# Customer Journey Map

**Customer Journey Map Of JEWEL CRM**

| | Entice | Enter | Engage | Exit | Extend |
|---|---|---|---|---|---|
| | How does someone initially become aware of this process? | What do people experience as they begin the process? | In the core moments in the process, what happens? | What do people typically experience as the process finishes? | What happens after the experience is over? |

## Steps
What does the person (or group) typically experience?

- Emotional Connection
- Emotions Transactions
- Digital Discover
- Expectation of Enhanced Personalization
- Concerns about Data Privacy
- Heightened Emotional State
- Increased Scrutiny
- Decision-Making
- Sense of Accomplishment/Satisfaction
- Relief
- Pride
- Enjoyment and Use of the Product
- Emotional Connection and Memory
- Word-of-Mouth Marketing

## Interactions:
What interactions do they have at each step along the way?
- *Things:* What digital touchpoints or physical objects would they use?
- *Place:* Where are they?
- *People:* Who do they see or talk to?

- People
- Place
- Things
- Excitement/Anticipation
- Anxiety/Uncertainty
- Intense Activity/Decision-Making
- Emotional Peaks
- Sense of Accomplishment/Relief
- Satisfaction/Gratification
- Integration into Personal Narrative
- Learning and Adaptation

## Goals & motivations
At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")

- Help me discover beautiful and trustworthy jewelry
- Help me avoid wasting time on irrelevant information
- Help me feel secure about my payment information
- Help me avoid damage or loss of my jewelry
- Help me avoid feeling forgotten after the sale.
- Help me find unique and high-quality
- Help me avoid scams or fake
- Help me get assistance with any repairs or
- Help me share my positive experiences with others
- Help me avoid missing out on exclusive opportunities

## Positive moments
What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?

- Enjoying pleasant sights, sounds, smells, tastes, or
- Seeing the finished product, of a custom designed
- Receiving helpful care instructions and warranty information.
- Designing or customizing something to their own taste.
- Feeling like the jeweler understands their individual
- Seeing 3D renderings or sketches of their custom design.
- Being able to easily compare different options.

## Negative moments
What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?

- Struggling to understand technical specifications for gemstones or metals
- Being misled about pricing or discounts.
- Being charged for unnecessary repairs
- Facing high repair costs that were not anticipated.
- Having to fill out lengthy forms or provide the same information
- Spending time correcting mistakes made by the jewler, such as incorrect engravings.

## Areas of opportunity
How might we make each step better? What ideas do we have? What have others suggested?

- Make the brand easily discoverable and create a compelling first impression.
- Offer a "wish list" or "favorites" feature.
- Host exclusive events for loyal customers
- Offer trusted and secure payment options.
- Send detailed order confirmations and receipts.

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored



THE CRM PROCESS

01 GENERATE BRAND AWARENESS
REACH
MARKETING
02 ACQUIRE LEADS
ACQUISITION
SALES AND/OR MARKETING
03 CONVERT LEADS INTO CUSTOMERS
CONVERSION
04 PROVIDE QUALITY CUSTOMER SUPPORT
RETENTION
CUSTOMER SERVICE
LOYALTY
05 DRIVE UPSELLS

| User Type | Functional Requirement (Epic) | User Story Number | User Story/Task | Acceptance criteria | Priority | Release |
|---|---|---|---|---|---|---|
| Customer (Mobile user) | **Registration** | **USN-1** | As a user, I can register for the application through Gmail | **I can register the application from gmail** | **Medium** | **Sprint -1** |
| | | **USN-2** | As a user, I can register for the application through Facebook | I can register & access the dashboard with Facebook Login | **Low** | **Sprint-2** |
| | **Login** | **USN-3** | As a user, I can log into the application by entering email & password | I can login in application by entering email & password | **High** | **Sprint-3** |
| | | **USN-4** | As a user, I can manage my login credentials | I can login to credentials | **Medium** | **Sprint -1** |
| | **Dashboard** | **USN-5** | As a user, I can view pre-built dashboards that provide insights into key sales metrics. | I can view dashboards | **Low** | **Sprint-2** |
| | | **USN-6** | As a user, I can filter dashboard components to focus on specific data subsets.<br>• | I can filter dashboard components | **Medium** | **Sprint-1** |
| **Customer(Web User** | **Login** | **USN-7** | As a user, I can log in to as a customer web | I can login as a customer web user, I can | **Medium** | **Sprint-1** |

| | | | | user, I can register for events or webinars | register for events or webinars. | | |
|---|---|---|---|---|---|---|---|

| | Registration | USN-8 | As a user, I can register for events or webinars | I can register for events or webinars | High | Sprint-3 |
|---|---|---|---|---|---|---|
| **Customer Care Executive** | **Access** | **USN-9** | As a user, I can access customer records to view their history, interactions, and previous cases | I can access customer records to view their history, interactions, and previous cases | **High** | **Sprint-3** |
| | **Assign** | **USN-10** | As a user, I can assign cases to other team members. • | I can assign cases to other team members. | **Medium** | **Sprint-1** |

