double booking facilities and instructors, resulting in client dissatisfaction. Opportunity exists to increase customer and instructor satisfaction.
- Cancellations not updated in a timely manner causing facilities and instructors to have dormant periods of time resulting in loss of income. Major opportunity to increase income utilizing facilities which would be left dormant when advance notice cancellations occur.
- Long range contract appointments for facilities and instructors not reflected in appointment book causing contract cancellations due to lost appointment books and employees not accurately recording dates and times resulting in loss of revenue and client retention. An improvement in long range contract appointments are an opportunity to leverage income against future business. An improvement in long range contract appointments for instructors are an opportunity to retain contract employees and commission from services rendered.

### ***2. Accounts Receivable***

- Cancellation fees for facilities and instructor services are not billed due to system inefficiencies. As a direct result of the poor scheduling practices, cancellation fees cannot be applied correctly resulting in a loss income. There is an opportunity to increase income from collected cancellations fees and a decreased in the number of cancellations due to the enforcement of the cancellation fee.
- Payments for facilities and instructor fees not received and accounted for in a timely manner. Using QuickBooks with accountants searching for payments over 30 days is inefficient resulting in high overhead cost. The opportunity to decrease manpower and increase revenue flow could be advantageous utilizing an automated system.
- Fee schedule for facilities and instructor services not adhered to and up to date. A software package with updateable fees for facilities and instructors would ensure accurate charges applied producing standardization of charges and increase in customer and instructor satisfaction.
- Several errors in accounts receivable journal entries made by accounting personnel not discovered until end-of –month review. Another opportunity exist to produce reliable entries into a software system which could generate daily reports for review and correction purposes.

### **3. *Inventory***

- Sales merchandise not accurately counted. Loss of revenue resulting from lost sales due to merchandise not on hand. Accurately recording and tracking inventory utilizing an automated system will enhance sales and increase revenue.
- Merchandise not ordered in a timely fashion resulting in on hand merchandise not available as advertised, merchandise out of season, sizes purchased not applicable to sizes sold. An inventory control system could generate automatic ordering capability, the ability to forecast purchasing requirements such as the number of each item per size to order according to sales.
- Sales merchandise inventory orders incorrectly filled by employee's error. Customers dissatisfied with long waits for orders to be reshipped creating cancellations and loss of income. An automated inventory control system would create the ability to validate entries for orders and increase customer satisfaction, generating and retaining income.

### **4. *Records Retention***

- Contact information for long term contract customers not retained and/or updated resulting in time wasted while employees track down client representatives and customer dissatisfaction. An automated software system provides the means to retain contact information in a reliable depository.
- Contact information for short term contract customers not retained and/or updated resulting in time wasted while employees track down client representatives and customer dissatisfaction. An automated software system provides the means to retain contact information in a reliable depository.
- Contact information for non-contract customers not retained and/or updated resulting in loss of income due to inability to advertise sales and/or events to patrons. An automated software system provides the means to retain contact information in a reliable depository.
- Performance records for contracted instructors not available due to loss of paperwork and/or lack of information. Unable to determine retaining contracted instructors or to determine customer satisfaction and/or complaints.

## **5. *Coupons and Promotional Advertising***

- Coupons are issued on an expiration date basis, however, employees are taking coupons without checking expiration dates which is resulting in loss of income. A computer software system using computer generated approval of coupon usage will ensure that the coupons are being applied to billing correctly.
- Amount of discounts deducted due to coupons are not reflected when applied to charges for facilities resulting in a failure to determine which coupons and/or discounts are generating income and which are not. Tracking discounted amounts and/or losses will enhance the ability to present promotions that actually work to increase income and customer base.



## ***Economics***

### ***1. Scheduling***

- The cost of continuing with the current practices in place are detrimental to Blue Ribbon Sports Training and Practice. Losses due to customer dissatisfaction with double bookings, cancellations, and rescheduling appointments are too high. Blue Ribbon Sports Training and Practice is not an essential expense for customers. Blue Ribbon Sports Training and Practice provides a service which is a luxury item and their customers are spending disposable income. Customers could easily become disgruntled and turn to other similar types of services and/or facilities.
- Blue Ribbon Sports Training and Practice would benefit from a computer software package to retain customer satisfaction and improve scheduling services and facilities.

