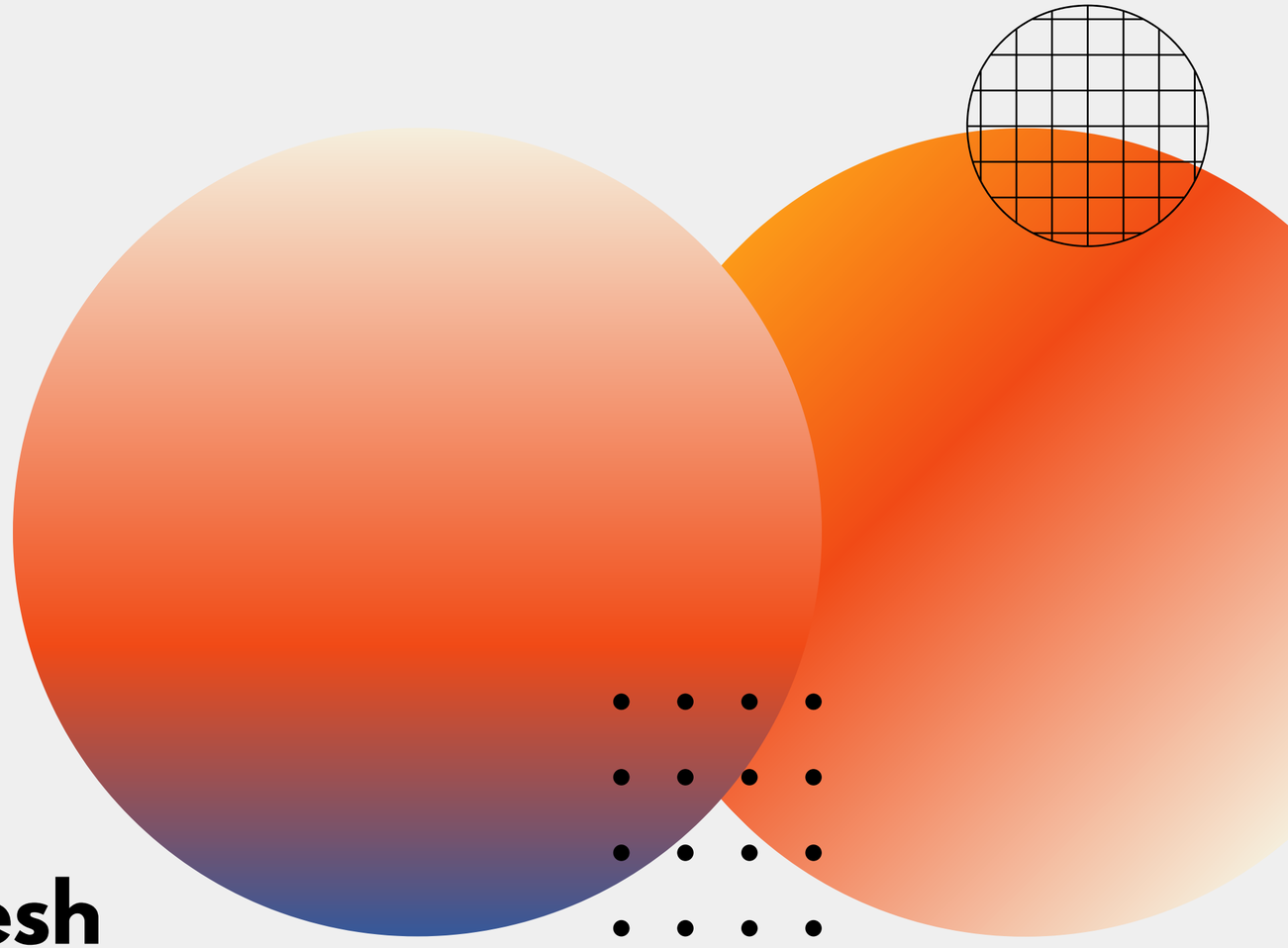
Let's Start

EXL Hackbot

- Deepakindresh



Agenda

Problem Statement
Solution
Design
Features
Demo
Future Scope
Conclusion

Problem Statement

Flexible API Layer

To handle different workloads

Fault-Tolerant

