Vision and Scope Document

for

Omnichannel Retailing System

Version 1.0 approved.

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Revision History

Name	Date	Reason For Changes	Version
Soham Kamble	9/15/23	Initial Draft	1.0 draft 1
Soham Kamble	9/24/23	Baseline following changes after stakeholder feedback	1.0 approved

1. Business Requirements

1.1. Background

ImmersiveTech's customers engage with both virtual and brick-and-mortar retail platforms, committing approximately 20 minutes to the virtual platform, but often beyond 90 minutes in physical stores due to the appealing AR, VR, and AI encounters. While some use the online portal for smooth pre-orders and in-store pickups, the high demand for the newest headset models means that not all customers can find their favorite products. ImmersiveTech faces inventory-related challenges: unnecessary inventory results in wastage, while scarce inventory leads to missed sales openings. Especially during promotions or holiday seasons, the demand increases, emphasizing the importance of efficient demand management and forecasting across all channels.

1.2. Business Opportunity

A system that would enable customers to pre-order headsets (and related immersive experiences) online for either in-store pickups or direct deliveries at a specific time and date has attracted a lot of interest from customers. A system like this would improve customer convenience when shopping and raise the probability that customers would find the things they wanted. The efficiency of the supply chain would increase if ImmersiveTech's inventories were more accurately predicted in advance. Additionally, the integration of products from other related tech companies or partnerships with content providers (such as gaming networks, video streaming services, etc.) may broaden the range of options available to consumers and open the door to future alliances and package deals that would improve the omnichannel retailing experience.

1.3. Business Objectives

BO-1: Within six months of the initial system implementation, streamline SCM and ERP procedures to cut the number of delayed shipments by 15%.

- Scale: The number of monthly shipments that are delayed.
- Meter: SCM and ERP system log analysis.
- Past: 27% (2023, preliminary analysis)
- Goal: less than 12%
- Stretch: under 10%

BO-2: Increase manufacturing effectiveness to cut manufacturing expenses by 10% within the first 12 months of system deployment.

- Scale: Per-unit manufacturing costs.
- Meter: Data from the ERP and financial systems.
- Past: $200 per unit (2023, preliminary estimation)
- Goal: less than $180 for each unit
- Stretch: under $175 for per unit

BO-3: Implement predictive analytics to enhance inventory control with the goal of reducing surplus stock by 20% within the first eight months of system introduction.

- Scale: Excess inventory stock every three months.
- Meter: Examining the inventory records in the ERP system.
- Past: 25% surplus stock (2023, preliminary analysis)
- Goal: less than 5%

Stretch: Almost 0% surplus stock

1.4. Success Metrics

SM-1: 80% of wholesalers consistently receive their shipments on time within six months of the original system deployment, a considerable improvement over the prior shipment delays.
SM-2: Within three months of the system's deployment, the average rating of ImmersiveTech's headgear rises by 0.5 points from the 2023 rating on a scale of 1 to 10, and by 1.0 points within a year.

1.5. Vision Statement

The Omnichannel Retailing Platform is a web-based and smartphone-enabled application that enables product exploration, seamless ordering, and a variety of delivery options, including in-store pickups or direct deliveries, for customers who want to buy ImmersiveTech headsets and immersive experiences both online and in physical stores. Customers who use the Omnichannel Retailing Platform will benefit from a unified buying experience, shorter wait times, and a wider selection of immersive tech options available to them than those who use traditional purchase methods.

1.6. Business Risks

RI-1: Due to the newly streamlined process, suppliers may find it difficult to regularly supply the component demand, which could result in shortages. (Probability = 0.5; Impact = 7)
RI-2: Distributors might need some time to become used to the new SCM system, which could delay shipments and deliveries. (Probability = 0.6; Impact = 8)
RI-3: Wholesalers might find the new order-to-cash mechanism complicated, which might lead to lower order volumes or frequencies. (Probability = 0.4; Impact = 6)
RI-4: The predictive analytics system may not offer precise forecasting in its first stages, which could result in instances of overproduction or underproduction. (Probability = 0.5; Impact = 7)
RI-5: Internal staff members may be reluctant or anxious to accept the new ERP system, which could slow down system integration and possibly result in operational inefficiencies. (Probability = 0.4; Impact = 5)

1.7. Business Assumptions and Dependencies

AS-1: ImmersiveTech workers will have access to systems with the proper user interfaces to manage the intricate order-to-cash and purchase-to-pay procedures, ensuring seamless transitions between the many phases of supply chain management.
AS-2: In accordance with the forecasting models offered by the new ERP system, manufacturing facilities, distributors, and suppliers will be prepared to manage the volume of headset production and deliveries anticipated.
AS-3: ImmersiveTech's direct-to-consumer web platform will synergistically work with the inventory management systems of the physical store to ensure accurate stock levels and reflect them to the end-users.
DE-1: The new ImmersiveTech ERP system must be able to interface with any supplier-owned inventory and order management systems to ensure real-time updates and integration.