### ***2. Accounts Receivable***

- The cost of overhead could decrease by 20% for accounts receivable personnel to manually account for payments received, send out notifications of late payment, incorrectly charge fees and services, and correcting journal entries. The opportunity to use a software system designed for Blue Ribbon Sports Training and Practice will result in retaining profit which means this amount of the budget could be allocated to other needs.

### ***3. Inventory***

- The cost of inventory losses in the form of lost sales, overages and shortages of inventory, poor customer satisfaction with ordering, and overall performance could be detrimental to the sales department of Blue Ribbon Sports Training and Practice. Beneficial rewards in sales, controlling inventory, and customer satisfaction utilizing an automated software system could generate a 75% increase in sales revenue.
- The cost of office and cleaning supplies as being written off is a loss that can and should be controlled. There is an opportunity for profit in decreasing costs.

### ***4. Records Retention***

- The cost of not properly retaining customer information is immeasurable. Contracts are lost or retained through customer satisfaction and the ability to renew contracts with representatives should be a priority in long range business plans. The profit for retaining the customer records is residual income from generating new contracts with existing customers.

- The cost of not properly handling personally identifiable information could be detrimental to Blue Ribbon Sports Training and Practice in the form of lawsuits. Profits from ensuring secure information is secured are unmeasurable.

### ***5. Coupons and Promotions***

- The cost of not tracking coupons and promotions is the inability to measure which advertising venues bring in the most business, therefore, generating more income or which coupons and/or promotions are actually a liability.
- The cost of not enforcing expiration dates on coupons can be recognized in the form of merchandise cost during timeframe that coupons were good. The profit in enforcing coupon expiration dates through using an automated software system will be in customer satisfaction.

## ***Control***

1. Office and cleaning supplies are misappropriated by employees recognizing the lack of control over supplies resulting in higher overhead costs. Utilizing an automated software system will result in lower overhead costs netting an increase to revenue.
2. Currently employees have the ability to view merchandise cost before overhead, discussing the markup on merchandise with customers and between themselves. This creates ill-will with customers who become dissatisfied with the prices they are paying and with employees who think they should be paid more. Incorporating an automated software system will create the ability to determine which personnel have authorization to view this information.
3. Office and cleaning supplies are written off resulting in a loss of net income by not taking advantage of a tax break on overhead as earned income before taxes. Using an automated software system to inventory and track office and cleaning supplies will increase net income after taxes.
4. Uncontrolled sales inventory has hidden cost in management not having the tools to support good decisions. Controlling sales inventory will create profits in deciding what and when to put merchandise on sale.
5. Another cost with uncontrolled sales inventory is the asset taxes charged on inventory not sold. These taxes can be avoided by buying what is needed when it is needed generating earned income before taxes.
6. A hidden unknown cost from lack of control and security is the probable breach of ethical behavior on the part of personnel and clients. Personnel taking advantage of sales which they are excluded from participating in are an example of one such behavior. Customers returning merchandise to Blue Ribbon Sports Training and Practice that was purchased at another business taking advantage of increased refunds due to merchandise pricing is another example. Using a computer software system to maintain sales records and customer purchases would deter this unethical behavior generating a profit in retaining income.
7. Number of personnel and customers inside a Blue Ribbon Sports Training and Practice facility or shop is unknown. In case of emergencies, such as a fire, personnel and clients are not accounted for against a list to ensure their safety. An opportunity is available to create a personnel and guest check-in system to address safety concerns, as well as controlling, the number of people in a facility in accordance with fire marshal laws.

## ***Efficiency***

1. Employees waste time searching for appointment book which moves according to who had it last and where they were when they set the appointment. Manually scheduling appointments requires more time and effort than to have a computer generated software system which could be updated almost instantaneously and used by more than one employee at a time.
2. Current system for tracking billing and sending out notifications is man-hour intensive. Utilizing a computer generated software system to track payments and notify users of late payments would create a 90% increase in efficiency.
3. Conducting manual inventory of merchandise requires excessive effort due to relying on checking purchase orders against manual count of merchandise. A computer software system would track the merchandise on hand numbers and could a report could be generated in mere seconds to compare to manual counts.
4. Manually ordering merchandise is time consuming and not being completed effectively. Minimum and maximum on hand quantities could be set in a software system that would generate notifications to personnel when merchandise is over stocked or under stocked.
5. Many man-hours are wasted searching for contact information in records that are not organized plus the additional time wasted when contact information is no longer valid. A customer record retention library would be an integral part of a software system for Blue Ribbon Sports Training and Practice eliminating untold wasted hours with reports that could be generated quickly and efficiently.
6. The burden of maintaining a log of coupons, expiration dates, and other promotions could be eliminated using an automated software system.

