

BUSINESS REQUIREMENT DOCUMENT (BRD)

Project Name: Ice Cream & Milk Products Manufacturing Management System
Prepared By: M. E. S. Maharshi
Date: 08 November 2025

1. Document Revision History

Date	Version	Description
08-Nov-2025	0.1	Initial draft created
08-Nov-2025	0.2	Added Business Objective & Problem Statement
08-Nov-2025	0.3	Added Stakeholder List and RACI Chart
08-Nov-2025	1.0	Completed BRD and Functional Requirements
08-Nov-2025	1.1	Updated Requirements and Added Use Case Diagrams
08-Nov-2025	1.2	Added SRS Components & Validation Rules
08-Nov-2025	1.3	Added UI Wireframes & Screen Mockups

2. Approvals

Role	Name	Designation	Signature	Date
Project Sponsor	Pavan Kumar Reddy	VP – Corporate Finance	P.K. Reddy	08-Nov-2025
Business Owner	Sravani Devi	Head – Tax & Compliance	S. Devi	08-Nov-2025
Project Manager	N. Sai Kiran	Senior IT Project Manager	Sai Kiran	08-Nov-2025
System Architect	Bhavana Iyer	Solutions Architect	B. Iyer	08-Nov-2025
Development Lead	Chaitanya Raju	Tech Lead – Web Development	C. Raju	08-Nov-2025
UX Lead	Anjali Chowdary	Lead UX Designer	A. Chowdary	08-Nov-2025
Quality Lead	Rohit Srinivas	QA Manager	R. Srinivas	08-Nov-2025
Documentation Lead	Harika Challa	Senior Documentation Specialist	H. Challa	08-Nov-2025

3. RACI Matrix for This Document

Role	Responsible	Accountable	Consulted	Informed
Business Analyst	✓			

Project Manager		✓	✓	
Development Team			✓	
QA Team			✓	✓
Finance Team			✓	
Tax & Compliance			✓	
IT Support				✓

4. Introduction

This Business Requirement Document explains the full business need, functional expectations, and development approach for building a centralized Inventory, Production, and Logistics Management System for Ice Cream and Milk Products.

The system will support real-time production monitoring, accurate stock tracking, smart dispatch planning, and faster deliveries across all manufacturing plants and warehouses.

This BRD is prepared based on real operational challenges, stakeholder inputs, and hands-on understanding of dairy and frozen product distribution.

4.1 Business Goals

The system aims to achieve the following high-level goals:

- Ensure complete stock accuracy with zero stockouts and minimal wastage.
- Reduce delivery turnaround time by ~20% within the first operational year.
- Provide one centralized platform for inventory, distribution, and logistics visibility.
- Improve on-time delivery performance for better customer satisfaction.
- Reduce transportation and storage operational cost through route and load optimization.
- Replace manual tracking with automation to reduce errors and improve efficiency.
- Enable data-driven decision making with reliable dashboards and analytical reports.
- Maintain full traceability and food safety compliance throughout the product lifecycle.

4.2 Business Objectives

The project's core business objectives are:

- To streamline and standardize inventory operations across all plants and warehouses.
- To improve delivery efficiency with optimized routing and minimized transit delays.
- To provide real-time visibility of stock levels, product movement, and dispatch schedules.
- To enhance customer experience through timely deliveries and accurate order fulfillment.
- To reduce operational overheads using automation and improved process accuracy.
- To enforce food safety standards in production, storage, and delivery operations.

4.3 Business Rules

- System must generate alerts when stock reaches minimum reorder levels.
- Delivery assignment should always be from the nearest warehouse or plant.
- Perishable products must be dispatched within defined temperature and time limits.
- Only authorized users can modify stock, dispatch details, or schedules.
- Delivery routes must be automatically optimized based on traffic, distance, and priority.
- Every product must pass a quality check before dispatch.
- Duplicate delivery bookings for the same order must be prevented.
- Any temperature breach during storage or transit must generate an immediate alert.
- Expired or damaged stock must be automatically flagged and excluded from availability.

4.4 Background

- The company manages multiple factories and warehouses producing and storing dairy and ice cream products.
- Due to the perishable nature of these items, speed and accuracy are essential.
- Manual tracking, outdated tools, and lack of real-time visibility are causing:
 - Stock-outs
 - Overstocking
 - Wastage
 - Delayed deliveries
- The company wants a modern digital system to overcome these issues and ensure consistent food safety compliance.

4.5 Project Objectives

- Build a central, integrated platform for inventory and logistics tracking.
- Enable real-time product movement visibility from production to delivery.
- Create a route optimization engine for faster and cost-effective dispatch.

- Incorporate quality control and compliance workflows.
- Provide dashboards for management decision-making.

4.6 Project Scope

4.6.1 In-Scope Functionalities

- Real-time inventory tracking across all units
- Automated low-stock alerts
- GPS-based delivery route optimization
- Live tracking for administrators and customers
- Automated SMS/Email notifications
- Role-based secure access
- Dashboard and performance monitoring
- Encrypted data storage and regular backups

4.6.2 Out of Scope

- Purchase or installation of hardware/IoT devices
- Management of third-party logistics companies
- Integration with systems not listed in requirements
- Mobile application development (unless added later)
- Customer complaint or grievance module
- Accounting or financial auditing functions
- Employee performance tracking

5. Assumptions

- All locations will have stable internet connectivity.
- Users will be trained before system go-live.
- Stakeholders will provide accurate product and stock data.
- ERP system supports integration with APIs.
- All users will follow defined inventory processes.
- GPS and traffic data services will remain reliable.
- Stakeholders will provide timely approvals.
- The system will support but not enforce food safety guidelines.

