Document 1- Business case document template

### Why is this project initiated?

* To Help Medical Rep for Daily call reporting
* To keep a track of Dr Visit/investment/ROI
* Track Dr wise RCPA
* Build a patient database in long run

**What are the current problems?**

* Lots of Physical work
* No way to check/confirm false reporting
* Need to fill repetitive info at every visit
* Doctor specific product detailing approach is missing/ not getting implemented
* No database of city wise, list of doctors, their potential and current business
* Difficult to keep a track of investments done on Doctor
* To ensure a patient follows the complete treatment
* We do not have Chemist list
* We cannot track Dr wise Rx

**With this project how many problems could be solved?**

* Lots of Physical work : **it will be reduced as user can see a Doctor Coverage Dashboard**
* No way to check/confirm false reporting : **Location tracking will ensure Dr visit**
* Need to fill repetitive info at every visit : **User need to select all info from existing database**
* Doctor specific product detailing approach is missing/ not getting implemented **: Database**
* No database of city wise, list of doctors, their potential and current business**: Database**
* Difficult to keep a track of investments done on Doctor **: Database**

**What are the resources required?**

* People
	+ Project Sponsor
	+ Business Analyst
	+ A good team of Developers and testers
	+ Network Admin
	+ Database admin
* Time
	+ 18 Months for Phase 1
	+ 8 Months for Phase 2
* Budget
	+ 2 Cr. for Phase 1
* Software and Hardware
	+ Latest Version of JAVA for App development and testing
	+ Laptops
	+ Firewalls and VPNs to protect Data
	+ Wi-Fi, Router installation and maintenance

**How much organizational change is required to adopt this technology?**

All existing filed persons will be shifting from physical diary maintenance to Mobile application, so Ajanta pharma will need to take extensive trainings across India for Sales force to use

**Time frame to recover ROI?**

Once the full application is implemented it will take around 3 years to get the ROI

Doctor database will help entire team to keep a track of Doctors preferences and target products accordingly

Patient database will help to identify chronic patients and ensuring they continued the therapy

**How to identify Stakeholders?**

To identify stakeholders, define the project's scope and outcomes, then brainstorm groups or individuals affected by or interested in the project. Use tools like the Power/Interest Grid or Stakeholder Salience Model to categorize stakeholders based on their power, interest, and influence. Identify both direct (e.g., team members, customers) and indirect stakeholders (e.g., regulators, community groups). Prioritize stakeholders by their level of impact and engagement needs to tailor communication strategies.

* **Power/Interest Grid**: Classify stakeholders based on their level of power and interest in the project.
	+ **High power, high interest**: Key players to manage closely.
	+ **High power, low interest**: Keep satisfied, but not overly involved.
	+ **Low power, high interest**: Keep informed and engaged.
	+ **Low power, low interest**: Monitor but don't invest much effort.
* **Stakeholder Salience Model**: Classify stakeholders based on their **power**, **urgency**, and **legitimacy**. Stakeholders with more of these attributes are prioritized in terms of engagement.

Document 2: BA Strategy

### ****1. Project Kickoff and Stakeholder Analysis****

* **Identify Stakeholders**: Key stakeholders include:
	+ **Medical Representatives** (Primary Users)
	+ **Sales Managers/Regional Managers** (Supervisors overseeing reps)
	+ **Marketing and Sales Team** (Key stakeholders for reporting metrics)
	+ **IT/Development Team** (Responsible for app development)
	+ **Product/Brand Managers** (Involved in tracking doctor interactions)
	+ **Compliance Team** (Ensures adherence to regulatory requirements)
* **Stakeholder Analysis**:
Use the **RACI** (Responsible, Accountable, Consulted, Informed) matrix to assign roles:
	+ **Medical Representatives**: Responsible for inputting daily calls.
	+ **Sales Managers**: Accountable for overseeing reps and ensuring accurate reporting.
	+ **IT Team**: Responsible for app development and maintenance.
	+ **Marketing Team**: Consulted for defining reportable data.
	+ **Project Sponsor**: Informed of overall project progress and outcomes.

Also consider an **ILS** (Influence, Level of Support) matrix to prioritize stakeholders based on their influence on the project and the level of support they provide.

### ****2. Elicitation Techniques****

To gather requirements effectively, apply the following elicitation techniques:

* **Interviews**: Conduct interviews with medical reps, sales managers, and marketing team to understand what data they need to capture and report.
* **Workshops**: Hold workshops with key stakeholders to define high-level features and reporting metrics (e.g., number of doctor visits, products discussed).
* **Surveys**: Distribute surveys to medical reps and sales managers to get feedback on current reporting challenges and feature requirements.
* **Document Analysis**: Review any existing reporting systems, tools, or spreadsheets currently used by medical reps.
* **Observation**: Observe a day in the life of a medical rep to understand their pain points and needs for streamlined reporting.

### ****3. Documentation to Write****

As a BA, you’ll need to create the following documents:

* **Business Requirements Document (BRD)**: Describes the business needs, goals, and objectives of the app.
* **Functional Requirements Document (FRD)**: Specifies the system’s features, functions, and behavior (e.g., input fields, reports, alerts).
* **User Stories**: Write user stories to define specific features (e.g., "As a medical representative, I want to log doctor visits and discussions with just a few clicks to save time").
* **Wireframes/Prototypes**: Design early mockups or prototypes to visually represent the app’s interface and flow.
* **Test Cases**: Develop test scenarios based on the defined functional requirements.
* **UAT Plan**: Define the User Acceptance Testing (UAT) criteria to ensure the app meets client expectations.

### ****4. Document Review and Sign-off Process****

* **Document Review**: Share the **BRD** and **FRD** with stakeholders for detailed review. Collect feedback and revise documents as needed.
* **Sign-off**: Once the documents are finalized, get formal sign-off:
	+ **BRD**: Confirm that all business requirements are understood and agreed upon by the client.
	+ **FRD**: Ensure that the technical team and stakeholders agree on the app’s functionality.
	+ **Wireframes/Prototypes**: Obtain approval for the UI/UX design before development begins.

