**Product Requirements Document (PRD)**

For Software Project of:

**CSE327: Software Engineering**

Section 2

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Submitted to:

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**Izzy CRM PRD**

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**Product Requirements Document (PRD)**

**Project Name:** Izzy CRM

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**1. Executive Summary**

**1.1 Overview**

Izzy CRM is a next-generation Customer Relationship Management platform built to unify **sales, marketing, and customer support** into a single, intelligent ecosystem. Designed for both **multi-brand enterprises** and **growing SMEs**, the system emphasizes **automation, data-driven insights, and conversational interactions** to help teams manage customers with unprecedented efficiency.

The platform will deliver a **mobile-first experience (Phase 1)** that transitions into an **AI-driven enterprise-grade solution (Phase 2)**. Izzy CRM is not just another CRM tool — it is designed as an **adaptive relationship intelligence system** capable of automating workflows, identifying sales opportunities, and enhancing the overall customer lifecycle.

With integrations across **email, VoIP, Telegram**, and **3rd-party APIs**, Izzy CRM enables end-to-end tracking — from lead acquisition to conversion and retention — all from a single platform.

**1.2 Key Value Proposition**

Izzy CRM’s value lies in its ability to **blend automation, analytics, and multi-channel communication** under one cohesive interface. The platform’s differentiating factors include:

1. **Unified Multi-Brand Management:** One account can manage multiple organizations or brands — a key feature for agencies, distributors, and corporations managing product lines like Walton, Singer, or RFL.
2. **Automated Workflows (Non-AI Phase 1):** Izzy CRM automates repetitive tasks through programmable logic, reducing manual input and human error.
3. **AI-Driven Optimization (Phase 2):** Advanced modules powered by **machine learning and NLP** provide sales predictions, sentiment analysis, and dynamic workflow recommendations.
4. **Omnichannel Communication:** Integrated mail, Telegram, and VoIP systems allow users to communicate with customers directly within the CRM.
5. **Smart Reporting & Analytics:** Real-time dashboards track conversions, complaints, and engagement to guide data-backed decision-making.
6. **Scalability & Security:** Enterprise-grade architecture built on **React, Kotlin, and Node.js** ensures performance, scalability, and compliance with global data protection standards.
7. **Ease of Use:** Designed with simplicity and accessibility in mind, Izzy CRM focuses on reducing cognitive load while maximizing user productivity.

**1.3 Product Vision Summary**

The vision behind Izzy CRM is to **redefine customer relationship management** by moving away from static databases and toward **intelligent, conversational ecosystems**. The platform aims to:

* Serve as the **central nervous system** for customer interaction.
* Leverage **automation and AI** to eliminate redundant work.
* Create **real-time visibility** across sales, service, and marketing operations.
* Empower teams to collaborate seamlessly across devices and departments.

In the long term, Izzy CRM envisions an **AI-first CRM platform** that continuously learns from customer interactions, recommends actions to agents, and predicts business outcomes — effectively functioning as a **digital relationship strategist** rather than just a data repository.

**1.4 Phase Overview**

Izzy CRM will be developed in **two primary phases**, each designed to incrementally enhance the platform’s capabilities while maintaining scalability and backward compatibility.

**Phase 1 – Core Automation & Mobile-First Experience**

* Focus on delivering a fully functional mobile CRM.
* Incorporate automation through rule-based logic.
* Enable multi-brand and multi-user access.
* Integrate with mail, VoIP, and Telegram for real-time communication.
* Provide analytics dashboards and pipeline tracking.

**Phase 2 – AI-Driven Optimization & Advanced Analytics**

* Introduce AI modules for predictive analytics, sentiment detection, and intelligent recommendations.
* Expand automation from rule-based to **machine learning-driven** workflows.
* Add conversational AI for customer interaction and internal task assistance.
* Implement advanced visualization dashboards and self-learning business insights.

**2. Vision & Objectives**

**2.1 Vision Statement**

To empower businesses with an intelligent, unified CRM platform that bridges the gap between **customer data, communication, and decision-making**, enabling organizations to build stronger relationships, accelerate sales, and operate with insight-driven precision.