6. Constraints

- Budget and team capacity limits.
- Strict project timelines.
- Seamless integration required with existing ERP.
- Must comply with data security regulations.
- Major requirement changes will impact budget/time.
- Hardware setup will be client-managed.
- Real-time performance depends on stable internet and hardware.

7. Risks

- **Technology Risks:** Integration failures, performance issues.
- **Skill Risks:** Users needing additional training.
- **Organizational Risks:** Internal decisions affecting progress.
- **Business Risks:** Market challenges or customer impact.
- **Requirement Risks:** Changing/unclear requirements.
- **Other Risks:** Any unforeseen operational risks.

8. Business Process Overview

8.1 Legacy System (AS-IS)

The current process uses a mix of basic software and manual tracking across different plants and warehouses.

Stock updates, dispatch information, and delivery details are not captured in real-time. Because of this:

- Stockouts and overstocking occur frequently
- Deliveries are delayed due to poor route planning
- No single view is available for all warehouses
- Decisions are delayed because communication is scattered
- Errors occur due to manual data entry
- Quality issues are identified late

This system lacks speed, transparency, and accuracy, which are all critical for managing ice cream and milk product distribution.

8.2 Proposed Recommendation (TO-BE)

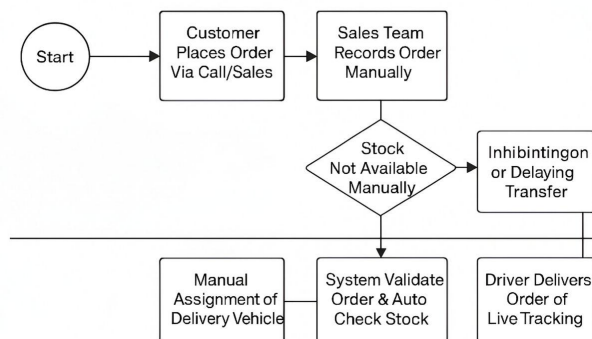
The new solution will replace the scattered process with a central, real-time digital system that connects manufacturing plants, warehouses, delivery teams, and customers.

The improved system will include:

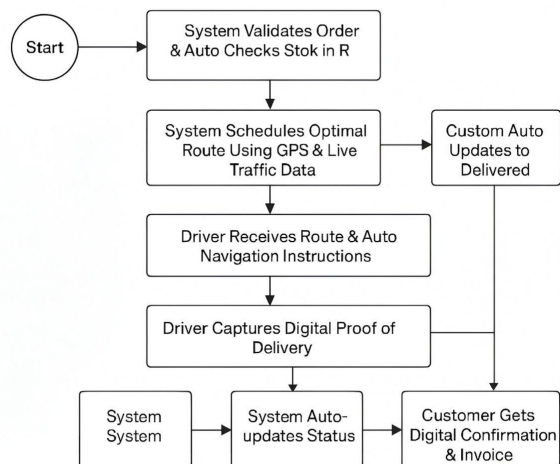
- Live stock tracking across all locations
- Automatic alerts for reorder, delays, and anomalies
- Optimized delivery routes using GPS and live traffic
- Customer notifications and tracking links
- Role-based secured login
- Analytics dashboards for management
- Quality checks and compliance workflows

This TO-BE model ensures faster deliveries, fewer errors, better planning, and stronger customer satisfaction.

AS-IS



TO-BE



9. Business Requirements

This section explains the specific capabilities the system must provide to support the business goals.

Each requirement is aligned with the operational needs of production, warehousing, dispatch, tracking, and customer communication.