### ****5. Obtaining Client Approvals****

* **Initial Requirement Approval**: After finalizing the **BRD** and **FRD**, ask the client to approve these documents, confirming the scope and functionality.
* **Design Approval**: Present wireframes/prototypes for client feedback and sign-off.
* **Development Approval**: After the app’s development is complete, conduct a demo to the client for feedback.
* **UAT Approval**: After testing, ensure the client formally approves the **UAT Results** and provides a signed **Client Project Acceptance Form**.

### ****6. Communication Channels****

Establish the following communication channels:

* **Kickoff Meeting**: Conduct a kickoff meeting with all key stakeholders to align on the project’s goals, timelines, and roles.
* **Project Management Tools**: Use tools like **Jira**, **Trello**, or **Asana** to track tasks, issues, and milestones.
* **Weekly Status Meetings**: Schedule regular meetings with stakeholders to provide progress updates and resolve issues.
* **Email**: For formal approvals, document sharing, and status updates.
* **Instant Messaging (Slack/Teams)**: For quick communication and issue resolution during development.

### ****7. Handling Change Requests****

* **Documenting Changes**: Capture each change request in a formal **Change Request Document**, detailing the nature of the change, reason, and impact.
* **Impact Analysis**: Evaluate the impact of the change on project scope, timeline, and budget.
* **Approval Process**: Review the change request with relevant stakeholders and get formal approval before implementing it.
* **Update Documentation**: Revise **BRD**, **FRD**, and related documents to reflect the approved changes.
* **Communicate Changes**: Update all stakeholders on the scope or timeline changes, and keep project documentation aligned.

### ****8. Reporting Progress to Stakeholders****

* **Progress Reports**: Provide weekly or bi-weekly reports to key stakeholders, including:
	+ Milestone achievements
	+ Upcoming tasks
	+ Risks/issues and their mitigation
	+ Resource utilization
* **Dashboard**: Share a real-time project dashboard (e.g., Jira, Trello) that stakeholders can access for live updates on project progress.

### ****9. User Acceptance Testing (UAT) and Sign-off****

* **UAT Execution**: Ensure that the **medical representatives** and **sales managers** test the app against predefined test cases, simulating real-world usage. Record test results, including any issues.
* **Client Project Acceptance Form**:
	+ Once UAT is successfully completed, prepare the **Client Project Acceptance Form** for sign-off.
	+ This form confirms that the client is satisfied with the app’s functionality and performance, allowing the project to be closed.
* **Post-UAT Review**: Conduct a review meeting with the client to discuss any final issues, risks, or potential enhancements before final sign-off.

Document 3- Functional Specifications

|  |  |
| --- | --- |
| Project name  | AP My Doctor Tracker |
| Customer name  | Ajanta Pharma Ltd. |
| Project Version  | V.01 |
| Project Sponsor  | Devendra Chaudhari **Sales and Business Head Ajanta Pharma Ltd** |
| Project Manager  | Rashmi Garse |
| Project Initiation date  | 02/01/2025 |

**Functional Requirement specifications:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Req ID** | **Req Name** | **Req Description** | **Priority** |
| 1 | User Authentication | The app must allow medical representatives to securely log in using a username and password. | High |
| 2 | User Role Management | The app should allow for different user roles (e.g., medical rep, sales manager, admin) with different access levels. | High |
| 3 | Dashboard Overview | The app should provide a dashboard showing daily call statistics, scheduled visits, and performance summary. | High |
| 4 | Doctor Search | The app must allow users to search for doctors by name, specialty, location, or practice. | High |
| 5 | Call Logging | Medical reps should be able to log the details of each doctor visit, including date, time, and topics discussed. | High |
| 6 | Product Discussion Log | The app must allow reps to log which products were discussed with each doctor during the visit. | High |
| 7 | Visit Duration Tracking | The app should allow medical reps to record the duration of each visit with a doctor. | Medium |
| 8 | Next Appointment Scheduling | The app should allow medical reps to schedule follow-up appointments with doctors directly from the app. | Medium |
| 9 | Follow-up Reminder Notifications | The app should send reminders for follow-up appointments or calls based on the doctor's preferences and the rep's schedule. | Medium |
| 10 | Activity Summary | The app should generate a daily or weekly summary of the rep’s activities, total visits, products discussed, and targets met. | High |
| 11 | Geo-location Tracking | The app should track the location of the medical rep during each call using GPS to ensure accuracy in visit data. | Medium |
| 12 | Visit Type (In-person/Call) | The app should allow the rep to categorize visits as either in-person or telephonic consultations. | Low |
| 13 | Feedback Entry | The app should allow reps to input feedback from doctors, including any concerns, product requests, or feedback on the rep’s performance. | Medium |
| 14 | Offline Mode | The app should allow reps to continue working in offline mode (e.g., logging calls) and sync the data once an internet connection is available. | High |
| 15 | Data Synchronization | The app must synchronize data across devices and users in real-time, ensuring all information is up-to-date. | High |
| 16 | Call Duration Analytics | The app should provide analytics on call durations across reps, identifying patterns and areas for improvement. | Medium |
| 17 | KPI Tracking | The app should track key performance indicators (KPIs) like number of visits, sales volume, doctor engagement, etc., for each rep. | High |
| 18 | Sales Report Generation | The app should allow sales managers to generate reports on sales and performance, filtered by doctor, region, or time period. | High |
| 19 | Admin Panel for User Management | The admin should be able to manage user accounts, reset passwords, and assign roles to medical reps and managers. | High |
| 20 | Customizable Reporting | The app should allow users to customize the reports they generate, including filters for specific doctors, regions, or product categories. | Medium |
| 21 | Integration with CRM | The app must integrate with existing CRM systems to sync doctor data, sales performance, and interactions. | High |
| 22 | Sales Target Tracking | The app should allow reps and managers to set and track sales targets, providing real-time progress updates. | High |
| 23 | Notes and Attachments | The app should allow medical reps to attach documents (e.g., brochures, prescriptions) or add notes related to their interactions with doctors. | Medium |
| 24 | Data Export Functionality | The app should provide the ability to export reports and logs to Excel, PDF, or other formats for further analysis. | Medium |
| 25 | In-app Messaging | The app should allow reps to send quick messages to managers or other team members, especially for urgent updates. | Low |
| 26 | Appointment History | The app should maintain a historical record of all past doctor visits and scheduled appointments for each medical rep. | High |
| 27 | Doctor Profile | The app should store a detailed profile for each doctor, including contact details, specializations, previous interactions, and prescriptions. | High |
| 28 | Push Notifications | The app should send push notifications to reps about important updates, reminders for calls, or new tasks assigned by the sales manager. | Medium |
| 29 | Compliance Reporting | The app should generate compliance reports to ensure that all interactions with doctors meet regulatory requirements (e.g., no gifts or unethical practices). | High |
| 30 | Multi-language Support | The app should support multiple languages to accommodate medical reps in different regions and improve usability. | Low |

