Asanshop

System Request and Feasibility Study / Planning Phase   
(Homework No.1B)

Project team: Team 09

Instructor: Dr. Araz Yusubov

Submitted in partial fulfillment of the requirements of the INFT 2303: Systems Analysis and Design course project

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| GitHub repository | https://github.com/ADA-SITE-INFT2303-2023-Spring/sys-dev-project-team-09 |
| 02/21/2023 | Several updates to introduction, perspectives, constraints, etc. |
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| <Date> | <Version description> |

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| --- | --- | --- |
| Team member | Contribution to this homework (NOT the project) | Estimated % |
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# Introduction

This is part of the System Proposal for a hypothetical project Asanshop submitted for partial fulfillment of the requirements of the Systems Analysis and Design course in the School of Information Technologies and Engineering at ADA University, Baku, Azerbaijan.

The project selection is the initiation of Asanshop in Azerbaijan, which aims to provide a convenient and reliable method for online shopping in the country. The team opted for this project due to its potential to boost the local economy, its scope and purpose, and its advantages for both customers and vendors.

The following are the individual System Request Statements:

* Improve access to online shopping in Azerbaijan.
* Reduce time, funding problems.
* Provide a platform for sellers and buyers to transact online in Azerbaijan.
* Increase economic value in Azerbaijan by promoting trade.

Several factors likely played a role in selecting this project over all others. These factors may have included:

Scope: The project has a broad scope, as it aims to provide an end-to-end online shopping platform in a country where such services are limited.

Economic value: The project has the capacity to enhance the economic value in Azerbaijan by encouraging local manufacturing and trade, which may result in a favorable impact on the national economy as well as the incomes of individual business employees.

Risk: Compared to the other project options, the Asanshop system was considered to have a relatively lower risk level. The team was concerned that an online healthcare system might encounter regulatory challenges, and a parking solution could be more technically complex.

Impact Scope: The Asanshop system has the potential to reach a significant number of people in Azerbaijan by offering an online shopping platform, while the other project options may have a more limited impact.

Overall, the project was likely selected due to its potential to provide a much-needed service in the country, promote economic growth, and have a positive impact on people's lives, while also being a feasible and worthwhile investment.

## Definitions

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| --- | --- |
| Term | Definition |
| Plan subscription | The service offers subscriptions to support the vendors to set up their own business easily. |
| FAQs | Abbreviation for frequently asked questions. |
| User manual  Feasible investment | A document that helps users to understand the system, service, or product (simply, instructions).  Feasible investment refers to an investment opportunity that is considered practical, realistic, and achievable. |

# Overall Description

<Based on the raw individual System Request Statement for the selected project, in this subsection:

* Our system will be produced by Asanshop.
* The Asanshop system is an online shopping platform that is designed to increase people’s confidence in online shopping in Azerbaijan and it allows vendors and customers to transact online. On the system both customers and vendors register for their category to get access to special functions such that vendors can list their product, on the other hand customers can browse and purchase products online. Order management, payment processing, and tracking of order fulfillment will all be handled by the system. Furthermore, customer support, including email, phone call, and live chat services will be provided to make better customer-vendor relations. In general, the main goal of the system is to provide both customers and vendors with a thorough online shopping experience in Azerbaijan.

## Product Perspective

A block diagram showing the major components of the larger system, interconnections, and external interfaces can be helpful. This is NOT a design or architecture picture. It is more to provide context, especially if your system will interact with external actors. The system you are building should be shown as a black box. Let the design document later present the internals.>

There are a number of online shopping platforms that offer similar services to what Asanshop is planning to build. These platforms offer customers the ability to browse and purchase a wide range of products. For example, Amazon and eBay are two of the most popular e-commerce platforms that serve a global audience. However, there are some key differences between these international platforms and the local platform that Asanshop aims to create. Our local system can potentially offer a more personalized and localized shopping experience compared to international ones.. This means the system may be more accessible to local businesses who may have difficulty reaching customers through larger international platforms. It can also serve as a catalyst for promoting local businesses, leading to a positive impact on the economy.

In terms of related research, there is an abundance of literature available. Numerous studies have been conducted that concentrate on the factors that influence consumer behavior, such as website design, pricing strategies, and the use of social media and etc. Moreover, there are numerous studies that examine the challenges and opportunities of e-commerce in developing countries, including matters related to logistics, infrastructure, and payment systems. Research that is specific to the Azerbaijani market may also be valuable in gaining insight into local consumer preferences and shopping behavior.

* Main components of our online local shopping system

Web Application: Main application that customers will use to browse and purchase products online includes features such as search, filtering, sorting, product details, reviews, ratings, and etc.

Payment Processing: This component is responsible for secure processing customer payments for purchases made through the application.

Vendor Management: This component is responsible for managing vendor accounts and product listings. Through this component, vendors are able to create and manage their product listings, keep track of their sales and inventory, and communicate with their customers.