# Project Design Phase-II

## Solution Requirements (Functional & Non-functional)

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|---|---|---|
| FR-1 | User Registration | Registration through Form<br>Registration through Gmail<br>Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email<br>Confirmation via OTP |
| FR-3 | User Profile Management | View User Profile<br>Edit User Profile<br>Change Password<br>Upload Profile Picture |
| FR-4 | User Login | Login with Username/Password<br>Login with Google<br>Login with LinkedIn |
| FR-5 | Password Recovery | Password Reset via Email<br>Password Reset via OTP |
| FR-6 | Search Functionality | Search by Keyword<br>Filter Search Results<br>Sort Search Results |
| FR-7 | User Dashboard | Display User's Recent Activity<br>Display Personalized Recommendations<br>Display User's Notifications |
| FR-8 | Notifications | Email Notifications<br>In-App Notifications<br>Push Notifications (if applicable) |

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description |
|---|---|---|
| NFR-1 | Usability | The system shall be intuitive and easy to learn for all user roles (administrators, regular users, and guest users). User interfaces shall be consistent and user-friendly, adhering to established design guidelines. Navigation shall be clear and efficient, requiring minimal steps to complete common tasks. Common actions should be readily available and discoverable. The system will provide clear error messages and help documentation. User onboarding and training documentation must be available. User should be able to complete main user flows within three clicks |
| NFR-2 | Security | The system shall protect user data and prevent unauthorized access. User authentication shall use strong passwords and multi-factor authentication where possible. Data at rest and in transit shall be encrypted using industry-standard encryption protocols. Regular security audits and vulnerability assessments shall be conducted. The system should prevent common web attacks, such as SQL injection and cross-site scripting (XSS). Access Control based on the role and least privilage principle. Personal Identifying Information (PII) must be protected. |
| NFR-3 | Reliability | The system shall operate reliably and consistently, minimizing downtime and errors. The system should recover gracefully from failures and prevent data loss. The system should have backup and restore capabilities. The system must meet all the functional requirements. The system must be able to properly display correct data |

| NFR-4 | **Performance** | The system shall respond quickly and efficiently to user requests, providing a smooth and responsive user experience. Page load times shall be within acceptable limits (e.g., less than 3 seconds). The system shall be able to handle anticipated user loads and data volumes without performance degradation. Response times should be optimized for critical transactions. The system should be optimized for common device types, and network speeds |
|---|---|---|
| NFR-5 | **Availability** | The system shall be available to users during specified hours of operation (e.g., 24/7). Downtime for maintenance shall be minimized and scheduled during off-peak hours, or handled in a rolling release. The system shall have redundancy and failover mechanisms in place to ensure high availability. Mean Time Between Failures (MTBF) should be high and Mean Time To Recovery (MTTR) should be low. The service should have a service level agreement (SLA) associated to it. |
| NFR-6 | **Scalability** | The system shall be able to handle increasing user loads and data volumes without significant performance degradation. The system architecture shall be designed to allow for horizontal and vertical scaling as needed. The database and infrastructure should be scalable. The System should be able to support a large number of concurrent users, and transactions. |