Document 4- Requirement Traceability Matrix

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Req ID** | **Req Name** | **Req Description** | **Design (D1)** | **Test (T1)** | **Design (D2)** | **Test (T2)** | **UAT** |
| **FR0001** | Login | User must be able to log in securely using username and password. | Done | Done | Done | Done | Completed |
| **FR0002** | Dashboard Overview | The app should display an overview of daily calls, scheduled visits, and performance statistics. | Pending | Done | Done | Done | Pending |
| **FR0003** | Doctor Search | Users must be able to search doctors by name, specialty, or location. | Done | Pending | Done | Pending | Pending |
| **FR0004** | Call Logging | Reps must be able to log the details of each doctor visit (date, time, doctor name). | Done | Pending | Done | Pending | Pending |
| **FR0005** | Product Discussion | Users must log which products were discussed during the visit. | Pending | Pending | Pending | Pending | Pending |
| **FR0006** | Visit Duration | Track the duration of each doctor visit. | Pending | Pending | Pending | Pending | Pending |
| **FR0007** | Next Appointment | Schedule follow-up appointments with doctors. | Pending | Pending | Pending | Pending | Pending |
| **FR0008** | Reminders | Send notifications for upcoming follow-ups. | Done | Done | Done | Done | Completed |
| **FR0009** | Activity Summary | Generate a daily/weekly summary of the rep’s activities. | Pending | Pending | Pending | Pending | Pending |
| **FR0010** | GPS Tracking | Use GPS to track the location of medical reps during visits. | Done | Done | Pending | Pending | Pending |
| **FR0011** | Visit Type (In-person/Call) | Allow classification of visits as in-person or call-based. | Pending | Pending | Pending | Pending | Pending |
| **FR0012** | Feedback Entry | Allow reps to input feedback from doctors after visits. | Done | Pending | Done | Done | Pending |
| **FR0013** | Offline Mode | The app should allow users to continue logging visits offline and sync once online. | Pending | Pending | Pending | Pending | Pending |
| **FR0014** | Data Synchronization | Sync data in real-time across devices and users. | Done | Done | Done | Done | Completed |
| **FR0015** | Call Duration Analytics | Provide analytics on the duration of calls by rep and region. | Pending | Pending | Pending | Pending | Pending |
| **FR0016** | KPI Tracking | Track key performance indicators (KPIs) like visits, sales volume. | Pending | Pending | Pending | Pending | Pending |
| **FR0017** | Sales Report Generation | Generate reports on sales and performance. | Done | Done | Done | Done | Completed |
| **FR0018** | Admin Panel | Allow admins to manage users, reset passwords, and assign roles. | Pending | Pending | Pending | Pending | Pending |
| **FR0019** | Customizable Reporting | Allow customization of reports by filtering doctor visits, regions, or product categories. | Pending | Pending | Pending | Pending | Pending |
| **FR0020** | CRM Integration | Sync app data with an existing CRM system. | Done | Pending | Done | Pending | Pending |
| **FR0021** | Sales Target Tracking | Track sales targets and progress for each rep. | Pending | Pending | Pending | Pending | Pending |
| **FR0022** | Attachments | Allow reps to attach documents (e.g., brochures, prescriptions). | Pending | Pending | Pending | Pending | Pending |
| **FR0023** | Data Export | Allow the export of reports and logs to Excel/PDF format. | Done | Done | Done | Done | Completed |
| **FR0024** | In-app Messaging | Allow reps to send messages to managers or team members. | Pending | Pending | Pending | Pending | Pending |
| **FR0025** | Appointment History | Maintain a historical record of all doctor visits and scheduled appointments. | Pending | Pending | Pending | Pending | Pending |
| **FR0026** | Doctor Profile | Store detailed profiles for each doctor (name, contact, specialty). | Pending | Pending | Pending | Pending | Pending |
| **FR0027** | Push Notifications | Send push notifications for important updates and reminders. | Pending | Pending | Pending | Pending | Pending |
| **FR0028** | Compliance Reporting | Generate compliance reports for doctor visits based on regulations. | Done | Done | Done | Done | Completed |
| **FR0029** | Multi-language Support | Support multiple languages for diverse regions. | Pending | Pending | Pending | Pending | Pending |
| **FR0030** | Visit Reminder | Set reminders for specific doctor visits or follow-ups. | Pending | Pending | Pending | Pending | Pending |

AP My Doctor Tracker

Business Requirement Document

[Type the abstract of the document here. The abstract is typically a short summary of the contents of the document. Type the abstract of the document here. The abstract is typically a short summary of the contents of the document.]

