
COMPANY NAME

TechBarter

Project Vision Document

Version 1.1

10/2/2024

Revision History

Revision	Date	Author	Reviewed By	Summary of Changes
0.1	09/25/2024	Ashish Rajan Sherry	Nishita Sachdev	Preliminary version of TechBarter Web Application
0.2	10/02/2024	Nishita Sachdev	Team Members	Final Version of Project Vision.

Document Approval List

Version	Approved By	Signature	Date

Document Distribution List

Version	Name of the Receiver/Group	Date

Table of Contents

1	Introduction	4
1.1	Purpose	4
1.2	Scope	4
1.2.1	In Scope	4
1.2.2	Out of Scope	Error! Bookmark not defined.
1.3	Definitions, Acronyms, and Abbreviations.....	4
1.4	References	4
2	Positioning.....	5
2.1	Business Opportunity.....	5
2.2	Problem Statement	5
2.3	Product Position Statement.....	6
2.4	SWOT Analysis.....	6
3	Stakeholder and User Descriptions.....	7
3.1	Stakeholder Summary	7
3.2	User Summary.....	8
4	Stakeholder Requirements	9
5	System Features	9
6	Assumptions.....	10
7	Constraints	11

1 Introduction

1.1 Purpose

The purpose of this document is to gather, analyze, and articulate the fundamental needs and features of the "Tech Barter" project. It emphasizes the essential functionalities required by stakeholders, including technology providers, end-users, and trading partners, while explaining the significance of these needs in enhancing the tech trading landscape. Detailed descriptions of how the project will fulfill these requirements will be provided through use-case scenarios and supplementary specifications.

1.2 Scope

This Vision Document applies to the **TechBarter** project, which will be developed by the OnesNZeroes Development team. The team will create a comprehensive marketplace platform designed to facilitate the buying and selling of electronics among users. The platform will enable sellers to access detailed visual reports on their sales data and introduce a recycling feature for unused technology. Additionally, it will include a community space for discussions and support, fostering interaction among users.

The system will leverage data analytics to enhance efficiency and user experience, making it easier for users to navigate and engage with the marketplace. Access to the platform will be available through web interfaces, allowing users to manage their transactions seamlessly..

1.3 Definitions, Acronyms, and Abbreviations

Term	Explanation
Tech Trade	The buying and selling of electronic gadgets and devices.
Marketplace	A platform where buyers and sellers conduct transactions.
Recycling Program	A system aimed at collecting and reprocessing old or unused electronic devices, promoting sustainability by reducing waste.
Visual Sales Reports	Graphical displays of sales data used to analyze performance and assist in decision-making.
Community Hub	A platform or space where users can communicate, share knowledge, and collaborate on activities related to electronics and tech trade.

1.4 References

T.B.D

Reference File Name	Version	Description

Name	Link

2 Positioning

2.1 Business Opportunity

There is a growing demand for a specialized platform that facilitates tech sales while promoting environmentally conscious practices, as many consumers are left with unused or outdated electronics that contribute to electronic waste. This project aims to develop a dedicated tech marketplace catering to technology enthusiasts, featuring a recycling option to encourage responsible disposal of unused devices, data-driven insights for sellers to optimize their sales strategies, and a community space for discussions and support. By focusing on sustainability and community engagement, this platform will positively impact both the environment and the tech sales landscape.

2.2 Problem Statement

The Problem	The lack of a dedicated marketplace for tech-related products, combined with limited options for responsible electronic disposal and recycling.
affects	Tech consumers, sellers, and environmentally conscious users who seek to buy, sell, and responsibly recycle electronics.
the impact of which is	A fragmented user experience with inefficiencies in the buying and selling process, minimal community engagement, and an absence of easy, eco-friendly recycling options for electronics.

a successful solution would be	To provide a seamless tech marketplace with user-focused features like visual sales reports, a supportive community hub, and a recycling initiative that encourages sustainable practices, improving both user satisfaction and market efficiency.
--------------------------------	--

Table 1 Problem Statement

2.3 Product Position Statement

For	Tech enthusiasts, casual consumers, and environmentally conscious individuals
Who	Need a reliable, user-friendly platform to buy, sell, and responsibly recycle electronic devices
The TechBarter	Is a comprehensive online marketplace and community hub
That	Offers a seamless experience for transactions, provides data-driven insights for sellers, and includes a recycling initiative for eco-friendly tech disposal
Unlike	Other e-commerce sites that don't prioritize sustainability or community connections
Our product	Focuses on tech with specialized tools, a vibrant user community, and eco-friendly features to support responsible recycling, Tech Suggestions to non tech savvy person who have little or no Knowledge, Visual Sales Reports for Sellers.

