

1. Business Domain Chosen

Customer Support — E-commerce Sector

□ 2. Defined Problem

In large e-commerce platforms, customer support teams handle thousands of repetitive queries daily — order status, refunds, cancellations, delivery timelines, return requests, etc. This results in:

Long wait times for customers (avg. 10–20 minutes).

High operational cost due to large human support teams.

Agent fatigue and inconsistent responses.

□ 3. Proposed AI Agent: SmartSupport AI

SmartSupport AI is an AI-powered customer support agent that:

Handles 80–90% of Tier 1 queries (FAQs, order status, return policy, etc.) via live chat or voice.

Understands intent and emotions using NLP and sentiment analysis.

Escalates complex queries to human agents with full context and chat history.

Integrates with backend systems like CRM, inventory, and order management systems for real-time responses.

Interaction Modes:

Embedded chat widget on website & app

WhatsApp/Telegram support

Voice interface for mobile users

□ 4. Measurable Outcomes

Metric Before AI Agent After SmartSupport AI

- Average Query Resolution Time 10–20 minutes < 1 minute (for 85% queries)
- Monthly Support Cost ₹20 Lakhs ₹8–10 Lakhs (50% reduction)
- Customer Satisfaction (CSAT) 72% 90%+
- Human Agent Load 100% Reduced by 70–80%

□ Bonus: Sketch of User Interaction

Scenario: Customer wants to know refund status

User (via chat on app): "Where is my refund for order #7835?"

SmartSupport AI: "Hi! Let me check that for you... □"
(5 seconds pause while querying system)

SmartSupport AI: "Your refund of ₹799 was initiated on July 5th and should reflect in your account by July 11th. Is there anything else I can help you with?"

User: "No, thanks!"

SmartSupport AI: "You're welcome! □"

□ Conclusion

Deploying SmartSupport AI offers e-commerce businesses a scalable, consistent, and cost-effective solution to improve customer experience, reduce wait times, and optimize support operations. It blends AI's speed with human escalation when needed — ensuring

quality without compromising empathy.