2025

Rashmi

[Type the company name]

1/1/2025

**AP My Doctor Tracker**

Abcd

**Project ID: MyDCT001**

Ahgw

**Version 1.0**

Swafe

**Author: Rashmi Garse**

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# 1. Document Revisions

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| --- | --- | --- |
| Date  | Version Number  | Document Changes  |
| 02/01/2024 | 1.0 | Project Initiation  |
|  |  |  |

# 2. Approvals

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Role**  | **Name**  | **Title**  | **Signature**  | **Date**  |
| Project Sponsor | Devendra Chaudhari | Sales and Business Head | Do | MM/DD/YYYY |
| Business Owner  | Yogesh Agrawal | MD | Do | MM/DD/YYYY |
| Project Manager  | Rashmi Garse | Business Analyst | Do | MM/DD/YYYY |
| System Architect  | Shweta Bonde | System Architect | Do | MM/DD/YYYY |
| Development Lead  | Moksh B | Team Lead | Do | MM/DD/YYYY |
| User Experience Lead  | Rudransh Chaudhari | Team Lead | Do | MM/DD/YYYY |
| Quality Lead  | Tweesha C | Team Lead | Do | MM/DD/YYYY |
| Content Lead  | Harshal Bhangale | Team Lead | Do | MM/DD/YYYY |

# 3. RACI Chart for This Document

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Role**  | **Name**  | **Title**  | **\*** | **R** | **A** | **S** | **C** | **I** |
| Project Sponsor | Devendra Chaudhari | Sales and Business Head | ✔ |  |  |  | ✔ | ✔ |
| Business Owner  | Yogesh Agrawal | MD | ✔ |  |  |  | ✔ | ✔ |
| Project Manager  | Rashmi Garse | Business Analyst |  | ✔ | ✔ | ✔ |  |  |
| System Architect  | Shweta Bonde | System Architect |  |  | ✔ | ✔ |  |  |
| Development Lead  | Moksh B | Team Lead |  |  | ✔ | ✔ |  |  |
| User Experience Lead  | Rudransh Chaudhari | Team Lead |  | ✔ | ✔ | ✔ |  |  |
| Quality Lead  | Tweesha C | Team Lead |  |  |  | ✔ | ✔ | ✔ |
| Content Lead  | Harshal Bhangale | Team Lead |  |  |  | ✔ | ✔ | ✔ |

# 4. Introduction

4.1. Business Goals

* **Increase Efficiency**: Streamline the process of medical representatives logging doctor visits and daily activities, reducing manual work and time spent on reporting.
* **Improve Data Accuracy**: Ensure accurate and real-time recording of doctor visit details, products discussed, and follow-up actions for better decision-making and analysis.
* **Boost Sales Productivity**: Enable medical reps to track their performance and activities, providing insights to help meet sales targets and improve performance.
* **Enhance User Experience**: Provide an intuitive, user-friendly interface to ensure ease of use for medical representatives in the field.
* **Support Compliance**: Ensure the app helps meet regulatory and compliance requirements related to reporting doctor interactions and product discussions.

4.2. Business Objectives

* **Streamline Visit Documentation**: Automate and simplify the process for medical representatives to log doctor visits, reducing manual entry and potential errors.
* **Enable Real-time Reporting**: Provide a platform for reps to submit and access real-time data on their visits, sales activities, and doctor feedback.
* **Enhance Data Analysis and Insights**: Facilitate easy tracking and analysis of sales performance, doctor engagement, and product discussions to support strategic decision-making.
* **Improve Rep Productivity**: Reduce administrative burdens on reps by providing tools that allow them to focus more on doctor interactions and sales activities rather than paperwork.
* **Increase Compliance and Accuracy**: Ensure adherence to industry regulations and maintain accurate records of interactions with healthcare professionals to avoid compliance risks.

4.3. Business Rules

* Data privacy and security must comply with relevant privacy laws (e.g., GDPR, HIPAA).
* Accurate reporting of doctor visits, including date, time, and products discussed.
* Adherence to healthcare industry regulations (e.g., Pharma Code, anti-bribery).
* All reports must go through an approval process by regional or area managers.
* Role-based access control (RBAC) for user access to sensitive data.
* Comprehensive audit trail of all activities (logins, data changes, approvals).
* Data retention for a minimum of 3 years or as per industry regulations.
* Offline functionality for logging visits and syncing data when online.
* Only authorized devices (smartphones/tablets) can access the app.
* Immediate reporting of lost or stolen devices for remote wipe.
* Regular performance reviews and adherence to sales targets.
* Mandatory training for all users on app features and compliance.

4.4. Background

### ****Project History and Initiation:****

The **Daily Doctor Call Reporting App** project was proposed in response to several key business challenges faced by the sales team of a pharmaceutical company.

#### ****Business Issues/Problems Identified:****

1. **Manual Reporting Inefficiency**: Medical representatives were spending a significant amount of time manually logging doctor visits and interactions, leading to inefficiencies and delays in data reporting.
2. **Inaccurate and Incomplete Data**: The existing manual processes resulted in inaccurate and incomplete data, affecting decision-making and sales strategies.
3. **Compliance Risks**: Regulatory compliance, including accurate documentation of doctor interactions and product discussions, was becoming harder to manage with the current system.
4. **Lack of Real-Time Insights**: The sales team lacked real-time data on visit outcomes and performance metrics, making it difficult to track progress and optimize sales efforts.
5. **Limited Visibility**: Managers had limited visibility into the daily activities of medical representatives, making it difficult to provide timely support or identify areas for improvement.

#### ****Expected Benefits of the Project:****

1. **Enhanced Efficiency**: By automating the reporting process, medical reps would save time, allowing them to focus more on customer interactions.
2. **Improved Data Accuracy**: The app would ensure that visit logs are complete, accurate, and updated in real-time, providing reliable data for analysis.
3. **Regulatory Compliance**: The app would assist in ensuring compliance with industry regulations by standardizing the documentation of doctor interactions and product discussions.
4. **Real-Time Performance Tracking**: The app would provide managers with real-time insights into reps’ activities, enabling them to monitor performance and make data-driven decisions.
5. **Increased Productivity**: With streamlined reporting and data collection, medical representatives would have more time to focus on building relationships with healthcare professionals and driving sales.
6. **Better Decision-Making**: Managers and executives would have access to up-to-date reports and analytics, helping them to make informed decisions on sales strategies and resource allocation.

The project was initiated with the goal of addressing these issues, improving operational efficiency, and ensuring the company’s field force is more effective in its daily activities, ultimately leading to increased sales and a competitive advantage in the market.

4.5. Project Objective

The **Daily Doctor Call Reporting App** aims to automate and streamline the logging of medical representatives' doctor visits, improving efficiency, accuracy, and compliance. The app will enable real-time data syncing, performance tracking, and seamless integration with CRM, ERP, and analytics systems.

