Vision

Version <1.0>

Revision History

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(Product Features)Table of Contents

1. Introduction 5

1.1 Purpose 5

1.2 Scope 5

1.3 Definitions, Acronyms, and Abbreviations 5

1.4 References 5

1.5 Overview 5

2. Positioning 5

2.1 Business Opportunity 5

2.2 Problem Statement 5

2.3 Product Position Statement 5

3. Stakeholder and User Descriptions 5

3.1 Market Demographics 5

3.2 Stakeholder Summary 5

3.3 User Summary 5

3.4 User Environment 5

3.5 Stakeholder Profiles 5

3.5.1 <Stakeholder Name> 5

3.6 User Profiles 5

3.6.1 <User Name> 5

3.7 Key Stakeholder or User Needs 5

3.8 Alternatives and Competition 5

3.8.1 <aCompetitor> 5

3.8.2 <anotherCompetitor> 5

4. Product Overview 5

4.1 Product Perspective 5

4.2 Summary of Capabilities 5

4.3 Assumptions and Dependencies 5

4.4 Cost and Pricing 5

4.5 Licensing and Installation 5

5. Product Features 5

5.1 <aFeature> 5

5.2 <anotherFeature> 5

6. Constraints 5

7. Quality Ranges 5

8. Precedence and Priority 5

9. Other Product Requirements 5

9.1 Applicable Standards 5

9.2 System Requirements 5

9.3 Performance Requirements 5

9.4 Environmental Requirements 5

10. Documentation Requirements 5

10.1 User Manual 5

10.2 Online Help 5

10.3 Installation Guides, Configuration, and Read Me File 5

10.4 Labeling and Packaging 5

A Feature Attributes 5

A.1 Status 5

A.2 Benefit 5

A.3 Effort 5

A.4 Risk 5

A.5 Stability 5

A.6 Target Release 5

A.7 Assigned To 5

A.8 Reason 5

Vision

# Introduction

## Purpose

The purpose of this document is to specify the business vision of the project “Smart Farming System”. It covers the problem statement, the stakeholders profile after project .The Business Vision document captures very high-level objectives of a business modeling effort. It communicates the fundamental "why’s and what’s" related to the project and is a gauge against which all future decisions should be validated.

## Scope

This Vision Document applies to the Smart Farming System, (SFS). This document overs problem statement, responsibilities of stakeholders, supplementary rules, impact, success criteria of the project. It also covers the supplementary specifications, besides it also covers business contents, political concerns and other requirement.

## Definitions, Acronyms, and Abbreviations

* SFS is for Smart Farming System.
* SAL is for Software Architecture Limited.

## References

Vision Draft

Rational Unified Process – Software Requirement Document template

## Overview

This document contains the representation of this system. The rest of the Business vision contains: Positioning, Stakeholder and Customer descriptions, Business modeling objectives, Constraints, Quality ranges, Precedence and Priority, and other requirements.

# Positioning

## Business Opportunity

[Briefly describe the business opportunity being met by this project.]

## Problem Statement

[Provide a statement summarizing the problem being solved by this project. The following format may be used:]

|  |  |
| --- | --- |
| The problem of | [describe the problem] |
| affects | [the stakeholders affected by the problem] |
| the impact of which is | [what is the impact of the problem?] |
| a successful solution would be | [list some key benefits of a successful solution] |

## Product Position Statement

[Provide an overall statement summarizing, at the highest level, the unique position the product intends to fill in the marketplace. The following format may be used:]

|  |  |
| --- | --- |
| For | [target customer] |
| Who | [statement of the need or opportunity] |
| The (product name) | is a [product category] |
| That | [statement of key benefit; that is, the compelling reason to buy] |
| Unlike | [primary competitive alternative] |
| Our product | [statement of primary differentiation] |

[A product position statement communicates the intent of the application and the importance of the project to all concerned personnel.]