## ***Service***

1. Current procedures utilized for scheduling are producing inaccurate records, creating conflict between customers and personnel both. A software system would ensure that records are maintained accurately creating a less stressful environment and helping customers remain satisfied.
2. Current procedures for inventory control require redundant work and produce inconsistent results. Manual count is often not balanced to merchandise purchase orders. An automated inventory control software system would ensure more accurate counts and cut down on the redundancy involved finding purchase orders and recounting inventory.
3. QuickBooks as a tool for accounts receivable is an inadequate software package. Utilizing a software package designed to perform on a business level and meet the needs of the business would create major improvements in accounts receivable.
4. Another disadvantage with current procedures in place is the billing of services and the billing of facilities separately. Service could be enhanced sending out one itemized bill avoiding redundancy. A computer software system could track payments and be utilized to sort payments.
5. Record retention services are extremely limited at this time producing unreliable and inconsistent results. Record retention would be increased by 99% using a computer software system.

# ***Detailed Recommendations***

## ***System Improvement Objectives and Priorities***

After an in depth review of the current business practices of Blue Ribbons Sports Training and Practice, Prime Systems Solutions has determined that the greatest improvements will be achieved by designing a centralized streamlined automated system that will incorporate user access controls, scheduling, accounting, inventory control, instructor and client management, and marketing.

Prime Systems Solutions will create a centralized system increasing efficiency and reducing redundancies. It is important to implement user access controls to ensure information can only be viewed or updated by designated personnel. This will provide confidentiality for the customers, and ensure information integrity.

A centralized scheduling system will eliminate 99% of the scheduling problems currently encountered. The scheduling system will be connected to the billing system in a manner that auto-generates bills, including cancellation fees. This will reduce errors and ensure billing is completed every 30 days. Employees will be notified when a customer with a past due account attempts to schedule additional services. This will allow Blue Ribbon Sports Training and Practice to prevent customers with past due accounts from incurring more debt.

The updated accounting system will securely store all information in a central location. Fee schedules will be maintained in a central location ensuring that the current rates are billed. Bills will be automatically generated receiving data from all the other system ensuring accuracy and timeliness.

The integrated inventory, sales, and ordering system for merchandise and supplies will improve efficiency and increase revenue. Streamlining this process will eliminate overages and shortages of inventory. The system will automatically store and track inventory information, allowing it to provide reports as well as track trends in sales. This will keep overhead to a minimum by eliminating overstock and by keeping high selling items in stock. This will eliminate customer and employee frustration over poor order fulfillment. The system will also provide management with time savings inventory reports.

A centralized instructor and client management system will ensure all contact and billing information is current and up to date while maintaining confidentiality of personal and billing information. Client and instructor usage can be tracked to ensure best use of facility and instructor time.

Marketing can be effectively utilised by using the new centralized system to track coupon codes in advertisement. Reports can be generated analyzing which advertising methods were most successful at drawing in new business, and which generated repeat business from established customers.

## ***Option 1 - Maintain Current System & Operations***

Make no changes to the current systems and processes. The current system uses handwritten records and spreadsheets to manage inventory, maintain client and trainer information.

### ***Feasibilities***

#### **Operation**

The current system is full of operational deficiencies. Revenue is greatly affected by inefficient scheduling and billing of facility use. There is no process in place to manage instructor efficiency. The current tracking of merchandise inventory leads to ineffective ordering of products and fulfillment of customer orders

#### **Technical**

The current system is limited and technically deficient. The majority of the processes are outdated and ineffective for current business needs. Manually updating documents consume managerial and employee time while creating more redundancies and inefficiencies within the system.