**Alignment to Business Objectives**:

1. Increases efficiency by reducing manual reporting.
2. Enhances data accuracy and compliance with regulations.
3. Boosts sales productivity by allowing reps to focus on doctor engagement.
4. Provides real-time insights for better decision-making.

The app will help improve sales performance, streamline reporting, and ensure regulatory compliance.

4.6 Project Scope

The **Daily Doctor Call Reporting App** will include the following features and functionalities:

1. **Visit Logging**: Medical representatives will be able to log doctor visits, including details like visit date, time, products discussed, and follow-up actions.
2. **Real-Time Data Syncing**: Ensure automatic syncing of visit data to the central system as soon as the internet connection is available.
3. **Performance Tracking**: Track sales performance, visit goals, and metrics for both individual reps and the team.
4. **Offline Capability**: The app will function offline, allowing reps to log visits and sync data once they are online again.
5. **User Dashboard**: Provide an easy-to-use interface for reps to view daily tasks, visit summaries, and performance metrics.
6. **Compliance Documentation**: Standardize visit records to meet industry regulations and ensure audit trails for doctor interactions.
7. **Integration with CRM and ERP Systems**: Seamless integration for managing doctor profiles, inventory tracking, and syncing sales data.
8. **Feedback Mechanism**: Allow reps to input feedback from doctors for follow-up and future engagement.

This scope excludes any development beyond these core features, such as advanced analytics or external system overhauls not related to the app's functionality.

### ****4.6.1 In-Scope Functionality****

* **Visit Logging**: Log doctor visit details such as date, time, products discussed, and follow-up actions.
* **Real-Time Data Syncing**: Sync visit data to the central database when internet connectivity is restored.
* **Offline Functionality**: Enable reps to log visits and interact with the app without an internet connection.
* **Performance Dashboard**: Provide a dashboard for reps to view their sales performance, visit goals, and activity metrics.
* **Compliance Documentation**: Standardize and capture doctor interaction details to ensure regulatory compliance.
* **User Roles & Access Control**: Implement role-based access control for different users (e.g., reps, managers, admins).
* **Integration with CRM**: Sync doctor profiles and sales data with the existing Customer Relationship Management (CRM) system.
* **Integration with ERP**: Sync product orders, inventory, and other relevant data with the Enterprise Resource Planning (ERP) system.
* **Feedback System**: Allow reps to capture doctor feedback for follow-up actions and future engagement.
* **Notification System**: Provide push notifications/reminders for follow-ups, tasks, and performance targets.

### ****4.6.2 Out-of-Scope Functionality****

* **Advanced Analytics**: In-depth analytics or AI-based insights beyond basic performance tracking and reporting.
* **Social Media Integration**: Integration with social media platforms for doctor interactions or product promotions.
* **Inventory Management**: Direct management or tracking of inventory outside the ERP integration scope.
* **Marketing Automation**: Tools for marketing campaigns or automated communication with doctors.
* **Third-Party Integrations**: Any integrations with systems not directly related to CRM, ERP, or compliance systems.
* **Custom Reporting**: Development of highly customized reports or business intelligence tools outside basic app reporting.
* **Customer Relationship Management (CRM) Overhaul**: Any changes or enhancements to the existing CRM system, other than integration with the app.

# 5. Assumptions

* **Availability of Infrastructure**: The organization will provide the necessary infrastructure, including servers, databases, and network connectivity, to support the app’s operations.
* **User Training**: All medical representatives and managers will receive adequate training on how to use the app effectively.
* **Device Compatibility**: The app will be compatible with commonly used mobile devices (smartphones and tablets) running on Android and iOS platforms.
* **Internet Connectivity**: Representatives will have access to internet connectivity at least intermittently for data syncing.
* **CRM and ERP Systems**: The existing CRM and ERP systems will be available and capable of integrating with the app for data exchange (doctor profiles, sales data, inventory).
* **Compliance Requirements**: The regulatory requirements for doctor interactions and data reporting (e.g., GDPR, HIPAA) will be consistent and adhered to throughout the app’s use.
* **Data Accuracy**: Representatives will input accurate and complete data into the app (visit details, feedback, etc.).
* **Management Approval**: Managers and supervisors will provide timely approvals for data and reports submitted by the reps.
* **Offline Capability**: The app will allow representatives to work offline in areas with poor connectivity, syncing data once the connection is restored.
* **System Maintenance**: The app will undergo regular updates and maintenance by the IT department to ensure system security, bug fixes, and performance improvements.
* **Role-Based Access**: User roles (representatives, managers, admins) will be defined clearly, and proper access control will be implemented based on these roles.
* **Data Backup**: Regular backups will be implemented to safeguard against data loss.
* **Scalability**: The app will be designed to handle increasing users and data volume as the organization expands.

# 6. Constraints

* **Budget Limitations**: The development and implementation of the app must stay within the allocated budget, limiting the scope of features and customization.
* **Timeline**: The app must be developed and deployed within a specified time frame to align with business objectives and market requirements.
* **Device Compatibility**: The app must be compatible with a predefined set of devices (smartphones/tablets) running Android and iOS, which may limit the use of certain features or UI designs.
* **Data Security Regulations**: The app must comply with strict data security and privacy regulations (e.g., GDPR, HIPAA), which may limit data storage, sharing, and access protocols.
* **Integration with Existing Systems**: The app's ability to integrate with legacy CRM and ERP systems may be constrained by the capabilities and flexibility of those systems.
* **Network Connectivity**: Limited or unstable internet connectivity in some areas may affect the real-time syncing and offline functionality.
* **User Adoption**: The success of the app relies on timely adoption by the sales team, with limited control over their willingness or ability to embrace new technology.
* **Compliance with Industry Regulations**: The app must adhere to industry-specific regulations regarding doctor interactions, which can limit certain functionalities or features.