# Project Design Phase-II

# Technology Stack (Architecture & Stack)

**Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2
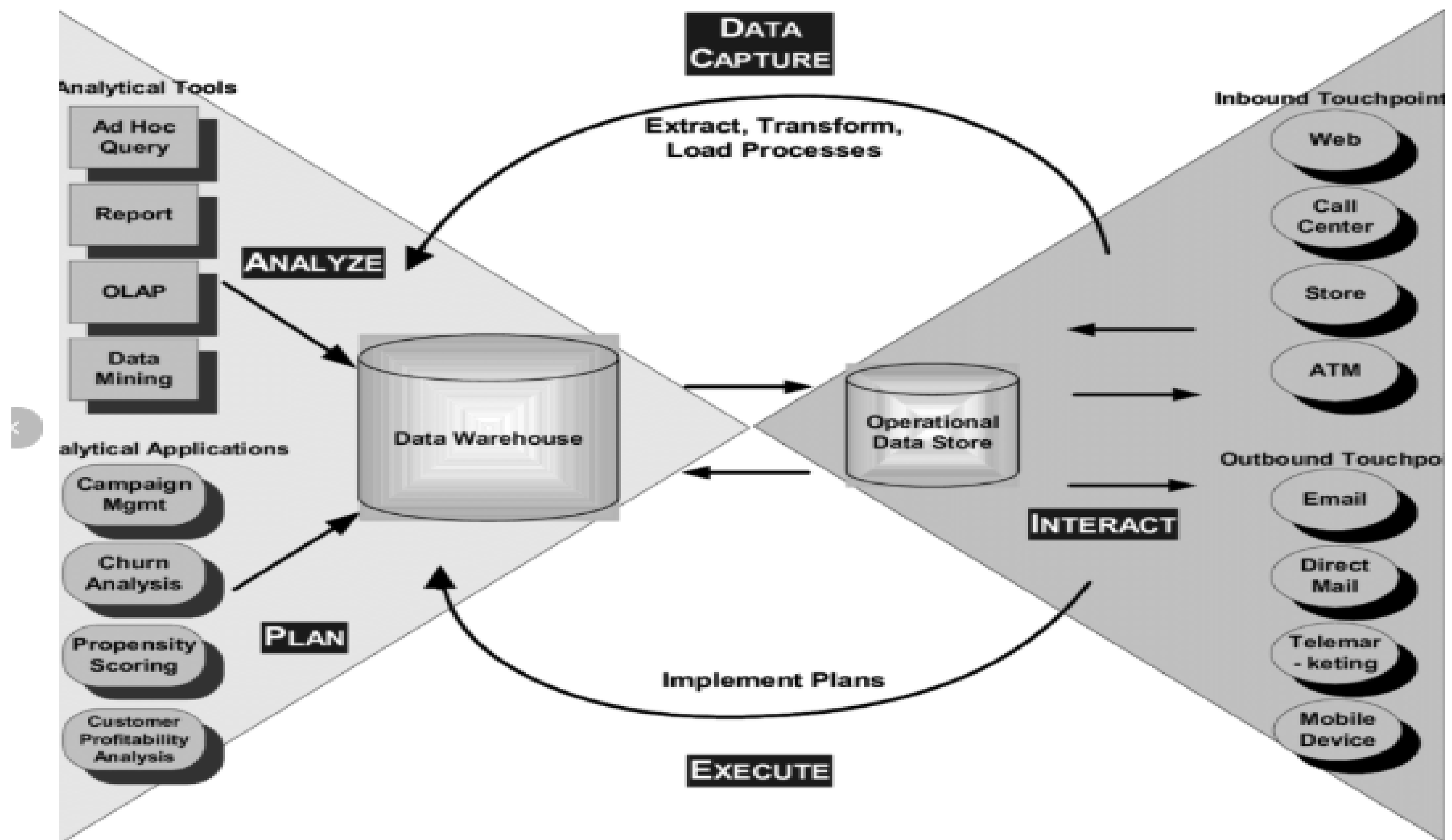


CRM Technical Architecture

| S.No | Component | Description | Technology |
|---|---|---|---|
| 1. | User Interface | Web/Mobile interface for CRM access. | React.js, Angular, Vue.js, HTML5, CSS3, JavaScript, React Native, Flutter |
| 2. | Customer Management API | Manages customer data and interactions. | Python (Django/Flask), Node.js (Express), Java (Spring Boot), REST, GraphQL |
| 3. | Inventory Management API | Tracks and manages jewelry inventory | Java (Spring Boot), .NET Core, Python, PostgreSQL, MySQL, Barcode/RFID SDKs |
| 4. | Order Management API | Handles order processing and fulfillment. | Node.js (Express), Python (Django), Payment/Shipping APIs, WebSockets |
| 5. | Database (Core) | Stores primary CRM data. | PostgreSQL, MySQL, MariaDB, SQL Server |
| 6. | Database (Analytics) | Stores data for reporting and analysis | Amazon Redshift, Google BigQuery, Snowflake, Azure SQL Database |
| 7. | File Storage | Stores images and documents. | Amazon S3, Azure Blob Storage, Google Cloud Storage |
| 8. | Payment Gateway API | Processes online/in-store payments. | Stripe API, PayPal API, Square API |
| 9. | Shipping API | Integrates with shipping providers | FedEx API, UPS API, USPS API, DHL API |
| 10. | Machine Learning | Provides predictive analytics. | Python (Scikit-learn, TensorFlow), Cloud ML Platforms (SageMaker, Google AI, Azure ML) |
| 11. | Infrastructure | Hosts the CRM application | AWS (EC2, Lambda), Azure (VMs, Functions), GCP (Compute Engine, Functions), Docker, Kubernetes, Nginx, Apache |

| S.No | Characteristics | Description | Technology |
|---|---|---|---|
| 1. | Granular Inventory Management | Beyond simple stock counts, it tracks individual pieces with detailed attributes (gemstone specifics, metal purity, etc.). | Cloud-Based Platforms |
| 2. | Sophisticated Customer Profiling | Captures detailed purchase histories, preferences, and significant life events | Advanced Database Systems |
| 3. | Integrated Sales and POS Functionality: | Handles complex sales transactions, including custom orders, layaways, and financing. | Mobile Integration |
| 4. | Targeted Marketing and Communication | Allows for highly targeted marketing campaigns based on customer preferences and purchase history. | E-commerce Connectivity |
| 5. | Enhanced Security and Compliance | Protects sensitive customer and financial data. | CRM and Marketing Automation Tools |