SOEN 6481 Systems Requirements Specification

Delivery #3

Rebutted Vision Document

&

Rebutted Requirements Analysis and Risk Evaluation

Submitted To: **Prof. Dr. Rodrigo Morales**

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ETR (electronic tool rental)

1. Introduction

The document depicts the overall goals of the project, the project's main stakeholders, the target users, demographic features, and the high-level needs of the ETR (electronic tool rental) tool. It focuses on the functionality needed by the stakeholders, and the end-users, as well as why these needs exist. The document is structured as a standard Vision document, containing within it the user description, stakeholder needs, alternatives, and the product features.

This document is composed by a Requirement Engineer, intended to converge the understanding of the software to be, between the stakeholders and the development team.

1.1. References

IBM Corporation. "Engineering Lifecycle Management 7.0.0 Vision document". Mar 30, 2022.
NBDiff diffing and merging IPython Notebook. "NBDiff Vision Document". Feb 13, 2014.
University of Dallas. "RUP Vision Document for the Home Appliance Control System". Oct 05, 2004.
Pearson Education. "Bringing it all together: The Vision Document". Dec 06, 2002.

2. Positioning

2.1. Problem Statement

The problem of	Creating an E-commerce online platform for the consumers to provide home improvement tools for rent.
Affects	Plumbing technicians, Pipe fitters, Steam fitters, Gas service technician, Business owners and general consumers.
The impact of which is	Unaffordability of expensive home improvement tools by the small-scale home renovators, interior decorators, self-funded technicians / plumbers, and the individual who needs the equipment to fix a minor issue in their houses.
A successful solution would be	Developing an E-commerce online rental platform of home improvement tools.

2.2. Product Position Statement

For	Plumbing technicians, Pipe fitters, Steam fitters, Gas service technician, Business owners and general consumers.
Who	Wants to rent the expensive home improvement tools for services, repairs, and short business needs.

The ETR (electronic tool rental)	is an E-commerce online rental platform.
That	Provides rental services of various home improvement tools like carpet cleaner rentals, woodchipper rentals, lawn rollers, saws for the wide range of vendors (plumbing technicians, Pipe fitters, Steam fitters, Gas service technician, Business owners and general consumers).
Unlike	Possessing and maintaining the expensive equipment for short needs by investing huge capital.
Our product	Provides rental services of tools with wide range of rental plans by eliminating the huge capital investment and maintenance efforts. Provides rental services of home improvement tools across the country which benefits the technicians/small scale business owners by eradicating the need of transporting the tools to different locations where they do repairs/services.

3. Stakeholder Descriptions

3.1. Stakeholder Summary

Below are the key stake holders of the ETR system,

Name	Description	Responsibilities
Consumers/ Customers	End users who rent the tools from ETR (electronic tool rental)	Utilizes the ETR tool to rent the home improvement tools and return the tools as per rental duration/plan.
Business Partners	Investors, Shareholders, Creditors, and the organization itself, who involved in the economic activities and development of the E-commerce online platform.	Managing employees, implementing marketing strategies, tracking financial objectives, Executing other strategic management activities.
Competitors	Competitors can be an important stakeholder element in that they are materially affected by the successful implementation of a project. Likewise, should a rival company bring a new product to market, the project team's parent organization could be forced to alter, delay, or even abandon their project.	Competition improves the conduct of managers, as they understand that in such markets only the fittest can survive. This, in turn, improves quality of products and reduces prices for consumers, and maintains or increases market share, and return on shareholders' investment
Employees	Representatives, who support the Rental platform system and serve	Responsible to add new branches to the system, creating branch employees in the

	directly to consumers such as, System administrators and the branch employees.	ETR system, responsible for adding/removing tools for rental in their respective locations, to hand out the tools to the customers in store, ensuring the returns of rental equipment, update the system with the status of the tool (available, rented, out of order, not available), supervise the rental warehouse, administration of property rentals, collecting rent, and complying with rental laws.
Suppliers	Organization who provides/sell home improvement tools in bulk to the rental warehouses to support ETR.	Sell/supply quality tools to the ETR warehouses ensuring long lasting life of the equipment.
Technology Support Team	IT vendors or Development team who improve and support the ETR and bridging the technology needs to run ETR seamlessly.	Responsible to provide technology support, system upgrade and various IT enhancements in the ETL system.