# Risks

|  |  |  |
| --- | --- | --- |
| **Risk Class** | **Risk Type** | **Strategy** |
| **Technological Risk** | System Downtime Due to Connectivity Issues | **Mitigate**: Develop offline functionality and sync data when connection is restored. |
| **Technological Risk** | Performance Issues with App (Slow Load Times, Crashes) | **Mitigate**: Optimize app performance through testing and ensure scalability across multiple devices. |
| **Technological Risk** | Data Synchronization Issues | **Mitigate**: Perform extensive testing for synchronization and implement backup mechanisms. |
| **Skills Risk** | Lack of Skilled Resources | **Transfer**: Hire external consultants or outsource critical tasks to skilled professionals. |
| **Skills Risk** | Insufficient Expertise in Regulatory Compliance | **Avoid**: Avoid delays by involving legal and compliance experts at the start to ensure proper adherence to regulations. |
| **Political Risk** | Changes in Government Regulations | **Mitigate**: Monitor changes in regulations and adjust the app’s features to comply with new laws. |
| **Political Risk** | Political or Economic Instability | **Transfer**: Use political risk insurance, and build contingency plans for financial security. |
| **Business Risk** | Loss of Competitive Advantage | **Mitigate**: Regularly monitor project progress, involve stakeholders, and align the project with strategic business goals. |
| **Business Risk** | Brand Reputation Damage | **Avoid**: Ensure quality control and rigorous testing to prevent reputational damage. |
| **Requirements Risk** | Misunderstanding of End-User Needs | **Mitigate**: Use iterative feedback loops from end users, and conduct regular reviews of the requirements. |
| **Requirements Risk** | Ambiguous Regulatory Requirements | **Mitigate**: Work closely with legal experts to clarify regulatory requirements. |
| **Requirements Risk** | Scope Creep Due to Changing Business Priorities | **Avoid**: Clearly define project scope at the beginning and implement a strict change control process to avoid scope creep. |
| **Other Risk** | Resistance to Change from Medical Representatives | **Mitigate**: Engage reps early, provide proper training, and incentivize adoption. |
| **Other Risk** | Unclear Communication Between Development and Business Teams | **Mitigate**: Hold regular meetings, ensure documentation is clear, and establish open channels of communication. |
| **Other Risk** | Delays in Approval from Stakeholders | **Accept**: Accept that delays may happen, but plan for them by setting realistic timelines and managing stakeholder expectations. |

# 8. Business Process Overview

#### ****8.1. Legacy System (AS-IS)****

The legacy system is the **current process** used by medical representatives (sales reps) to track doctor visits, calls, and related activities. The process is often manual, prone to errors, and inefficient.

**Brief Explanation of Legacy Process**:

1. **Manual Reporting**: Medical representatives document their daily calls and activities using paper forms or spreadsheets.
2. **Data Entry Delays**: Data is manually entered into the CRM or other systems, leading to delays and errors.
3. **Limited Reporting Capabilities**: Reports are created manually, and analysis is often time-consuming, making it difficult to track performance in real-time.
4. **Poor Data Visibility**: Due to manual entries, there’s limited visibility into key metrics like call frequency, outcomes, and follow-up actions.
5. **No Real-time Updates**: Sales managers or higher-level stakeholders receive reports after significant delays, making it difficult to respond to issues or opportunities quickly.

#### ****8.2. Proposed Recommendations (TO-BE)****

The **To-Be System** represents the future state where the process of reporting daily doctor calls and visits is automated, streamlined, and integrated with a digital solution.

**Recommended Process Flow**:

1. **Mobile App for Data Entry**: Medical representatives will use a mobile app to record doctor visits, call summaries, and follow-up actions in real-time.
2. **Automatic Syncing**: Data entered by the reps will sync automatically with the central CRM system, reducing errors and data entry delays.
3. **Real-Time Reporting**: Sales managers and business owners can access real-time reports and performance metrics through the app’s dashboard.
4. **Data Validation & Quality Checks**: The app will have built-in validation rules to minimize data entry errors.
5. **Improved Visibility & Analytics**: The app will provide interactive dashboards and analytics to track doctor engagement, call success rates, and more.
6. **Seamless Integration**: The app will be integrated with other systems like CRM, ERP, and analytics tools to provide a holistic view of the sales team’s activities.

### ****How the Proposed System Will Address Legacy Challenges****:

* **Improved Data Entry**: The mobile app reduces the dependency on manual processes, ensuring faster and more accurate data input.
* **Real-Time Insights**: Sales managers and stakeholders will have access to real-time data and analytics, improving decision-making capabilities.
* **Error Reduction**: By using built-in validation rules and automated syncing, data accuracy will be greatly improved compared to the legacy system.
* **Streamlined Reporting**: Automatic data synchronization with CRM and other integrated systems eliminates the delay in report generation, allowing quicker insights into sales activities and doctor engagement.
* **Better Analytics**: The app’s dashboard provides in-depth analytics, helping to track key performance indicators (KPIs) for reps, doctors, and sales activities.

