

# Cost-Volume-Profit Modeling: A Strategic and Financial Approach

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## ABSTRACT

*Set in the context of a youth soccer tournament, this case study addresses critical accounting and business topics such as cost-volume-profit analysis, identification of business processes and internal controls and the internal control environment. Students are expected to make business decisions based upon financial and strategic analyses. In addition, the case requires students to identify weaknesses with internal controls and most importantly, make suggestions to strengthen the control environment.*

**Keywords:** Internal Controls, Control Environment, Business Processes, Business Risk

## INTRODUCTION

The number of soccer players in the United States has grown rapidly in recent years. It is estimated that there are over 18 million players on adult and youth soccer teams in the U.S. And, the number is growing by about 5% per year. By contrast, basketball has experienced only a slight increase in team participation, while baseball actually experienced a decrease in team play. Basketball still has the highest total of team players in the U.S. with soccer not too far behind. Male participants outnumber females by a 57% to 43% ratio.

### Popularity of Youth Soccer

Youth soccer has exploded in popularity in recent years. There is a variety of reasons for this – the simplicity of the rules; the relative lack of expensive equipment and uniforms; and of course, its appeal to children because it is a free-flowing sport where everyone on the team gets into the action. Another reason for the growth of soccer is that millions of parents have supported and encouraged their children's participation because it has a reputation as a relatively "safe" sport.

## BACKGROUND

### Mission Statement

The mission of the Soccerfest Tournament is to provide players with an opportunity to play soccer against the best possible teams and offer the chance for the player, coaches and families to interact positively with a broad cross-section of the soccer community while bringing respect, visibility and financial support to the Hunter Soccer Club and its travel teams.

### History of the Tournament

The Soccerfest Tournament enters its 15<sup>th</sup> year this fall. It was established in memory of Hans Porter, the founder of the Hunter Soccer Club (HSC) to raise funds to: 1) help offset the costs of operating the club, 2) subsidize registration fees for those in need and, 3) fund a scholarship named in honor of Hans Porter.

Eighteen teams participated in the inaugural tournament. Since then, participation has grown to over 250 teams. In total, the tournament hosts approximately 4,500 players. The participation is approximately split evenly between male and female players. The age groups range from U-8 through U-16.

## **BUSINESS PROCESSES**

It requires a great deal of effort to successfully administer a soccer tournament. Many tasks must be completed in order for it to be a success. The key business processes for the Soccerfest Tournament are discussed below.

### **Registration and Scheduling**

Soccerfest will only accept applications that are submitted on line through their website. All sections of the application must be completed. The information provided in the application is the major basis for invitation decisions by the Tournament Committee. The entry fee is \$600 [USD] per team.

Because Soccerfest is a highly selective and competitive tournament, completion of the application procedures does not guarantee invitation. The Selection Committee spends considerable time on verifying all application information and selects the most competitive teams possible and determines the Division placement. Competitors will be placed in divisions at the discretion of the Selection Committee.

All notifications of acceptance and reminders will be posted on the web site or sent electronically as this is a paperless endeavor. This will allow for all information to be made available instantly – versus waiting for the mail to arrive.

### **Sponsorship Arrangements**

A significant portion of Soccerfest's revenues is generated by sponsorship agreements whereby sponsors provide financial support in exchange for promotional opportunities associated with the tournament. These opportunities include the sponsor's name attached to an age division championship trophy, signage at the various venues and advertising in the tournament program. There are three levels of sponsorship, as described below.

#### **Gold Sponsor**

Gold sponsorship is the highest level. Each Gold sponsor receives prominent coverage before, during and after the tournament. The contribution for this level is \$10,000 and up, some or all of which can be offset by suitable contributions-in-kind.

Benefits include:

- Naming rights as Principal Sponsor.
- Sponsor name will be used in signage, at registration and in printed promotional materials.
- Sponsor may set up its own booth at fields and/or at the tournament headquarters for distribution of promotional materials.
- Prominent linked website presence.
- Back cover advertisement in tournament program. If more than one Platinum Sponsor, then inside covers will be used.
- Sponsor may provide promotional materials for inclusion in registration materials distributed to competing teams and players.
- Sponsor name or logo will appear on Championship and Tournament T-Shirts.
- Listing as an "Official Sponsor" on all e-mail messages and correspondence.

### **Silver Sponsor**

Silver Sponsors will be visibly identified and will receive prominent coverage before, during and after the tournament. The contribution for this level is \$5,000 and up, some or all of which can be offset by suitable contributions-in-kind.

Benefits include:

- Sponsor, if it wishes, can select an element of the tournament to sponsor, such as scoreboards, tents, or the Saturday night reception. Corporate name and logo will be displayed prominently on or with the element as is appropriate.
- Corporate name will be used in signage, at registration and in printed promotional materials.
- Sponsor may set up its own booth at fields or the tournament headquarters for distribution of promotional materials.
- Linked website presence.
- Full-page color advertisement in tournament program.
- Sponsor may provide promotional materials for inclusion in registration materials distributed to competing teams and players.

### **Bronze Sponsor**

The Bronze Sponsor will receive full representation during the tournament. The contribution for this level is \$3,000 and up, some or all of which can be offset by suitable contributions-in-kind.

Benefits include:

- Sponsors name will be used in signage, at registration and in printed promotional materials.
- Sponsor may set up its own booth at fields or the tournament headquarters for distribution of promotional materials.
- Linked website presence.
- Half-page advertisement in tournament program.
- Sponsor may provide promotional materials for inclusion in registration materials distributed to competing teams and players.