# Stakeholder and User Descriptions

## 

## Market Demographics

The target market medium includes all the landlords, farmers, transporters, exporters shopkeepers who are looking for more and more easier ways to buy and sale products and put their work to a next stage where they get more opportunities and more success. All these actors might be looking for more chances of making progress and increasing their sale and export and get higher rates for the payment. As they seek more help in this case of working more through automated system which they were not able to do in the manual working system. Their every problem will be solved by working online as they can handle every work by sitting anywhere they want to but just need to get registered and get online whenever they want to and they will always get notified through a notification about any kind of update or news related to their work. And their all further issues will be solved on the automated system. As the reputation of the Smart Farming System in the market would be very successful due to being a computer operated automated system which works online all the time and 24/7. It also enables all the farmers and landlords to develop more relations and good terms with the buyers, exporters and wholesalers, and they can even briefly discuss the issues related to the required products with them and discuss the sales price too. As according to this user communication is made more easier and it is made more easier for the all kind of users of the system to find out more opportunities and regarding this benefit it will automatically increase the market value of the product software. As it automatically reaches up the mark of market requirement and automatically the goals of meeting the needs

## Stakeholder Summary

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Responsibilities** |
| Landlord | This is a stakeholder who owns the land and is like an offstage actor but somehow works through help of farmer | Helps in risk management and reduction and checking of total expending’s, sales and savings. Also responsible for the working management observed from farmer. |
| Farmer | This is the stakeholder who works somehow under the landlord and is responsible for sailing, buying. Etc. | He identifies problems, takes notice of everything and notifies landlord, buys and sales products and keep records of them and hands them over to landlord and makes payment. |
| Investors | They are one of the non-user stake holders. They provide the financial facilities to improve it more. | They ensure that the system is developed on time and keep an eye on the market needs and checks the quotation progress, approves funding for improving system according to needs of market. |
| Agricultural Supplier and Services | They are the stakeholders like pesticide manufacturers, seed suppliers, wholesalers. And they also deliver the products as exporters. | Makes sure the timely delivery of products, pesticides, and seeds to the landlord and farmers and also provide support to producers. And also export the products to other countries. |
| Project Manager | This is a stakeholder that is primary for leading the system development. | Plans, manages and allocates resources, shapes priorities, coordinates interactions with customers and users, and keeps the project team focused. Also establishes a set of practices that ensure the integrity and quality of project artifacts |

## User Summary

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Description** | **Responsibilities** | **Stakeholder** |
| Investors | They are one of the non-user stake holders. They provide the financial facilities to improve it more. | They ensure that the system is developed on time and keep an eye on the market needs and checks the quotation progress, approves funding for improving system according to needs of market. | Self-represented |
| Landlord | Primary end user of system | Helps in risk management and reduction and checking of total expending’s, sales and savings. Also responsible for the working management observed from farmer. | Self-represented |
| Farmer | End user | He identifies problems, takes notice of everything and notifies landlord, buys and sales products and keep records of them and hands them over to landlord and makes payment. This is the stakeholder who works somehow under the landlord and is responsible for sailing, buying. Etc. | Self-represented |
| Customers | End user | They monitor the status of the system and can easily buy agricultural products they want by sitting at their homes and get them delivered. And can complaint if requirements not met. | Self-represented |

## User Environment

The User Community is a large sophisticated community that demands the flexibility and response time that an on-line helping company or a software can provide. The most of the users are educated, computer literate, and in most cases own personal computers in their homes some people might not be educated much but they do have mobile phones and know how to use them. The ability to register on this software via personal computers and to seek help and buy and sale products for customers, farmers etc. will be easy through this system. SFS will be designed to be expandable and all user community, public users and the farmers, landlord’s data will be easy driven and easily modifiable upon system installation. And all the services provided by the SFS, will be easily approached and understood.