3.2. User Summary

Name	Description	Responsibilities	Stakeholder
Consumers/ Customers	End users who rent the tools from ETR (electronic tool rental)	Utilizes the ETR tool to rent the home improvement tools and return the tools as per rental duration/plan.	End users/ Consumers
System administrators	Who support and maintain the Rental platform system.	Responsible to add new branches to the system, creating branch employees in the ETR system.	Employee
Branch employees	Representatives, who support the Rental platform system and serve directly to consumers.	Responsible for adding/removing tools for rental in their respective locations, to hand out the tools to the customers in store, ensuring the returns of rental equipment, update the system with the status of the tool (available, rented, out of order, not available)	Employee

3.3. User Environment

- ***Consumers/End users*** are expected to have a digital device like, Smart phone, Laptop or Tablet to access ETR application provided with the stable Internet connection.
- ***System administrators*** should possess the access to the system available in the warehouses with the valid credentials to access the ETR system.

- ***Branch employees*** should have a pre-requisite of account creation validated by System admins. with the approved credentials, branch employees can access the ETR system in the warehouse machines/workstations.

3.4. Key Stakeholder or User Needs

Target	Need	Priority	Concerns	Current Solution	Proposed Solutions
End users	Feature-Rich and intuitive	High	Non complicated and hassle-free road map in the application to rent an equipment.	None (No rental online platform available in the market yet)	Simple navigation menu options and sample demo rental booking guide for the first-time users of the ETR.
End users	Seamless Payment options	High	Non fraudulent payment options.	None (No rental online platform available in the market yet)	Embedding industry standard and government approved payment gateways to the ETR system.
System Admin	Consistency	High	Unique data maintained across the system integrated with several branches.	None	Centralised data maintenance of the system partnering with the high-quality cloud-based database solution providers.
Branch Employees	Reliability	High	Reliable inventory management and accuracy of rental activities.	None	Accurate information on the availability of equipment and rental details can be made available by implementing memory efficient and latest technology stack.
Branch Employees	Robustness	High	ETR must be available consistently and perform well irrespective of traffic in the network.	None	Deploying the ETR with the support of load balancing techniques aided by the cloud providers.

4. Product Overview

4.1. Product Perspective

The architecture diagram of the ETR is mentioned below, it depicts the users, interactions, workflows, and the details about the external systems connected to ETR to provide seamless experience for all the users of ETR system.