Vendor: This component represents the sellers who will use the Vendor Management component to create and manage their product listings, track sales and inventory, and communicate with customers. In other words, this component serves as a platform for the vendors to manage their online business operations.

Customer: The end-user of the system who will browse, search, and purchase products through the Web Application.

## Product Functions

1. Product Management:

* Displaying products.
* Managing inventory.

1. Order management:

* Placing orders.
* Tracking order status.
* Viewing order history.
* Fulfilling orders.
* Generating invoices.

1. Search:

* Search functionality for products.
* Browsing products by category and subcategory.
* Sorting and filtering.

1. Product details and images:

* Detailed product information, including description, specifications, and features.
* Product images
* Product reviews and ratings.

1. Cart and checkout:

* Adding items to cart.
* Modifying cart contents.
* Applying discounts.
* Shipping and billing address management.

1. Payment processing:

* Secure payment processing.
* Multiple payment methods.

1. Customer support:

* Email support.
* Live chat support.
* Phone support.

1. Vendor management:

* Vendor registration and approval.
* Product management.
* Order management.
* Payment and commission management.

1. Marketing and promotions:

* Discounts.
* Coupon codes.
* Special offers.
* Plan subscriptions.

1. Analytics and reporting:

* Sales tracking.
* Customer behavior analysis.
* Market trend analysis.

1. Support and training:

* FAQs.
* User manuals.

1. Feedback management:

* User ratings, reviews, and comments.
* Feedback moderation by system administrator.
* System administrator responding to user feedback.
* User account information management & viewing of order history and feedback.

1. User account management:

* User registration and login.
* User profile management.
* Password reset and recovery.
* Payment method management.

1. Privacy and security:

* Ensuring privacy and security.
* Implementation of data protection measurements.
* Secure transmission of user information.

## User Characteristics

<Describe those general characteristics of the intended users of the product including educational level, experience, and technical expertise. DO NOT state specific requirements but rather provide the reasons why certain specific requirements maybe specified in subsequent documents.

What is it about your potential user base that will impact the design? Their experience and comfort with technology will drive user interface design. Other characteristics might actually influence internal design of the system.

For example:

The target user must:

• Have basic experience using computers and browsing the internet. Has filled out online forms or surveys and may have purchased or sold a product

• Have a computer with access to the internet

• Be willing to share information such as home address and contact information >

<This section is accounting for about 10% of your assignment grade.>

## Constraints

There are some constraints for the Asanshop:

* Availability - The system should be available 7/24, there should not be system interruption.
* Performance - The system is needed to have high speed page loading, there will be many vendors and a lot of products so, the website may load the pages slowly. The website should be optimized for data access, caching and content delivery to improve user experience.
* Scalability - The system should accept a high number of customers and support concurrent user sessions. The website is an ecommerce multi vendor website so, there will be many customers on special days such as Black Friday, Christmas and so on. This requires a scalable architecture and load balancing techniques.
* Compatibility - Mainly, people use mobile phones during online shopping, so the system should be compatible with mobile phones.

<This section is accounting for about 7% of your assignment grade.>

## Assumptions and Dependencies

There are many assumptions:

* Data management - assumptions about the data management and analysis capabilities such as the data storage and analysis tools may affect the requirements for the system.
* Messaging(emailing) system - the system can provide messaging service for the vendors and customers to discuss the order.
* Payment system - the system may support the international payment gateways.
* Dispute - if the item has not been delivered or the customer do not like the item then the customers will be able to open a case which is related to order(items).

There are many dependencies:

* The system should be integrated with some third party APIs such as payment gateways, shipping services, email services and so on.
* The platform’s security depends on some factors such as secure coding practices, data privacy regulations and so on
* The user experience of the system is related to(depends) the usability of the user interface and responsiveness of the system.

<This section is accounting for about 6% of your assignment grade.>

# Feasibility Analysis

<On this stage, develop a basic feasibility study that includes the following:

Technical feasibility: can we build it?

* Familiarity with application(s) or technology: Less familiarity generates more risk.
* Project size: Large projects have more risk.
* Compatibility: The harder it is to integrate the system with the company’s existing technology, the higher the risk will be.

Economic feasibility: should we build it?

* Development costs
* Annual operating costs
* Annual benefits (cost savings and/or increased revenues)
* Intangible benefits and costs
* Necessary calculations

Organizational feasibility: if we build it, will they come?

* Is the project strategically aligned with the business?
* Project champion(s)?
* Senior management?
* Users and other stakeholders?>

<This section is accounting for about 30% of your assignment grade that is 10% for each of the sub-sections.>

# References

<Insert here any document referred to in the document. An example might be articles or Web sites that you consulted during the literature search. This is not just a list of used materials, so do not forget to clearly MARK the exact points(s) of reference in the main text.>

<This section is accounting for about 5% of your assignment grade.>