Business Requirements

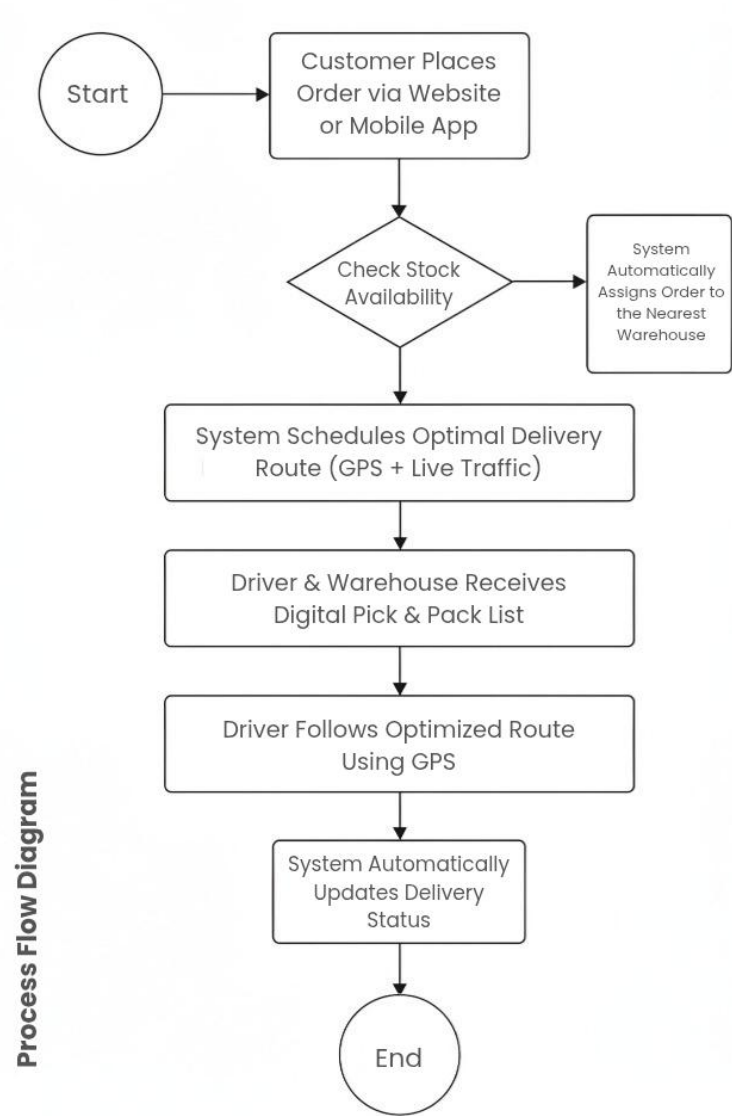
Sr. No.	Business Requirement	Functionality Description	BV
BR-01	Real-Time Stock View	System must show live stock levels from all plants and warehouses.	500
BR-02	Low Stock Alerts	Send automatic alerts when stock reaches minimum levels.	500
BR-03	All Warehouse View	Show combined stock view of all warehouses in one dashboard.	200
BR-04	Smart Route Planning	System must automatically suggest the best delivery route using GPS and live traffic.	500
BR-05	Customer Order Updates	Customers must receive live order updates through SMS/Email.	200
BR-06	Delivery Live Tracking	Enable tracking of delivery vehicle location in real time.	500
BR-07	Analytics Dashboard	Provide dashboards showing stock, orders, delays, routes, and performance.	200

Sr. No.	Business Requirement Title	Functionality Description	BV
BR-08	User Access Control	Assign roles such as Admin, Warehouse	500

		Manager, Delivery Agent, and Customer with specific permissions.	
BR-09	Delay and Issue Alerts	System must send alerts if deliveries are delayed or errors occur.	100
BR-10	Performance Reports	Generate detailed reports for order accuracy, delivery time, and fulfillment metrics.	100
BR-11	Data Security	Secure all data with encryption and restrict access to authorized users only.	500
BR-12	Customer Notifications	Send automatic messages for order confirmation, dispatch, and delivery time.	200
BR-13	Stock Transfer	Manage stock transfers between warehouses with approval tracking.	100
BR-14	Compliance Check	Ensure all workflows follow food safety and regulatory standards.	200
BR-15	Backup & Recovery	Perform daily backups and support disaster recovery for business continuity.	100
BR-16	ERP Sync	Integrate stock, order, and dispatch data with existing ERP.	500
BR-17	Order Validation	Block orders when available stock is insufficient.	200
BR-18	Delivery Feedback	Allow customers to rate their delivery experience.	50
BR-19	Batch & Expiry Tracking	System must track batch numbers, expiry dates, and prevent expired stock usage.	500

BR-20	Temperature Monitoring Alerts	Trigger alerts if cold storage or vehicle temperature goes out of allowed limits.	500
BR-21	Dispatch Scheduling	System should allow planned scheduling of dispatch slots to avoid delays.	200

Process Flow Diagram



Introduction – Business Analyst Assigned to Your Project

Subject: Introduction – Business Analyst Assigned to Your Project

Dear [Client Name],

I hope you are doing well.

My name is M. E. S. Maharshi, and I have been assigned as the **Business Analyst** for your upcoming project. I will be your primary point of contact for understanding your business processes and ensuring that every requirement is captured clearly and translated into the right technical solution.

As part of the **Business Understanding Phase**, I will be closely working with you and your team to:

- Understand your current workflows (AS-IS)
- Identify challenges, gaps, and dependencies
- Define the desired future process (TO-BE)
- Map end-to-end user journeys
- Identify key user groups such as customers, administrators, operations, and logistics teams
- Document all functional and non-functional requirements in a structured and clear manner

My focus will be to ensure smooth communication, complete requirement clarity, and alignment between your business goals and the final solution. I will coordinate with the development, QA, design, and architecture teams to ensure that all requirements are implemented as expected and validated thoroughly during each stage.

I look forward to working with you closely and ensuring a smooth, transparent, and productive engagement.

Please share your availability so that we can schedule our first requirement discussion.

