

# NeoBank Digital – Customer Support & Notifications Module

## 1. Document Control

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## 2. Executive Summary

The Customer Support & Notifications Module provides a seamless, omni-channel support experience for NeoBank customers. It enables automated and human-assisted customer service, while ensuring customers are continuously informed through proactive notifications. This module reduces support costs, improves response times, and enhances overall customer satisfaction.

## 3. Objectives

- Provide multi-channel support (chat, email, phone, in-app).
- Reduce average support response time to under 2 minutes.
- Automate 40% of customer queries with AI chatbots.
- Deliver timely notifications about loan status, repayments, and account activities.

## 4. Scope

### In-Scope

- AI-powered chatbot for first-level queries.
- Human-assisted support ticketing system.

- In-app & email notifications for account/loan updates.
- Push notifications for repayments and due reminders.
- Escalation workflows for unresolved issues.
- Customer feedback capture.

### Out-of-Scope

- Loan application workflows.
- Fraud detection workflows.
- Collections process (covered in Repayment Module).

## 5. Key Features

1. **AI Chatbot** – handles FAQs and simple customer queries.
2. **Ticketing System** – escalation to human agents.
3. **Multi-Channel Support** – chat, email, phone, in-app.
4. **Notification Service** – SMS, email, push notifications.
5. **Loan Status Updates** – real-time alerts for approval, disbursal, repayment.
6. **Feedback Surveys** – post-interaction feedback capture.
7. **Agent Dashboard** – unified interface for support agents.

## 6. User Stories

- As a **customer**, I want a chatbot to answer my simple queries instantly so I don't have to wait.
- As a **customer**, I want to get notified of my loan status so I'm always updated.
- As a **support agent**, I want a dashboard of all tickets so I can manage cases efficiently.
- As a **customer**, I want to give feedback after support so I can share my experience.

## 7. Integrations

- **Chatbot AI Service** – NLP provider (Dialogflow, Rasa, etc.).
- **Ticketing System** – Zendesk/Freshdesk.
- **Notification Service** – SMS/email/push API.
- **CRM Integration** – customer profile management.

## 8. Authentication & Security

- Authentication: OAuth2.0 with MFA.
- Secure API integrations with ticketing and notification systems.
- Role-based access control for support agents.
- Encrypted storage of support conversations.

## 9. Non-Functional Requirements (NFRs)

- **Performance:** Chatbot response  $\leq$  1 second.
- **Availability:** 99.9% uptime for support services.
- **Scalability:** Handle 1M notifications/day.
- **Compliance:** GDPR, CCPA (privacy of conversations).
- **Security:** End-to-end encryption of customer communications.

## 10. Risks & Mitigations

Risk	Impact	Mitigation
High chatbot failure rate	Customer frustration	Continuous model training, fallback to live agents
Notification delays	Missed reminders	Multiple providers for redundancy
Ticket backlog	Poor service quality	Auto-escalation workflows & agent productivity KPIs
Data privacy issues	Legal penalties	Encrypted storage & GDPR compliance

## 11. Success Metrics

- Chatbot Automation Rate:  $\geq$  40% of queries resolved without agent.
- Avg Support Response Time:  $\leq$  2 minutes.
- Customer Satisfaction Score (CSAT):  $\geq$  4.5/5.
- Notification Delivery Success Rate:  $\geq$  99%.

## 12. Dependencies

- AI chatbot vendor contract.
- Notification gateway provider availability.
- Ticketing/CRM system integrations.
- Compliance approvals for customer data handling.

## 13. Timeline & Milestones

- **Week 1–2:** Requirements finalization & vendor selection.
- **Week 3–4:** Chatbot integration.
- **Week 5–6:** Ticketing system integration.
- **Week 7:** Notification service setup.
- **Week 8:** Internal testing.
- **Week 9:** UAT & compliance review.
- **Week 10:** Production rollout.

## 14. Appendix

- Glossary of Terms: CSAT, CRM, MFA.
- Reference Standards: GDPR, CCPA, RBI customer service guidelines.