Internal Travel System (ITS)

Project Proposal

ITEC 640 – Information Technology Project Management

Team:

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# Introduction

Quick overview of travel system as discussed on the phone:  
  
Enterprise application system that enables users to book travel, including air, hotel, car & expense their travel (within one application). The application allows travel arrangers or employees to compare and contrast pricing to make the best decision (fiscally) and track and allocate spending.

Key notes to think about:

1. Creates standardization to put in place standard operating procedures
2. Decreases complexity of IT systems and duplication of work for stakeholders to research travel
3. Integrates IT with business operations, enabling employees to quickly meet the needs of customers. That is, employees will depend on a system that delivers quick, innovative solutions to travel so they can focus on what matters: the business

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Silver Springs, LLC is a Maryland-based, medium-sized business that delivers innovative IT solutions, specializing in project management practices and principles, and has a community standing for being known as a trusted, innovative source. The company has a successful track record of delivering multi-million-dollar solutions on time and within budget and prides itself on its customer-relationship management by maintaining face-to-face client interaction. However, the company has been facing significant challenges because of the lack of internal standard operating procedures and technological limitations leading to unsustainable costs for its travel system. To continue thriving as a company, Silver Springs, LLC must invest in new technologies and processes.

Advances in technology, such as Cloud enterprise systems, have made it possible for businesses to create and successfully maintain standardization, improve security, and reduce costs. As an example, Amazon Web Services has established itself to be the leading Cloud Service Provider for enterprise applications by proving its adaptability and forward-leaning technologies, providing a multitude of businesses with solutions never before possible. These advancements have created an opportunity for Silver Springs, LLC to utilize a platform that can establish proper security protocols, interoperability between its departments, and streamlined business processes. Cloud services will enable on-demand, secure, and scalable infrastructure as the company continues to grow. Silver Springs, LLC must capitalize on these technological advancements to stabilize its cost and improve infrastructure.

Silver Springs, LLC will embark on a journey to build an enterprise-wide centralized travel system to modernize its infrastructure, reduce overhead and travel costs, and create standard operating procedures. One modernization project that was conducted a year ago, the implementation of the enterprise-wide Office 365, has already proven to reduce overhead costs, standardize practices and procedures, and create interoperability within the company. Silver Springs, LLC will capitalize on this past success to build a next-generation travel system that will meet the organization’s needs for a secure, high-performing environment. The travel system will be implemented within the company by using Agile methodologies, which will enable the team to capture user stories and implement first-class technological solutions.

Key guiding principles for this project will provide structure and agility for designing and building. These guiding principles serve to provide structure to the project’s vision.

1. Scalability: as the company grows, it expects more employees to utilize the travel system. The system should be scalable to accommodate users as needed.
2. Availability: information should be available on-demand and provide a wide array of tools.
3. Automation: all aspects of travel, including invoicing and payment, should be in one system.
4. Governance: the system should allow and provide management of travel data and traceability of costs.
5. Standardization: standard operating procedures should be created and maintained.
6. Security: maintain security standards to protect user and company sensitive information.

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Because of the company’s success, it has attracted notice from several big firms and has won contracts across multiple states; its most recent contract win is in California. The new contract will require frequent travel for its employees to attend in-person business meetings with clients. After performing an as-is analysis, the company found that a system of checks and balances for its travel system is severely lacking and that employees were not booking travel that is advantageous to the company. As a result, the company has elected to assign a team to resolve this issue by building an enterprise travel system to meet the needs of its employees while being fiscally responsible. The company’s CFO intends to assign a project manager from within the company to manage the project, and the CFO will also provide the necessary resources from within the company to work in the functional environment.

