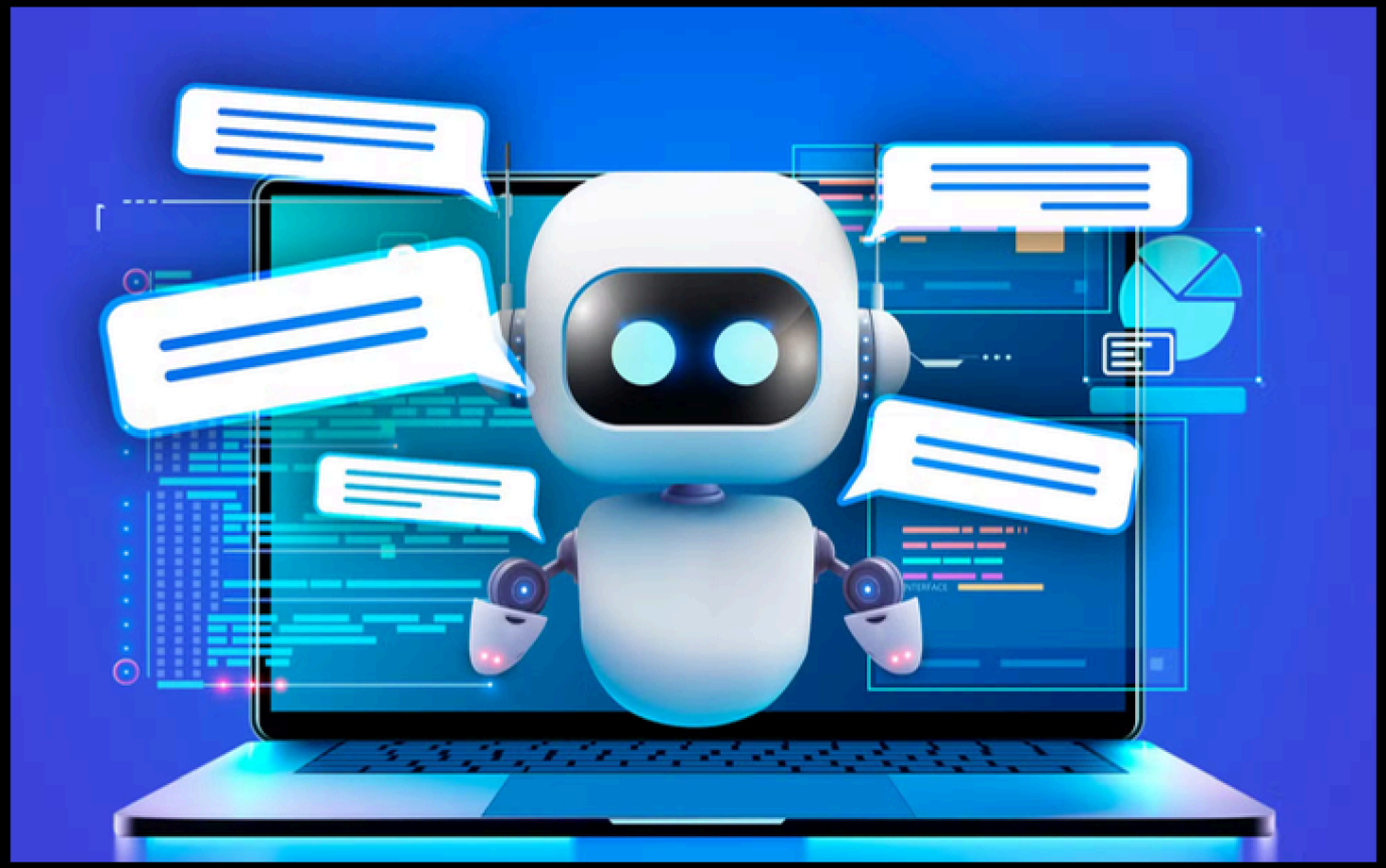
/EXECUTE: AI GENESIS HACKATHON

REPLYMATE AI

Team: Aptiva AI



OVERVIEW

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PROBLEM STATEMENT

- Businesses miss out on leads and trust due to:
  - Delayed replies
  - Fraudulent messages
  - Lack of smart message routing
  - Need for 24/7 AI-powered communication assistant

SOLUTION (REPLYMATE AI)

- An AI Agent that:
  - Instantly replies to common queries
  - Flags suspicious messages with anomaly detection
  - Notifies owners in real-time
  - Integrates with WhatsApp, FB Messenger, Email, and SMS

MARKET VALUE

01 $25B chatbot market by 2028 — ReplyMate taps into a booming space with AI-driven messaging.