#### **Economic**

N/A – no additional financial impact – losses will continue to increase at current rates

#### **Schedule**

N/A

#### **Constraints**

N/A



### ***Pricing - Option 1***

Implementation	
Study/Design:	\$0
Hardware	\$0
Software	\$0
Training	\$0
 Total Implementation Cost	 \$0
 Annual Cost/losses	
Loss of management time	\$25,000
Loss of Product/inventory	\$12,500
Loss of billing revenue	\$25,000
Loss due to scheduling problems	\$65,000
 Total Annual cost/losses	 \$127,500

## ***Option 2 - Purchase off-the-shelf software package***

This option requires purchasing a commercial-off-the-shelf (non-custom/generic) software package. It will manage scheduling, client and trainer information, and inventory. To be installed and set up by Prime Systems Solutions.

### ***Feasibilities***

#### **Operational**

A commercial-off-the-shelf package will allow for some centralized scheduling, inventory, client and trainer data. It is an improvement over option 1, however, it does not meet all the needs of Blue Ribbon Sports.

#### **Technical**

Blue Ribbon Sports will be required to set up and maintain this system. Customizations of commercially generic systems are very limited and time consuming. Blue Ribbon Sports will have to make their business fit the software vs having software that fits the business.

#### **Economic**

This option is a vast improvement over option 1. However the limits of a commercial-off-the-shelf system will incur annual losses at 45% over a system designed by Prime Systems Solutions.

#### **Scheduling**

Must be completed by May 9. This system can be up and running faster than a custom designed system. This option will take approximately 40 days. Training will be more intensive due to having to work around the pre-made specifications of the software.

#### **Constraints**

A commercial-off-the-shelf package may require re-design of current procedures and practices to fit the limitations of the software. It will manage scheduling more efficiency than the current system but will not be integrated with billing. The system will not correct the coupons/discount problem or manage client check-in/check-out system.

### ***Pricing Option 2***

Implementation	
Study/Design	\$2,000
Hardware	\$35,000
Software	\$17,000
Training	\$10,000
 Total Implementation Cost	 \$64,000
 Annual Cost/losses	
Loss of management time	\$10,000
Loss of Product/inventory	\$5,500
Loss of billing revenue	\$10,000
Due to scheduling problems	\$7,000
 Total Annual cost/losses	 \$32,500

### ***Option 3 - Custom system designed by Prime Systems Solutions***

A customized system designed by Prime Systems Solutions, created specifically for the business needs of Blue Ribbon Sports Training and Practice. It will streamline scheduling, accounting and inventory. A centralized system will ensure ease of use for employees. Useful interfaces and reports will allow management to maximize employee efficiency. This system will provide easier access to information, improved communication within the company, simpler and more reliable billing, more efficient inventory management, and improved interactions with customers.

### ***Feasibility***

#### **Operational**

A custom system created by Prime Systems Solutions will optimize reservations, accounting and inventory management reducing losses to a bare minimum. Our customized system will be designed around the business and operational needs of Blue Ribbon Sports.

#### **Technical**

A custom system will be created specifically to handle the technical needs of Blue Ribbon Sports. In-depth client and trainer records will be centrally located preventing duplicate and/or out of date information in billing. Access requirements will be implemented ensuring data can only be viewed or altered by authorized individuals. Automated scheduling records will assist in billing for services and cancellation fees. An integrated inventory management system will streamline order fulfillments and re-ordering of goods/supplies. It will include tracking coupons, discounts and any special offers, as well as employee refreshments and snack use. This is the only system that will include a personnel and client check-in/check-out system.

#### **Economic**

The cost will include a custom designed system, including all necessary hardware and software. Prime Systems Solutions will install the system and train all necessary personnel to ensure a smooth transition. This streamlined customised system will decrease overhead for accounts receivable by 20%, increase sales revenue up to 75% and a 90% increase in billing efficiency.

### **Schedule**

Must be completed by May 9. A custom system will take longer to implement due to than an off-the-shelf product due to the time needed to design the system. This option will take approximately 80 days. Training time shorter due to user input applied to the creation of the system in an intuitive manner aiding in ease of use.

### **Constraints**

A custom system from Prime Systems Solutions will have minimal constraints. It will be designed specifically to meet all the needs of Blue Ribbon Sports Training and Practice.

