MIND&MATTER

QBot – AI-Driven Conversational Chatbot For Enhanced Customer Experience

Sector: Customer Engagement & Support
Solutions: AI ChatBot for Personalised Customer Experience and Automation
Deployment: Cloud-based with Web & Third-Party Integrations

1. Assessment & Vision Setting

Current State Analysis

Businesses face challenges in creating quick customer touchpoints, offering personalised conversations, and enabling live agents with enough context to resolve issues on the go. Manual customer care operations and generic chatbots lacked intelligence and adaptability.

☑ **Defined Objectives**
- ○ Automate first-level customer interactions
- ○ Personalise conversations to improve engagement
- ○ Reduce load on live agents with contextual handovers
- ○ Enable seamless support across multiple business verticals

Stakeholder Alignment

Collaborated with Customer Service, Sales, and IT teams to define conversational flows, integration points, and escalation rules.

2. Process Reengineering

Mapped Existing Workflows

- ☑ Manual handling of FAQs and lead qualification
- ☑ Service ticket creation via email/phone support
- ☑ E-commerce support is managed through multiple disconnected channels

Redundancy Elimination

- ☑ Automated FAQ resolution and ticket generation
- ☑ Integrated lead qualification into chatbot conversations
- ☑ Unified e-commerce assistance through a single interface

Standardised Procedures

- ☑ Conversational flows documented for each use case: Customer Care, Lead Generation, Ticketing, and E-commerce.
- ☑ Rules established for escalation to live agents with full context.

3. Technology Transformation

Cloud Deployment

QBot is deployed as a scalable, cloud-based chatbot with role-based access and API-driven integrations.

- ☑ **AI/NLU Layer**
  - ○ Powered by BERT Transformer models for contextual understanding and personalised responses.

- ☑ **Backend Services**
  - ○ Built on Node.js and PHP for speed, flexibility, and easy integration.

- ☑ **Web Frontend**
  - ○ Developed using AngularJS and JavaScript to deliver responsive, real-time interactions.

- ☑ **Third-Party Integrations**
  - ○ Google Text-to-Speech and Speech-to-Text enabled natural voice interactions for enhanced accessibility.

4. Automation & Self-Service

Customer Care

Instantly responds to FAQs, billing queries, and service requests.

Lead Generation

Engages prospects with contextual questions, qualifies leads, and syncs data with CRM.

Service Ticketing

Automatically generates and routes tickets to the right department, reducing turnaround time.

E-commerce Assistance

Guides users with product discovery, order tracking, and personalised recommendations.

5. Data & Insights Activation

- ☑ Analytics Dashboards to track interaction volumes, resolution rates, and escalation trends.

- ☑ Conversation Logs & Reports provide insights into customer intent, improving business decision-making.

6. Governance & Compliance

- ☑ Secure role-based access for chatbot configuration and logs.

- ☑ GDPR-compliant data handling for customer interactions.

7. Continuous Improvement

- ☑ Feedback Loops enhance chatbot intent recognition with each customer interaction.

- ☑ Scalable Framework allows expansion into new domains and languages without major redevelopment.

Outcome

- ☑ 65% reduction in first-level support queries handled by agents

- ☑ 50% faster resolution time for service tickets

- ☑ Increased lead capture rate by 40% through chatbot-driven engagement

- ☑ Improved customer satisfaction scores with personalised, AI-driven conversations