

# Bank of Baroda Hackathon - 2022

## Your Team Name : Hack-a-holics

Your team bio : Making a difference in the world we live in

Date : 11th September, 2022.



# Problem Statement?

Why did you decide to solve this Problem statement?

- Online banking offers protection against online scams and account hijacking.
- You may do online purchases from the comfort of your home at any time of day.
- There is no longer any reason to stand in line for a lengthy time at the bank.
- Last but not least, having access to e-banking and a reliable budgeting tool at your disposal makes monitoring your finances and creating a budget easier.
- Hence, providing customers a virtual assistant which will ensure smooth experience of e-banking is the need of the hour.

# User Segment & Pain Points

Which user /advertiser segment would be early adopter of your product & why?

- The main perk of our product is that it caters to people from all walks of life
- From a young teenager who just learnt the basics of finances, to a retired person trying to manage his savings, this virtual bot will ease banking for everyone
- We anticipate that this bot would initially be adopted by people in the age group 18-24. This is because they are technically savvy and are comparatively unaware of how traditional banking works.

## Pre-Requisite

Some of the alternatives/competitive products for the problem we are solving are:

1. Banking apps for each Bank, along with virtual chat bot to solve the issues which are very generic and do not cater to real time queries. These have fixed answers which answer the already pre-set answers in the application.
2. Using lead generations in banking applications to attract customers.
3. Human assistance through helpline problem, which is not always reachable and feasible considering the population of our country.
4. Advanced Security and Fraud Alerts which makes it easy for customers to be aware of any mishappening in their account.

## Tools or resources required for the implementation

- Build, test, and deploy a bot or virtual agent on mobile devices, messaging platforms, or even on a real robot using IBM Watson Assistant.
- IBM Watson Discovery: A content analytics and cognitive search engine for applications to spot trends, patterns, and get necessary insightful details.
- IBM Watson Natural Language Understanding: Using natural language understanding, analyse text to extract metadata from content, such as concepts, entities, keywords, categories, sentiment, emotion, relations, and semantic roles.
- The IBM Watson Tone Analyzer analyses written text using linguistics to identify conversational tones.

## Any Supporting Functional Documents

1. Discovery collection is made using the FAQ documents.
2. The users can interact with the chatbot via the app UI.
3. Tone Analyzer analyses user input and searches for angry words. The context is enhanced by an anger score.
4. Natural Language Understanding(NLU) is used to process user input . The context is enhanced using NLU-detected entities and keywords (e.g., a location).
5. The enriched context and input are sent to Assistant. The assistant can identify entities, conversation pathways, and intent. It reacts by responding and/or acting.
6. The programme can optionally carry out a user's requested action. Assistant can:
  - Lookup additional information from bank services to append to the reply
  - Use Discovery to reply with an answer from the FAQ documents

# Key Differentiators

Our solution is better than alternatives because:

1. The AI-based Virtual Assistant can comprehend real human expressions, typos, synonyms, and linguistic subtleties and offer the appropriate response or course of action. Additionally, contextual virtual assistant will keep the context of the conversation from beginning to conclusion in addition to comprehending human language.
2. Personalization is another factor; it will provide a more convenient, engaging, and individualised customer experience in retail banking.
3. Banks will connect virtual assistant with several back-end systems and other information sources, ensuring that their conversational interfaces and big data are compatible. Additionally, a banking chatbot will gather additional information to be examined for increased personalisation at the same time.
4. In order to prevent social engineering attempts, bots will be able to mimic human speech. The virtual assistant will consider and take care of all technological approaches, including biometrics, two-factor authentication, behaviour analytics, and data encryption.
5. At the conclusion, provide a better customer experience so that the consumer may enjoy the app without having to find it difficult to use.