02 WhatsApp-first approach — Optimized for platforms where real customers already are.

03 Built-in fraud detection — Adds a security layer most chatbots lack, ideal for finance & e-commerce.

04 SaaS-ready — Easily scalable for B2B use across emerging and global markets.

TECH STACK ARCHITECTURE OVERVIEW

Backend

Python (FastAPI), Redis, MongoDB

Frontend

Streamlit (for MVP UI), React.js (Admin Panel)

AI/ML

GPT-4o, LangChain, RAG, Isolation Forest

APIs

Meta (WhatsApp Business API), Twilio, SendGrid

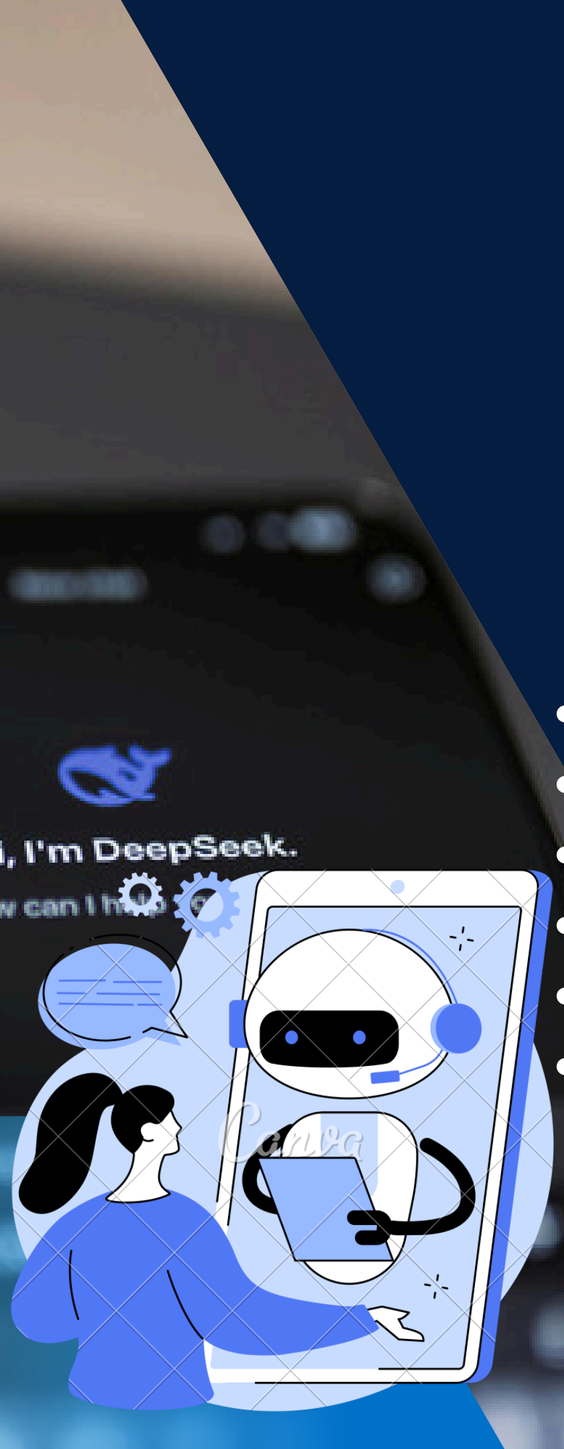
Hosting

Railway.app, AWS, Vercel

Security

OAuth2, HTTPS, JWT, reCAPTCHA

FUTURE ENHANCEMENTS



- Multi-Channel Support: Integrate more platforms (Telegram, Slack, etc.).
- Advanced Personalization: AI-driven, sentiment-aware responses.
- Enhanced Fraud Detection: Smarter anomaly detection with continuous learning.
- Analytics & Reporting: Business insights on customer interactions.
- Voice Integration: Add voice capabilities with assistants like Alexa.
- Global Expansion: Support multiple languages and regional platforms.