# Members

|  |  |
| --- | --- |
| Name | Role |
| Eugene Kim | Project Definition |
| Didimus Kimbi | Statement of Need |
| Brittany Kircher | Introduction |
| Debashis Jena | High Level Approach, Team Lead |

# Project Topic

1. Company system for travel (back end and front end). [DJ (02/09), regardless of the topic we choose, we need to plan for the below activities anyway.] [Adding specifics for project management below; first bullet points should be key points for SDLC based on the project plans/schedule. Please feel free to add – BK]

**SDLC**

* Requirements
  + Gathering
  + Documenting workflow
  + As-is state
  + Security
* Analysis
  + To-be state
  + Stakeholder analysis
* Design
  + Data flow diagram
  + Context diagram
  + ERD
* Development & testing
  + Backend
    - Database System
    - Data API
    - Integration with other external systems
  + Frontend
    - UX/UI
    - HTML/JS
* Deployment
* Maintenance

**Project management**

* Initiation
  + Charter
* Planning
  + Project plan
    - Scope management
    - Time management
    - Cost management
    - Communications management
    - Quality management
    - Risk management
    - Stakeholder management
* Executing
  + Quality assurance
  + Management
* Monitoring & controlling
  + Scope
  + Costs
  + Quality
  + Risks
* Closing
  + Acceptance of deliverables criteria

# Statement of Need

**Didimus**

# Project Definition

**Eugene**

# High-Level Approach

The scope of this project is to automate the travel system for the internal employees and the reimbursement process of the expenses. The current process which is purely manual and involves many defined steps for the employees and the accounting team will be automated and can be accessed via an internet browser or a mobile application. ITS will be comprised of sub-modules.

# Application Features

This product may be broken down into the following user groups and high-level features.

# User Profiles

User contexts for ITS may vary by profiles. The key users for this system can be classified into four profiles.

1. Travelers – Users who will book their travel and request approval for reimbursement
2. Managers / Approvers – Approves the reimbursement request
3. Accounting – Reimburses the travel expenses
4. Administrators – Setup users and configurations

# Modules

ITS can be broken down into the following areas.

1. Front End
   1. Travelers view
      1. Search flights
      2. Book hotel
      3. My bookings
      4. Request for approval
   2. Approvers view
      1. Pending requests for approval
      2. Approval history – Approved / Rejected requests
   3. Accounting view
      1. Approved requests for reimbursement
      2. Additional approval overriding capability – They may approve or reject the approval by the manager, or they may be able to request for further approvals from higher executives
      3. Traveler details with reimbursement history
      4. Dashboards – Custom dashboards
      5. Custom Reports
   4. Admin view
      1. User setup
      2. Business rule setup
      3. Other system configurations
2. Back End
   1. ITS Main – Salesforce can be used for the following.
      1. User setup – Profiles, roles
      2. Approval processes
      3. Process builders – Automate business rules
      4. Email system – For request approval, travel confirmation, other notifications
      5. Reports and dashboards
   2. Reservation module Integration with Salesforce – Many COTS products are available to build out this module. Instead of building this feature from scratch, any third-party solutions can be utilized for this purpose. For example, companies like TripAdvisor, Rezdy or TrekkSoft provide APIs for an enterprise travel system. The selection of the software will be based on budget and usability.
   3. Integration with Payroll system – For the reimbursement process the ITS Main needs to be integrated with the current payroll system.
   4. Amazon Web Service (AWS) platform – The backend databases, APIs and jobs which are required to support the processes which are external to Salesforce can be created within AWS.

# Execution Plan

These modules are needed to be tightly coupled with each other. An iterative development process can be followed to develop the application features described in the following section. This development process will help the project to deliver application functionalities incrementally and continuously to the customer.

# Team

Scrum type agile method will perfectly suit to develop this application. Multiple teams may work on each of the modules simultaneously. However, each of the teams will consist of the below team members.

1. Product owner
2. Scrum Master
3. Development team
4. Quality Assurance (QA)
5. DevOps

# Activities

In every iteration, there will be a few defined steps for each of the teams.

1. Planning for the iteration – A goal to implement a portion of the assigned module will be set.
2. Development, integration, and QA of the planned portion for the iteration.
3. At the end of the sprint, a demo to the stakeholders.
4. Upon approval, the implemented portion will be deployed to the production system.

# Closing

As the ITS development is complete, the acceptance criteria will be validated with the customers. As the criteria are successfully met, the project will be assumed to be complete.

# Training and Maintenance

As the project is complete, formal training will be provided to the users. Additionally, a maintenance team can be deployed for any future issues or enhancements.