
Vision and Scope Document

for

Tour Booking System

Seven Wonders

Version 1.0 approved

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Revision History

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1. Business Requirements

SevenWonders is a tourist company that provides its customers full planning of their trips including optimal way of travelling both sides and booking a place to stay at the destination place. The company is planning to create a website, as this is one of the modern world's requirements for every top-level company.

1.1. Background

SevenWonders is a worldwide company whose services are used by thousands of customers around the world every year. It cooperates with some of the most famous hotel networks, such as Hilton Hotels, InterContinental Hotels Group, Wyndham Hotel Group as well as with plenty of different low-cost hotels and with lots of airlines that provide quick and comfortable flights to almost every place on the Earth, except Antarctica. In 2017 the company decided to create its website to improve their employees' workflow and increase customer satisfaction.

1.2. Business Opportunity

The most competitive and popular tourist firms use the Internet to get in contact with their customers. This is a very important advantage over the companies that still stay offline and this is going to let SevenWonders significantly improve its market position. The company used to provide tourist service mainly for the customers from cities where the company offices are located, and this step is going to create the possibility to involve the customers from all around the world including smaller towns, villages etc.

There are many companies that organize the travel or do the hotel booking job, but SevenWonders takes care of all parts of the trip from the moment a customer leaves their home and until they return back.

Another one useful opportunity is to contact companies that specialize in online advertisements to sell advertising space on the website. Being involved in online advertising can bring the company more income. Also we can get in touch with companies whose products or services are related to travelling and tourism to sign contracts about mutual advertising.

In addition, one of the advantages of a website is that it provides to monitor the market of travelling and hotel business with minimum time and money efforts. The statistics of customers' needs will also be helpful in further business planning.

Last but not least, the company is also planning to release the mobile version of the website as well to make it more convenient for the customers with mobile phones or tablets because the smartphones are used more and more widely in today's world and it is likely that more than half of the customers will use the mobile version.

1.3. Business Objectives and Success Criteria

The primary business objective is to increase the number of sold tours. One of the best way to reach this goal is to encourage more different customers to use the company's service.

The secondary objective is to reduce the time and money spent on providing a single tour to a customer to increase the amount of tours that can be processed by a single employee per working day as well as increase our profit margin.

A helpful step is getting rid of all paper-form statistics and analytic documentation and convert it all to electronic form to save in a database. This will make the access to such information much easier.

To measure the success in reaching the business objectives, such success criteria can be used:

- 60% increase in yearly tours sold;
- 50% increase in the number of customers that purchase a tour package, including a 100% increase in the number of remote customers (located more than 30km away from a SevenWonders office);
- 70% decrease in time and 40% decrease in money spent on organizing a single tour;
- 100% increase in gross yearly income, including income from online advertising.

1.4. Customer or Market Needs

1. In today's fast-moving world people want to waste as little time as possible. That's why the time spent on booking a tour should be minimized. Also, nobody wants to overpay for such a service – SevenWonders should provide the possibility for fast and cheap booking while maintaining a reasonable profit margin.
2. People spend too much time when using different sites for flight and hotels booking – SevenWonders will offer both of these on a single website, as well as additional services such as taxi services, car rentals, tour guides etc. This will significantly decrease the amount of time a customer spends on booking a tour.

3. The company offers a wide variety of tours not only for those who go a vacation, but also for people that plan a business trip and have no time to think about all the details. Customers such as these can plan their trip as quickly and comfortably as possible using the company's premium services.
4. One of the most requested things on travel websites is a feedback form. It should be very convenient for a customer to contact the manager via the feedback service on the site or to arrange a meeting if the customer has more complicated questions which they would like to discuss. The manager will do their best to help and provide appropriate assistance.
5. Our customers often tend to use their phones to access the Internet, and some of them don't own a desktop at all. Thus the website should have both desktop and mobile versions, be accessible from any browser and operating system and have a reasonably high performance.
6. The website must scale to a large amount of customers. Therefore, the database should support saving large amount of data which is also needed to collect analytical statistics and to plan further innovations based on it.