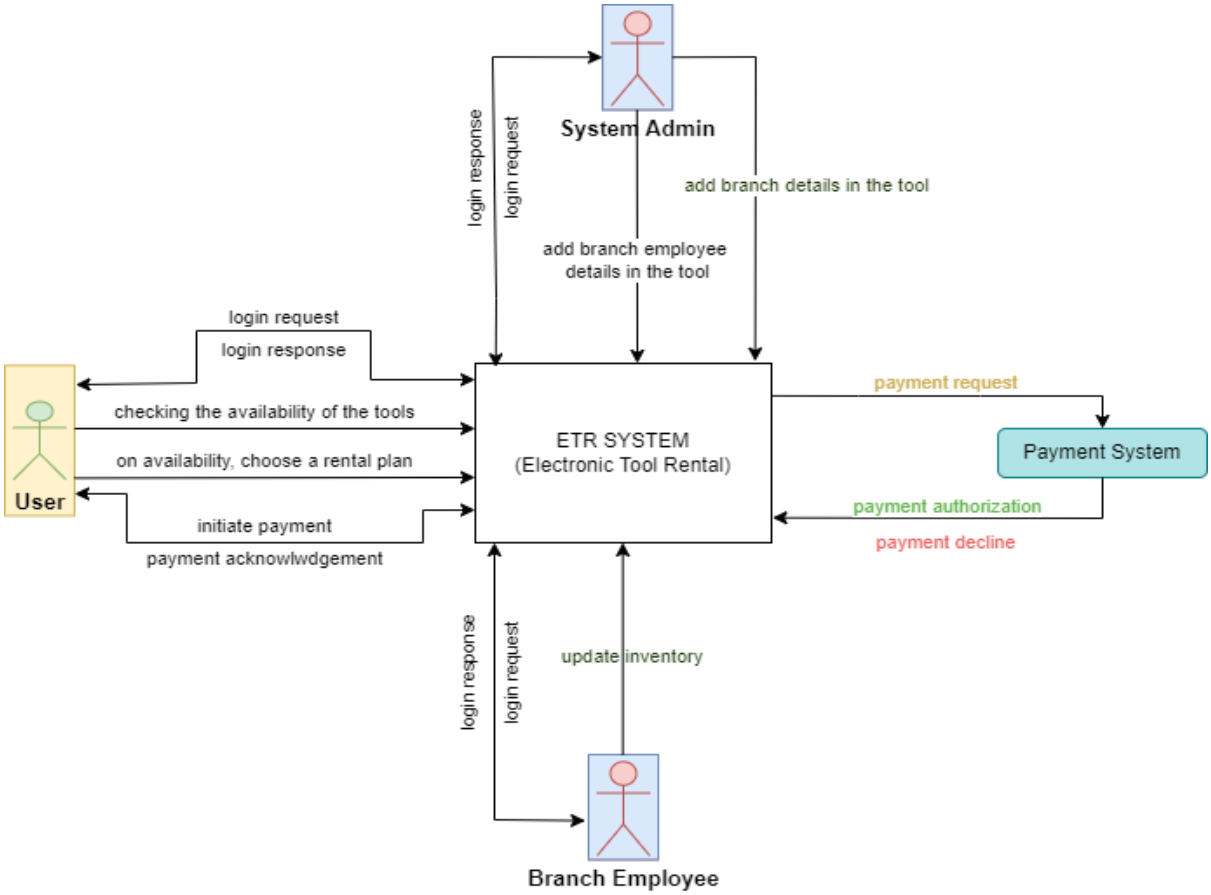

Figure 1 : ETR Architecture Diagram

4.2. Assumptions and Dependencies

Assumptions	Dependencies
Stable internet connection to access the ETR system available in the web.	Network Provider
Scalability of the ETR web application over all the supported browsers	Scalability/Compatibility of the ETR Application.
Users (Consumers, System Administrators and Branch employees) have login details to access the system	Usability
Once Branch employee updates the inventory, the updated inventory details are reflected the same to the end users of the respective location in the ETR system.	System consistency (Technology Support Team must ensure these constraints during development with the procedural smoke testing).
Once System admin creates a Branch employee account in the ETR system in a respective location, no other system admins are allowed to create the same branch employee account in the system.	System consistency (Technology Support Team must ensure these constraints during development with the procedural smoke testing).

Consumers can reserve only one equipment per reservation.	System consistency (Technology Support Team must ensure these constraints during development with the procedural smoke testing).

5. Product Features

Feature_Id	Feature	Description
ETR_01	Account Creation / Login Functionalities	End users, system admins and branch employees should create an account and maintain their login credentials to access the system.
ETR_02	Password Recovery Support	End users, system admins and branch employees maintain their login credentials to access the system. In case they have problem with logging into the systems, they can utilize password recovery option to reset their password.
ETR_03	Checking the availability of tools respective to location	Consumers can check the availability of home improvement tools based on their demands.
ETR_04	Renting the tools	Consumers are provided with minimum rental period of 4 hours, and can be rented for longer-term such as daily, weekly, monthly based on the availability and can request a reservation for as early as the next day and up to 30 days in advance.
ETR_05	Multiple Payment gateway support	Consumers are facilitated with the support of multiple payment systems like credit card, debit card, apple pay, and Samsung pay.
ETR_06	Adding branches to the system based on location	System admins can add / create branches of ETR stores in the locations which has considerable demand of home improvement tools for rent.
ETR_07	Adding branch employees to the system	System admins can add branch employees by creating accounts and adding their details in the system, where they will be tagged to a particular store/location.
ETR_08	Updating the inventory in the ETR tool	Branch employees can add/ update the inventory details of a particular location based on the availability of the tools.
ETR_09	Updating the rental information in the tool	Brach employees can add the rental details which comprises information like consumer's name, address, rental period and rented equipment.
ETR_10	Notifying the rental time notice to the customer	System is capable of notifying the consumers when they reach closer to return date of the rented equipment. Therefore, that can return the equipment on time to avoid late return charges.

ETR_11	Payment dispute support	System can handle payment exceptions and manage refunds to the respective account in case of payment disputes.

6. Other Product Requirements

Feature	Description
Performance	The system must be capable of handling multiple users irrespective of location without any latency of data retrieval.
Usability	The system should be easy to use with the non-complicated hassle-free road map in the application to rent an equipment.
Security	The system maintains integrity of the various identity of the users and the payment information
Fault Tolerance	The system must function properly and should continue to run despite failures or malfunctions of hardware/software.
Robustness	The system must be available consistently and perform well irrespective of traffic in the network.