## Stakeholder Profiles

### Investors

|  |  |
| --- | --- |
| **Representative** | Investor |
| **Description** | Investor is the stakeholder who provides the financial support to the system. |
| **Type** | This is a casual user, possibly with previous use of  management systems |
| **Responsibilities** | Ensures that the system is completely made on time and running on budget according to the market needs. |
| **Success Criteria** | The success is completely defined by the customers continuing business with using our system |
| **Involvement** | They are involved as basic or non-users who only invest and get benefit like offstage actors. |
| **Deliverables** | Keeps eye on documentation and proper working of system by being in budget. |
| **Comments and Issues** | None |

### Landlord

|  |  |
| --- | --- |
| **Representative** | Primary end user as landlord |
| **Description** | An individual that will use the system for keeping an eye on the farmer and check payments and rechecking whole budget of sailing and buying agricultural products and water and other managements etc. |
| **Type** | This is a primary user, possibly with many skills of handling, managing and maintain all the records and systems related to his land. |
| **Responsibilities** | Helps in risk management and reduction and checking of total expending’s, sales and savings. Also responsible for the working management observed as done by farmer. |
| **Success Criteria** | The success is completely defined by check in the records of agricultural products bought and sold and other systems like water management, payment management and sale initiation. |
| **Involvement** | Only checks the things and works done by the farmer and guides him. |
| **Deliverables** | None |
| **Comments and Issues** | None |

### Agricultural Suppliers and Services

|  |  |
| --- | --- |
| **Representative** | Seed suppliers, wholesalers, pesticide manufacturers etc. |
| **Description** | These are the agricultural suppliers and they provide different services like transportation too and they are stakeholders who are kept in interest of the system. |
| **Type** | They act as advanced users who manage to help the whole system by using the system as to sell the seeds, pesticides and other fertilizers to farmers and landlords. |
| **Responsibilities** | Helps in risk management and makes sure the timely delivery of products, pesticides, seeds to the landlord and farmers and also provide support to producers. And also export the products to other countries. |
| **Success Criteria** | The success is completely depending on the products required which are supplied and sent to the farmers and landlords. . |
| **Involvement** | Only checks and confirms the delivery of required products. |
| **Deliverables** | None |
| **Comments and Issues** | None |

## Customer Profiles

### Customer

|  |  |
| --- | --- |
| **Representative** | end user |
| **Description** | An individual that will buy agricultural or land grown products from farmers and put forward his request to buy fruits or vegetables or whatever they like in any amount. |
| **Type** | This is an advanced user with experience in supporting similar online calling or questioning systems. |
| **Responsibilities** | Ensures that the system provides the necessary comforts, fulfill the requirements and holds proper security and management to satisfy the other stakeholders and investors and inform that they are provided with whatever they required from the system online. |
| **Success Criteria** | The success is completely defined by the ability for the Customer Care group to eliminate negative customer complaints about getting support while using our system |
| **Involvement** | Management-reviewer, specially features affecting usage concerns. |
| **Deliverables** | None |
| **Comments and Issues** | None |

## Key Stakeholder or Customer Needs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Need** | **Priority** | **Concerns** | **Current Solution** | **Proposed Solutions** | |
| Buying online | High | People go out and manually go and buy whatever they need on their own by wasting a lot of time outside. | People go to the shops and wait there in a lot and then shopkeepers or suppliers provide them with products required. | | Users would like to have online access to quickly buy and sale the products they want by sitting at their homes through online system. Farming is made easier. |
| Secured access | High | Management of private user info | most of the people do not have secured accounts and their accounts get hacked and private information is revealed | | Manages user access with pin code sent to their mobile phones or emails to enter for their login and encryption |
| Easy to use | High | Ability to provide the users easy access to any kind of item they are searching for. | The users and other farmers too use to go out and buy or sale their products by standing in large queues and then get success after wasting a lot of time. | | Provides user friendly management system and the user can easily know about the product or agricultural item they want as easy for farmers, landlords, sellers and customers too. Easy to use and access. |
| Low cost | Medium | Time taking and costly | The all kind of users spend a lot of money by going on their own besides having such budget or not and have no proper calculations of products and just pay whatever the next person demands. | | Provides simple use and also the stakeholders have the share in the total payment and users also get products at lower price with discounts or at regular prices as they should be. Noting more expensive and out of budget. As whole system is easy to use and made with such view that to be in budget and beneficial too at the same time. |

# Product Overview

The purpose of this document is to specify the business vision of the project “Smart Farming System”. It covers the problem statement, the stakeholders profile after project.