1.5. Business Risks

In this section of the document, we has attempted to identify possible risks associated with the completion of the SevenWonders project, rated those risks into the categories of HIGH, MEDIUM, and LOW, and provided mitigation plans to help reduce the chance of the risk occurring.

HIGH	Chance of risk occurring is high, level of mitigation must be critically considered.
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MEDIUM	Chance of risk occurring is medium, level of mitigation should be seriously considered.
LOW	Chance of risk occurring is low, level of mitigation should be moderately considered.

These possible business risks, the estimated risk level, and the suggested mitigation of each are defined as follows:

Risk	Severity	Mitigation
Delay in project timeline due to software configuration or deployment issues.	MEDIUM	Delays in the timeline due to software configuration or deployment issues will be mitigated by designing software with simple installation requirements, meeting these installation requirements, following proper installation instructions, providing detailed and complete documentation, and thorough training of administration staff.
Delay in project timeline due to scope change or improperly defined requirements.	LOW	Delays in the timeline due to scope changes and improperly defined requirements will be mitigated through detailed analysis, documentation, testing, and agreement between all involved parties on project vision, timelines, resources, and cost prior to installation.
Different customers may not be able to access the	MEDIUM	This issue will be mitigated by maintaining development using open cross-platform standards, avoiding

website or display it properly.		vendor-specific software packages, and extensive testing across multiple platforms.
Customers may incorrectly use website forms, leading to internal issues.	MEDIUM	This issue will be mitigated by developing the software to validate all customer-provided data before submission. An information checking system should be implemented.
Software developed may not run on our hosting provider's servers.	HIGH	This issue will be mitigated by using open-source development packages that can be used on the majority of hosting platforms.
High competition level among the other tourist companies.	HIGH	This issue will be mitigated by provide a high-quality service with different unique features that are not provided anywhere else, and designing easily extensible software that can quickly keep up with features introduced the competition.
High cost or inefficient advertising and marketing of the site.	MEDIUM	This issue will be mitigated by choosing appropriate advertising platforms and designing creative and effective marketing campaigns.

2. Vision of the Solution

The website will enable easy and fast tour management that is convenient and productive for both the organization's business and customer needs thereby improving the service quality and increasing revenue.

2.1. Vision Statement

SevenWonders will use a smart search engine that can quickly find various tours using different parameters. It will also provide innovative and powerful technologies that are easily accessible, highly configurable, and that can deliver information in a visually appealing way to the largest possible audience.

The amount of managers that work on tour management will be decreased as much as possible – most of their current workload will be automated. However, if no tour is found using the parameters entered by customers, alternative solutions should be suggested.

The list of our travelling and hotels partners should be easily extensible in order to increase our variety of tours and to be able to satisfy every customer.

For customers who wish to get their seats reserved, tickets booked, purchased and printed without visiting a company office, the electronic reservation system is a solution which is based on a website further linked with an RDBMS that will provide a more reliable form of entering, storing as well as accessing the data. Unlike the current manual reservation system, our product will provide a way to make overall service operations easier and more efficient.

2.2. Major Features

Functional requirements:

1. Customer features:

- login and registration of new users;
- smart search of tours using different parameters, filters and sorting options;
- tour booking;
- the possibility to print hotel and airplane tickets;
- view of already reserved tours;
- secure online payment;
- email confirmation during registration and payment;
- a feedback service that allows the user to contact a manager.

2. Manager features:

- hotels and rooms management: addition, editing, removal;
- flight, schedule and airport management;
- working with tours assigned to the manager.

3. Administrator features:

- view of statistics and analysis results using certain criteria;
- overseeing the managers work, banning users for inappropriate behavior.

