

**INNOVASIAN ENTERPRISE**

Software Requirements Specification

| **Team Number** | 2 |
| --- | --- |
| **Section** | S12 |
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# Executive Summary

Innovasian is a small yet dynamic company making waves in the WiFi and IT solutions industry since its establishment in September 2019. Based in the heart of Pasay City, the company is run by a dedicated two-person team who manage every aspect of the business, from client relations to technical operations. Despite its size, Innovasian has carved out a niche for itself, offering tailored solutions for both enterprises and residential clients.

The company specializes in more than just selling network equipment; it provides end-to-end services designed to ensure seamless connectivity. The team conducts detailed site surveys to understand the specific needs of each client, designs secure and efficient networks, and personally configures high-performance equipment. For installation work, such as wiring and physical setup, Innovasian hires skilled freelance laborers to assist in completing projects efficiently and professionally.

What Innovasian lacks in size, it makes up for in dedication and expertise. As a small company, it offers a level of personalized service that larger organizations often cannot match. Clients work directly with the owners, ensuring clear communication, attention to detail, and solutions that are truly customized.

Innovasian’s commitment to reliability and security has earned it a strong reputation among its growing base of clients. From small business owners seeking to upgrade their network infrastructure to homeowners needing fast, dependable WiFi, the company provides solutions that work. Despite its modest beginnings, Innovasian has earned recognition not only locally but also from international clients who value its innovative approach and high-quality service.

This two-person operation exemplifies how small businesses, driven by passion and expertise, can deliver exceptional results in a competitive industry. Innovasian’s focus on client satisfaction, combined with its commitment to staying at the forefront of networking technology, ensures it continues to thrive and grow.

# Overview of the Business Process

## Existing Business Process

Innovasian, as a small but agile company, operates with a lean two-man team responsible for the core aspects of the business process, including network configuration and site surveys. The process begins when a client reaches out to Innovasian, expressing interest in network setup or upgrade services. The two-man team then takes on the task of assessing the client’s needs and specifications, which could range from high-performance network solutions for businesses to reliable WiFi setups for residential properties. As of the moment, Innovasian is not looking for applicants as they are still building their name and reputation.

The next step involves conducting a thorough site survey at the client's location. This is a crucial part of the process, as the team evaluates the physical space where the network will be installed. They assess factors like the building layout, signal coverage areas, potential interference sources (e.g., walls or electronic devices), and the number of devices that will connect to the network. Based on this survey, the team determines the most appropriate equipment—such as routers, switches, access points, and cables—and calculates the number of devices required to ensure optimal performance. The team may also identify any specific needs for the client, such as security measures or advanced features like VLAN setup, ensuring that the network design will meet both functional and performance requirements.

Once the site survey is complete, the team moves on to the network configuration phase. This is where they select the equipment, set up configurations for performance, security, and scalability, and ensure that all systems are compatible with the client’s existing setup. This may involve configuring IP addresses, setting up firewalls, and ensuring that all security protocols are in place, especially for enterprise clients with sensitive data.

However, when it comes to the installation phase, Innovasian hires freelance laborers to assist with the physical tasks involved. These workers help with the labor-intensive aspects of the process, such as wiring the building, setting up access points in the optimal locations, running cables, and mounting hardware. These freelance laborers play a key role in ensuring that the physical infrastructure is set up according to the specifications determined during the site survey. Innovasian’s two-man team oversees this phase to ensure that everything is done according to plan and that the installation is completed smoothly.

After the physical setup, the team performs a final test of the system to ensure that everything is functioning correctly, including verifying signal strength, testing connectivity, and ensuring the system meets the client's expectations. Once testing is completed and any necessary adjustments are made, the network is handed over to the client, along with the necessary documentation and support instructions.

This efficient process allows Innovasian to maintain a high level of control over the quality of service while keeping overhead costs low. The use of a small core team allows Innovasian to remain flexible and scalable, bringing in freelance labor as needed for larger projects or areas where more hands are required, such as complex installations or tight deadlines. This model enables Innovasian to provide personalized service with a strong emphasis on quality, reliability, and innovation.

The business process can be visualized in the diagram shown in Figure 2-1.

<insert your business process diagram here>

Figure 2-1. Existing Business Process

<Reports that are produced as part of the business process must be discussed next. >

## Data Requirements

The business process at Innovasian relies on various types of data that are captured, stored, and generated throughout the process. Some of the key data points include:

* **Client Information:** Name, address, contact details, type of business (enterprise or residential), and specific needs for their network.
* **Network Configuration Data:** Details of the high-performance network solution, including hardware used, IP configurations, and security settings.
* **Installation and Maintenance Records:** Information on the installation process, including installation date, team responsible, and any issues encountered. Maintenance data is stored for tracking purposes and includes dates of scheduled service or troubleshooting efforts.
* **Support Requests:** Data generated from clients submitting support tickets, which include the nature of the problem, the resolution provided, and follow-up actions taken.

Reports related to these data points, such as installation completion reports, maintenance logs, and support ticket summaries, are generated regularly. These reports are stored in the company's database and are accessible to the relevant teams for review and action.