Warm regards,

M. E. S. Maharshi
Business Analyst
Shinedove – The Gold & Co.
8106068232

BUSINESS REQUIREMENT DOCUMENT (BRD)

Project Name: Online Ticket Booking System
Prepared By: M. E. S. Maharshi
Date: 08 November 2025

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08-Nov-2025	1.1	Updated Requirement List & Added Basic Use Cases
08-Nov-2025	1.2	Added SRS & Validation Requirements
08-Nov-2025	1.3	Added Simple UI Mock Screens

2. Approvals

Role	Name	Designation	Signature	Date
Project Sponsor	K. Pavan Reddy	VP – Corporate Finance	P. Reddy	08-Nov-2025
Business Owner	S. Harsha Latha	Head – Tax & Compliance	H. Latha	08-Nov-2025
Project Manager	N. Sai Teja	Senior IT Project	S. Teja	08-Nov-2025

		Manager		
System Architect	Anusha Iyer	Solution Architect	A. Iyer	08-Nov-2025
Development Lead	Kiran Raju	Tech Lead – Web Development	K. Raju	08-Nov-2025
UX Lead	Divya Chowdary	UX Designer	D. Chowdary	08-Nov-2025
Quality Lead	Srinivas Rao	QA Manager	S. Rao	08-Nov-2025
Documentation Lead	Harika Challa	Documentation Specialist	H. Challa	08-Nov-2025

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Developers	✓			
QA Team			✓	✓
Finance Team			✓	
Compliance Team			✓	
IT Support				✓

4. Introduction

This project aims to build a simple, reliable, and user-friendly online ticket booking system that allows users to book tickets for events, movies, shows, or trips without visiting a physical counter.

The system will support browsing events, checking availability, selecting seats, booking tickets, making secure payments, and receiving instant digital confirmation.

Admins will be able to manage events, pricing, availability, schedules, and booking records through an easy dashboard.

4.1 Business Objectives

- Allow users to view available shows/events with timing, seat availability, and pricing.
- Provide a smooth and fast ticket booking experience with secure digital payments.
- Reduce manual booking efforts and avoid errors.
- Allow admins to easily update events, pricing, and booking data.
- Improve customer satisfaction through instant confirmations and notifications.

4.2 Business Goals

- Provide a seamless online ticket booking solution.
- Reduce human errors through automation.
- Enable fast and secure payments with real-time booking confirmation.
- Provide a centralized admin dashboard to manage the complete ticketing process.
- Improve overall customer satisfaction and increase business revenue.

4.3 Business Rules

- Users must log in or register before booking tickets.
- Payment must be completed to confirm booking.
- Booking cannot exceed the available seat count.
- Tickets cannot be canceled after a defined cutoff time.
- Only admins can add, edit, or remove event listings.
- Confirmation must be sent via SMS/Email after payment.
- Only approved payment methods (UPI, Card, Wallet) can be used.
- Each user can book only the allowed number of tickets per event.

4.4 Business Background

- Manual bookings cause long queues, errors, and overbooking.
- Customers expect quick, digital, paperless ticket booking.
- Businesses require real-time tracking of bookings and seat availability.
- A digital platform reduces operational overhead and improves accuracy.
- Online ticketing increases reach and overall revenue.

4.5 Project Objectives

- Build an easy-to-use online platform for booking tickets.
- Integrate secure payment gateways.
- Generate digital tickets and confirmations instantly.
- Show live seat availability and pricing.
- Provide a strong admin dashboard for management.
- Ensure accurate booking reports and payment records.
- Reduce manual handling by automating end-to-end booking flow.
- Support both mobile and desktop users.
- Ensure data security and prevent unauthorized access.

4.6 Project Scope

4.6.1 In-Scope

- User registration and login
- Event/show listing with date, time, price, seat status
- Seat selection (if applicable)
- Ticket booking
- Secure online payment
- Digital ticket and confirmation
- Booking history
- Admin event management
- Cancellation option (if allowed)

4.6.2 Out of Scope

- Offline booking operations
- Third-party event integration

- CRM/complaint management
- Physical ticket printing logistics

5. Assumptions

- Users have internet access and digital payment options.
- Payment gateway will work smoothly.
- Admin team will provide correct event and pricing information.
- SMS/Email services will work without delays.
- Users will enter correct personal and payment details.

6. Constraints

- Booking allowed only for available seats.
- Payment must be completed within a fixed time window.
- Poor network from user end may affect booking.
- Must comply with data security and payment standards.
- Only allowed payment types can be used.
- Admin access is restricted.

7. Risks

- Payment failure may cause booking drop-offs.
- Heavy traffic during festival releases may slow the system.
- Cybersecurity risks and data breach attempts.
- Wrong event data from admin may confuse users.
- Delay in confirmation email/SMS due to gateway issues.
- User no-shows causing business loss.

8. Business Process Overview

8.1 AS-IS (Current Business Situation)

The existing ticket booking process is mostly manual and depends heavily on physical interaction. Users must visit ticket counters, stand in queues, and complete their booking using paper-based methods. Because the entire process is handled manually, the system faces multiple operational challenges:

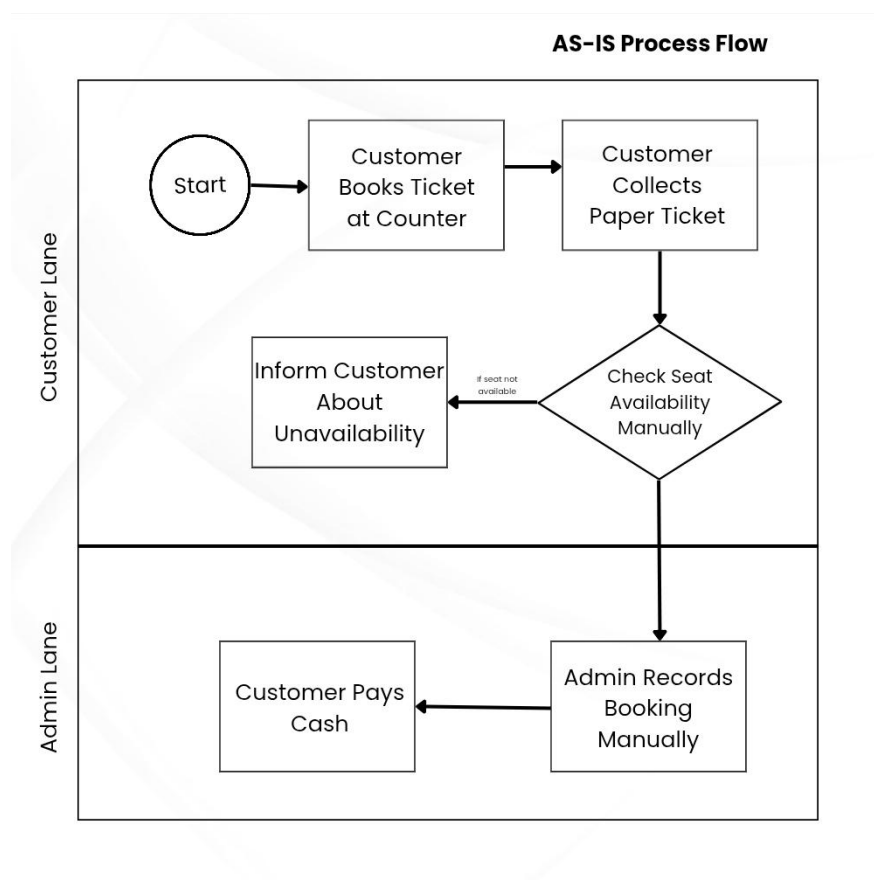
- Users stand in long queues at physical ticket counters to book tickets.
- Booking confirmations are issued only through printed paper tickets.
- Seat availability is updated manually, increasing the chances of overbooking.

- Payments are mostly handled in cash, with no digital tracking or automated records.
- Admins maintain booking logs, seat status, and revenue information manually, making the process time-consuming and error-prone.

Current Challenges

- Manual processes lead to frequent mistakes, delays, and poor customer experience.
- No real-time seat availability, which often results in double booking.
- No centralized platform to view, manage, or track bookings, payments, and seat updates.

This AS-IS process lacks speed, accuracy, transparency, and real-time visibility.

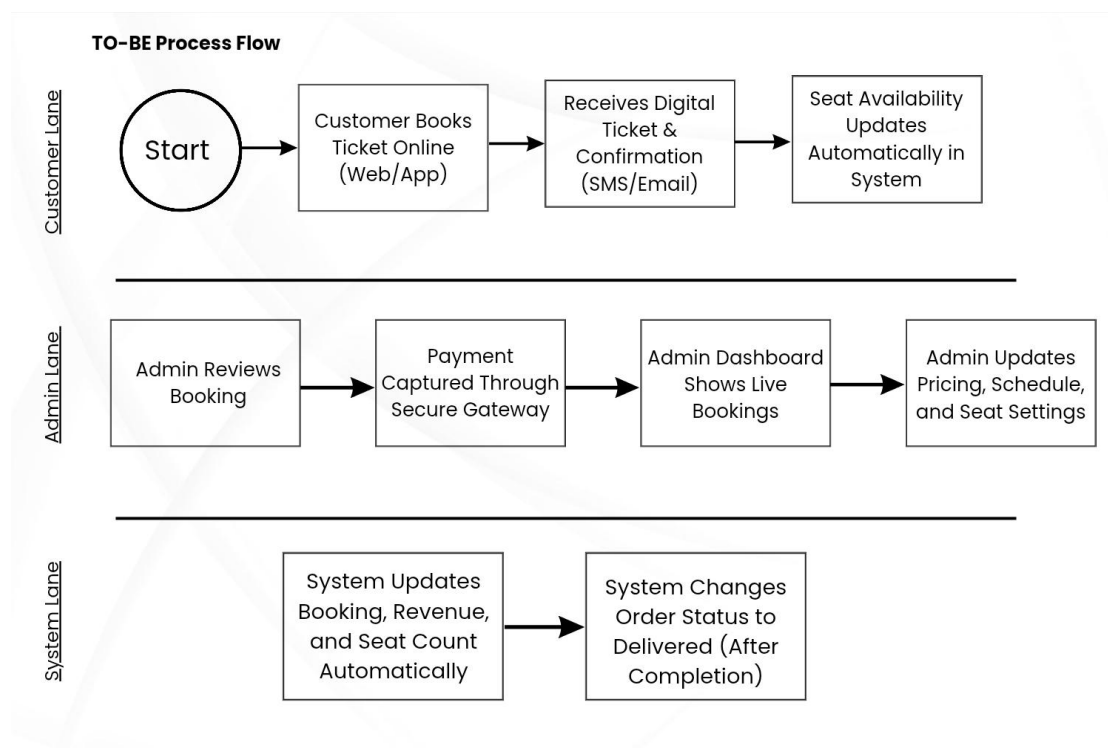


8.2 TO-BE (Proposed Future Situation)

The proposed system will fully digitize the ticket booking process to provide fast, accurate, and seamless booking services for customers and efficient management capabilities for the admin team.