Non-functional requirements:

- object-oriented design to be implemented with ASP.NET Web API;
- written as a Web Service project using .NET technologies;
- must support ability to work with different data stores (e.g., SQL DB or text file);
- can be accessed using different devices, browsers and operating systems;
- high performance;

- adaptable;
- highly maintainable, with readable and understandable code.

2.3. Assumptions and Dependencies

- **Assumption:** The new system, using a third-party vendor like PayPal, puts the responsibility of the payment security on the vendor rather than SevenWonders.
 - **Dependency:** This should achieve greater security and customer confidence while paying for the tour online.
- **Assumption:** The idea of our tourist firm requires such benefits as taking care of customer's comfort once he arrives at the destination place. This includes taxi service, car rent, excursion guides etc.
 - **Dependency:** Establishing relations with various companies that provide such kinds of service will greatly increase the quality of feedbacks customers leave after finishing the trip and thus do perfect advertising for our company.
- **Assumption:** Additional training of managers is foreseen for managers to teach them how to use the new website with the most efficiency.
 - **Dependency:** Additional training time allowed for managers.

3. Scope and Limitations

It is obvious that all of the envisioned capabilities cannot be delivered at once. In the sections that follow, the scope of this project will be defined in terms of major features that will be implemented and those that will not.

The fundamental goal of this development cycle is to deliver those features that will satisfy our immediate needs while positioning the product so that it can be enhanced to meet our future needs.

Initially the website will incorporate online login and registration, tour searching system and tour booking, an administrators' portal, and manager-oriented features. Initially the system will not offer a secure payment processing system and discount system, though it will be included in a future release.

SevenWonders already has a database containing our users, hotel providers and partner airlines, so this project will use this database in the future.

3.1. Scope of Initial Release

The initial release of the product will include an online login and registration form, tour searching and booking system, manager-oriented features and an administrators' portal. The goal of this release is to deliver a finished version of the website which can already be used by customers and managers but still can be expanded with different features. Since this initial release will be fully functional, it is critical and essential to include user and technical support documentation as well as to install and configure the application so it is usable in the new environment.

3.2. Scope of Subsequent Releases

Future releases will include:

- Online payments system that supports all of the most popular payment services – Visa, MasterCard, WebMoney etc.
- Performance increase where possible.
- Additional premium partners such as chauffeurs and personal assistants.
- Architecture improvements to make tour searches as fast as possible (30 seconds or less).
- The possibility to leave feedback about hotels and flights after using the company's service.

3.3. Limitations and Exclusions

A feature that will be excluded from initial releases is a smart service that analyzes the statistics of already provided services and creates an optimal route for the customer describing how to get from the airport to the hotel the customer has chosen.

The reason for its' exclusion is that it's not among the main features of the product that need to be included into the scope of first releases, and requires active user data to be able to deliver helpful assistance to the customer. In the future we can consider the idea of implementing this feature based on statistic and analytic data.

4. Business Context

The customers for SevenWonders are different travelers all over the world: from those who go on a vacation to business travelers who need to quickly and comfortably reach their destination. The project team is responsible for meeting project priorities and stakeholder profiles. The website must support an audience from all over the country.

SevenWonders has previously used a traditional ‘paper-based’ way of tour booking. The customer had to come to the company office with all needed documents and only after spending a lot of time they could have their booking. It would be reasonable to say that this used to be really inconvenient either for people who need business trips or for those who live far away from the company office.

All these problems are easily eliminated with a new website that allows to book a tour whenever the customer needs it and wherever they are. It is even possible to book while a customer is in an airplane (if there is Internet access, of course). It is obvious that such innovation will significantly increase the amount of customers using our company’s services.