The system should predict failures and scale accordingly

Interactive Design

Easy to use UI/UX and handle structured and unstructured data

Automation

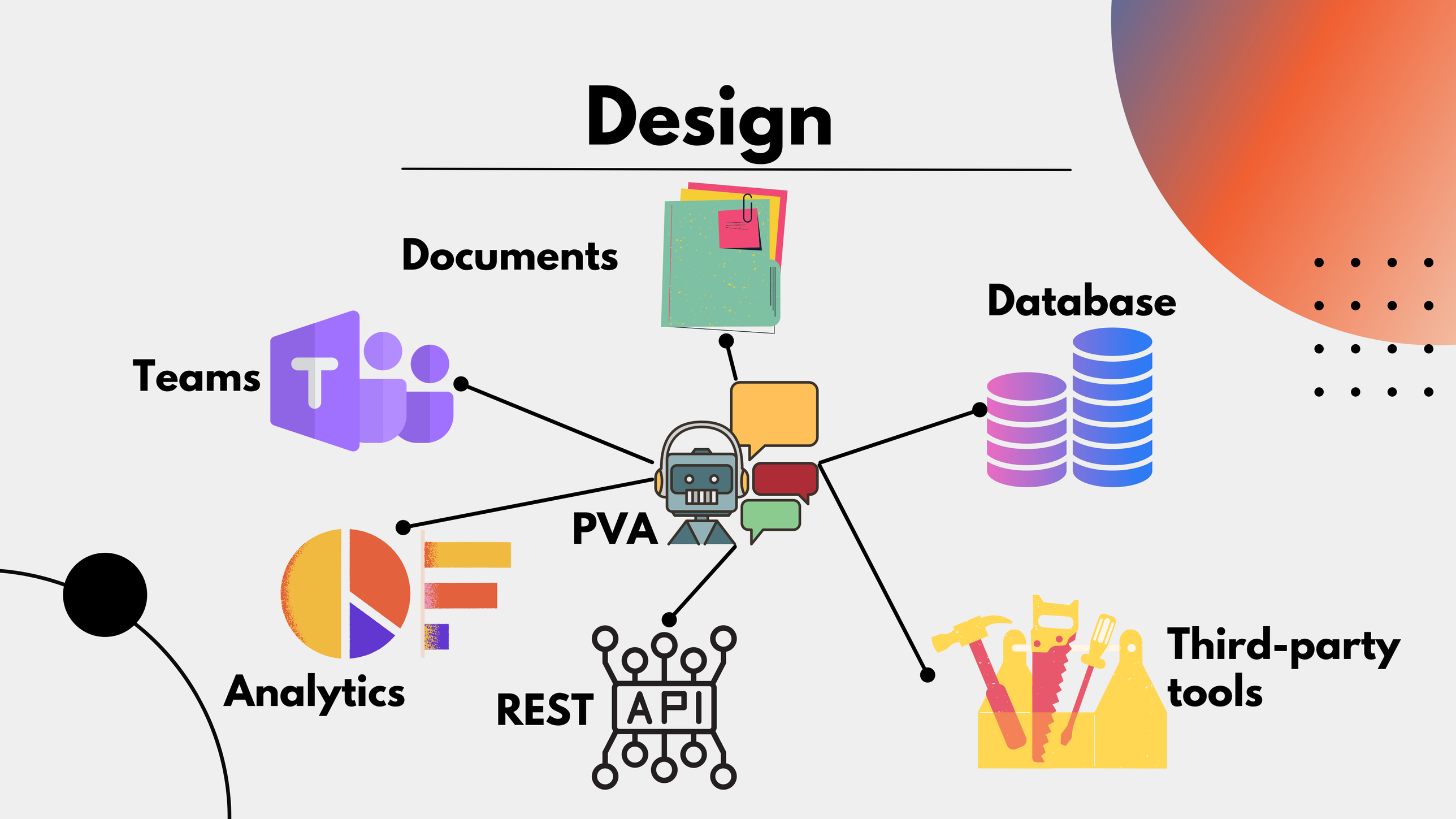
Automation of creating topics by uploading a basic web URL