The Business Vision document captures very high-level objectives of a business modelling effort. It communicates the fundamental "why’s and what’s" related to the project and is a gauge against which all future decisions should be validated.

It also covers the supplementary specifications, besides it also covers business contents, political concerns and other requirement.

Product is independent and totally self-contained, state it here. If the product is a component of a larger system, then this subsection needs to relate how these systems interact and needs to identify the relevant interfaces between the systems. Product is easy to use and efficient so it can have good impact on its users

## Product Perspective

[This subsection of the **Vision** document puts the product in perspective to other related products and the user’s environment. If the product is independent and totally self-contained, state it here. If the product is a component of a larger system, then this subsection needs to relate how these systems interact and needs to identify the relevant interfaces between the systems. One easy way to display the major components of the larger system, interconnections, and external interfaces is with a block diagram.]

## Summary of Capabilities

[Summarize the major benefits and features the product will provide. For example, a **Vision** document for a customer support system may use this part to address problem documentation, routing, and status reporting without mentioning the amount of detail each of these functions requires.

Organize the functions so the list is understandable to the customer or to anyone else reading the document for the first time. A simple table listing the key benefits and their supporting features might suffice. For example:]

**Table 4-1 Customer Support System**

|  |  |
| --- | --- |
| **Customer Benefit** | **Supporting Features** |
| New support staff can quickly get up to speed. | Knowledge base assists support personnel in quickly identifying known fixes and workarounds. |
| Customer satisfaction is improved because nothing falls through the cracks. | Problems are uniquely itemized, classified and tracked throughout the resolution process. Automatic notification occurs for any aging issues. |
| Management can identify problem areas and gauge staff workload. | Trend and distribution reports allow high level review of problem status. |
| Distributed support teams can work together to solve problems. | Replication server allows current database information to be shared across the enterprise. |
| Customers can help themselves, lowering support costs and improving response time. | Knowledge base can be made available over the Internet. Includes hypertext search capabilities and graphical query engine. |

## Assumptions and Dependencies

[List each of the factors that affect the features stated in the **Vision** document. List assumptions that, if changed, will alter the **Vision** document. For example, an assumption may state that a specific operating system will be available for the hardware designated for the software product. If the operating system is not available, the **Vision** document will need to change.]

## Cost and Pricing

[For products sold to external customers and for many in-house applications, cost and pricing issues can directly impact the application’s definition and implementation. In this section, record any cost and pricing constraints that are relevant. For example, distribution costs, (# of diskettes, # of CD-ROMs, CD mastering) or other cost of goods sold constraints (manuals, packaging) may be material to the projects success, or irrelevant, depending on the nature of the application.]

## Licensing and Installation

[Licensing and installation issues can also directly impact the development effort. For example, the need to support serializing, password security or network licensing will create additional requirements of the system that must be considered in the development effort.

Installation requirements may also affect coding or create the need for separate installation software.]

# Product Features

**Worker Management**

* Feature 1.1: Worker Registration Management FR 1.1.1: System will allow user to register the user into the system through proper verification. NFR1.1.1: System will allow the access to the user to through a secured database.
* Feature 1.2: Record Management FR 1.2.1: System will allow user to maintain i.e. Create, Update, delete and read record of the worker. NFR1.2.1: System will allow user to access worker record through accessing the online server which will available 24/7.
* Feature 1.3: Profile management FR 1.3.1: System will allow the user to maintain i.e. Create, Update, delete and read the profile of the worker. NFR1.3.1: System will allow the availability of the of the profile updating 24/7

**Project management**

* Feature 2.1: Project Creation management FR 2.1.1: System will allow user to create project by providing the required details. NFR2.1.1: System will save the details of the project on the database that can accessed by the users anytime.
* Feature 2.2: Project Submission management FR 2.2.1: System will allow user to submit the created project onto the server. NFR2.2.1: After the submission of the project the system will ensure the integrity of the details.