Izzy CRM envisions becoming the **operating system for customer relationships**, capable of evolving with business growth and market changes.

**2.2 Business Goals**

Izzy CRM’s strategic business goals align with providing measurable value to both clients and internal stakeholders.

1. **Enhance Efficiency:** Automate manual CRM processes by 70% through rule-based and AI-driven features.
2. **Enable Scalability:** Support multi-brand and multi-organization setups to accommodate enterprise structures.
3. **Improve Conversion Rates:** Utilize data-driven insights to increase lead-to-deal conversion by at least 20% within the first year.
4. **Reduce Operational Cost:** Through workflow automation and self-service tools, reduce support overhead by 30%.
5. **Deliver Real-Time Intelligence:** Empower users with dynamic dashboards, alerts, and automated reporting to support decision-making.
6. **Ensure Reliability:** Maintain a 99.9% uptime guarantee with real-time system monitoring and robust cloud architecture.

**2.3 Product Objectives**

Izzy CRM’s product objectives define how these business goals will be achieved through tangible software functionalities.

| Objective | Description | Measurement |
| --- | --- | --- |
| **Unified Customer View** | Integrate all customer data into a single interface | Customer lookup < 2 seconds |
| **Workflow Automation** | Rule-based task automation (non-AI) | 80% task reduction |
| **Cross-Brand Accessibility** | Single account usable across multiple brands | 100% shared access model |
| **Intelligent Communication** | Integrated mail, call, and chat | Zero external app dependency |
| **Data Analytics** | Real-time dashboards and reports | Update interval < 1 minute |
| **Scalability** | Modular, API-first system | Handle 10,000+ users per org |

**2.4 Strategic Impact**

Izzy CRM will deliver strategic advantages at both micro and macro levels:

**Operational Impact**

* Reduces dependency on manual reporting.
* Standardizes communication and task management.
* Increases data transparency across teams.

**Financial Impact**

* Reduces the need for multiple SaaS subscriptions.
* Increases conversion rates, leading to direct revenue uplift.
* Lowers customer churn through improved service tracking.

**Market Impact**

* Positions Izzy CRM as a **Bangladesh-origin SaaS platform** capable of competing regionally with global CRMs like HubSpot and Pipedrive.
* Builds brand reputation as a flexible, AI-ready, enterprise-class CRM system.

**3. Stakeholders**

**3.1 Internal Stakeholders**

| Role | Description | Responsibilities |
| --- | --- | --- |
| **Product Manager (You)** | Project lead overseeing roadmap and requirements | Defines PRD, manages scope, prioritizes features |
| **Tech Lead / Software Architect** | Backend & API design | Ensures scalability, performance, and security |
| **Frontend Developers** | React + Android + iOS developers | Build UI and integrate APIs |
| **Backend Developers** | Node.js / Java engineers | Develop business logic and database systems |
| **UX/UI Designers** | Design interaction flow and prototypes | Create user-friendly, responsive interfaces |
| **QA Engineers** | Testing and quality validation | Perform regression, integration, and performance testing |
| **DevOps Engineers** | Cloud deployment and CI/CD | Maintain AWS/Docker/Kubernetes infrastructure |

**3.2 External Stakeholders**

| Stakeholder | Type | Role |
| --- | --- | --- |
| **Clients (SMEs, Enterprises)** | Primary User | Use Izzy CRM for managing customers and sales |
| **System Integrators** | Partner | Customize CRM integrations with external tools |
| **Marketing Teams** | Client-side User | Use analytics dashboards and campaign insights |
| **Customer Support Teams** | Client-side User | Manage tickets, complaints, and follow-ups |
| **Regulatory Bodies** | Indirect Stakeholder | Ensure compliance with data protection standards |
| **Vendors / API Providers** | Integration Partner | Enable mail, VoIP, and AI services |

**3.3 Roles & Responsibilities**

| Role | Responsibilities |
| --- | --- |
| **Product Management** | Define product roadmap, feature prioritization, and metrics of success. |
| **Engineering** | Build and maintain the codebase, ensure security, scalability, and reliability. |
| **Design** | Create consistent visual and interaction design across platforms. |
| **QA / Testing** | Validate each release cycle against acceptance criteria. |
| **Marketing & Sales** | Handle go-to-market strategy, customer onboarding, and communication. |
| **Customer Success** | Ensure user adoption and gather feedback for continuous improvement. |

**4. Target Users & Market Segments**

**4.1 User Personas**

**4.1.1 Sales Representative** Sales representatives are the frontline drivers of revenue. They need a **centralized view of leads, opportunities, and customer interactions**, with automation for follow-ups and reminders. Challenges include fragmented customer data and time-consuming manual reporting. Izzy CRM allows sales reps to **update pipelines in real-time, track targets, and generate actionable insights**.

