# Project Proposal: Proactive WhatsApp Al Bot

For eCommerce, B2B, CRM, and Business Management

# Project Scope and Objectives

The WhatsApp AI Bot will serve as a **proactive assistant** tailored to eCommerce, B2B, CRM, and management use cases. It will:

- Instantly provide product information, order tracking, and support.
- Recognize and personalize communication for repeat customers and B2B partners.
- Capture and nurture leads to boost conversions.
- Automate key CRM tasks like returns, warranty handling, and payment reminders.
- Support sales through viral campaigns like Lucky Draws and targeted broadcasts.
- Empower management with real-time alerts, analytics, and operational insights.
   This solution is built using the BOOST Al Approach, integrating GPT models, APIs, and smart agents to automate and personalize workflows with high precision.

# Core Features and Implementation Plan

Powered by the **BOOST AI Framework** 

### **BOOST AI Architecture**

### 1. User Message Received

Customer initiates a chat via WhatsApp.

#### 2. Escalation Check

The system checks for urgent, inappropriate, or unsupported messages.

If matched, the query is immediately escalated to a human agent.

#### 3. Al Guardrail Filtering

OpenAl Guardrails are applied to enforce:

- Safety
- Compliance
- Context relevance

Only safe messages proceed further.

#### 4. Sentiment Analysis

GPT-4o analyzes the emotional tone of the message:

- Positive
- Neutral
- Negative

This insight influences response personalization and tone.

#### 5. Greeting Agent Activation

Based on sentiment, a **Greeting Agent** (powered by Gemini API) sends a warm, emotional acknowledgment to the user.

### 6. Main Agent Activation

The Main Agent (GPT-4.1) handles the core query.

Asynchronous tool access includes:

- **MyShopify API** (for product lookup, order details, etc.)
- CRM Database (for personalized messaging, tagging, segmentation)

The agent intelligently processes the query and pulls relevant data using these tools.

#### 7. Fallback to Human Support

If Al cannot confidently answer (e.g. edge cases, unresolved queries), the system escalates to a **real human agent**, passing chat context and history.

# **%** Integrated Tools Overview

Purpose Tool/Technology

Backend & DB Supabase

E-Commerce Integration MyShopify API
Greeting Agent Gemini API

Sentiment Analysis GPT-40
Main Al Conversation Engine GPT-4.1

**₩** Key Features (BOOST Al-Powered)

### 1. Shopify Integration

→ Real-time product details, order status, auto-order placement.

#### 2. Google Sheets CRM

→ Logging of orders, leads, and waitlists.

#### 3. Customer Personalization

→ Personalized greetings, returning customer history, tagging.

#### 4. Follow-Up Triggers

→ Auto follow-ups and restock alerts based on activity.

### 5. Broadcasting & CRM Segmentation

→ Meta-approved broadcast flows to segmented audiences.

#### 6. WhatsApp CRM Functions

→ Tagging, filtering, managing user conversations.

#### 7. B2B Logic

→ Show partner pricing, invoice tracking, and credit management.

#### 8. Returns & Warranty Automation

→ Handle RMAs, track refund windows, and status updates.

### 9. ERP Integrations (QuickBooks/Odoo)

→ Sync invoices, orders, and inventory updates.

#### 10. Birthday & Special Greetings

→ Schedule personalized greetings using customer data.

### 11. Payment Reminders

→ WhatsApp reminders with invoices and payment links.

### 12. Assembly Videos & Docs

→ On-demand support content sent via WhatsApp.

#### 13. Management Dashboards & Alerts

→ Business KPIs, sales stats, and low-stock alerts to owners.

### 14. Lucky Draw Segment

→ Viral gamified feature with referral tracking and winner selection.

# **Advanced & Future-Ready Features**

- Proactive Cart Recovery
- Al Product Recommendations
- Automated FAQs (Google Sheets KB)
- Live Order Tracking Map (Courier APIs)
- Smart Upsell/Cross-sell Logic
- Multi-Language Switching (Urdu/English)
- Voice Commerce (Phase 2)
- Al Mood Detection
- VIP Customer Tagging & Alerts
- Human Feedback Loop for Al Response Evaluation
- WhatsApp ChatWidget for Website Integration

# Technical Approach

- Architecture: BOOST AI (Hybrid model using GPT-40, GPT-4.1, and Gemini)
- Toolset: Shopify, Supabase, QuickBooks, WhatsApp Business API, Gemini API
- Scalability: Ready for future expansion into Instagram, voice, and web channels
- **Custom Code**: Specialized functions (e.g., Lucky Draw, Multi-language, Cart Recovery) will be built using JavaScript (Node.js)
- **Compliance**: Meta's guidelines + GDPR compliant

Delivery Plan			
Phase	Timeline	Deliverables	Cost
Phase 1	1 Week	Core Integrations: Shopify, CRM, WhatsApp	\$300
Phase 2	2 Weeks	Automation, B2B, Lucky Draw, Analytics	\$400
Phase 3	2 Weeks	End-to-End Testing, Training & Delivery	\$300
Total	5 Weeks	_	\$1,000

# ☑ Growth Opportunities

- 1. Dynamic Pricing Engine
- 2. **B2B Reorder Suggestions**

- 3. Social Media Lucky Draw Amplification
- 4. Gamified Loyalty Program
- 5. Al-Powered Sales & Inventory Insights

### © Commitment to Success

We promise to deliver a reliable, personalized, and growth-ready WhatsApp Al Bot with:

- Full Testing & 24/7 uptime readiness
- Hands-On Training (Urdu/English)
- Written Documentation & Feature Checklist
- Support for Future Upgrades