The Solution

A bot that is not just capable of handling communications, but also takes actions from making API calls to sending messages to live agents, accessing databases all from one place

Hackbot - Power Virtual Agent (PVA)

Design


Documents
Database
Teams
PVA
Analytics
REST
API
Third-party
tools

Features

Secure and Reliable

Analytics

User Friendly Interactions

Intelligent

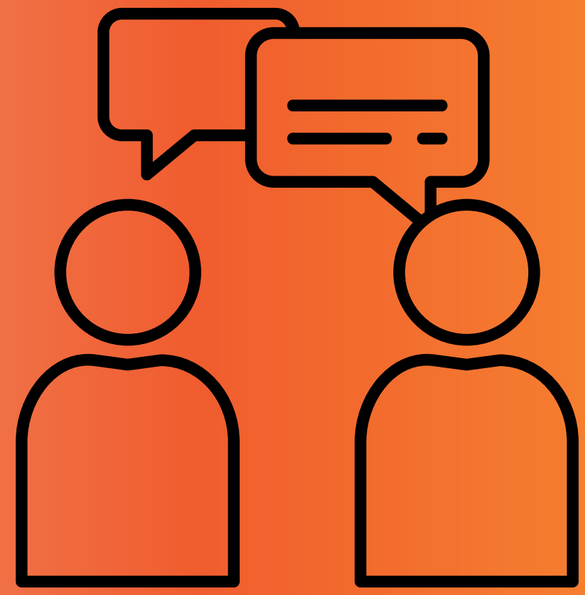
Intelligence

- The bot is capable of suggesting topics if provided a Web URL such as an FAQ page, or a Document hosted in a URL which could be a PDF, etc.

- The bot can also flow from one topic to another topic if it requires additional data without explicitly constructing it

Interactiveness

- The PVA tool provides pre-built topics for greeting and ending conversations etc. which was trained on a huge data corpus
- This allows the bot to understand and respond to unstructured data such as "3 pm today" and converts it to "10-07-2022 15:00:00"



Security and Compliance

- The Hackbot was created using Power Virtual Agent by Microsoft, a Saas solution, and thus security is handled by the cloud.
- Furthermore, there are additional features such as authentication and web channel security.

Analysis and Testing

- The Virtual Power Agent also provides tools, graphs, and metrics for analyzing the performance of the bot such as: -
- Engagement Rate
- Escalation Rate
- Abandon Rate

Implementation

The detailed implementation is provided in the "EXLHackbot_Documentation.pdf" attached in the zip file

Youtube Demo link: https://youtu.be/iyh8jSHfqnw

Self Made Documentation Link:-
https://github.com/Deepakindresh/Hackbot/blob/main/EXLHackbot_Documentation.pdf

Demo Link of Hackbot:-
https://web.powerva.microsoft.com/environments/Default-d4963ce2-af94-4122-95a9-644e8b01624d/bots/466369c7-4963-4a8a-82af-1716433ff342/canvas

Future Scope

Build Recommender Systems using Machine Learning

- Customer-based data
- Product-based data

Customer-based data

Dataset involving customer details such as previous orders, age, weekday most visited etc.

Scenario: Food Restaurant Company (Eg. KFC)
For Cross-selling: -
The customer must have a history of trying new things, and different meal orders each time. Thus the model must be able to predict new products that the customer is likely to try.

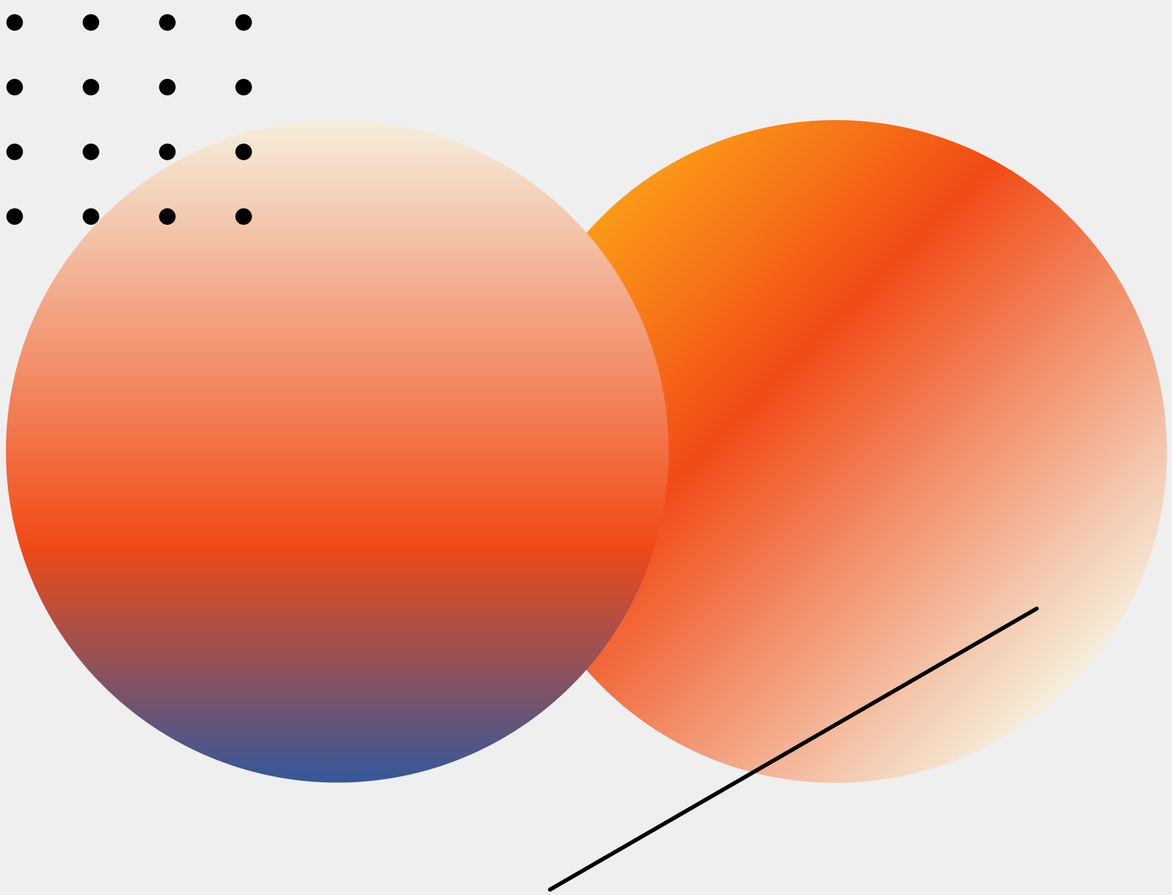
For Upselling: -
It should be a regular customer who orders the same thing and checking his/her age if it is possible to upsell to this person.

Product-based data

Dataset involving product details such as most popular dish, correlation between two different dishes etc.

Scenario: Food Restaurant Company (Eg. KFC)
For Cross-selling: -
The products that are bought together for example if the data suggests that 90% of customers buy fries if ordered burgers, then the machine learning model must suggest fries if the customer asks for a burger.

For Upselling: -
The model must be able to check the day of the week and understand available offers and try upselling products.



Conclusion

The Hackbot is tailored for businesses and enterprises and is highly trustable as it uses well-known Microsoft products.
It can also be customized and created within days for any different company with different goals.

End

Thank you

Do you have any questions?