**4.1.2 Customer Support Agent** Support agents manage post-sale customer interactions and issue resolution. They require **quick access to complete interaction histories, ticket statuses, and escalation workflows**. Current pain points include siloed communication channels and manual logging. Izzy CRM provides **ticket management, auto-response templates, and searchable knowledge bases** to streamline support.

**4.1.3 Marketing Executive** Marketing executives design campaigns, segment audiences, and measure ROI. They need **real-time insights into customer engagement and campaign effectiveness**. Common challenges include incomplete data and difficulty tracking results. Izzy CRM offers **audience segmentation, campaign management dashboards, and integrated analytics**.

**4.1.4 Business Manager** Business managers oversee overall operations and make **strategic decisions**. They require **KPIs, dashboards, and reports that consolidate sales, marketing, and support data**. Their main challenges are delayed reporting and fragmented visibility. Izzy CRM provides **role-based executive dashboards and performance monitoring** to enhance decision-making.

**4.2 Market Segments**

* **Small and Medium Enterprises (SMEs):** Require **affordable, scalable, and easy-to-deploy CRM solutions** for daily operations.
* **Enterprise Organizations:** Demand **robust, multi-brand support, deep analytics, and advanced integrations**.
* **Startups:** Seek **intuitive, mobile-first platforms** that can scale with growth without complex onboarding.

**4.3 Competitive Advantage**

1. **Unified Platform:** Combines sales, marketing, and support workflows under one ecosystem.
2. **Automation:** Reduces manual tasks with rule-based logic in Phase 1, evolving to **AI-driven automation in Phase 2**.
3. **Omnichannel Communication:** Integrated mail, VoIP, and messaging allow seamless customer interaction.
4. **Real-Time Insights:** Dashboards provide **up-to-the-minute reporting** on performance metrics.
5. **Scalable & Secure:** Built on **React, Flutter, Node.js, and PostgreSQL/MariaDB**, ensuring enterprise-grade scalability and compliance.
6. **Ease of Use:** Intuitive interfaces reduce learning curves and improve adoption.

**5. Product Scope**

**5.1 In-Scope Features**

* Lead and contact management.
* Sales pipeline and opportunity tracking.
* Customer support ticketing and knowledge base.
* Marketing campaign planning, execution, and analytics.
* Role-based dashboards and reporting.
* Integration with email, calendar, and third-party APIs.

**5.2 Out-of-Scope Features**

* AI-driven predictive analytics and recommendations (planned for Phase 2).
* Full ERP integrations outside CRM scope.
* Offline-first mobile functionality (planned for Phase 3).

**5.3 Product Boundaries**

* Focused exclusively on **CRM operations**: sales, marketing, and support.
* Excludes accounting, HR management, inventory, or other ERP modules.
* Web-based with responsive design; mobile-first, but not offline-native in Phase 1.

**5.4 Core Use Cases**

* Sales rep adds or updates a lead and tracks progress.
* Marketing executive launches a targeted campaign and monitors engagement.
* Support agent resolves tickets and escalates issues as needed.
* Manager generates KPI reports and monitors team performance.

**6. System Overview**

**6.1 High-Level Architecture**

* **Client Layer:** Web dashboard (ReactJS) and mobile app (Kotlin/Swift ).
* **Application Layer:** Backend services managing business logic (Node.js/Express or Django).
* **Data Layer:** Relational database (MariaDB/PostgreSQL).
* **Integration Layer:** Third-party APIs (email, calendar, analytics, payment).