The new TO-BE system will include:

- Instant digital ticket generation and confirmation via SMS/Email after successful payment.
- Seat availability will update automatically and in real time after every booking to avoid overbooking.
- A secure online payment gateway will ensure safe transactions with proper digital records.
- A centralized Admin Dashboard will display live booking updates, seat status, pricing, schedules, and real-time revenue analytics.
- Automation will significantly reduce manual work, eliminate human errors, and improve overall booking speed and accuracy.



9. Business Requirements

The system must support the key functions needed for online event/movie/trip ticket booking.

Each requirement below is aligned to the overall business goals of providing a smooth user experience, real-time updates, secure payments, and efficient admin control.

Business Requirements Table

Sr. No.	Business Requirement	Functionality Description	BV
BR-01	Event Browsing	Users can view all available movies/events/trips with filters like date, location, category, and price.	200
BR-02	Seat Availability View	System must show real-time seat availability before and during booking to avoid overbooking.	500
BR-03	Secure Payment	Support UPI, card, wallet, and net banking with encrypted payment processing.	500
BR-04	Instant Ticket	Generate and send digital tickets with QR/Booking ID instantly after successful payment.	500
BR-05	User Account	Allow users to register/login and view past bookings, upcoming tickets, downloads, and refunds.	200
BR-06	Admin Event Setup	Admins can add, edit, or remove events, update pricing, and set schedules.	200

Sr. No.	Business Requirement	Functionality Description	BV
BR-07	Cancellation Option	Allow users to cancel tickets based on predefined rules and trigger refund processing.	100
BR-08	Alerts & Notifications	Send SMS/Email alerts for confirmations, payment failure, reminders, and schedule updates.	100
BR-09	Reports Dashboard	Provide booking reports, revenue statistics, and customer activity data to admins.	100

BR-10	Role-Based Access	Give different access levels to Admin, Support Staff, and Users for security.	50
BR-11	Booking Time Limit	Automatically release seats if payment is not completed within the fixed time window.	200
BR-12	Unique Booking ID	System must generate a unique booking/ticket ID for every successful transaction.	50
BR-13	Event Search	Provide a simple search option for users to find events by name, artist, venue, or date.	20
BR-14	Refund Tracking	Allow users to track the status of refunds after ticket cancellation.	20

SOFTWARE REQUIREMENTS SPECIFICATION (SRS)

1. Introduction

1.1 Purpose

The purpose of this SRS is to clearly define the complete functional and non-functional specifications of the Online Ticketing System. It documents system features, interfaces, performance expectations, and constraints required for smooth ticket search, seat selection, booking, payment, and ticket management for users and administrators.

1.2 Scope

The system will allow users to view events/movies/trips, check seat availability, book tickets, make secure payments, and receive instant digital confirmation.

Admins will manage schedules, pricing, seat availability, bookings, cancellations, and system reports.

The system aims to remove manual work, avoid overbooking, and provide fast and accurate service.

1.3 Definitions

- **User / Customer:** Person who books tickets.

- **Admin:** Person managing events, pricing, seats, and bookings.
- **Digital Ticket:** E-ticket sent via Email/SMS with ID/QR code.
- **Payment Gateway:** Secure external system used for digital payments.
- **Seat Availability Engine:** Module that updates seats after each booking.

1.4 References

- Existing manual booking process notes
- Industry standards for online ticketing
- Payment gateway documentation
- Government rules for digital transactions & GST compliance

1.5 Overview

This SRS presents the complete system behavior including the features, architecture, interfaces, data flow, business rules, and technical requirements that must be met for successful development and deployment.

2. Overall Description

The Online Ticketing System replaces the manual booking approach with a digital, fast, and user-friendly solution.

Users can instantly book tickets on any device, while the system updates seat status automatically and maintains real-time records.

Admins receive a full dashboard for tracking bookings, revenue, schedules, and event performance.

3. System Features and Functional Requirements

The major system features include:

- User login and profile
- Event/Movie/Trip listing
- Real-time seat availability
- Seat selection and booking
- Secure payment
- Digital ticket creation
- Admin event management
- Booking history and cancellation

Functional Requirements

Sr. No.	Requirement Name	Requirement Description	BV
FR-01	User Login	Users can register, log in, and update profile details.	200
FR-02	Browse Events	Users can browse and filter events/movies/trips by date, category, and location.	200
FR-03	Event Details	Users can view schedule, price, and real-time seat count.	200
FR-04	Seat Selection	Users can select seats or choose ticket quantity before booking.	500

Sr. No.	Requirement Name	Requirement Description	BV
FR-05	Start Booking	System must allow users to begin the booking process after selecting seats.	100
FR-06	Secure Payment	Users can complete payments through UPI, card, wallet, or net banking securely.	500
FR-07	Ticket Download	System generates a digital ticket with QR/Booking ID for download.	100
FR-08	Booking Confirmation	System sends instant SMS/Email confirmation after successful payment.	100
FR-09	Booking History	Users can view all past and upcoming bookings with status.	50
FR-10	Ticket Cancellation	Users can cancel tickets according to defined policy and receive refunds.	50
FR-11	Admin Event Setup	Admins can add, update, or delete events, prices, schedules, and seat maps.	200

