INFOST 340 Systems Analysis

Case Scenario: Cheddarville Book Sale

Introduction

The Cheddarville Public Library is located in central Wisconsin. It serves a town-wide population of 10,000 and a county-wide population of 25,000. The library is supported in part by the efforts of a not-for-profit group named the Friends of the Cheddarville Public Library (FOCPL). FOCPL runs an annual used book sale. The proceeds of this book sale (nearly \$25,000 last year) are donated to the library to support programs identified by FOCPL.

Lorie Curd is the president of FOCPL and she is assisted by a vice president, Mary Melter, and a treasurer, Bill Slicer. Lorie is responsible for overall planning of the sale. Mary is responsible for recruiting and scheduling volunteers. Bill is responsible for pricing inventory, accounting for sales, and controlling funds.

The annual sale takes place over a three-day holiday weekend each fall. It is typically staffed by approximately 5 volunteers at a time from a group of 75 volunteers overall. These are recruited by Mary from patrons of the library who live in Cheddarville and surrounding Dairy County. They typically work 3-hour shifts that make up a 9-hour workday.

Used books are collected by library staff over the course of the year. They are stored in the basement of the library in anticipation of the sale. The average book sells for approximately \$2. There were approximately 12,500 books sold last year. Books are classified into 3 categories and each category has a different price.

All customer payments are made in cash. Bill stores the cash in the safe of his barber shop throughout the weekend and deposits it at the bank on Tuesday morning.

Problem or Opportunity Background

Presently, the book sale has little or no support from computer-based information systems. Lorie, Mary, and Bill all use a combination of hand-written documents, typed documents and Excel spreadsheets to do their work. Lorie is convinced that some greater level of computer-based information system support can help take the book sale to the next level. Mary is eager to get a greater level of support for recruiting and scheduling. Bill seems accustomed to his current cash accounting practices and is resistant to computer-based solutions generally.

Scope-Related Background

Lorie is eager to get support for pricing and revenue forecasting. Mary is eager to get support for recruiting and scheduling. As stated previously, Bill is resistant to the idea of more automation – particularly in his area of responsibility.

Known Functional Requirements

- 1. Track prospects for recruitment.
- 2. Schedule volunteers.

Known Non-Functional Requirements

- 1. Support up to 5 simultaneous system users.
- 2. Provide cashiers with 2-second response time or less.
- 3. System outages should be resolved within 15 minutes.
- 4. Data should be backed-up frequently to avoid data loss.