Table 2 Product Position Statement

2.4 SWOT Analysis

Strengths	Weaknesses
Focused on the tech market with specialized features.	Currently lacks a large user base, meaning significant marketing efforts will be needed to attract and retain users.
Integrates eco-friendly practices such as recycling.	Limited brand recognition compared to more established platforms, which could slow initial growth.
Opportunities	Threats
Rising demand for affordable technology solutions among consumers.	Intense competition from well established e-commerce platforms.
Increasing awareness and commitment to recycling electronics.	Potential for market saturation as more players enter the tech marketplace.

3 Stakeholder and User Descriptions

The target market segment for the TechBarter app includes middle-income individuals and families residing in medium to large cities. These users range from tech-savvy consumers who regularly utilize smartphones for personal and business interactions to non-tech-savvy individuals seeking guidance in purchasing, selling, and recycling electronics. Many of these users are homeowners who are interested in efficient and eco-friendly tech solutions. As newcomers to the community marketplace landscape, we aim to establish partnerships with reputable electronics manufacturers and recycling organizations to enhance our platform's credibility. Additionally, TechBarter will provide tailored suggestions and support to help users, regardless of their tech expertise, navigate their purchasing decisions. This collaborative approach will not only facilitate our market entry but also foster a vibrant community space where users can engage, share knowledge, and promote sustainable practices in tech transactions, ultimately aligning with our mission to create a more efficient and eco-friendlier marketplace.

3.1 Stakeholder Summary

Stakeholder Name	Represents	Role
Project Sponsor	Company's management	Oversee project direction, provide funding, and ensure alignment with company goals.
Development	Technical expertise	Design and implement the TechBarter platform, focusing on user-friendly features and functionality.
System Analyst	Stakeholders	Works with stakeholders to gather their needs, leads requirements elicitation, and outlines system functionality.
Requirements Specifier	System Analyst	Translates stakeholder requests into clear, actionable requirements for design, including both functional and non-functional aspects.
Technical Reviewer	Development Team	Provides feedback during the review process, focusing on the technical aspects of project artifacts to ensure quality and adherence to standards.
Software Architect	Development Team	Leads the system development by defining the software architecture, making key technical decisions, and ensuring maintainability.

Stakeholder Name	Represents	Role
Project Manager	Company's management	Plans, manages, and allocates resources, coordinates interactions with customers and users, and keeps the project team focused on goals.
Market Analyst	Product positioning	Assesses market demand for the platform's features and new services, ensuring successful positioning of TechBarter in the marketplace.
Marketing team	Promotion of the platform	Drive user engagement, market the platform, and highlight eco-friendly practices to attract users.
End Users	Sellers, buyers, community members	Provide feedback on the platform, use it for buying, selling, and recycling electronics, and engage with the community.

Table 3 Stakeholder Summary

3.2 User Summary

User Name	Description	Responsibilities	Stakeholder
Swappers	Individuals or businesses swapping tech items on the platform.	List items for swap, manage inventory, respond to inquiries, and track swap performance	Self
Seekers	Individuals seeking Tech Items on the Platform.	Browse the marketplace, compare products, make swap requests, and leave reviews and feedback	Self
Community Members	Users engaging in platform discussions and sharing tech knowledge.	Participate in forums, share tech knowledge, support eco-friendly initiatives, and offer swapping advice	Self
Moderators	Platform managers overseeing site operations and ensuring compliance with policies.	Oversee site operations, manage user accounts, ensure compliance with policies, and handle technical issues	Self

User Name	Description	Responsibilities	Stakeholder
Admin	Platform administrators responsible for overall platform management.	Manage moderators, oversee platform performance, and make strategic decisions	Self

Table 4 User Summary

4 Stakeholder Requirements

ID	Requirement	Stakeholder
1	Seamless user experience, compare prices, read reviews, receive notifications, access product condition report	Buyers
2	Easily list Products, access sales reports, real-time data on trends, participate in community discussions.	Sellers
3	Accessible recycling options, recycle old tech items, view recycling impact report, receive reminders	All Users
4	Participate in discussions, support eco-friendly initiatives, receive community notifications	Community Members
5	Monitor user activities, manage user community, generate platform usage reports	Administrators