**Employer management**

* Feature 3.1:Registeration management FR 3.1.1: System will allow user to register the user into the system through proper verification. NFR3.1.1: System will allow the access to the user to through a secured database.
* Feature 1.2: Record management FR 3.2.1: System will allow user to maintain i.e. Create, Update, delete and read record of the Employer. NFR3.2.1: System will allow user to access worker record through accessing the online server which will available 24/7.
* Feature 3.3: Profile management FR 3.3.1: System will allow the user to maintain i.e. Create, Update, delete and read the profile of the worker. NFR3.3.1: System will allow the availability of the profile updating 24/7.

**Proposal and Bid management**

* Feature 4.1: Proposal management FR 4.1.1: System will allow user to submit the details of the proposal on a specified project. NFR4.1.1: System will allow the access to view the proposal as soon as the proposal is submitted.
* Feature 4.2: Bid management FR 4.2.1: System will allow user to create and submit the bid with the specified amount on specific project. NFR4.2.1: System will ensure the integrity of the bid details after the project time exceeds.
* Feature 4.3: Delete Proposal and Bid FR 4.3.1: System will allow the user to delete the proposal and bid submitted on the project before the project time exceeds. NFR4.3.1: System will permanently delete the details of proposal and bid from servers.

**Payment management**

* Feature 5.1: Payment milestone management FR 5.1.1: System will allow user to create a milestone of the payment by collecting the payment. NFR5.1.1: System will store the payment milestone into a highly secured third medium server that can only be accessed after the milestone is released.
* Feature 5.2: Release Payment Milestone FR 5.2.1: System will allow user the user to release the payment milestone after the project is completed. NFR5.2.1: System will only make transaction to go through to the worker when the user release the payment milestone.
* Feature 5.3: Payment Commission management FR 5.3.1: System will auto-collect the commission of the project by deducting the original amount. NFR5.3.1: System will store the commission amount in the personal account of the company.

# Constraints

[Note any design constraints, external constraints or other dependencies.]

# Quality Ranges

This section defines the quality ranges for performance, robustness, fault tolerance, usability, and similar characteristics for the system

* Availability: The System shall be available 24 hours a day, 7 days a week.
* Usability: The System shall be easy-to-use and shall be appropriate for the target market of computer-literate or mobile users that might be literate or illiterate, somehow software would be understandable for them. As well as it will be easily useful for the workers too.
* Usability: The System shall include online help for the user. People will not have to go out for manually calling the worker or take the faulty item to the shops.
* Maintainability: The System shall be designed for ease of maintenance .All data should be table-driven and modifiable and all feedback forms will be kept in view to maintain a better serving to the people.
* All the performance of the system will be kept in view all the time and if needed or in case of any single complaint, changes will be made and customer reviews will be preferred.

# Precedence and Priority

[Define the priority of the different system features.]

# Other Product Requirements

[At a high level, list applicable standards, hardware or platform requirements, performance requirements, and environmental requirements.]

## Applicable Standards

[List all standards with which the product must comply. These can include legal and regulatory (FDA, UCC) communications standards (TCP/IP, ISDN), platform compliance standards (Windows, UNIX, and so on), and quality and safety standards (UL, ISO, CMM).]

## System Requirements

[Define any system requirements necessary to support the application. These can include the supported host operating systems and network platforms, configurations, memory, peripherals, and companion software.]

## Performance Requirements

[Use this section to detail performance requirements. Performance issues can include such items as user load factors, bandwidth or communication capacity, and throughput, accuracy, and reliability or response times under a variety of loading conditions.]

## Environmental Requirements

[Detail environmental requirements as needed. For hardware- based systems, environmental issues can include temperature, shock, humidity, radiation, and so forth. For software applications, environmental factors can include usage conditions, user environment, resource availability, maintenance issues, and error handling and recovery.]

# Documentation Requirements

[This section describes the documentation that must be developed to support successful application deployment.]

## User Manual

[Describe the purpose and contents of the User Manual. Discuss desired length, level of detail, need for index, glossary of terms, tutorial versus reference manual strategy, and so on. Formatting and printing constraints must also be identified.]

## Online Help

[Many applications provide an online help system to assist the user. The nature of these systems is unique to application development as they combine aspects of programming (hyperlinks, and so forth) with aspects of technical writing, such as organization and presentation. Many have found the development of an online help system is a project within a project that benefits from up-front scope management and planning activity.]