### ***Pricing Option 3***

Study/Design:	\$12,000
Hardware	\$35,000
Software	\$7,000
Training	\$6,500
Total Implementation Cost	\$60,500
Annual Cost	
Loss of management time	\$1,500
Loss of Product/inventory	\$1,200
Loss of billing revenue	\$3,500
Due to scheduling problems	\$2,500
Total Annual cost/losses	\$8,700

## ***Package Pricing Options***

### ***Option 1 - Maintain Current Systems and Operations***

Implementation cost	\$0
Annual Cost/Losses	\$127,500

### ***Option 2 - Purchase off-the-shelf software package***

Return on investment expected with in 4 years

Implementation cost	\$64,000
Annual Cost/Losses	\$32,500

*Savings first year	\$31,000
*Each additional year	\$95,000

### ***Option 3 - Custom system designed by Prime Systems Solutions***

Return on investment expected with in 3 years

Implementation cost	\$60,500
Annual Cost/Losses	\$8,700

*Savings first year	\$58,300
*Each additional year	\$118,800

\*Savings is related to Option 1

## ***Project Plan***

After extensive research and an in-depth look at the problems, opportunities, and directives of Blue Ribbon Sports Training and Practice, the most effective solution is to implement a custom system designed by Prime Systems Solutions as described in option 3 of the Detailed Recommendations. Implementing a custom system, Blue Ribbon Sports Training and Practice can run a business that is well managed, more efficient, organized, adequately staffed, and precisely scheduled. Prime Systems Solutions' custom system will allow for improved accuracy and storage of client information, secure access to stored information, and an improved way to handle billing and instructor records. A new scheduling system will also be implemented in order to streamline the management of reservations and cancellations. The system will also provide improved inventory management that will make it easier to monitor and control.



## ***Project Timeline***

### ***Study Phase***

- January 28, 2014 – Received request from Blue Ribbon Sports Training and Practice to implement computerized support for business operations
- February 6, 2014 – Initial meeting with Blue Ribbon Sports Training and Practice
- February 20, 2014 – System Improvement Objectives and Recommendations Report due
- February 27, 2014 – Delivery of System Improvement Objectives and Recommendations presentation

### ***Design Phase***

- February 28, 2014 – System design for Blue Ribbon to begin
- March 25, 2014 – Design of the new system due
- March 27, 2014 – Presentation to be delivered of proposed design of new system

### ***Implementation Phase***

- April 2, 2014 – Implementation of new system will begin
- April 3, 2014 – First progress report due
- April 8, 2014 – Second progress report due
- April 15, 2014 – Third progress report due
- April 22, 2014 – Fourth progress report due
- April 24, 2014 – Fifth progress report due
- May 6, 2014 – Final presentation of completed system for Blue Ribbon Sports Training and Practice

# ***Appendixes***

## ***Memorandum - Request for Services***

To: Bruce Myers

From: Patricia Louise Buckner, Managing Partner  
Blue Ribbon Sports Training and Practice

Date: 1/27/2014

Re: Computer Support for Business Operation

Our business provides space for various individuals to practice team and individual sports. We also provide instructors for various sports skills as needed. We have batting cages, pitching facilities, practice infields for both baseball and softball, and other facilities that may be scheduled by teams or individuals on a one-time basis or on a regular schedule. We have a fee schedule for each facility based on single usage and another schedule based on team usage. We also enter into long term contracts with various school teams. We need to keep detailed information on all people and organizations that we serve. We need a better system to keep up with our reservations, and we accept short and long term reservations. We have a cancellation policy that requires 48 hours notice to avoid having to pay the full fee regardless of usage. We need to be able to quickly update our schedule when cancellations occur. We bill the services of the instructors separately from the facilities use and we must keep detailed information on each instructor. We contract with each instructor rather than having them be employees.

We have a separate facility that sells various sports related items, including clothing. We need help with managing inventory for this facility and computer support for managing reordering. We have a big problem dealing with mixing orders with the right combination of sizes that will meet the needs of customers. We do take credit cards as well as cash for all purchases but we already have a system for credit card processing.

We also sell bottled water and other refreshments and need help with accounting and reordering those items. Another problem that we have is the accounting for items used by employees. These are “written off” but there needs to be a system for showing that they are removed from inventory.

Finally we advertise in lots of newspapers and magazines and provide coupons for various offers such as a 15 percent discount on the first visit or three introductory hours for \$35.00. We need a way of keeping records on the type of coupons that are issued on when they expire.

As you can see we have many operations that can possibly be computerized. Please schedule a meeting with me as soon as possible to discuss how your company may assist us.