Table 5 Stakeholder Requirements

5 System Features

ID	Feature	Description	Stakeholder Requirement ID
1	Marketplace for Electronics	A platform for buying and selling electronic items, enabling seamless transactions and better access to affordable technology.	1
2	Visual Sales Analytics for Sellers	Provides sellers with detailed visual reports and insights into their sales performance, helping them optimize their business strategies.	2
3	Tech Recycling Program Integration	Facilitates the recycling of old or unused electronics, promoting environmentally sustainable practices among users.	3
4	Community Hub for Discussions	A dedicated space for users to engage in discussions, share knowledge, and get advice about electronics and accessories.	4
5	Product Condition Report	Provides detailed information about the condition of used electronics, helping non-tech savvy buyers make informed purchasing decisions.	N/A

ID	Feature	Description	Stakeholder Requirement ID
6	Price Comparison Tool	Allows users to compare prices of similar products from different sellers, making it easier for non-tech savvy buyers to find the best deals.	N/A
7	User Reviews and Ratings	Enables users to leave reviews and ratings for products and sellers, helping non-tech savvy buyers make informed purchasing decisions.	N/A
8	Tech Support Resources	Offers resources and guides to help non-tech savvy users understand and use their electronic devices, reducing the need for external support.	N/A
9	Personalized Recommendations	Provides users with personalized product recommendations based on their interests and preferences, making it easier for non-tech savvy buyers to find relevant products	N/A

Table 6 System Features

6 Assumptions

- **Reliable Internet Access:** Users will have a dependable internet connection to access the TechBarter platform without interruptions, ensuring a seamless buying and selling experience.
- **Basic Tech Knowledge:** Users will possess a fundamental understanding of how to navigate online marketplaces and community discussion forums, enabling them to utilize the platform effectively.
- **Smooth Integration of Third-party Services:** External services, such as payment processing systems, shipping solutions, and analytics tools, will integrate effectively and efficiently to enhance user experience.
- **Compliance with Laws and Regulations:** The platform's recycling feature will operate in accordance with all relevant legal and environmental regulations regarding electronic waste disposal, promoting responsible practices.
- **User Engagement:** Users will actively participate in community discussions, provide constructive feedback, and engage with the platform's features, fostering a collaborative environment.
- **Data Accuracy:** Users will provide accurate and up-to-date information about their products, including detailed descriptions, competitive pricing, and the condition of the items to build trust within the marketplace.

- **Platform Adoption:** TechBarter will aim to gain a significant number of users, including both buyers and sellers, to create a vibrant and dynamic marketplace that encourages transactions and community interaction.
- **Continuous Improvement:** The platform will continuously evolve and improve based on user feedback, advancements in technology, and changing market trends, ensuring it remains relevant and user-friendly.

7 Constraints

- **Budget Limitations:** The project operates under a restricted budget, which may limit the scope of development and reduce the resources available for implementation, marketing, and user support.
- **Time Constraints:** A fixed timeline for the project restricts the time available for thorough testing, quality assurance, and iterative improvements before the platform's official launch.
- **Regulatory Compliance:** The TechBarter platform must adhere to various legal and regulatory requirements related to e-commerce and electronic waste disposal, complicating the development process and potentially delaying project timelines.
- **Dependency on Third-party Services:** The reliance on external services, such as payment processors and analytics tools, poses a risk; any disruptions or issues with these services could negatively impact the platform's functionality and user experience.
- **Technical Limitations:** The platform's technical capabilities may be limited by the chosen technology stack, infrastructure, and resources, potentially affecting performance and feature implementation.
- **User Adoption:** The success of the platform relies heavily on user adoption and engagement, which can be influenced by factors such as effective marketing, user experience, and competition within the marketplace.
- **Security and Data Protection:** The platform must prioritize the security and protection of user data, a complex and resource-intensive task that requires ongoing attention to maintain user trust and compliance with regulations.
- **Scalability:** The platform must be designed to scale with user growth effectively. This can be challenging, especially if the platform experiences rapid growth, requiring additional resources and infrastructure adjustments.