## Installation Guides, Configuration, and Read Me File

[A document that includes installation instructions and configuration guidelines is important to a full solution offering. Also, a Read Me file is typically included as a standard component. The Read Me file can include a "What's New With This Release” section, and a discussion of compatibility issues with earlier releases. Most users also appreciate documentation defining any known bugs and workarounds in the Read Me file.]

## Labeling and Packaging

[Today's state-of-the-art applications provide a consistent look and feel that begins with product packaging and manifests through installation menus, splash screens, help systems, GUI dialogs, and so on. This section defines the needs and types of labeling to be incorporated into the code. Examples include copyright and patent notices, corporate logos, standardized icons and other graphic elements, and so forth.]

# A Feature Attributes

[Features are given attributes that can be used to evaluate, track, prioritize, and manage the product items proposed for implementation. All requirement types and attributes need to be outlined in the Requirements Management Plan, however, you may wish to list and briefly describe the attributes for features that have been chosen. The following subsections represent a set of suggested feature attributes.]

## A.1 Status

[Set after negotiation and review by the project management team. Tracks progress during definition of the project baseline.]

|  |  |
| --- | --- |
| Proposed | [Used to describe features that are under discussion but have not yet been reviewed and accepted by the "official channel," such as a working group consisting of representatives from the project team, product management, and user or customer community.] |
| Approved | [Capabilities that are deemed useful and feasible, and have been approved for implementation by the official channel.] |
| Incorporated | [Features incorporated into the product baseline at a specific point in time.] |

## A.2 Benefit

[Set by Marketing, the product manager or the business analyst. All requirements are not created equal. Ranking requirements by their relative benefit to the end user opens a dialog with customers, analysts, and members of the development team. Used in managing scope and determining development priority.]

|  |  |
| --- | --- |
| Critical | [Essential features. Failure to implement means the system will not meet customer needs. All critical features must be implemented in the release or the schedule will slip.] |
| Important | [Features important to the effectiveness and efficiency of the system for most applications. The functionality cannot be easily provided in some other way. Lack of inclusion of an important feature may affect customer or user satisfaction, or even revenue, but release will not be delayed due to lack of any important feature.] |
| Useful | [Features that are useful in less typical applications will be used less frequently or for which reasonably efficient workarounds can be achieved. No significant revenue or customer satisfaction impact can be expected if such an item is not included in a release.] |

## A.3 Effort

[Set by the development team. Because some features require more time and resources than others, estimating the number of team or person-weeks, lines of code required or function points, for example, is the best way to gauge complexity and set expectations of what can and cannot be accomplished in a given time frame. Used in managing scope and determining development priority.]

## A.4 Risk

[Set by development team based on the probability the project will experience undesirable events, such as cost overruns, schedule delays or even cancellation. Most project managers find categorizing risks, as high, medium, and low, is sufficient, although finer gradations are possible. Risk can often be indirectly assessed by measuring the uncertainty (range) of the projects team’s schedule estimate.]

## A.5 Stability

[Set by the analyst and development team, this is based on the probability that features will change or the team’s understanding of the feature will change. Used to help establish development priorities and determine those items for which additional elicitation is the appropriate next action.]

## A.6 Target Release

[Records the intended product version in which the feature will first appear. This field can be used to allocate features from a **Vision** document into a particular baseline release. When combined with the status field, your team can propose, record, and discuss various features of the release without committing them to development. Only features whose Status is set to Incorporated and whose Target Release is defined will be implemented. When scope management occurs, the Target Release Version Number can be increased so the item will remain in the **Vision** document but will be scheduled for a later release.]

## A.7 Assigned To

[In many projects, features will be assigned to "feature teams" responsible for further elicitation, writing the software requirements, and implementation. This simple pull-down list will help everyone on the project team to understand responsibilities better.]

## A.8 Reason

[This text field is used to track the source of the requested feature. Requirements exist for specific reasons. This field records an explanation or a reference to an explanation. For example, the reference might be to a page and line number of a product requirement specification or to a minute marker on a video of an important customer review.]

USE CASE DIAGRAM:

