# Sample presentation Bank of Baroda Hackathon 2024

**Team Name: Arise from the shadows** 

Team bio: We are a team of three enthusiastic and skilled individuals participating in this hackthon in call to put taste on our skills of AI-ML, computer vision for a real life problem





#### **Problem Statement?**

Why did you decide to solve this Problem statement?

❖ We chose this challenge because it addresses a critical aspect of banking – customer service – which directly impacts customer satisfaction, loyalty, and the bank's reputation. This challenge is particularly compelling as it's a superset of Challenge 6 (Personalized Content Generation), allowing us to create a more comprehensive solution that not only generates personalized content but also uses it in the context of broader customer service interactions.





### Pre-Requisite

What are the alternatives/competitive products for the problem you are solving?

- Traditional call centers with human agents
- Rule-based chatbots
- Generic Al assistants
- Standalone personalized content generators



#### Tools or resources

Azure tools or resources which are likely to be used by you for the prototype, if your idea gets selected

- Azure OpenAl Service for natural language processing and content generation
- Azure Cognitive Services for language understanding and sentiment analysis
- Azure Bot Service for multi-channel bot deployment
- Azure Machine Learning for customer behavior modeling
- Azure Synapse Analytics for big data processing
- Azure Cosmos DB for scalable data storage
- Azure Functions for serverless compute



### **Any Supporting Functional Documents**

Present your solution, talk about methodology, architecture & scalability

Our solution, "OmniServe", is an AI-powered customer service platform that provides personalized, efficient, and proactive support across multiple channels.

#### Methodology:

Data Integration: Aggregate customer data from various sources

AI Model Training: Develop models for natural language understanding, sentiment analysis, and personalized response generation

Multi-Channel Integration: Deploy the AI across various customer touchpoints (chat, email, voice, app)

Personalized Content Generation: Create tailored responses and proactive communications (incorporating Challenge 6)

Continuous Learning: Improve the AI based on interactions and feedback

#### **Architecture:**

Core Al Engine: Azure OpenAl Service and Azure Machine Learning Interaction Layer: Azure Bot Service for multi-channel deployment

Data Processing: Azure Synapse Analytics

Knowledge Base: Azure Cosmos DB

Integration Layer: Azure Functions and Logic Apps

Human Oversight: Web dashboard for customer service staff





### **Key Differentiators & Adoption Plan**

How is your solution better than alternatives and how do you plan to build adoption?

#### **Key Differentiators:**

Comprehensive AI-driven service: Handles complex queries and generates personalized content

Omni-channel consistency: Provides uniform experience across all touchpoints Proactive engagement: Anticipates customer needs based on data analysis Seamless human handoff: Integrates AI assistance with human support when needed

#### **Adoption Plan:**

Phased rollout starting with chat and email support

Extensive training for customer service staff

Customer awareness campaign highlighting new AI capabilities

Gradual expansion to voice and in-app support

Continuous feedback collection and improvement





### GitHub Repository Link & supporting diagrams, screenshots, if any

How far it can go?

- Predictive customer service (addressing issues before they arise)
- Personalized financial advisory services
- Automated complaint resolution and escalation
- Integration with IoT devices for context-aware banking assistance



#### **Business Potential and Relevance**

What are the business applications of the problem you are solving?

- Improved customer satisfaction and loyalty
- Reduced operational costs in customer service
- Increased efficiency in query resolution
- Enhanced cross-selling and upselling through personalized interactions
- Valuable insights from customer interaction data



### **Uniqueness of Approach and Solution**

What is the unique aspects of the proposed idea?

Our solution uniquely combines customer service AI with personalized content generation (from Challenge 6). This integration allows for an approach to customer interactions, it provides reactive support and also proactive, personalized engagement.



### **User Experience**

How will your idea enhance the user experience?

- 24/7 availability of personalized support
- Faster resolution of queries and issues
- Consistent experience across all channels
- Proactive, relevant communications and advice
- Seamless escalation to human agents when needed



### **Scalability**

How effectively can your solution be scaled to accommodate growth without compromising performance?

To explain in short, the cloud-based, serverless architecture allows for automatic scaling. As the volume of customer interactions grows, the system can allocate more resources in real-time to maintain responsiveness.



### **Ease of Deployment and Maintenance**

How simple is your solution to implement and maintain on an ongoing basis?

- Modular design allows for phased implementation across channels
- Self-learning capabilities reduce need for constant manual updates
- Centralized management dashboard for easy monitoring and control
- Regular AI model updates can be deployed without service interruption



### **Security Considerations**

What measures are incorporated to ensure the security and integrity of your solution?

- End-to-end encryption for all customer interactions
- Strict data access controls and authentication
- Compliance with banking regulations and data protection laws
- Regular security audits and penetration testing
- Ethical AI guidelines to ensure responsible and fair customer service



## Thank You

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