7. Logging / Gantt report(Updated)

Date	Activity	Hours Spent
May 14, 2022	Introduction	30 mins
May 15, 2022	Positioning	1 hour
May 16, 2022	Stakeholder Descriptions	2 hours + 5 mins
May 17, 2022	Product Overview	1 hour
May 18, 2022	Product Features	2 hour 30 mins + 2 mins
May 18, 2022	Other Product Requirements	30 mins
May 19, 2022	Logging / Gantt report	15 mins + 2 mins
May 19, 2022	Acronyms	5 mins

8. Acronyms

ETR	Electronic tool rental

Requirements Analysis and Risk Evaluation

ETR (electronic tool rental)

1. Logging (Updated)

S.No.	Task	Time Spent (Hours)
0	Task 0 - Logging	5 mins
1	Task 1 – Identifying and finding inconsistencies in the vision document	3 hours + 10 mins
2	Task 2 – Documenting conflicts	2 hours + 10 mins
3	Task 3 – Conflict resolution	1 hour
4	Task 4 – Conflict evaluation	2 hours
5	Task 5 – Risk management	4 hours

2. Identifying and finding inconsistencies in the vision document

Defect #	Location	Defect type	Classification	Description	Status	Date Corrected
1	3.1. Stakeholder Summary	Omission	Major	Missing key Stakeholders to illustrate the requirements. No information regarding Competitors who are one of the primary stake holders	No Change	NA
2	3.2. User Summary	Omission	Major	Consumers age requirement is nowhere mentioned in the vision document.	No Change	NA
3	3.3. User Environment	Inadequacy	Minor	Not sufficiently describing the future enhancements of the product.	No Change	NA
4	3.4. Key Stakeholder or User Needs	Omission	Major	Tool reservation constraints were not explained in the User needs section.	No Change	NA
5	3.4. Key Stakeholder or User Needs	Omission	Major	Information regarding rental period is not mentioned as a part of user needs.	No Change	NA

6	4.1. Product Perspective	Inadequacy	Minor	Architecture Diagram can be more detailed. Only Abstract information are given. System's stack is not explained in the architecture diagram Only System's data flow is covered.	No Change	NA
7	4.2. Assumptions and Dependencies	Omission	Major	Exceptional cases like rental tool lost, rental tool damage policies are not emphasized in the Assumptions and Dependencies section.	No Change	27-Jul-2022
8	5. Product Features	Inadequacy	Major	Products primary features like password recovery, Web Push Notification and Live chat were not included as a part of product features	No Change	NA
9	6. Other Product Requirements	Inconsistent	Minor	Market is flooded with lot of browsers, there is no information about the best supported browsers to access the application.	No Change	27-Jul-2022

2.1. Inconsistencies Inspection Form

S.no	Location	Inconsistency type	Classification	Description	Status	Date corrected
1	***3.4. Key Stakeholder or User Needs*** S1 : Customers must be at least 18 years old. S2 : Customers must have a government-issued photo ID that is valid at the time of rental.	Designation	Weak	Customers who are 18 years old, might not have a valid government ID, as they would have just turned out 18, they might have applied for a government ID, there should be an option to accept college ID to verify the age.		
2	***3.2. User Summary*** S3 : Store branches are being added, modified, and deleted by system administrator.	Structure	Strong	Customers might rent tools or reserve tools in advance, but due to organization policies if Administrator tries to delete a branch,		

	S4 : Customers can request a reservation for as early as the next day and up to 30 days in advance.			System shouldn't permit the administrator to do so as they were some existing rental reservations existing in advance for the respective store/Location.		
3	***3.4. Key Stakeholder or User Needs*** S5 : The branch employees are responsible for adding/removing tools for rental in their respective locations. S6 : The branch employees are also responsible to hand out the tools to the customers in store, and to receive them.	Designation	Major	Once the customer returns the equipment, the branch manager should place the tools in the store and failing to update in the system will never update the availability of tools and there will be an inconsistency between the tools available in the store and the available rental tools in the ETR system.		

3. Documenting Conflicts

A standard documentation technique consists of building an interaction matrix (Kotonya & Sommerville, 1997).

Statements	S1	S2	S3	S4	S5	S6	Total
S1	0	1	0	0	0	0	1
S2	1	0	0	1000	0	0	1001
S3	0	0	0	1	0	0	1
S4	0	1000	1	0	0	0	1001
S5	0	0	0	0	0	1	1
S6	0	0	0	0	1	0	1
Total	1	1001	1	1001	1	1	**2006**

The total number of non-conflicting overlaps and conflicts is given by the quotient and remainder of the integer division of Total by 1000

2006 / 1000 = 2.006

So, according to interaction matrix,

Total number of overlapping statements = 2 | non-Conflicting overlap: 2
Total number of conflicting statements = 6 | Conflicting statements: 0.006

Statements 7 and 8 are removed from the interaction matrix and the conflict calculations has been updated respectively.