# 9. Business Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Req ID** | **Req Name** | **Req Description** | **Priority** | **Use Case** |
| **BR001** | User Authentication | The app must allow sales representatives to securely log in using their credentials. | High | Use Case 1: Login |
| **BR002** | Doctor Visit Entry | Sales reps should be able to input details of each doctor visit, including outcomes and next steps. | High | Use Case 2: Add Visit |
| **BR003** | Real-time Data Sync | The app should sync data in real-time with the central CRM and ERP systems. | High | Use Case 3: Data Sync |
| **BR004** | Reporting & Analytics | The app should generate real-time performance reports based on call frequency, doctor engagement, and sales. | High | Use Case 4: Reports Generation |
| **BR005** | Offline Mode | The app must allow medical reps to log visits even without internet connectivity and sync once online. | Medium | Use Case 5: Offline Data Entry |
| **BR006** | Push Notifications | The app should send reminders and notifications for follow-ups, tasks, and new product launches. | Medium | Use Case 6: Notifications |
| **BR007** | Multi-device Compatibility | The app should be compatible across mobile devices (iOS and Android) with responsive UI/UX design. | High | Use Case 7: Cross-platform |
| **BR008** | Data Validation | Input data must be validated for accuracy and completeness (e.g., valid doctor IDs, dates, etc.). | High | Use Case 8: Data Validation |
| **BR009** | Role-Based Access Control | Different users (e.g., sales reps, managers, admins) should have specific access privileges. | Medium | Use Case 9: User Roles |
| **BR010** | Compliance with Regulations | The app should ensure compliance with medical and data privacy regulations (e.g., HIPAA, GDPR). | High | Use Case 10: Compliance |
| **BR011** | In-app Help & Support | The app should provide a help section with FAQs and contact information for support. | Low | Use Case 11: Help & Support |
| **BR012** | Customizable Reports | Users should be able to generate customized reports based on specific criteria (e.g., call frequency, doctor type). | Medium | Use Case 12: Custom Reports |
| **BR013** | Automated Data Backups | The app should automatically back up all data to the cloud on a daily basis to prevent data loss. | Medium | Use Case 13: Backup |
| **BR014** | Integration with Other Systems | The app must integrate with existing CRM, ERP, and other internal systems. | High | Use Case 14: System Integration |
| **BR015** | Task Assignment | The app should allow sales managers to assign tasks and track the progress of these tasks. | Medium | Use Case 15: Task Assignment |
| **BR016** | User Feedback & Survey | The app should have functionality to collect feedback from sales reps and doctors via surveys. | Low | Use Case 16: Feedback Collection |
| **BR017** | Task Completion Tracking | The app should track and update task status based on sales rep performance and completion. | High | Use Case 17: Task Completion |
| **BR018** | Custom Notifications | Sales reps should be able to set custom alerts for important events (e.g., call follow-ups). | Medium | Use Case 18: Custom Alerts |
| **BR019** | Sales Rep Performance Tracking | The app should track the performance of sales reps with KPIs (e.g., calls made, visits per day, etc.). | High | Use Case 19: Performance Tracking |
| **BR020** | Doctor Profiles | The app should allow sales reps to view doctor profiles, including specialties, preferences, and past visits. | High | Use Case 20: Doctor Profile |
| **BR021** | GPS Tracking | The app should integrate GPS to log the location of visits, ensuring reps are at the correct locations. | Medium | Use Case 21: GPS Tracking |
| **BR022** | Scheduling Appointments | The app should allow sales reps to schedule appointments with doctors and receive reminders. | High | Use Case 22: Appointment Scheduling |
| **BR023** | Data Encryption | All user data, including personal and medical information, must be encrypted for security purposes. | High | Use Case 23: Data Encryption |
| **BR024** | Admin Dashboard | The app should provide a centralized dashboard for admin users to monitor all sales activities. | Medium | Use Case 24: Admin Dashboard |
| **BR025** | Document Upload | Sales reps should be able to upload documents (e.g., brochures, product details) for each visit. | Low | Use Case 25: Document Upload |
| **BR026** | Real-time Collaboration | The app should allow sales reps to collaborate and share updates with managers and other team members. | Medium | Use Case 26: Collaboration |
| **BR027** | User Management | The app should allow admins to create, update, and deactivate user accounts for sales reps and managers. | Medium | Use Case 27: User Management |
| **BR028** | Sales Rep Leaderboards | The app should display a leaderboard for top-performing sales reps based on key performance metrics. | Low | Use Case 28: Leaderboard |
| **BR029** | Customizable Dashboard | Sales reps should be able to customize their app dashboards to see relevant metrics for their daily activities. | Medium | Use Case 29: Dashboard Customization |
| **BR030** | Doctor Rating System | The app should allow doctors to rate their interaction with the sales rep for feedback and performance review. | Low | Use Case 30: Doctor Rating |

# Traceability Matrix

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Req ID** | **Req Name** | **Design**  | **Development (D1)** | **Testing (T1)** | **Development (D2)** | **Testing (T2)** | **UAT** |
| **BR001** | User Authentication | Yes | No | No | No | No | No |
| **BR002** | Doctor Visit Entry | Yes | No | No | No | No | No |
| **BR003** | Real-time Data Sync | Yes | No | No | No | No | No |
| **BR004** | Reporting & Analytics | Yes | No | No | No | No | No |
| **BR005** | Offline Mode | No | No | No | No | No | No |
| **BR006** | Push Notifications | Yes | No | No | No | No | No |
| **BR007** | Multi-device Compatibility | Yes | No | No | No | No | No |
| **BR008** | Data Validation | Yes | No | No | No | No | No |
| **BR009** | Role-Based Access Control | No | No | No | No | No | No |
| **BR010** | Compliance with Regulations | Yes | No | No | No | No | No |
| **BR011** | In-app Help & Support | No | No | No | No | No | No |
| **BR012** | Customizable Reports | Yes | No | No | No | No | No |
| **BR013** | Automated Data Backups | No | No | No | No | No | No |
| **BR014** | Integration with Other Systems | Yes | No | No | No | No | No |
| **BR015** | Task Assignment | Yes | No | No | No | No | No |
| **BR016** | User Feedback & Survey | No | No | No | No | No | No |
| **BR017** | Task Completion Tracking | Yes | No | No | No | No | No |
| **BR018** | Custom Notifications | Yes | No | No | No | No | No |
| **BR019** | Sales Rep Performance Tracking | Yes | No | No | No | No | No |
| **BR020** | Doctor Profiles | Yes | No | No | No | No | No |
| **BR021** | GPS Tracking | No | No | No | No | No | No |
| **BR022** | Scheduling Appointments | Yes | No | No | No | No | No |
| **BR023** | Data Encryption | No | No | No | No | No | No |
| **BR024** | Admin Dashboard | Yes | No | No | No | No | No |
| **BR025** | Document Upload | No | No | No | No | No | No |
| **BR026** | Real-time Collaboration | Yes | No | No | No | No | No |
| **BR027** | User Management | Yes | No | No | No | No | No |
| **BR028** | Sales Rep Leaderboards | No | No | No | No | No | No |
| **BR029** | Customizable Dashboard | Yes | No | No | No | No | No |
| **BR030** | Doctor Rating System | No | No | No | No | No | No |

