

INFOST 340 Systems Analysis

Case Scenario: Wilma's Wild Wisconsin

Introduction

Wilma's Wild Wisconsin (WWW) is an adventure tour company owned and operated by Wilma Carson. Wilma started the business in 2010 based on her family's love of kayaking and canoeing and Wilma's dream of starting her own business. Wilma's staff includes her husband, Bud, and a collection of people who share Wilma's love for kayaking, canoeing, and leading others as they learn and perfect their abilities in these sports.

While Wilma has dreams of significant business expansion, the operations of WWW are currently limited to one-day river trips within Wisconsin during the summer season. Current trip destinations include the Upper Wisconsin River, the Lower Wisconsin River, and the Wolf River. Trips are currently scheduled for only one weekend day (Saturday) allowing the possibility to postpone these trips by one day (to Sunday) when required by unfavorable conditions.

Wilma runs WWW from her home in Milwaukee. She takes care of reservations, cancellations, payment, confirmations, employee scheduling, payroll, and other administrative duties. Wilma is a qualified guide and acts as a substitute when regular guides are sick or otherwise unavailable. In these instances, the WWW office is staffed by one of the workers with reservations qualifications.

Guides must be qualified to lead the type of trip to which they are assigned (kayak, or canoe). Wilma is planning to add rafting trips next year, so she would like the system to support rafting as a trip type and as a guiding expertise.

When trips are particularly large, or when the preponderance of guests are inexperienced, WWW assigns one of the staff to join the trip as a Gear Assistant. This also depends on the level of experience of the guide assigned to the trip.

A typical trip starts when the guide (and possibly a gear assistant) meet the guests at the Guest Gathering Point. This is a parking facility near the take-out point for the trip. Guests are expected to arrive by the agreed Latest Guest Arrival Time and the party boards a locally hired bus for transport to the put-in point. Equipment and box lunches are provided by third party contractors at the put-in point.

Problem or Opportunity Background

Wilma uses Microsoft Excel spreadsheets, a laptop, and a printer to meet the information technology needs of the business. This approach works fairly well because Wilma is a former bookkeeper and is particularly talented at keeping all of the duplicate information in the spreadsheets synchronized. Nevertheless, she does make the occasional embarrassing mistake.

Wilma is planning significant growth for WWW starting next summer. Ideas under consideration include a longer season (to include spring), rafting trips, trips on weekdays, and more river destinations in Wisconsin. Most important, Wilma plans to turn over the record keeping and reservations work to office staff so that Wilma can get back to guiding (her first love) on a more full-time basis. When these changes take place in the business, Wilma expects that the current information systems approach will result in many mistakes. She is concerned that these mistakes will lead to lost customers, lower employee morale, and bad financial performance.

Scope-Related Background

Wilma is eager to convert the spreadsheet-based recordkeeping that she currently does to a more robust database-driven application that will support office staff that does not have Wilma's set of unique capabilities. The spreadsheets that she currently creates include the following:

1. Phone List
2. Guide Roles and Capabilities List
3. Employee Availability List
4. Booking Summary
5. Trip Roster
6. Trip Detail Sheet

Wilma also has a list of ideas for systems features that she believes could increase or improve business in the future. These include:

1. Customers booking and paying directly on the WWW Web site.
2. Sending emails to customers and prospects regarding special offers.
3. Providing access to employees so that they can provide availability information.
4. Real-time tracking of trips to provide status information to the office and the public.

Known Functional Requirements

1. Replace existing spreadsheets with a more robust solution.

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.