**6.2 Frontend Stack**

* Framework: **ReactJS** for web, **Kotlin/Swift**  for mobile.
* State Management: **Redux** or **Provider**.
* UI Components: **Tailwind CSS** and **shadcn/ui**.
* Charts and Analytics: **Recharts**.

**6.3 Backend Stack**

* Language & Framework: **Node.js/Express** or **Django**.
* RESTful API with **JWT-based authentication**.
* Background jobs via **Celery** or **Node cron**.

**6.4 Database Schema Overview**

* **Users Table:** Credentials, roles, and permissions.
* **Customers Table:** Contact information and interaction history.
* **Leads & Opportunities Table:** Tracks sales pipelines.
* **Tickets Table:** Support requests and resolutions.
* **Campaigns Table:** Marketing activities and engagement metrics.

**6.5 Integration Services**

* Email (e.g., **SendGrid**).
* Calendar sync (**Google/Outlook**).
* Analytics and reporting integrations.
* Optional payment gateway for subscription management.

**6.6 Security Framework**

* Role-based access control (**RBAC**).
* TLS/HTTPS encryption.
* Password hashing (**bcrypt** or **Argon2**).
* Activity logs and audit trails.
* Regular vulnerability scans and patching.

**6.7 Scalability Considerations**

* Horizontal scaling via **Docker/Kubernetes**.
* Database replication and sharding.
* Load balancing for high availability.
* Caching with **Redis/Memcached** for performance.

**7. Core Features**

**7.1 Contact & Account Management**

Provides a **centralized repository** for customer data, including contact details, company accounts, interaction history, and hierarchical relationships. Supports **multi-brand visibility** and role-based access for secure information sharing.

**7.2 Lead & Deal Pipeline**

Enables tracking of **prospects, opportunities, and deals** across customizable sales stages. Includes pipeline visualization, probability scoring, and task reminders to ensure **timely follow-ups and accurate forecasting**.

**7.3 Communication Hub**

Integrates **email, VoIP, and Telegram** into a single platform. Users can **send, receive, and log communications** directly in the CRM. Supports attachments, chat history, and **real-time notifications**.

**7.4 Complaint & Issue Management**

Offers a **ticketing system** to track customer complaints and service requests. Includes automated escalation, SLA tracking, and knowledge base linkage for **efficient resolution**.

**7.5 Task & Calendar Management**

Provides integrated **task management, reminders, and calendar scheduling**. Supports recurring tasks, deadline notifications, and **team collaboration** features.

**7.6 Reporting & Analytics**

Delivers **real-time dashboards and reports** on sales, marketing, and support metrics. Customizable views allow **filtering by brand, team, or period**, ensuring actionable insights.

**7.7 Access Management**

Implements **role-based permissions (RBAC)** and **multi-organization access**. Supports granular control over data visibility, editing rights, and administrative privileges.

**7.8 Automation Engine**

Rule-based workflow engine automates repetitive tasks such as **lead assignment, follow-ups, ticket routing, and notification triggers**. Sets the foundation for AI-driven automation in Phase 2.

**8. Phase-Specific Requirements**

**8.1 Overview**

Izzy CRM will be rolled out in **two phases**, with Phase 1 focusing on **core CRM functionality and workflow automation**, and Phase 2 introducing **AI-driven enhancements, predictive analytics, and enterprise scalability**.

**8.2 Phase 1 – Core CRM & Automation**

**8.2.1 Phase 1 Goals**

* Deliver **fully functional web and mobile CRM**.
* Implement **rule-based workflow automation**.
* Enable **multi-brand and multi-user support**.
* Integrate basic **communication and reporting modules**.

**8.2.2 Key Deliverables**

* Contact & account management module.
* Lead & opportunity pipeline tracking.
* Task, calendar, and automation engine.
* Communication hub (email, VoIP, Telegram).
* Reporting dashboards for sales and support.

**8.2.3 Technology Stack**

* Frontend: **ReactJS, Kotlin/Swift**
* Backend: **Node.js/Express or Django**
* Database: **MariaDB/PostgreSQL**
* Integrations: **Email APIs, VoIP, Telegram**

**8.2.4 Functional Requirements**

* CRUD operations for contacts, leads, and accounts.
* Pipeline stage transitions with probability scoring.
* Ticket creation and tracking with SLA alerts.
* Task assignment, calendar synchronization, and reminders.
* Rule-based automation for notifications and task routing.