## ***Interview Questions***

1. Will the system need to interface with outside vendors?
  - a. What needs to be front end versus back-end?
    - i. How many different departments are within the company and will they interact differently with the system?
2. When do you need the system up and running?
3. What current forms and systems are being used for billing, accounting, inventory, internal management, personnel, or others?
4. How do you plan to maintain the system?
5. What are the direction or expansion plans for this current business?
  - a. Are there any services not currently offered to be offered with the new system?
6. Is it local, regional, national, international? Languages and currency become important.
7. Are they planning on purchasing new server software or are they using an open source platform?
  - a. What server/system is available?
  - b. How long do you keep data on hand and how much and what type of storage is requested? What can be archived and when?
8. How many employees do you anticipate using the system at a time? Altogether?
9. Will the system handle any human resources information?
  - a. Detailed information about clients, instructors, and employees?
  - b. Will the system serve as a time clock or time management for hours worked?
10. Do you have an existing online business presence? If not, are you going to need one or want one?
11. Will credit card system need to integrate with database for tracking sales, customer data, etc?
  - a. Does a point-of-sale system exist and will it need to be integrated for the facility that sells items? Does the point-of-sale system export any data that needs to be addressed?
12. What kind of knowledge are you hoping to get from the data collected by the system?
13. What amount of resources are available for this project?
14. We find that it's beneficial to the design of the system to have the user's point of view at each level of use. Will you be able to allocate time for us interact with the staff?
15. Are there any special legal issues that need to be addressed?
  - a. Do you have liability or other waivers that need to be tracked?
16. The services of the instructors are billed separately from the use of the facilities; should this continue for the future or would it be better, if possible, to include those on the same bill?
17. What information from the system, if any, needs to be provided to your accounting department?
  - a. Are there any systems to integrated with? Existing systems, like a time management system, that outputs data that needs to be handled by the system?

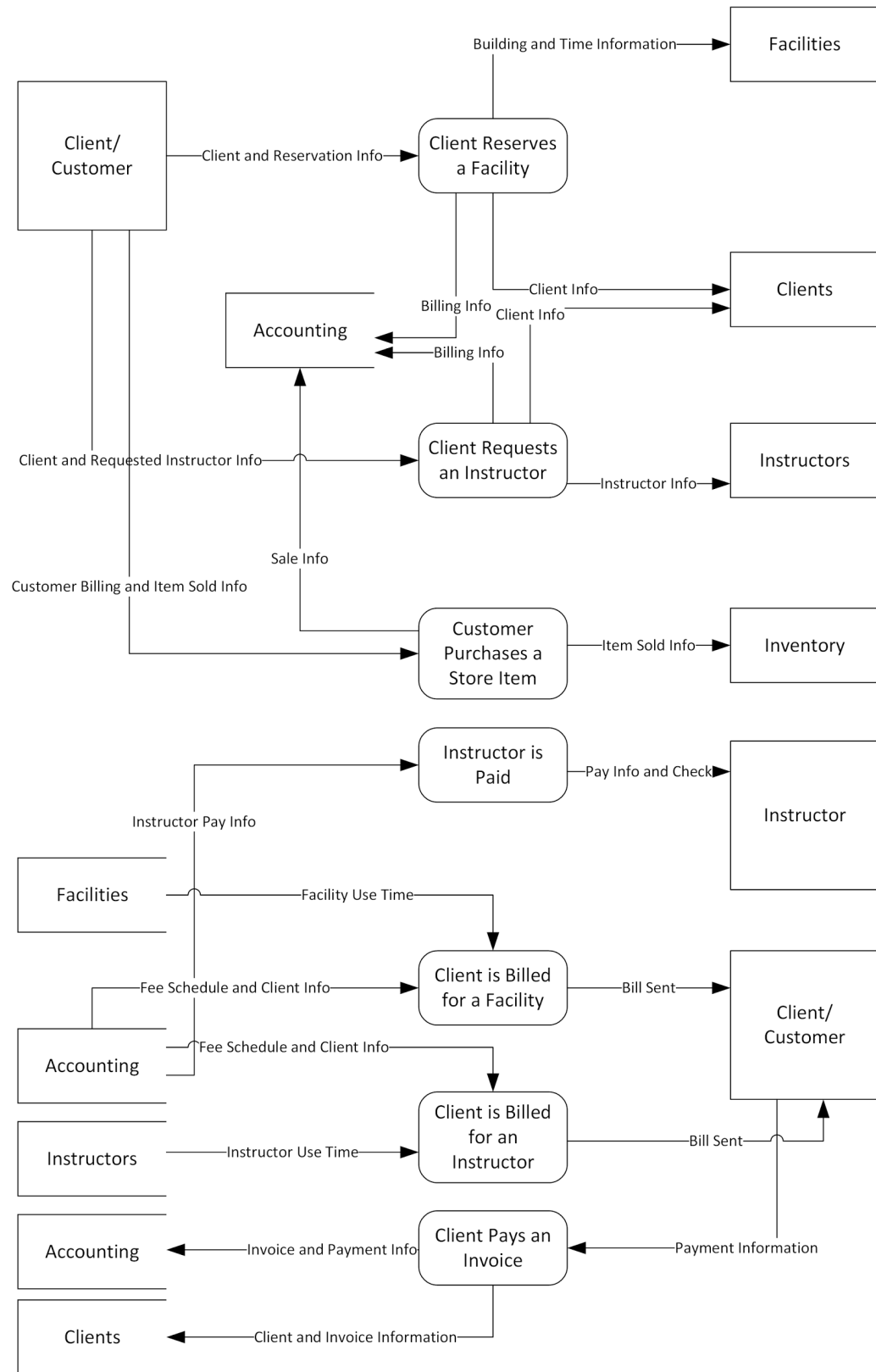
18. Do we need to honor any coupons that are currently outstanding, prior to the implementation of the system?