4. Conflict Resolution

4.1. Conflict between S1 and S2 :

Operator Applied: Specializing Conflict source or target

This conflict can be resolved by specializing the conflict source or target by enabling the auto verification of the customers age by integrating the system with Federal system, whereas the customer can enter their last 4 digits of SIN id and the system can identify the customer's age by request authorization approved from the Government.

Operator Applied: Weaking Conflicting Statements

The conflicting statements can be weakened by, accepting any non-governmental ID's too which has the date of birth details in it.

4.2. Conflict between S3 and S4 :

Operator Applied: Avoid Boundary Condition

The specific boundary condition for this conflict is Admin's privilege to delete a branch and User's privilege to rent or return the tools, these two statements are contradicting and puts the system in a deadlock situation if the admins deletes a store which has some reservations and ongoing rental records, it will end up in data loss and financial loss, this can be eradicated by introducing a new requirement that, Admin will never be allowed to delete a store, until the store has no reservation or rental records.

Operator Applied: Restore Conflicting Statements

The statements S3 and S4 can be retained by, having a law imposed by board of directors of ETR organization, to not to delete a store until the organization decides to close the business in a particular location due to some non-functional and business-oriented issues.

4.3. Conflict between S5 and S6 :

Operator Applied: Avoid Boundary Condition

If the branch employee doesn't update the system after receiving the equipment from the rental customer the boundary condition would occur where the customer won't have the details of the updated inventory in the system, this can be avoided by having an automated system to perform an inventory count in the respective store before closing the business for the day and updating them in the system.

Operator Applied: Weaking Conflicting Statements

The Statement S6 can be made weaken by having a dedicated branch employee team who can focus only on receiving the tools and updating them in the system, this way the inventory details will be consistent with the available inventory.

5. Conflict Evaluation

Using Weighted matrices for evaluating alternative options for the above documented conflicts.

$$totalScore(opt) = \sum(Scores(opt,crit) \times Weight(crit))\ crit$$

5.1. Evaluation for S1 and S2 :

Option 1: Integrating ETR with government system to obtain User's age.

Option 2: Accepting Non-governmental Id's which has age details.

Evaluation Criteria	***Significance Weighting***	***Option 1***	***Option 2***
Time efficient	0.4	0.3	0.9
Minimal Inconvenience	0.2	0.4	0.7
Reliable Response	0.4	0.4	0.8
Total	1.0	0.36	0.82

From the above computation, **Option 2** can be used to resolve the conflict.

5.2. Evaluation for S3 and S4 :

Option 1: A new requirement that, Admin will never be allowed to delete a store, until the store has no reservation or rental records.

Option 2: A law imposed by board of directors of ETR organization, to not to delete a store.

Evaluation Criteria	***Significance Weighting***	***Option 1***	***Option 2***
Time efficient	0.3	0.2	0.8
Accessing the System	0.2	0.8	0.3
Reliable Response	0.5	0.9	0.2
Total	0.1	0.67	0.4

From the above computation, **Option 1** can be used in place of S4 to resolve the conflict.

5.3. Evaluation for S5 and S6 :

Option 1: An automated system to perform an inventory count.

Option 2: A dedicated branch employee team who can focus only on receiving the tools and updating them in the system.

Evaluation Criteria	***Significance Weighting***	***Option 1***	***Option 2***
Interactive	0.4	0.7	0.7
Quality	0.2	0.6	0.8
Time efficient	0.4	0.6	0.9
Total	1.0	0.66	0.77

From the above computation, **Option 2** can be used in place of S6 to resolve the conflict.

6. Risk management

A risk is an uncertain factor whose occurrence may result in a loss of satisfaction of a corresponding objective. It has a likelihood of occurrence and one or several undesirable consequences associated with it. Each consequence has a severity in terms of degree of loss of satisfaction of the corresponding objective Risks can be identified by several methods like risk checklists, risk trees and component inspection. And the identified risks are below as follows:

6.1.1. By component Inspection

1. Server/Database failure.

2. Communication Network component failure.

3. Hardware and Software component failure.

6.1.2. By Risk Checklists: Considering the Non-Functional Requirements

4. Data Breach / Data leakage (Safety and Security).

5. Accidentally downloading malware (Installation).

6. Project not delivered at scheduled time (Time).

7. Developing the wrong software functions (User Interaction).

8. Lack of Budget (Cost).

6.1 Risk Tree

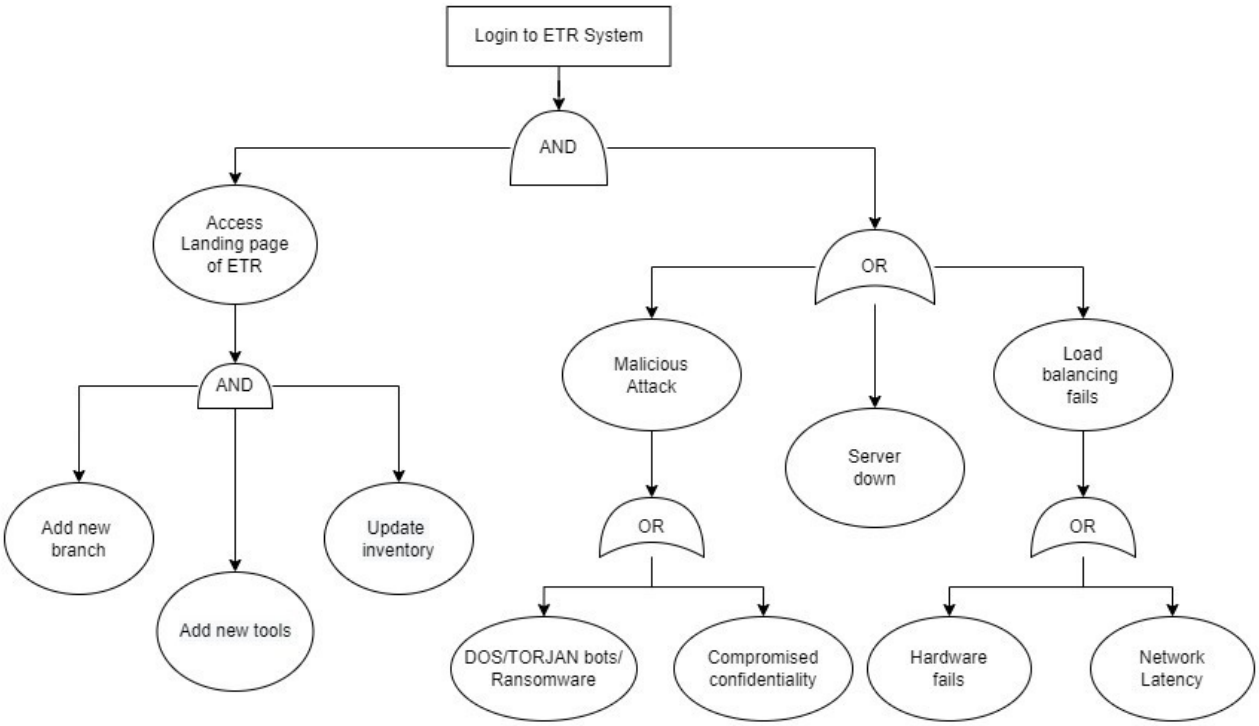

Figure 2: The risk tree shows the major point of failure where the stakeholders are unable to access the system

6.2 Risk Assessment: QUANTITATIVE

Risk Number	Likelihood	Probability	Impact (Thousands in Capital)	Exposure (Probability X Impact)
1	High	0.5	0.5	0.025
2	High	0.06	0.2	0.012
3	Moderate	0.01	0.3	0.003
4	Low	0.01	0.2	0.002
5	Low	0.01	0.2	0.002
6	Moderate	0.05	0.5	0.025
7	Moderate	0.05	0.5	0..025
8	High	0.04	0.8	0.032

1. Server Failure

Consequences	Likely	Possible	Unlikely
Error 404: This website is not available	Moderate	Severe – Scale 7	Moderate
Data loss	High	Severe – Scale 8	Low

2. Communication Network Failure

Consequences	Likely	Possible	Unlikely
users unable to login	Moderate	Severe – Scale 7	Moderate
Slow response	High	Severe – Scale 8	Low

3. Hardware and Software component failure

Consequences	Likely	Possible	Unlikely
Location of Store, GPS locating Functionality is misbehaving	Moderate	Severe – Scale 5	Moderate

4. Data breach or Data Leakage

Consequences	Likely	Possible	Unlikely
Hackers misusing the system’s data (user details compromise)	Low	Severe – Scale 9	High

5. Accidentally downloading malware

Consequences	Likely	Possible	Unlikely
Data corruption	Low	Severe – Scale 8	High

6. Project Not Delivered at scheduled time

Consequences	Likely	Possible	Unlikely
Losing Market value	Moderate	Severe – Scale 9	Moderate

7. Developing the wrong software functions

Consequences	Likely	Possible	Unlikely
User dissatisfaction	Low	Severe – Scale 5	High

8. Lack of Budget

Consequences	Likely	Possible	Unlikely
Incomplete Product	Low	Severe – Scale 9	High

6.3. Risk Control

1.
Option 1 – Frequent Backup
Option 2 – Replication of server for Server failure:
Both methods will help in preventing loss and corruption of data when risk happens.
.

Risk Reduction Leverage (RRL): Consider a server which maintains a repository of data. The probability of losing the data is 15%. The cost of losing the data is measured in terms of the cost of its reproduction and re-entry into the database which is estimated at $30,000. To reduce the risk of losing the data, there are two options. The first option is estimated to reduce the risk to 10%. It is estimated to cost to $2000. The second option is estimated to reduce the risk to 5%. It is estimated to cost $2500.

So here, we need to calculate the RRL for both options and choose the option that has value above 1.

Risk Reduction Leverage = (Risk Exposure Before) – (Risk Exposure After) / Cost of Risk Reduction
Risk Exposure Before = 30000 X 15 / 100 = 4500

Option 1 – Risk Exposure After = 30000 X 10 / 100 = 3000
Option 2 – Risk Exposure After = 30000 X 5 / 100 = 1500

RRL Option 1 = 4500 – 3000 / 2000 = 0.75
RRL Option 2 = 4500 – 1500 / 2500 = 1.2 **So, option 2 is better.**

2.
Option 1 – Fibre Optic Cable
Option 2 – Wireless Optical Networks for Communication Network failure:
Both methods will help in preventing loss and corruption of data when risk happens.

Risk Reduction Leverage (RRL): Consider a network company providing network services. The probability of losing the connection is 15%. The cost of losing the network is measured in terms of the cost of its coverage and re-establishment into the database which is estimated at $30,000. To reduce the risk of losing the data, there are two options. The first option is estimated to reduce the risk to 5%. It is estimated to cost to $2500. The second option is estimated to reduce the risk to 10%. It is estimated to cost $2000.

So here, we need to calculate the RRL for both options and choose the option that has value above 1.

Risk Reduction Leverage = (Risk Exposure Before) – (Risk Exposure After) / Cost of Risk Reduction

Risk Exposure Before = 30000 X 15 / 100 = 4500 Option 1 – Risk Exposure After = 30000 X 5 / 100 = 1500 Option 2 –Risk Exposure After = 30000 X 10 / 100 = 3000

RRL Option 1 = 4500 – 1500 / 2500 = 1.2
RRL Option 2 = 4500 – 3000 / 2000 = 0.75 **So, option 1 is better.**

3. *Reduce Risk Likelihood for Hardware and Software Component failure:* The risk can be prevented by replacing the GPS device or restoring the compass positioning of the system.

4. *Reduce Risk Likelihood for Data breach/ Data Leakage:* By opting methods like securing database, encryption, authentication, authorization we can create and maintain a safe web portal.

5. *Avoid the Risk for accidentally downloading malware:* This can be obtained by having an anti-virus installed in the system, avoiding advertisements, avoiding e-mail attachments.

6. *Mock-ups and Prototypes for Project Not delivered at scheduled time and for Developing the wrong software functions:* To avoid both risks we can practice the mentioned elicitation technique as it will be highly helpful to analyse and act accordingly. Scheduling a delivery and achieving it will give confidence to the team and if no will give them an idea on where to work, where they are lacking. Similarly, having evolutionary prototypes will help in achieving the features and can work on iterations to complete the product.

7. *Mitigate risk for Lack of Budget:* This risk can be handled by adding a separate team for handling the financial flow ensuring the team doesn't run out of money.

Rebuttal Template

ETR (electronic tool rental)

1. Title

Response to reviewers, teacher assistant and instructor.

2. Introduction

I would like to thank the reviewers, teacher assistant for their detailed feedback and useful suggestions to improve my vision document.

I have carefully considered all the issues raised by my peers. Teacher assistant, and instructor and prepared a revised vision document. This document outlines how I have addressed each comment individually. Each comment has been assigned a number R(1-3).C(1-N), where the number to the right of the R identifies the reviewer, and the number to the right of the C identifies the comment.

My response to each comment is highlighted in blue and marked yellow in the location of the document.

Thanks for the opportunity to improve my vision document

Sincerely,
Manimaran Palani

3. Reviewer comments

Reviewer	**ID**
Peer 1 (comments received in D2)	R1
Peer 2 (comments received in D2)	R2
Teacher assistant (comments received in D1)	R3

3.1 Reviewer 1 Comments (Peer 1)

ID	**Comments**	**Response**	**Page**
R1.C1	7. Defect type can be omission	The comment has been taken into consideration and the necessary changes are made in the document.	12
R1.C2	9.Defect type can't be Contradiction	The comment has been taken into consideration and the necessary changes are made in the document.	12
R1.C3	The mentioned statements (S1 and S2) can't be classified into any of the Inconsistency types.	I object with the reviewer for this comment. It's very valid that, a customer who want to rent a tool might be 18 years old , but not possess a Government ID, so this type of conditions/statements can be considered. For Example : To obtain Intoxicated Products in the public stores age verification is done based on	-

		College ID's as well. So ETR tool can have this feature and it can be considered.	
R1.C4	Statements, S1 and S2 neither conflict nor overlap each other.	This statement is defended in R1.03	
R1.C5	Missing of Statements 7 and 8. Therefore, the conflicts calculation is incorrect.	The comment has been taken into consideration and the necessary changes are made in the document.	13
R1.C6	As there is no conflict between S1 and S2; conflict resolution is not required.	This statement is defended in R1.03	-
R1.C7	As there is no conflict between S1 and S2; conflict evaluation is not required.	This statement is defended in R1.03	-

3.2 Reviewer 2 Comments (Peer 2)

ID	Comments	Response	Page
R2.C1	[Defects] 3.3. (User environment) The description for the defect identified is slightly incorrect as User requirement does not need to have information regarding future enhancements of the product. It simply has to describe the major users, what environment they will be working on and how are they going to access it.	In the User Environment section of the vision document, there is no such information regarding the future improvement of the product. Hence, the comment is not considered.	-
R2.C2	[Defects] 3.4. Key Stakeholder or User Needs The description for the defect identified is slightly incorrect as this particular defect identified is not correct as one relating to omission of tool reservation constraints has already been included just about it, which can cover all the information relating to tool reservation period. So, this particular defect could be sub part of the 4th defect mentioned.	The comment has been taken into consideration and the necessary changes are made in the document.	12
R2.C3	[Inconsistencies] 3.4 [Key stakeholder or user needs] S5 and S6 talks about the roles of Branch employees but the description says branch manager. So, to me it is unclear whom to consider, also If the branch manager is assigned the role for adding/removing tools for rental and is also responsible for handing out the tools to the customers in store, and	I object with the reviewer for this comment. It's very fair to alter the requirements to analyse the improvement in performance of the employees. In that basis, to improve the efficiency of the Branch Employees, the tasks of them can be delegated and the statements can be considered as conflicts.	-

	receive them, then we are assuming that branch employee will update the status of tool on the website, as that will be his role. Failing to do so will be a mistake to his part and will not be counted as a designation clash as the roles will be preassigned in the pipeline.		
R2.C4	In the Interaction Matrix, S7 and S8 both are not mentioned in the document, along with that there can be a potential overlap between S3 and S5.	The comment has been taken into consideration and the necessary changes are made in the document.	13
R2.C5	S5 S6 will not result in a conflict (an overlap instead). This can change the overall total and will affect the number of overlaps and conflicts.	This statement is defended in R2.03	-
R2.C6	I think S5 and S6 does not qualify to be a conflict which I already mentioned in Task 1 and Task 2.	This statement is defended in R2.03	-
R2.C7	The number of risks that are included are supposed to have brief description for each of those risks identified in order to better gauge how can those risks affect the system.	The risk descriptions are self-explanatory and providing in-depth details about it, will lead to overspecification. The risk details were well communicated in the last section of Risk Management(Risk Control).	18
R2.C8	Here it is not mentioned which tactic is undertaken in order to mitigate the risk. Risk Exposure Before was already calculated in B) Risk Assessment which was 0.025. Here again there was no need to calculate it.	The risk tactics and counter measures are explained in detail in the Risk Control section.	18
R2.C9	Only 1 countermeasure is suggested for 3 - 7 risk control statements.	For each risk, the counter measures were documented in the Risk Control section.	18

3.3 Reviewer 3 Comments (Teacher assistant)

ID	Comments	Response	Page
R3.C1	Some missing stakeholders like competitors that are already available in market also some stakeholders.	The comment has been taken into consideration and the necessary changes are made in the document.	5
R3.C2	Some missing product features such as password recovery	The comment has been taken into consideration and the necessary changes are made in the document.	9