DE-2: To enable precise and real-time shipment and delivery tracking for wholesalers and direct-to-consumer purchases, the chosen distributors' logistics and tracking systems must be compatible with ImmersiveTech's ERP.

2. Scope and Limitations

2.1. Major Features

FE-1: Manage headset inventory from various vendors by ordering and managing it, making sure that component stock levels are sufficient to meet manufacturing demands.
FE-2: Wholesalers' order processing is simplified, making it easier to run effective order-to-cash operations and to react more quickly to market demands.
FE-3: Real-time monitoring and analytics for supply chain management, headset manufacture, and distribution, giving ImmersiveTech information to improve manufacturing and distribution procedures.
FE-4: Produce, browse, edit, and preserve product catalogs that contain thorough descriptions of the immersive headsets, their parts, and their integration abilities.
FE-5: Provide in-depth analytics and insights into customer habits, preferences, and purchasing patterns from wholesaler orders as well as direct-to-consumer sales.
FE-6: The ERP system must be seamlessly integrated across a variety of platforms and gadgets for ImmersiveTech employees, vendors, and distributors to have anywhere, anytime access to vital information and features.

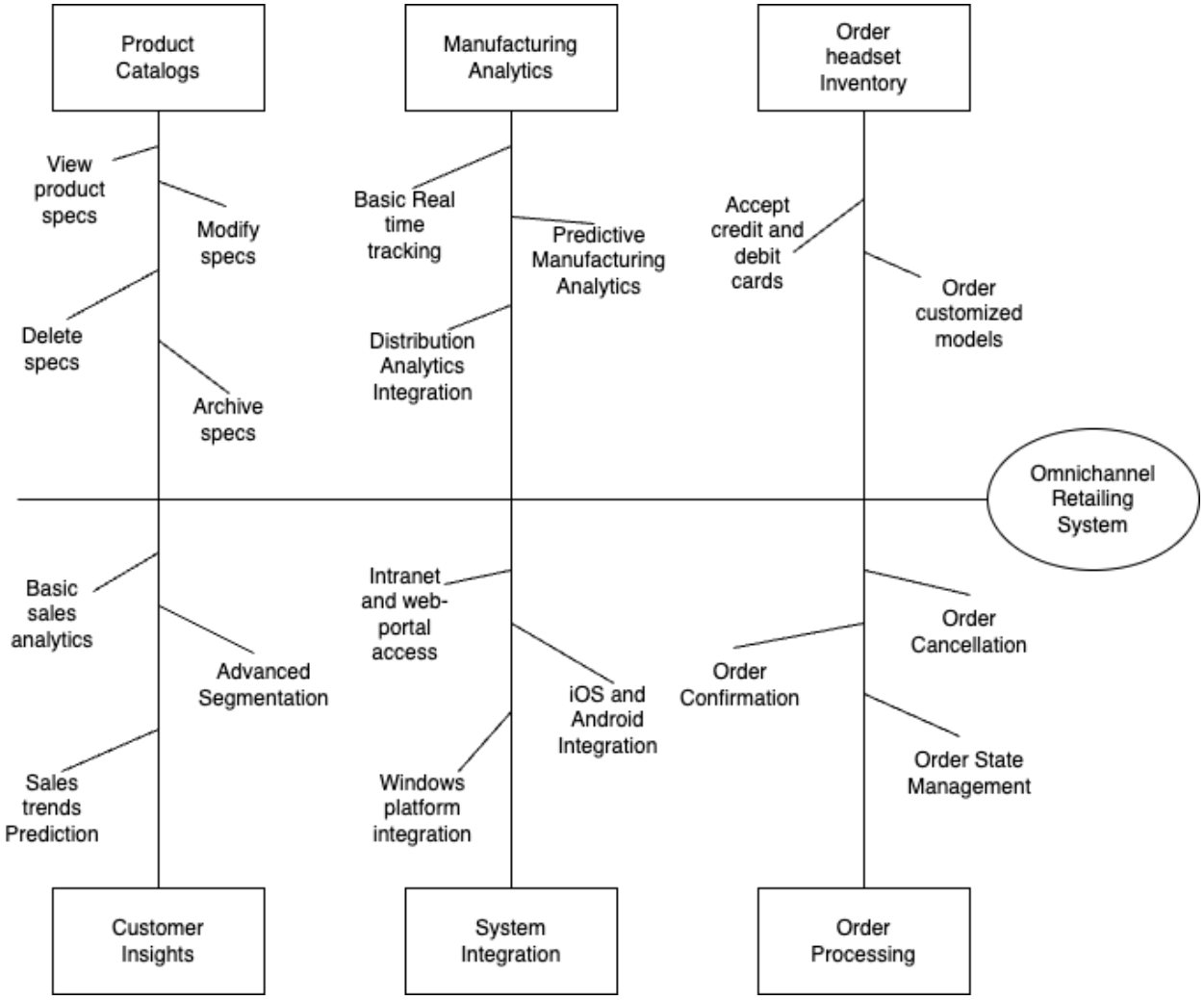

Figure 1: *Partial Feature Tree for Omnichannel Retailing System*

2.2. Scope of Initial and Subsequent Releases

Feature	Release 1	Release 2	Release 3
FE-1, Order headset inventory	Standard headset models only; orders can be paid for only by company credit	Accept credit and debit card payments for suppliers	All headset models including customized
FE-2, Order processing	Basic order-to-cash operations for wholesalers	Advanced features for tracking and fulfilling orders	Full integration with supply chain
FE-3, Manufacturing analytics	Basic real-time tracking	Advanced insights with predictive analytics	Integration with distribution analytics
FE-4, Product catalogs	Create and view product specifications	Modify, delete, and archive product specifications	
FE-5, Customer insights	Basic analytics on direct sales	Advanced analytics and segmentation	Predictive analytics for sales trends
FE-6, System integration	Access via company intranet and external web portal	Integration with iOS and Android platforms	Integration with Windows platform

2.3. Limitations and Exclusions

LI-1: Some headset components may not be available for immediate shipping and their lead times may be longer due to their fragility or unique production requirements. As a result, the ERP system may have product offers with longer delivery lead times.
LI-2: The primary manufacturing and distribution plant of ImmersiveTech, located in Silicon Valley, California, will be the only one served by the ERP system for operations and inventories.