## ***Interview Meeting Notes***

- One person can follow up with questions for Dr. Myers, but make sure that the group is informed of responses.
- Start looking ahead at how we are going to handle our implementation. Dr. Myers prefers that we host our projects on university servers if we do a web-based implementation, so we will check with him about that.
- Sales will be buying from outside vendors. The boss won't want employees looking at or changing prices. We must establish different levels of access and interaction. (Manager and Employee logins, at least)
- Assume they are currently using spreadsheets to handle all of their data. Tax people are keeping some in-house records for IRS reporting.
- The business will likely expand in the future but how is unknown.
- We help them with purchasing of servers and software. We would need to look at and evaluate existing hardware. Archives and backups are something we would recommend and set up.
- Several workstations exist throughout the facility, exact number of users at any given time is unknown/unpredictable.
- We will not handle HR, payroll, or time clocks with the system.
- Trainers and Employee scheduling is important. We will also need to generate reports, both about facilities and the employees themselves.
- They will want to advertise online and eventually have online reservations, but for now the system only needs to work in-house.
- We will take credit cards but we do not need to process. We will want to capture and store that information. We can't rule out checks as a method of payment.
- Important things to be gained from the system: better scheduling, the ability to see what each employee's producing, better billing system.
- They want to be able to determine when someone is late paying. The ability to block late or no-payers from scheduling should also be included.
- Asking what computers and hardware resources they have is valid, but not money.
- Another important question is who is the contact person?
- Important: we need to know when people are in our building at any given time. Check-in system for people entering and check-out for leaving the facility. Only legal issue. Yes/no checkbox for liability in the system but the form is a paper copy.
- (16) Needs recommendations on a better setup. They do want to bill separately but need an organized rate schedule. Cost for track per time, etc. We should make up our own data. Needs to be a database for services, set up by hour, # of hours can be entered. (probably in ¼ hour increments)
- (17) We want reports to include receipts, money taken in, broken up by cash/check/credit. Any outstanding coupons will be handled specially. We will be starting fresh with the computer couponing system.

- Logically correct is more important than reports.
- Cost estimate looks good but is made up for the sake of this report.
- We suggest employee logins. Employee and manage login. be careful what is left available, such as costs and the ability to edit prices should not be left to employees. This can either be done by having 2 entry points (one for employee, one for manager) or we can decide what is available based on the employee number and what role they are.
- Don't ask how customer plans to maintain system. We will want to bill customer for resolving issues later.
- During initial phase do not use software related "big words" like archive and integration.
- "Visualize many employees using system at same time."
- Need recommendation on how to incorporate organized rate schedule for facilities and trainers.

## Process Model







PRIME SYSTEMS SOLUTIONS

**Project Manager**

**Scott Shumate**

**Team Members**

**Vickie Gilliam**

**Christopher Hodge**

**D'lynn Simmonds**