

INFOST 340 Systems Analysis

Case Scenario: Bert's Brewery

Introduction

Bert's Brewery (BB) is a small craft brewery owned and operated by Bert Bensen. Bert started the business in 1995 based on his family's love of beer and Bert's dream of starting his own business. Bert's staff includes his wife, Trudy, and a collection of people (mostly part-timers who are enrolled full-time at the University of Wisconsin – Milwaukee) who love beer.

Bert's Brewery is located in Milwaukee, his hometown. While Bert's main source of revenue is selling his bottled craft beers to beer distributors, his second largest source of revenue is a series of brewery tours. Patrons buy tickets to tour Bert's Brewery and to participate in a generous tasting event that follows the tour. Reservations are made for the brewery tours by telephone and the calls are taken by Bert, Trudy, or one of the trusted part-timers who work at the brewery. Tickets are paid in advance by credit card and processed very much like in-person sales. Bert's mails tickets and credit card receipts to customers. A few tickets are always reserved for in-person sales on the day of the tour.

Tours are led by Bert, Trudy, or the part-timers. It is important to schedule enough workers to handle the tours that are scheduled. Tours can accommodate between 10 and 20 persons depending upon the number of leaders available for the tour (1 or 2). There are 2 tours on Tuesday through Friday and Four tours on Saturday. Sunday and Monday are dark days. Trudy currently schedules staff using a spreadsheet. But, the process is difficult to control with the current volume of business. Bert and Trudy would like to increase the number of tours. But, this seems unwise given the marginal control that they currently have over the process.

Problem or Opportunity Background

The current approach to booking and accounting for tour tickets is based upon Excel spreadsheets. Trudy creates a spreadsheet on the office computer for each tour. Whoever books the tour, places an entry into the spreadsheet for each ticket sold. There is no direct connection between this record keeping system and credit card charges. Trudy reconciles the credit card charges against the tour rosters once per month. This is time consuming. Often, Trudy discovers that tours have been undersold when she knows that there were customers turned away who wanted to reserve a spot on that tour. Occasionally, she discovers that tickets have been distributed without a credit card having been charged. Trudy believes that a more robust computer-based information system will increase control, reduce errors, increase revenue, and improve profits.

Trudy would also like greater automation support of the tour scheduling, booking and staffing process. Bert isn't sure and wants to know your opinion about this option.

While Bert agrees with Trudy about the automation of the existing ticketing process, he has visions of this process being fully automated via Web application so that prospective customers can book and pay online. Bert also would like more support for other applications. One that he is particularly excited about is an email-based system to notify Bert's followers of seasonal beers available for purchase at the brewery.

Scope-Related Background

Bert and Trudy seem to agree that the current ticket booking process needs more systems support. They are divided in their opinions about the amount of support needed for the remainder of the functions.

Known Functional Requirements

1. Increase automation support for tour scheduling, ticket booking, payment, and reconciliation.

Known Non-Functional Requirements

1. Support up to 3 simultaneous system users.
2. Provide cashiers with 1-second response time or less.
3. System outages should be resolved within 30 minutes.
4. Data should be backed-up frequently to avoid data loss.