3. Business Context

3.1. Stakeholder Profiles

Stakeholder	Major Value	Attitudes	Major Interests	Constraints
Corporate Management	Improved inventory management; cost savings due to efficient production	Strong commitment through Release 2; support for Release 3 contingent on earlier results	ROI exceeding development and implementation costs	Budget allocations for further releases
Manufacturing Team	Streamlined order and production process; better forecast of resources	Hopeful for reduced workload and more accurate projections; concerns about transition challenges	Ensuring minimal disruptions during the transition period	Training for staff on ERP system usage
Retail Partners	Better inventory updates; efficient order management	Enthusiastic about real-time inventory updates; cautious optimism	Ensuring smooth order placements and real-time updates	Requires regular updates to the ERP interface
IT Department	Streamlined IT operations with centralized data	Concerned about integration work but recognizes the long-term value	Seamless integration with existing IT infrastructure	Limited bandwidth for new projects while implementing ERP
Suppliers	Predictable order forecasts; timely payments	Receptive but cautious	Clear communication and order tracking	Might not have updated tech infrastructure to integrate with the new ERP system

3.2. Project Priorities

Dimension	Constraint	Driver	Degree of Freedom
Features	All features pertaining to inventory management and order tracking in Release 1.0 must be fully operational.		
Quality	98% of user acceptance tests must pass; all security and data integrity tests must pass.		
Schedule			Release 1 planned for the start of Q3 next year, with Release 2 by end of Q3. An overrun of up to 3 weeks is acceptable without a need for a review by the sponsor.
Cost			Budget overruns of up to 10% are acceptable without a review by the sponsor.
Staff		Core team consists of a half-time project manager, half-time business analyst, 3 developers, and 1 tester; additional integration specialist and half-time data migration expert if necessary.	

3.3. Deployment Considerations

It will be necessary to optimize the current server architecture to support the new ImmersiveTech ERP system. For both legacy systems and any third-party systems the business now employs, integration adaptors must be created. Compatibility tests with a variety of enterprise-grade mobile devices, mostly utilized by the sales team and on-the-ground workers, will be required as part of the second release. Any necessary infrastructure adjustments must be made before the second release is released, especially with regards to data security and real-time synchronization. We'll create consumable training videos that are no more than five minutes apiece to walk users through the essential features of the new ERP system.