FR-12	Admin Reports	Admins can view booking reports, revenue trends, and event performance.	50
FR-13	Unique Booking ID	System generates a unique booking ID for each successful transaction.	20
FR-14	Payment Timeout	System must release selected seats if payment is not completed in the allowed time window.	100

External Interface Requirements

4.1 User Interface

- **Simple and responsive UI** for mobile, tablet, and desktop
- **Easy navigation** for searching, booking, and payment
- **Admin dashboard** with charts, tables, and filters

4.2 Hardware Interface

- Accessible on **smartphones, laptops, desktops, or tablets**
- **Cloud-based** or hosted server infrastructure

4.3 Software Interface

- **Payment gateway API**
- **SMS/Email notification service**
- **Database** (MySQL / PostgreSQL / Oracle)
- **Admin analytics tools**

4.4 Communication Interface

- All communication over secure **HTTPS**
- Notification via **SMS/Email**
- Reports downloadable in **PDF/Excel**

5. Non-Functional Requirements (NFR)

5.1 Performance

- Must support **high user traffic**
- Each booking must complete within **3–4 seconds**

5.2 Security

- **Encrypt** all personal and payment data
- **Role-based access** for Admin and User
- User passwords stored using **hashing**

5.3 Reliability

- **99% uptime**
- **Daily backups** and recovery mechanism

5.4 Usability

- Simple, **intuitive layout**
- **Clear instructions** for users

5.5 Maintainability

- **Modular architecture** for easy updates
- **Well-documented** codebase

5.6 Portability

- Compatible with **all major browsers**
- Can scale to **mobile apps in future**

6. Other Requirements

- **GST billing support**
- **Multi-language interface** (optional)
- **Session timeout** for security
- **Refund and cancellation rules**

7. Appendices

7.1 Glossary

Term	Description
User/Customer	Person booking events or shows
Admin	Person managing events and bookings
Event/Trip/Show	Movie, bus, concert, or activity for booking
Booking	Complete process from seat selection to payment
Seat Availability	Total remaining seats for booking
Payment Gateway	System that handles secure payments
Confirmation Message	SMS/Email sent after booking
Cancellation Policy	Rules for canceling tickets
Dashboard	Admin system used for tracking data
Ticket ID	Unique number generated for each booking

8. Assumptions

- **Payment gateway** will be available and functional
- **Users** have internet access
- **Admins** will provide accurate event details
- **Notification services** will work without delay

9. Dependencies

- **Payment gateway API**

- **SMS/Email service provider**
- **Server hosting** and database setup

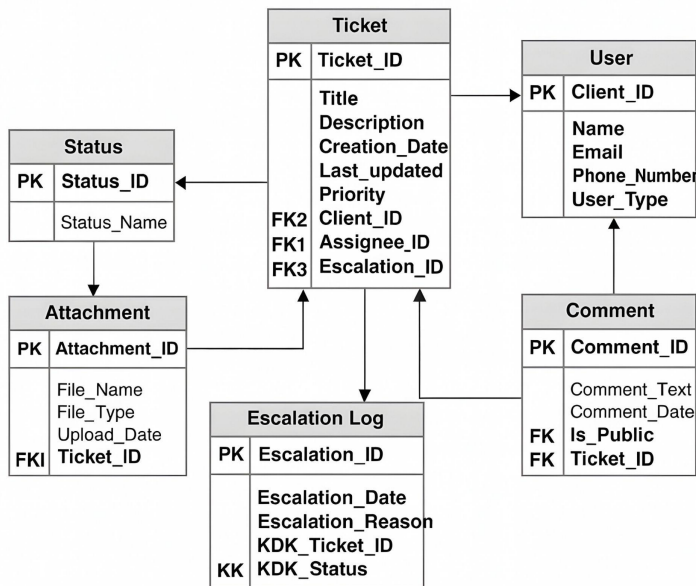
Entity-Relationship (ERD) for a Support Ticket Lifecycle

An **ERD** is like a **blueprint for your system's data**, showing the main players (**Entities**) and how they talk to each other (**Relationships**). For a simple ticketing system, here is the visual logic:

The Story of a Support Ticket

Imagine a customer (**USER**) has a problem and creates a ticket (**TICKET**). The ticket is then assigned to a specialist (**AGENT**), and every action (like a reply or status change) is logged as a history entry (**TICKET_HISTORY**).

Entity (The main "things" to track)	Attributes (The data we store about them)	Relationship (How they connect)
USER (Customer)	User ID, Name, Email, Phone	A USER can create many TICKET s.
AGENT (Specialist)	Agent ID, Name, Department, Role	An AGENT can be assigned to many TICKET s.
TICKET	Ticket ID, Subject, Description, Date Created, Priority, Status, Date Closed	Each TICKET is created by one USER and assigned to one AGENT .
TICKET_HISTORY	History ID, Timestamp, Change Made, Note	Each TICKET can have many TICKET_HISTORY records (logs).