4.1. Stakeholder Profiles

Stakeholder	Major Value	Attitudes	Major Interests	Constraints
President of	Increasing revenue	As the scope of the company expands, it is becoming	Deliver high quality service in a timely manner	maximum budget = \$2.0M

SevenWonders		increasingly difficult to manage all customers' requests in time, so maybe hiring some additional managers should be considered.	at a low cost. Maintain a high professional reputation of the company in the area of tourism.	
Software Development Team - Developers	Designing and developing new software, maintaining and providing enhancements for existing software.	Trello will assist developers in ensuring that only the necessary changes are made, that all problems are addressed, that all files are included in builds, and that testers are provided with the correct testing steps. Trello will be used to assign tasks to developers and to aid them in managing and reporting the work they have done.	Providing design of new requirements for the product. Providing code changes to applications to address problems reported and new functionality. Delivery of high quality software with few problems.	Must deliver the product in time.

Software Development Team – Testers	Testing of the product, reporting software problems, ensuring that changes address the problems that have been reported and do not compromise other aspects of the system.	Testers will be key users of Trello. They will create problem reports for problems found during testing. They will be assigned problem reports for testing evaluation and after development has been completed to ensure that the change was made correctly. Trello will contain appropriate test steps for each problem report, which will ensure that the correct problem is being addressed.	Ensuring that software problems are found and addressed. Software should be delivered with a minimum of problems.	Must report all the problems in time.
Software Development Team – Scrum Master	Organizing the work of the team	Scrum Master will track the progress of software reports and manage the distribution of the workload by assigning versions to	Overseeing the development and testing of all software changes. Manages project scheduling and reporting of	Limited in time for all the organizing work.

		<p>problem reports and assigning problem reports to developers and testers to be worked. She will be able to generate reports and view the time spent on each problem.</p>	<p>project progress to the customer.</p> <p>Delivering a quality project on time and in budget that meets the user's needs.</p>	
Software Development Team – Business Analyst	Understanding the needs of the customer.	<p>He will view and submit enhancement requests into the system. He will provide comments on the problem reports to document how the application should be functioning and to provide guidance to the developers.</p> <p>Communicating with the customers and with the developers and testers.</p>	Delivering a quality project that meets the user's functional requirements.	Customers' needs may be unstable.

System Administrator	Technical support for the software development team	System Administrator is proficient with computers, understands the software development process.	All the environment meets the needs of the software development team.	Software development team need may increase during the development process.
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4.2. Project Priorities

Dimension	Driver (state objective)	Constraint (state limits)	Degree of Freedom (state allowable range)
Schedule	release 1.0 to be available by 04/15, release 1.1 by 05/01, release 1.2 by 05/15	Any unscheduled issue could cause delay.	Web server will be running 100% in release 1.0.
Features	<ul style="list-style-type: none"> Smart tours searching Customer feedback service Statistics and analysis Managers part 	Software bugs and hackers.	70-80% of high priority features must be included in release 1.0.

Quality	The product will increase customer satisfaction and save time during booking.	Searching could be hard during server down time.	90-95% of user acceptance tests must pass for release 1.0, 95-98% for release 1.1.
Staff	Developers Testers Scrum Master Business Analyst	Team size limited to 4 people. Number could not be increased.	Staffs knowledge covers 100% of requirements need for this project.
Cost	\$20,000.00	Any price changes on hardware, software and new software needed could increase the cost.	Budget overrun up to 15% acceptable without executive review.

4.3. Operating Environment

Customers from all over the country will be able to use SevenWonders website for planning either a vacation or a business trip. They are located in all 24 time zones so every customer will be able to work with the site using their own time zone.

The website will be online 24/7 and there will always be at least one manager online to ask any customer's question or help with a piece of advice.

The data will be stored on Microsoft SQL Server and will be easily accessible at any time and at any location. For more efficient data management it is supposed to use several powerful servers combined into a cluster. There will be also several backups to restore all the data in case of any extra unforeseen circumstances.

It is planned to handle around 10,000 simultaneous requests to the database.

The users will be able to tolerate short-term service interruptions (e.g. several seconds) but the long-term ones are critical and should thus be avoided.

SevenWonders website will be accessible from any device with any operating system installed (Windows, Linux, Mac OS, Android, IOS etc.) using any browser (Chrome, Edge, Opera, Safari, Firefox, IE etc.)