Key Factors and Guidelines

1. Use good interpersonal skills.

When socioeconomic status is objective and open, with good listening skills, their relationships with users and other team members are productive. Their ability to effectively communicate project status and resolve stakeholder issues and conflicts

increases the likelihood of project success.

1. Think broadly and comprehensively.

Senior executives with extensive knowledge of the enterprise (whether systems, services, or enterprise) that is developing the requirements can add value and identify cost-effective solutions.

1. Identify Key Stakeholders

Identify the key people who will be affected by the project. Start by clarifying exactly who the project's sponsor is. This may be an internal or external client. Either way, it is essential that you know who has the final say on what will be included in the project's scope, and what won't.

Then, identify who will use the solution, product, or service. These are your end-users. Your project is intended to meet their needs, so you must consider their inputs.

1. Determine the root cause of the problem.

Before the requirements gathering begins, SE must answer the following questions: what are the real requirements for our travel site project and its products? SE must be handled with care and determination in the user's environment to discover real and perceived requirements. Examining some of the conceptual and operational

requirements information can help with the analysis. The next important question is: do all stakeholders agree on a clear statement of requirements that is consistent with the business case? The ability of SE to state the problem in an implementation-independent way is extremely important. Customers may find it difficult to accept the fact that the

solution to their perceived problem is not feasible or that other options should be explored.

1. Define the capability scope.

The capability scope gives a framework for the whole project and collects the requirements.

* Purpose: What problem is the customer trying to solve? What do they need and want?
* Value Proposition: Why is this capability justified?
* Objectives/Goals: High-level goals that can be measured.
* Sponsor: Who is paying for the capability?
* Customers: Who will use the results of the project?
* Scope of Project: Activities and deliverables included in this project.
* Out-of-Scope: Activities and deliverables not included in this project.
* Interfacing: What are the interfacing capabilities, systems, or user communities that will touch this project?
* Major Milestones: Events denoting progress in the project life cycle.
* Dates: When are deliverables due? What are the planned milestone dates?
* Critical Assumptions: Assumptions underlying plans for conducting and completing the project.
* Risks: Potential changes in the project's environment or external events that may adversely affect the project.
* Issues: Issues that have already been identified for this project.
* Constraints: Rules and limitations that may dictate how the project is carried out.
* Success Criteria: Outcomes that meet requirements, targets, and goals and satisfy the customer.

1. Discover and elicit requirements from all relevant sources.

We should gather the requirements from all possible ways: experienced and new users, stakeholders, SMEs, managers or even users’ customers. In order to get to know users’ operational environment and all the detailed information, they need to get all kinds of concise documents.

1. Document requirements' types and attributes.

Requirements’ attributes should be traceable to find for testing, validation and other processes and help to identify duplicate and ambiguous requirements.

1. Model requirements for validation.

The stakeholders sometimes need to explain their needs and requirements and interact with the implementary process for they also hope to see the desirable outcomes.

1. Prioritize the requirements.

Firstly, the stakeholders need to define the priority of their requirement. Then, the SEs should point out the inappropriate ones and communicate with the stakeholders to reach the agreement.

1. Work toward getting final agreement from contributing stakeholders.

There should be a face to face meeting at the end for the last change for the requirements should reach an agreement with the stakeholders.

1. Documents requirements for final approval

It is necessary to keep the good requirements and delete the bad ones and their dependents requirements. After that, the executive sponsors need to do the final approval.

1. Capture lessons learned.

When the project goes to end, all the project members need to write down their whole experience which helps to learn lessons from this project and sort out where they need to improve.

# Define the Functional and Content Requirements

1. Browse the home page

The users can enter the home page as a visitor, he can browse the page for some information and get the travel strategy from the different columns. As a visitor he can browse most pages of the travel website to obtain the useful information he wanted.

And We define this requirement from taking the users as the main stakeholders and our website’s main purpose is provide all useful information and convenient features about the travel for our users.

1. The vertical search requirement

We will have a lot of information, contents and pages about the different aspects of the travel. But only can browse the pages will take a lot of time for each user. So we define the vertical search requirement for each user could directly find the information and the contents he needs without wasting precious time.

And this step asks for the 5th guideline: Define the capability scope.

1. Register and create an account

During the browsing of the pages, a user may want to favorite some useful information or he/she wants to buy tickets and add some products on our website, he/she has to create his/her account in advance. He/she has to fulfill the the basic information table as asked to register. All the information will be in specific format.

And this step asks for the 8th guideline: Model requirements for validation.

1. Login the account

After creating an account successfully, the user can login the website by his/her username and password. And then he/she can browse the website and add something in wishlist and buy tickets.

And this step asks for the 3th guideline: Identify Key Stakeholders.

1. Book the trip or the tickets and the hotels or rent the cars

After the user has his own account he can book the hotels or the flight tickets even the whole trip on the website. The user just need to put the relevant products into the cart.

And this step asks the 5th guideline: Define the capability scope.

1. Add the information to favorites and make the comments.

While browsing the pages the user could add the information or the hotels he tends to in the favorites.

And this step asks the 5th guideline: Define the capability scope.

1. Make the payment

Aftering the user add the products he needs into the cart he wanted to make the payment and place the order to book or buy what he needs.

And this step asks the 5th guideline: Define the capability scope.

# The Model we decide to choose

In our project, we decide to use multiple models. We will use more than one model during our project's development.

Firstly, we use the Waterfall model to progress through a series of milestones in our linear fashion over time. The initial phase is our project’s target customers’ requirements task. The first milestone occurs when the customers’ requirements have documented, validated, and approved. Phases that follow are design, implementation, testing,

integration, operations, and maintenance. Each phase is formally documented, validated, and approved.

Then we use the Spiral model to save time and labor cost when we define

requirements. We will collect and document requirements at the start and update them after each cycle. At the end of each cycle, we analyze risks at the next level. The customer evaluates the work and may suggest modifications for the next loop. Our project can end at any point if the customer determines that the prototype satisfies the requirements and can be made as they thought.

We also use the Agile model in our project. As we all know agile projects are very short cycles, substantial customer collaboration from start to finish, close teamwork, open and constant communication among participants, adaptability on the part of all team members, and incremental development. Every member in our group has great teamwork and will discuss several times every week to wear several hats in an agile environment by providing support as needed, like: identifying emerging requirements; analyzing, then documenting requirements as they evolve; calculating metrics; and

writing functional specifications, test cases, meeting minutes, and progress reports.

In conclusion, regardless of the particular model, all approaches in our project should include requirements elicitation. We may change, reorder, repeat, or omit activities on the list, depending on our project type, complexity, methodology, and environment.