MARKET DEMAND

83%

of business owners reported that implementing AI for messaging increased efficiency and customer satisfaction. (Source: McKinsey)

90%

businesses are expected to invest in Conversational AI by 2026 (Source: MarketsandMarkets)

MARKET OPPORTUNITY

SMEs & D2C Brands are struggling with:

- Overwhelming message volumes
- Limited support staff
- Missed leads due to delayed replies

TAM (Total Addressable Market):

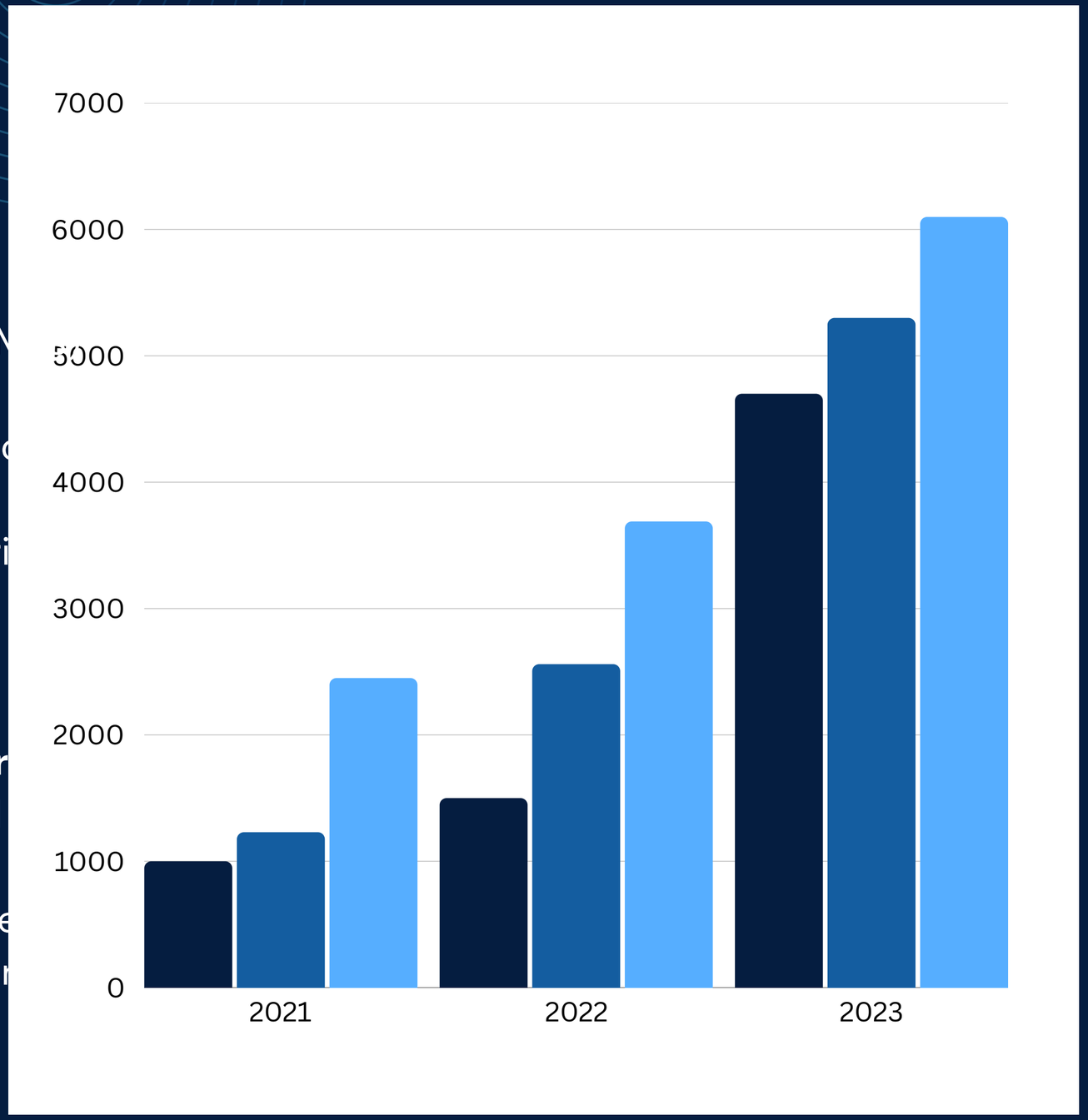
- $30B+ global Conversational AI market

SOM (Serviceable Obtainable Market):

- Start with 100K+ WhatsApp-based businesses in Pakistan & MENA region

Market Analysis

- **Target Market**: Small to Medium-sized Enterprises (SM
and E-commerce businesses
- SMEs represent 99% of all businesses globally, with gro
interest in automating customer service.
- **E-commerce market: $4.2 trillion in 2023**, with AI-dri
customer sup**port becoming essential for scaling operations.**
- **Key Drivers of Growth:**
- **Shift towards digital transformation: 78% of SMEs ar
adopting AI and automation to improve operational efficiency.**
- Increased messaging app usage: 71% of consumers pre
messaging apps for customer interactions, leading to r
demand for automated solutions.



OUR TEAM

Ramspheld

Eesha Tariq

Deepak Kumar

Zeeshan Tariq

M. Ehtisham

Najma Razzaq

Thank You

Connect with us.