

SDLC Example: RMO Tradeshow Project



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

Outline

The RMO Company and Tradeshow Project

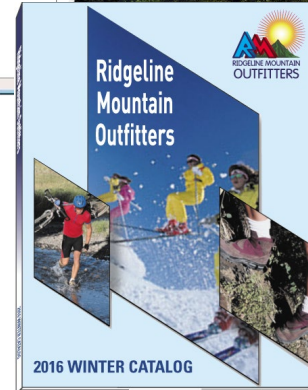
SDLC Activities for Developing the Tradeshow System





Ridgeline Mountain Outfitters (RMO)

- Large Retail Company
 - Sells outdoor and sporting clothing and accessories
- RMO purchasing agents at trade shows
 - Find and purchase products from vendors
 - To place an order, they used to exchange information with vendors and follow up.
 - Cannot keep up with the current business
- Needs small information system (app)
 - Collects supplier and product information
 - Allows agents to complete orders online
 - Added to the existing supply chain management system





SDLC of RMO Tradeshow System

- Demonstrate **one iteration** of the project – assuming more iterations in total project.
- Go through **all six core processes** of SDLC
- The plan for this chapter is to complete iteration in six days

Core processes	Iterations					
	1	2	3	4	5	6
Identify the problem and obtain approval.						
Plan and monitor the project.						
Discover and understand details.						
Design system components.						
Build, test, and integrate system components.						
Complete system tests and deploy the solution.						



RMO Tradeshow System

- **Problem** – purchasing agents attend apparel and fabric trade shows around the world to order new products from suppliers
- **Need** – information system (app) to collect and track information about suppliers and new products while at tradeshow
- **Tradeshow System** – is proposed
 - Supplier Information Subsystem
 - Product Information Subsystem



Initial Activities

- Identify the problem and document the objective of the system (**Core Process 1**)
 - Preliminary investigation
- **System Vision Document**
 - ❖ Problem Description
 - ❖ System Capabilities
 - ❖ Business Benefits
- Obtain approval to commence the project
 - Meet with key stakeholders, including executive management
 - Decision reached, approve plan and budget

RMO Tradeshaw System



Problem Description

Trade shows have become an important information source for new products, new fashions, and new fabrics. In addition to the large providers of outdoor clothing and fabrics, there are many smaller providers. It is important for RMO to capture information about these suppliers while the trade show is in progress. It is also important to obtain information about specific merchandise products that RMO plans to purchase.

Additionally, if quality photographs of the products can be obtained while at the trade show, then the creation of online product pages is greatly facilitated.

It is recommended that a new system be developed and deployed so field purchasing agents can communicate more rapidly with the home office about suppliers and specific products of interest. This system should be deployed on portable equipment.

System Capabilities

The new system should be capable of:

- Collecting and storing information about the manufacturer/wholesaler (suppliers)
- Collecting and storing information about sales representatives and other key personnel for each supplier
- Collecting information about products
- Taking pictures of products (and/or uploading stock images of products)
- Functioning as a stand-alone without connection
- Connecting via Wi-Fi (Internet) and transmitting data
- Connecting via telephone and transmitting data

Business Benefits

It is anticipated that the deployment of this new system will provide the following business benefits to RMO:

- Increase timely communication between trade show attendees and home office, thereby improving the quality and speed of purchase order decisions
- Maintain correct and current information about suppliers and their key personnel, thereby facilitating rapid communication with suppliers
- Maintain correct and rapid information and images about new products, thereby facilitating the development of catalogs and Web pages
- Expedite the placing of purchase orders for new merchandise, thereby catching trends more rapidly and speeding up product availability



System Vision Document

- Problem Description

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Day 1 Activities

- **Core Process 2: Plan the Project**
 - Determine the major components (functional areas) that are needed
 - Supplier information subsystem
 - Product information subsystem
 - Plan the rest of the first iteration
 - Decide to develop Supplier subsystem first
 - Steps:
 1. Identify the tasks required for the iteration
 2. Organize and sequence these tasks into a schedule.
 3. Identify required resources (especially people), and assign people to tasks.



Day 1 Activities

□ **Work Breakdown Structures** for Iteration

❖ Describes the work and covers
Core Processes 3, 4, 5, and 6

Work Breakdown Structure

- I. *Discover and understand the details of all aspects of the problem.*
 1. *Meet with the Purchasing Department manager. ~ 3 hours*
 2. *Meet with several purchasing agents. ~ 4 hours*
 3. *Identify and define use cases. ~ 3 hours*
 4. *Identify and define information requirements. ~ 2 hours*
 5. *Develop workflows and descriptions for the use cases. ~ 6 hours*
- II. *Design the components of the solution to the problem.*
 1. *Design (lay out) input screens, output screens, and reports. ~ 8 hours*
 2. *Design and build database (attributes, keys, indexes). ~ 4 hours*
 3. *Design overall architecture. ~ 4 hours*
 4. *Design program details. ~ 6 hours*
- III. *Build the components and integrate everything into the solution.*
 1. *Code and unit test GUI layer programs. ~ 14 hours*
 2. *Code and unit test Logic layer programs. ~ 8 hours*
- IV. *Perform all system-level tests and then deploy the solution.*
 1. *Perform system functionality tests. ~ 5 hours*
 2. *Perform user acceptance test. ~ 8 hours*



Day 1 Activities

□ Work Sequence Draft for Iteration

❖ Elaborates the Work Breakdown Structure

- Commercial tools (Microsoft Project) to aid allocating resources and people to specific tasks/sub-tasks