### **Program Book**

The tournament's program book is distributed to all players, spectators, and sponsors. It contains the complete schedule of games, rosters, team information, tournament rules, and other useful information. Full-page advertisements cost \$300, with smaller ads also available. There are approximately 30 pages of advertisement in the book in addition to the rosters of each team. Booster ads from competing teams or their parents are most welcome.

### **Risk Management**

The "Tournament Cancellation Insurance Policy" protects each team's tournament entry fee in the event the tournament is canceled. For teams that were accepted and scheduled to play in tournament at the time of cancellation, the policy will pay 100% of the registration fee paid by the team to enter the tournament.

Three other policies are also purchased; a Soccer Accident policy covers all registered players and general and umbrella liability policies provide protection for other occurrences.

### **Cash Management and Security**

The tournament accepts only checks for all cash receipts payable to “Soccerfest.” All receipts are forwarded to the treasurer who prepares a listing of receipts. Another Tournament Committee member verifies the listing for accuracy and completeness. At that point, the vice president takes the deposit to the bank. Control risk is minimized due to the strong segregation of duties.

### **Volunteers**

Soccerfest relies heavily upon volunteers during the tournament as well as throughout the entire year. The Tournament Committee completes the detailed preparation. The Committee is composed of 20 people, including parents and coaches. Sub-committees are formulated and include: Registration, Finance, Facilities, Security, Program, and Hospitality. The committee meets monthly from September through July.

### **Concession and Vendor Arrangements**

An expansive combination Food and Soccer Merchandise Court is located at the main venue. Food and beverage sales generate sizeable revenues for the tournament. Soccerfest approves only a limited number of vendors. For a significant fee, merchants, are granted approval by the committee, to set up their booths.

Criteria for acceptance includes product price, quality and variety. Soccerfest also considers the following factors in selecting vendors: past or potential performance regarding health standards (for the food vendors), cooperation in the past with Soccerfest volunteers, estimated revenues, and the ability to absorb sales losses in the event of inclement weather. Vendors of soccer merchandise complete an application and agree to pay Soccerfest a fixed fee based upon booth location and square footage. Vendors bear the risk of loss of revenues due to inclement weather. Soccerfest bears no liability for vendor losses.

### **Physical Security**

Soccerfest hires Event Security, Inc. to provide security and traffic control for the tournament. Crowd control and traffic management has not been a problem in past years, despite the estimated traffic of over 10,000 attendees.

### **Budgeting and Financial Reporting**

The tournament has experienced significant growth in recent years. Continued growth is dependent upon several factors, one of which is careful budgeting. In July of each year, the committee meets to analyze the prior-year’s budget versus the actual results. Variances are discussed and changes are suggested as needed. Shortly thereafter, the committee formulates a budget for the next year’s tournament.

### **PLANS FOR THE FUTURE**

The Tournament Committee is interested in seeing Soccerfest continue to grow in both size and competitiveness. There are several ways to achieve these goals. Increased advertising and marketing efforts could impact the mix of participants. However, the growth of the tournament is dependant upon, in part, upon identifying additional playing fields.

### **CASE REQUIREMENTS**

1. What are Soccerfest’s key strategic objectives? What are the determinants of whether or not it has been successful in terms of those objectives?
2. What are Soccerfest’s critical “business” processes? Which of those do you think are most important? Justify your choice(s).

3. Identify the key business risks associated with sponsorship agreements?
4. What role does budgeting play for Soccerfest? Identify several controls to mitigate the impact of the possibility of inclement weather.
5. Soccerfest depends upon an all-volunteer workforce. As such, an effective organizational structure is critical. In an effort to delegate and share responsibilities, various committees are formed to successfully execute events such as Soccerfest. In addition to the committees identified in the case, you are to identify the necessary key committees and briefly describe their roles.
6. The Executive Committee is considering increasing the number of teams by 50 with no increase in the registration fee. However, several expenses will be affected if this occurred.

They include:

<u>Item</u>	<u>Increase</u>
Security	\$ 500
T-Shirts	800
Referee Fees	3,000
Assignor fees	150
Gifts (referees)	150
Groundskeeping	20%
Insurance	20%
Field rental	20%

Prepare an analysis of the effects of the proposed change for the Executive Committee. Would you recommend this change? Explain your decision.

7. The Executive Committee is considering decreasing the number of teams by 50 with no increase in the registration fee. However, several revenues and expenses will be affected if this occurred.

They include:

<u>Item</u>	<u>Decrease</u>
Concession revenues	15%
Field rental	10%
Trophies	10%
T-Shirts	10%
Referee fees	15%
Assignor fees	15%
Gifts (referees)	15%
Insurance	15%

Prepare an analysis of the effects of the proposed change for the Executive Committee. Would you recommend this change? Explain your decision.

8. Prepare a list of common internal accounting controls related to paying bills.
9. Soccerfest processes many financial transactions, both receipts and disbursements. Effective internal control over these transactions is critical to the success of the tournament. You are to prepare a list of recommended controls for authorization and processing of both cash receipts and disbursements.
10. Virtually all cash disbursements are paid by check. Provide guidance to the Executive Committee as to why it is important to have a clear process in place for issuing checks.

**AUTHOR INFORMATION**

**Dr. Joseph M. Larkin** is an Associate Professor of Accounting in the Haub School of Business at Saint Joseph's University. He joined the faculty in 1984. He earned his undergraduate degree from Saint Joseph's University and holds graduate degrees from The Pennsylvania State University and Temple University. He has published in the *Journal of Business Case Studies*, *Journal of Business Ethics*, *Advances in Managerial Accounting*, *Journal of Applied Business Research* among others.

**NOTES**