<Other reports that are prepared by the employees of ECTPA should also be presented here.>

## Roles in the Business Process

Innovasian is a small company that is not currently hiring. This business process shows its operations, and it operates on a more traditional spectrum and relies on a mix of physical and third-party software tools to streamline its business processes and maintain efficiency in delivering its services. These tools are carefully selected to meet the specific needs of the company's operations, covering everything from client management to technical support and financial administration. Below is a detailed look at the software Innovasian uses:

**Customer Relationship**

At the heart of Innovasian’s client management process. The company tracks all client interactions, from initial inquiries to post-installation support. Manually input customer details and history to ensure that the team has access to up-to-date information about each client’s requirements, project status, and communication history.

* Client profiles with detailed records of interactions.
* Sales tracking to monitor progress on potential deals.
* Task scheduling for follow-ups and client check-ins.

Maintains strong client relationships by ensuring timely communication and effective follow-ups, which are crucial for client satisfaction and retention.

**Network Configuration Tools**

These tools are used by Innovasian’s technical team during the configuration phase of a project. They enable the team to set up and fine-tune network equipment to ensure optimal performance, coverage, and security.

* Configuration of routers, switches, and access points.
* Tools for managing IP addresses, VLANs, and firewalls.
* Monitoring and diagnostic features for real-time network performance.

These tools ensure that networks are designed and implemented with precision, reducing the likelihood of performance issues or security vulnerabilities.

**Accounting and Billing**

Innovasian is a small company, so it uses manual steps to record transactions, prepare invoices, and collect payments. It typically follows a straightforward sequence, relying heavily on physical documentation and basic tools like spreadsheets, printed forms, or handwritten records.

* Contract forms for the project.
* Invoices and ORs (Official Receipts) for records of transactions.
* Excel spreadsheets for detailed product price lists.

# Problem Analysis

This chapter presents the findings of the investigation on the organization’s needs and problems to be addressed by the software. (Only problems to be ADDRESSED) This section will also provide the reader with a background of the organization which is the primary stakeholder of the system to be developed. The various users and stakeholders of the software are also presented here.

| **#ID** | **Description** | **Cause** | **Symptoms** | **Impact** |
| --- | --- | --- | --- | --- |
|  | What’s the problem? | What causes the problem? | How do we know the problem exists? | Why is this important? What are the consequences? |
|  | Stock is being managed through a spreadsheet | no inventory management system for the company | the client explained to us that they only use a Google spreadsheet to monitor their supplies | Time is lost inputting data in the spreadsheet |
|  |  |  |  |  |
|  |  |  |  |  |
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# Software Solution

## Objectives

Our goal was to create an Inventory Management System designed to make managing inventory easier, faster, and more reliable. Many businesses struggle with outdated, manual processes—like handwritten records and inconsistent data—that lead to errors, wasted time, and missed opportunities. This software was created to solve these problems by streamlining inventory management, improving accuracy, and helping businesses stay ahead with better tools and insights. Here’s how the system works.

**Inventory Management System:**

* **Inventory Page**: Think of this as your inventory command center. It lets you see all your products in one place and makes it simple to update the list by adding, editing, or deleting items. No more messy paperwork or lost records—everything is organized and standardized.
* **Low Stock Alert Page**: Running out of stock can be a headache, but this feature has you covered. It sends you real-time notifications when products are running low, so you know exactly when to restock and avoid disruptions.
* **Recent Activity Page**: Transparency is key in managing any team, and this page helps you keep track of what’s happening. It logs all user actions so you can see what staff or admins have done and ensure everything is accurate and above board.
* **Graphical Trend Page**: Understanding your inventory isn’t just about what’s in stock—it’s about seeing the bigger picture. This page provides graphs and charts to help you spot trends, analyze patterns, and understand customer preferences. With this knowledge, you can plan smarter and grow faster.

At its core, the Innovasian Inventory Management System is built to save you time, reduce errors, and give you the tools you need to make better decisions. Whether you’re managing a small store or a large operation, it’s designed to help you stay organized and focus on what really matters—growing your business.

## Characteristics

To achieve the business goals of the Innovasian Inventory Management System, several non-functional requirements must be met to ensure the software operates efficiently, reliably, and securely. These requirements focus on the system's quality attributes and play a critical role in delivering a seamless user experience while supporting long-term scalability and maintainability.

1. **Reliability**
   * The system must achieve an uptime of 99.9%, ensuring that critical features like low-stock alerts and activity logs remain available during business operations.
2. **Usability**
   * The user interface must be intuitive and easy to navigate, requiring minimal training for new users to get started.
   * Clear feedback and error messages should be provided to guide users and minimize mistakes.
3. **Security**
   * User accounts must be secured with role-based access control to ensure that only authorized personnel can make changes to inventory or view sensitive data.
   * All data transmissions, especially login credentials and sensitive inventory information, must be encrypted to prevent unauthorized access.
4. **Maintainability**
   * The system should be built with modular components to simplify updates, troubleshooting, and the integration of new features in the future.
   * Comprehensive documentation must be provided for both users and developers to ensure efficient maintenance and onboarding.
5. **Data Accuracy**
   * Validation rules must be implemented to prevent invalid or incomplete data entries, ensuring that the inventory records remain accurate and reliable.

By addressing these non-functional requirements, the Innovasian Inventory Management System will deliver a robust and user-friendly solution that aligns with the business goals of reducing manual errors, enhancing efficiency, and empowering data-driven decision-making.