User Stories (Ecommerce)

User Story No.	Task	Priority	User Story	Acceptance Criteria (AC)
1	1	Highest	AS A NEW USER, I WANT a clean and attractive homepage, SO THAT I can explore easily and start shopping quickly.	Homepage must have a clean and visually appealing layout. Popular/trending products must be displayed at the top. Clear and simple categories must be visible. Page must load quickly.
2	2	Highest	AS A RETURNING USER, I WANT to see my recently viewed products,	Recently viewed products section must be visible on homepage/dashboard. Product thumbnail and name must be shown.

			SO THAT I can access them without searching again.	Clicking must open the correct product page.
3	3	Highest	AS A USER , I WANT product filters (price, brand, size, color), SO THAT I can find the right product faster.	Filters must be visible on product listing page. User can apply multiple filters. Product list updates instantly after filters.
4	4	Highest	AS A USER , I WANT clear images, details, and reviews, SO THAT I can decide confidently.	Product page must show images, description, price, ratings, reviews. Images must support zoom/full screen. Customer feedback must be scrollable.
5	5	Highest	AS A USER , I WANT a fast search bar with suggestions, SO THAT I can find products quickly.	Search bar must be available on all pages. Instant suggestions must appear while typing. Clicking suggestion must open relevant search or product.
6	6	Highest	AS A USER , I WANT one-click Add to Cart, SO THAT I can review items before purchase.	Add to Cart button visible on list and product page. Clicking should add product without redirect. Cart amount updates automatically.
7	7	Highest	AS A USER , I WANT to change quantity in cart, SO THAT I can	Quantity must be changeable (+ / – buttons). Total price must update instantly. System must

			adjust my order.	validate stock.
8	8	Highest	AS A GUEST USER , I WANT to order without creating an account, SO THAT I can checkout faster.	“Continue as Guest” must be shown on checkout. User must provide only essential delivery and contact details. Order must be placed without registration.
9	9	Highest	AS A REGISTERED USER , I WANT saved addresses and payments, SO THAT I can checkout quickly.	Saved addresses must auto-fill. Previous payment methods shown. User can edit/update address/payment.
10	10	Highest	AS A USER , I WANT clear shipping charges, SO THAT I know the total cost.	Shipping charges must be shown separately. Charges must change based on location/cart value. Total bill must display clearly.
11	11	Highest	AS A USER , I WANT multiple secure payment methods, SO THAT I can pay safely.	UPI, Card, Net Banking, Wallet, COD must be available. Payment encryption required. Failed payment must show error message.
12	12	Highest	AS A USER , I WANT instant order confirmation, SO THAT I know my order is placed.	“Order Successful” screen must appear. Email/SMS with order ID and details must be sent. Must show delivery date and payment method.
13	13	Highest	AS A USER , I WANT order	Order timeline: Placed → Packed → Shipped →

			tracking, SO THAT I know the delivery progress.	Delivered. Real-time status updates. Tracking number must be shown.
14	14	Highest	AS A USER , I WANT to view past orders, SO THAT I can reorder or check history.	Past orders shown under “My Orders”. Each order shows item details and delivery date. Reorder button must be available.
15	15	Highest	AS A USER , I WANT to create an account, SO THAT I can save my details.	Registration form must collect essential details. Email/phone verification. Successful registration must redirect to dashboard.
16	16	Highest	AS A USER , I WANT to update profile details, SO THAT my account stays correct.	Edit name, email, phone, address. Updated details must reflect instantly. Validation required.
17	17	Highest	AS A USER , I WANT to subscribe to newsletters, SO THAT I get updates on offers.	Subscription option must be visible. Confirmation message must appear. Email added to mailing list.
18	18	Highest	AS A USER , I WANT to add items to wishlist, SO THAT I can save them for later.	Wishlist icon on product pages. Clicking saves item to wishlist. Wishlist visible only for logged-in users.

19	19	Highest	AS A USER , I WANT live chat support, SO THAT I can get instant help.	Chat icon must be visible. Chat window opens for conversation. Response must be timely.
20	20	Highest	AS A USER , I WANT a FAQ/help center, SO THAT I can find answers easily.	FAQs must be categorized. Answers expand on click. Search bar inside help center.
21	21	Highest	AS A USER , I WANT product comparison, SO THAT I can decide between similar items.	Compare button must appear. Comparison page must show features & price. User can remove items from comparison.
22	22	Highest	AS A USER , I WANT to sort products, SO THAT I can view items in my preferred order.	Sorting options: Price Low–High, High–Low, Newest, Popular. List updates instantly.
23	23	Highest	AS A USER , I WANT to apply coupon codes, SO THAT I can get discounts.	Coupon field must be visible at checkout. Valid coupons reduce total price. Invalid coupon must show error.
24	24	Highest	AS A USER , I WANT out-of-stock alerts, SO THAT I can know availability changes.	“Notify Me” option for out-of-stock items. Email/SMS alert when product restocks.

25	25	Highest	AS A USER , I WANT to upload return images, SO THAT returns are clear for the seller.	User can upload product photos for return request. System must verify image formats. Return request submitted successfully.
26	26	Highest	AS A USER , I WANT invoice download, SO THAT I can keep purchase records.	Invoice download button must be visible. PDF must include order details and GST.
27	27	Highest	AS A CUSTOMER , I WANT to register in Scrum Foods, SO THAT I can order food from the restaurant.	Registration screen must include fields: Name, Password, Mobile, Email, Address. Register button must work. Success message must appear.