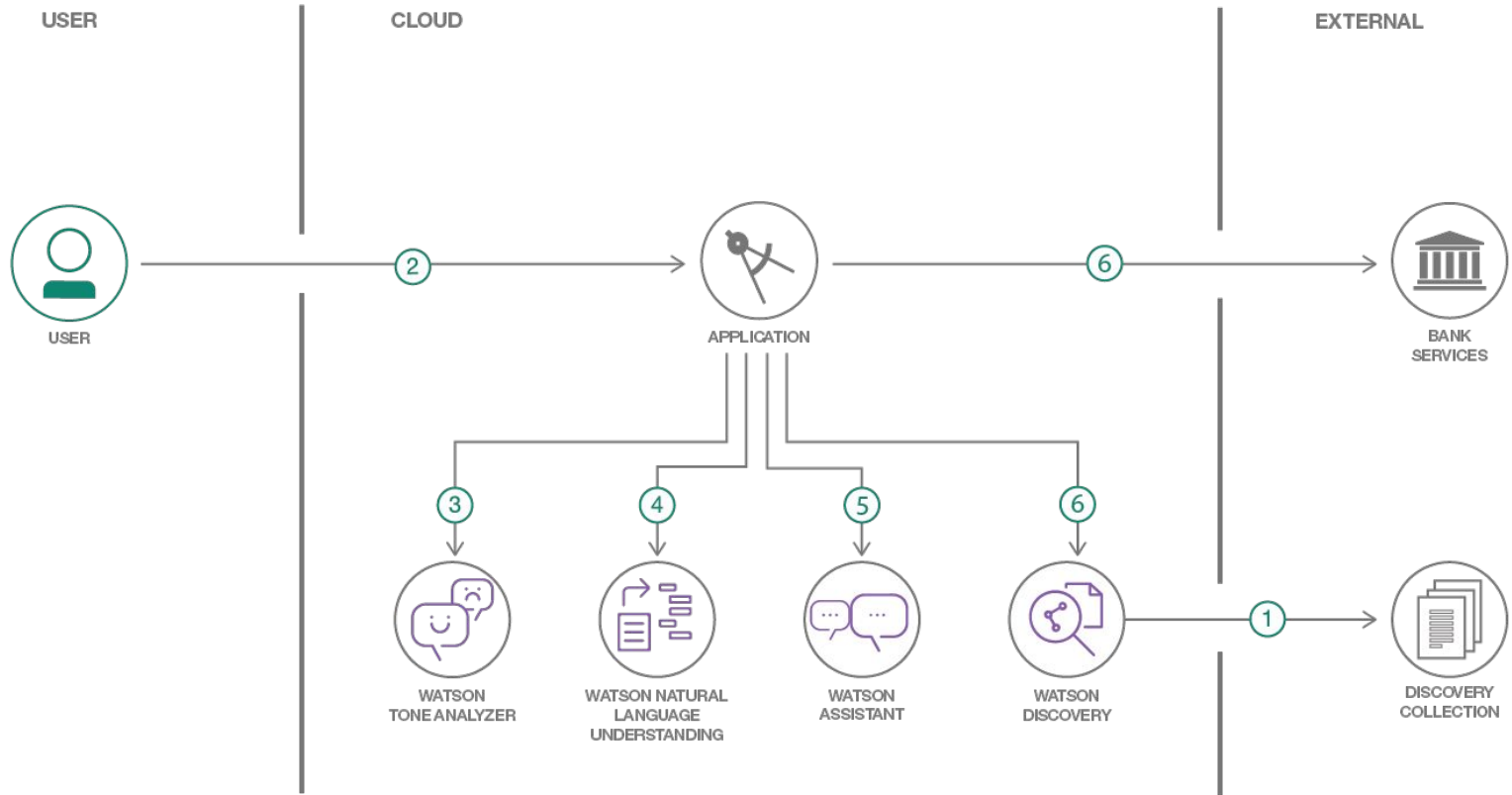
# Adoption Plan

We wish to deploy the below given adoption plan:

1. To make it easier for consumers to use the bank application, we will first introduce a section labelled "Virtual Assistance."
2. All physical Banks will have QR codes so that customers while visiting them can learn more about the Virtual Assistant and the services provided by it.
3. As a test mode, we will start the rollout with nearby institutions and start-ups in the financial industry.
4. Continuous user feedback will be used to fix bugs and maintain the Virtual Assistant.
5. Additionally, we will implement this in the village bank sector so that people may begin receiving support in their own tongue.
6. Spreading awareness of the Virtual Assistant using social media as a marketing tool so that more people are aware of it and may receive assistance.
7. People will be given a user manual in their selected language so they can use and comprehend the Virtual Assistance with ease.



# Supporting Diagram



# TECHGIG

# Thank You

Team member names

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