# 10. Appendices

### ****List of Acronyms****

1. **UAT** - User Acceptance Testing
2. **CRM** - Customer Relationship Management
3. **ERP** - Enterprise Resource Planning
4. **HIPAA** - Health Insurance Portability and Accountability Act
5. **GDPR** - General Data Protection Regulation
6. **API** - Application Programming Interface
7. **UI** - User Interface
8. **UX** - User Experience
9. **GPS** - Global Positioning System
10. **TBD** - To Be Determined
11. **SaaS** - Software as a Service
12. **DB** - Database
13. **KPI** - Key Performance Indicator
14. **ROI** - Return on Investment
15. **IT** - Information Technology
16. **SQL** - Structured Query Language
17. **SDK** - Software Development Kit
18. **B2B** - Business to Business
19. **B2C** - Business to Consumer
20. **TLS** - Transport Layer Security
21. **SSL** - Secure Sockets Layer
22. **SMS** - Short Message Service
23. **PWA** - Progressive Web Application
24. **MVP** - Minimum Viable Product
25. **UI/UX** - User Interface/User Experience
26. **CSV** - Comma Separated Values
27. **PM** - Project Manager
28. **RACI** - Responsible, Accountable, Consulted, Informed
29. **R&D** - Research and Development
30. **DMS** - Document Management System
31. **PMS** - Project Management System
32. **CI/CD** - Continuous Integration/Continuous Deployment
33. **SLA** - Service Level Agreement
34. **AWS** - Amazon Web Services
35. **SEO** - Search Engine Optimization
36. **TCO** - Total Cost of Ownership

## 10.2. Glossary of Terms

1. **User Authentication**
The process of verifying the identity of a user before granting access to the system.
2. **Doctor Visit Entry**
The functionality that allows medical representatives to record their visits to doctors, including details like time, date, and purpose of visit.
3. **Real-time Data Sync**
The ability to automatically synchronize data between the app and server in real-time to ensure the latest information is available across devices.
4. **Reporting & Analytics**
Tools that allow users to generate reports and analyze performance metrics from the collected data.
5. **Offline Mode**
A feature that allows the app to function without an active internet connection by storing data locally and syncing later.
6. **Push Notifications**
Alerts or messages sent to a user's device, even when the app is not actively being used, to notify them about new updates or events.
7. **Multi-device Compatibility**
The ability of the app to work seamlessly across various devices, such as smartphones, tablets, and desktop computers.
8. **Data Validation**
The process of checking the accuracy and quality of data before it is processed or stored.
9. **Role-Based Access Control (RBAC)**
A method of restricting system access based on the user's role within the organization, ensuring that only authorized users can access specific data or functionalities.
10. **Compliance with Regulations**
Adhering to legal and industry standards such as HIPAA, GDPR, or other local regulations regarding privacy, data protection, and security.
11. **In-app Help & Support**
A feature that provides users with assistance, FAQs, or a support chat within the application itself.
12. **Customizable Reports**
Reports that users can configure based on their needs, allowing for the selection of parameters and the generation of tailored data insights.
13. **Automated Data Backups**
The automatic creation of copies of data at regular intervals to prevent data loss and ensure recovery in case of a failure.
14. **Integration with Other Systems**
The ability of the app to connect and share data with external systems such as CRM, ERP, or third-party APIs.
15. **Task Assignment**
The feature that enables managers to assign specific tasks to medical representatives or other users within the app.
16. **User Feedback & Survey**
A tool that allows users to provide feedback about the app or complete surveys to improve the product's performance.
17. **Task Completion Tracking**
The functionality that tracks the progress and completion status of assigned tasks in the system.
18. **Custom Notifications**
Notifications that can be tailored based on user preferences or specific criteria.
19. **Sales Rep Performance Tracking**
A feature that tracks the performance of medical representatives, such as the number of doctor visits, sales generated, or tasks completed.
20. **Doctor Profiles**
The profiles containing information about doctors, including their contact details, specialties, and past interactions with sales representatives.
21. **GPS Tracking**
A feature that uses GPS to track the real-time location of medical representatives during their visits.
22. **Scheduling Appointments**
A feature that allows users to schedule appointments with doctors or clients within the app.
23. **Data Encryption**
The process of converting data into a secure format to prevent unauthorized access, ensuring privacy and data security.
24. **Admin Dashboard**
A central control panel for administrators to manage users, track system activity, and configure app settings.
25. **Document Upload**
The ability to upload documents or images into the system for storage or sharing with other users.
26. **Real-time Collaboration**
The ability for multiple users to work together in real-time on shared data or tasks within the app.
27. **User Management**
A functionality for managing user accounts, including creating, updating, and deleting users, as well as managing user roles and permissions.
28. **Sales Rep Leaderboards**
A feature that displays a ranking of medical representatives based on their performance metrics, such as visits or sales.
29. **Customizable Dashboard**
A personalized view that allows users to configure their dashboard to show relevant data and metrics.
30. **Doctor Rating System**
A feature that allows medical representatives to rate their interactions with doctors, providing feedback for future visits.
31. **SaaS** - Software as a Service
A cloud-based software delivery model where applications are hosted and maintained by a third-party provider.
32. **API** - Application Programming Interface
A set of rules that allow different software applications to communicate and interact with each other.
33. **UI** - User Interface
The space where users interact with the application, typically through buttons, screens, and other visual elements.
34. **UX** - User Experience
The overall experience a user has when interacting with the app, including ease of use and satisfaction.
35. **MVP** - Minimum Viable Product
A version of the product that contains only the essential features needed to meet the primary goals and requirements of early adopters.
36. **SSL** - Secure Sockets Layer
A protocol for securing internet communications, primarily used to encrypt data during transmission.
37. **KPI** - Key Performance Indicator
Metrics used to evaluate the success of a particular activity or goal, such as sales, visits, or customer satisfaction.
38. **CRM** - Customer Relationship Management
A system used to manage a company's interactions with current and potential customers, often storing contact information, history, and performance data.
39. **RACI** - Responsible, Accountable, Consulted, Informed
A matrix that clarifies roles and responsibilities in the decision-making process for a project.

### ****10.3. Related Documents****

1. Project Charter
2. Business Requirements Document (BRD)
3. System Requirements Specification (SRS)
4. Use Case Documents
5. Wireframes and UI/UX Design
6. Project Plan
7. Test Plan
8. Risk Management Plan
9. Change Management Plan
10. User Manual and Training Guides