**8.2.5 User Interface Mockup Summary**

* Clean **dashboard layout** with KPIs and pipeline overview.
* Modular widgets for tasks, tickets, and analytics.
* **Responsive design** for mobile-first access.
* Intuitive navigation for **multi-brand switching**.

**8.3 Phase 2 – AI, Prediction & Scalability**

**8.3.1 Phase 2 Goals**

* Introduce **AI-assisted workflows** for predictive lead scoring and task recommendations.
* Enhance analytics with **real-time predictive dashboards**.
* Implement NLP-based **conversational interfaces**.
* Ensure **enterprise scalability** for thousands of concurrent users.

**8.3.2 AI-Driven Features**

* Intelligent lead prioritization.
* Automated ticket routing based on historical patterns.
* Contextual suggestions for marketing campaigns.

**8.3.3 Predictive Analytics**

* Forecast **sales outcomes and conversion probabilities**.
* Identify high-risk customers and retention opportunities.
* Real-time alerts for deviations in KPI trends.

**8.3.4 NLP & Conversational Interface**

* Virtual assistant for CRM navigation and task creation.
* Natural language queries for **report generation and insights**.
* Conversational support for ticket triaging.

**8.3.5 Phase 2 Architecture**

* Microservices-based backend for **scalability and modularity**.
* Advanced caching with **Redis** for low-latency queries.
* AI models served through **REST/GraphQL APIs**.

**8.3.6 Advanced Data Models**

* Customer segmentation via clustering algorithms.
* Predictive lead scoring with historical data.
* Sentiment analysis of customer communications.

**9. Integration Overview**

**9.1 Pipedrive Integration**

Sync leads, deals, and pipeline stages for **seamless migration or co-existence**.

**9.2 Telegram Bot Integration**

Send notifications, reminders, and messages directly through **Telegram**, including two-way interaction logging.

**9.3 VoIP / IP Call Integration**

Enable **click-to-call, call logging, and call recording** for complete CRM communication tracking.

**9.4 Email APIs & Automation**

Integrate with **SendGrid, Gmail, or Outlook APIs** for email sending, tracking, and automated follow-ups.

**9.5 External Issue Tracking**

Support integration with **third-party ticketing systems** like Jira or Zendesk for unified issue management.

**9.6 Calendar APIs**

Synchronize with **Google and Outlook calendars** for task and meeting scheduling.

**9.7 Future Integrations**

* WhatsApp Business API
* SMS Gateway
* Payment & subscription gateways
* Advanced marketing automation platforms

**10. User Journey & Workflows**

**10.1 Phase 1 User Journey**

**10.1.1 Sign-up and Onboarding**

* Multi-step registration capturing organization, brand, and user roles.
* Guided onboarding checklist for **first-time users**.

**10.1.2 Organization Setup**

* Configure **brand hierarchy, departments, and user permissions**.
* Multi-brand dashboard access enabled.

**10.1.3 Data Import**

* CSV/Excel upload for contacts, leads, and accounts.
* Automated validation and deduplication.

**10.1.4 Pipeline Configuration**

* Define **sales stages and opportunity probability scoring**.
* Map tasks and automation rules to stages.

**10.1.5 Automation Setup**

* Configure **rule-based triggers** for task assignments, notifications, and SLA alerts.

**10.2 Phase 2 User Journey**

**10.2.1 AI Assistance**

* Virtual assistant provides **task recommendations and lead scoring**.
* Contextual tips for **marketing and support actions**.

**10.2.2 Predictive Workflow**

* Automates **high-probability conversions** and ticket prioritization.
* Suggests next-best actions for sales and support agents.

**10.2.3 Smart Reporting**

* Predictive dashboards with **trend analysis and anomaly detection**.
* AI-generated **insights and alerts** for managers.

**10.3 Customer Lifecycle Management**

* Tracks customers from **lead acquisition to retention**.
* Maps interactions across **sales, marketing, and support**.
* Provides **360-degree visibility** and **intelligence-driven recommendations** for retention and upselling.

**11. Access Management & Permissions**

**11.1 Role Definitions**

Izzy CRM implements **role-based access control (RBAC)** to ensure that users only access the data and features appropriate to their role:

* **Admin:** Full system access, including configuration, user management, and reporting.
* **Manager:** Oversight of teams, dashboards, and analytics; cannot alter system settings.
* **Sales Representative:** Access to leads, contacts, deals, and pipeline management; cannot view other teams’ private data.
* **Marketing Executive:** Access to campaign management, analytics, and segmentation tools.
* **Customer Support Agent:** Access to tickets, complaints, and knowledge base; limited reporting.

**11.2 Permission Matrix**

| Role | Read | Write | Update | Delete | Admin Config |
| --- | --- | --- | --- | --- | --- |
| Admin | ✔ | ✔ | ✔ | ✔ | ✔ |
| Manager | ✔ | ✔ | ✔ | ✖ | ✖ |
| Sales Representative | ✔ | ✔ | ✔ | ✖ | ✖ |
| Marketing Executive | ✔ | ✔ | ✔ | ✖ | ✖ |
| Customer Support Agent | ✔ | ✔ | ✔ | ✖ | ✖ |

**11.3 Multi-Organization Support**

Izzy CRM supports **multi-brand and multi-organization structures**, allowing users to operate under **separate brands or departments** while maintaining a unified login. Access rights are scoped by organization, ensuring **data isolation and brand-specific reporting**.

**11.4 Audit Trail**

* Tracks all user actions: logins, updates, deletions, and configuration changes.
* Provides **timestamped, immutable records** for compliance and troubleshooting.
* Supports filtering by **user, action, date, or module** for fast reporting.

**12. Security & Compliance**

**12.1 Data Encryption**

* **At-rest encryption** using AES-256 for databases and file storage.
* **In-transit encryption** using TLS 1.2/1.3 for all network communications.
* Encryption keys **rotated regularly** and stored securely.

**12.2 Authentication & Authorization**

* Supports **JWT-based session authentication** and OAuth 2.0 integrations.
* Multi-factor authentication (MFA) enforced for admins and managers.
* Fine-grained **RBAC permissions** control feature-level access.

**12.3 Network Security**

* Firewalls, intrusion detection, and **secure VPN access** for cloud infrastructure.
* DDoS protection and rate limiting to mitigate external threats.
* Regular **penetration testing and vulnerability scans**.

**12.4 GDPR & Local Compliance**

* Full compliance with **GDPR and Bangladesh data privacy laws**.
* Provides **data subject access requests (DSAR)**, consent management, and the right to be forgotten.
* Privacy-first design ensures **minimal PII exposure** for internal and third-party users.

**12.5 Monitoring & Incident Response**

* 24/7 monitoring with **real-time alerts for system anomalies**.
* Automated logging and dashboards for **security events and performance metrics**.
* Defined **incident response plan** with priority escalation and resolution timelines.

**13. Success Metrics & KPIs**

**13.1 Product Performance Metrics**

* **System uptime:** ≥99.9% SLA.
* **API response time:** <200ms for critical endpoints.
* **Dashboard refresh rate:** <1 minute for analytics and reporting.

**13.2 Operational KPIs**

* **Lead-to-deal conversion rate:** Target 20% increase within first year.
* **Ticket resolution time:** Average SLA <24 hours.
* **Task completion efficiency:** ≥80% automation-driven completion for routine tasks.

**13.3 User Adoption Goals**

* **Onboarding completion rate:** ≥90% within first month.
* **Active usage rate:** ≥75% of registered users weekly.
* **Feature engagement:** ≥70% adoption of key modules (leads, pipeline, reporting).

**13.4 System Health Metrics**

* **Error rate:** <0.5% of all transactions.
* **Database growth and storage usage:** Monitored monthly with alerts for thresholds.
* **System latency and load metrics:** Monitored continuously with auto-scaling triggers.

**14. Scalability & Future Roadmap**

**14.1 Phase 3 (Future Vision)**

* Introduce **offline-first mobile functionality** for field sales and support.
* Expand AI capabilities to **automated strategy recommendations** across sales, marketing, and support.
* Integrate **advanced ERP and inventory modules** for a full business ecosystem.

**14.2 Performance Optimization**

* Implement **database sharding and horizontal scaling** for high concurrency.
* Optimize caching strategies using **Redis/Memcached**.
* Introduce **load balancing and CDN distribution** to ensure low latency globally.

**14.3 Plugin Marketplace**

* Allow third-party developers to build **extensions, widgets, and integrations**.
* Supports **custom modules** for marketing, analytics, or communication.
* Marketplace will be **managed and curated** for security and compliance.

**14.4 Workflow Rule Engine**

* Enable **drag-and-drop workflow creation** for sales, support, and marketing automation.
* Support **conditional triggers, scheduled actions, and multi-step pipelines**.
* Integrate **AI-assisted suggestions** for workflow optimization.

**14.5 Custom Analytics Dashboards**

* Users can **design dashboards** with KPIs relevant to their role or team.
* Real-time updates, **predictive trends, and anomaly detection** included.
* Exportable reports for board meetings and regulatory compliance.

**14.6 Partner Ecosystem Expansion**

* Integrate with **regional SaaS providers, ERP solutions, and communication platforms**.
* Offer co-branded or white-label CRM solutions for **enterprise clients and agencies**.
* Establish **developer and reseller programs** to accelerate adoption.

**15. Risks & Mitigation Strategies**

**15.1 Technical Risks**

* **Scalability issues** with high concurrent users.
* **Integration failures** with third-party APIs.
* **Data loss or corruption** during migrations.

**15.2 Product Risks**

* Low user adoption due to **complexity or UI challenges**.
* Feature bloat causing **performance degradation**.
* Misalignment with **market expectations** or competitors’ offerings.

**15.3 Market Risks**

* Aggressive competition from **global CRMs** (HubSpot, Salesforce).
* Regulatory changes affecting **data privacy or cloud storage**.
* Economic downturn affecting SME adoption rates.

**15.4 Mitigation Plans**

* Use **modular microservices** architecture for scalability.
* Conduct **integration testing and staging migrations** for all third-party connections.
* Invest in **UX/UI testing, training, and documentation**.
* Continuous **market research and agile roadmap adjustments**.
* Ensure **compliance monitoring** and proactive legal consultation.

**16. Appendices**

**16.1 Appendix A – Module List**

* Contact & Account Management
* Lead & Deal Pipeline
* Communication Hub
* Complaint & Issue Management
* Task & Calendar Management
* Reporting & Analytics
* Access Management & Permissions
* Automation Engine
* AI & Predictive Analytics (Phase 2+)

**16.2 Appendix B – Glossary**

* **CRM:** Customer Relationship Management
* **RBAC:** Role-Based Access Control
* **SLA:** Service Level Agreement
* **DSAR:** Data Subject Access Request
* **NLP:** Natural Language Processing

**16.3 Appendix C – References**

* HubSpot CRM Documentation
* Pipedrive API Guide
* GDPR Compliance Guidelines
* Salesforce CRM Best Practices
* SaaS Performance and Scalability Whitepapers

**16.4 Appendix D – Example Use Cases**

* Lead capture and follow-up automation
* Escalation of overdue support tickets
* Marketing campaign ROI tracking
* Multi-brand executive dashboards
* AI-predicted sales closure suggestions

**17. Conclusion**

**17.1 Final Summary**

Izzy CRM is a **modern, scalable, and intelligent CRM platform** designed to unify sales, marketing, and customer support. By combining **rule-based automation, predictive analytics, and multi-channel communication**, it empowers organizations to **streamline operations, improve conversion, and enhance customer satisfaction**.

**17.2 Expected Outcomes**

* Increased **sales efficiency and conversion rates**.
* Reduced **support response times and operational overhead**.
* Improved **data-driven decision-making** through real-time insights.
* High **user adoption** with intuitive interfaces and multi-brand support.

**17.3 Future Growth Potential**

* Expansion into **AI-first CRM capabilities**, including virtual assistants and predictive workflows.
* Development of a **plugin ecosystem** and third-party integrations.
* Regional and international adoption through **partner networks and white-label solutions**.
* Continuous improvement with **advanced analytics dashboards and workflow engines**.