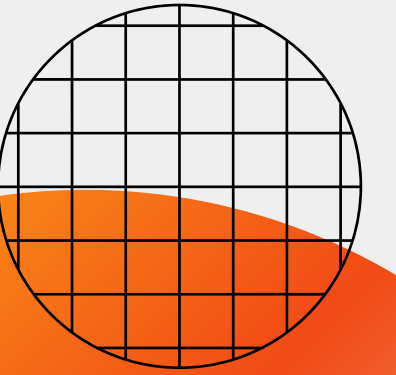


Let's Start

# EXL Hackbot

- Deepakindresh



# Agenda

Problem Statement

Solution

Design

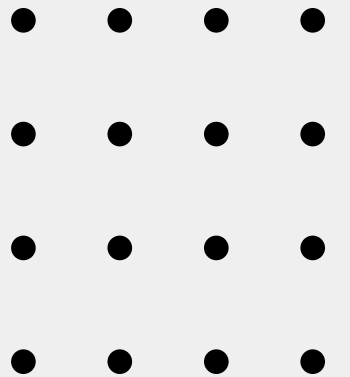
Features

Demo

Future Scope

Conclusion

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# Problem Statement

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## Flexible API Layer

To handle different workloads

## Fault-Tolerant

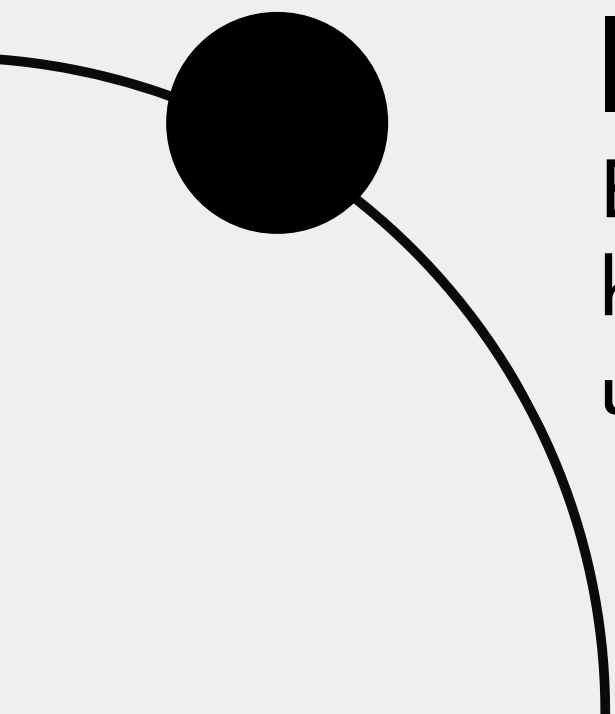
The system should predict failures and scale accordingly

## 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

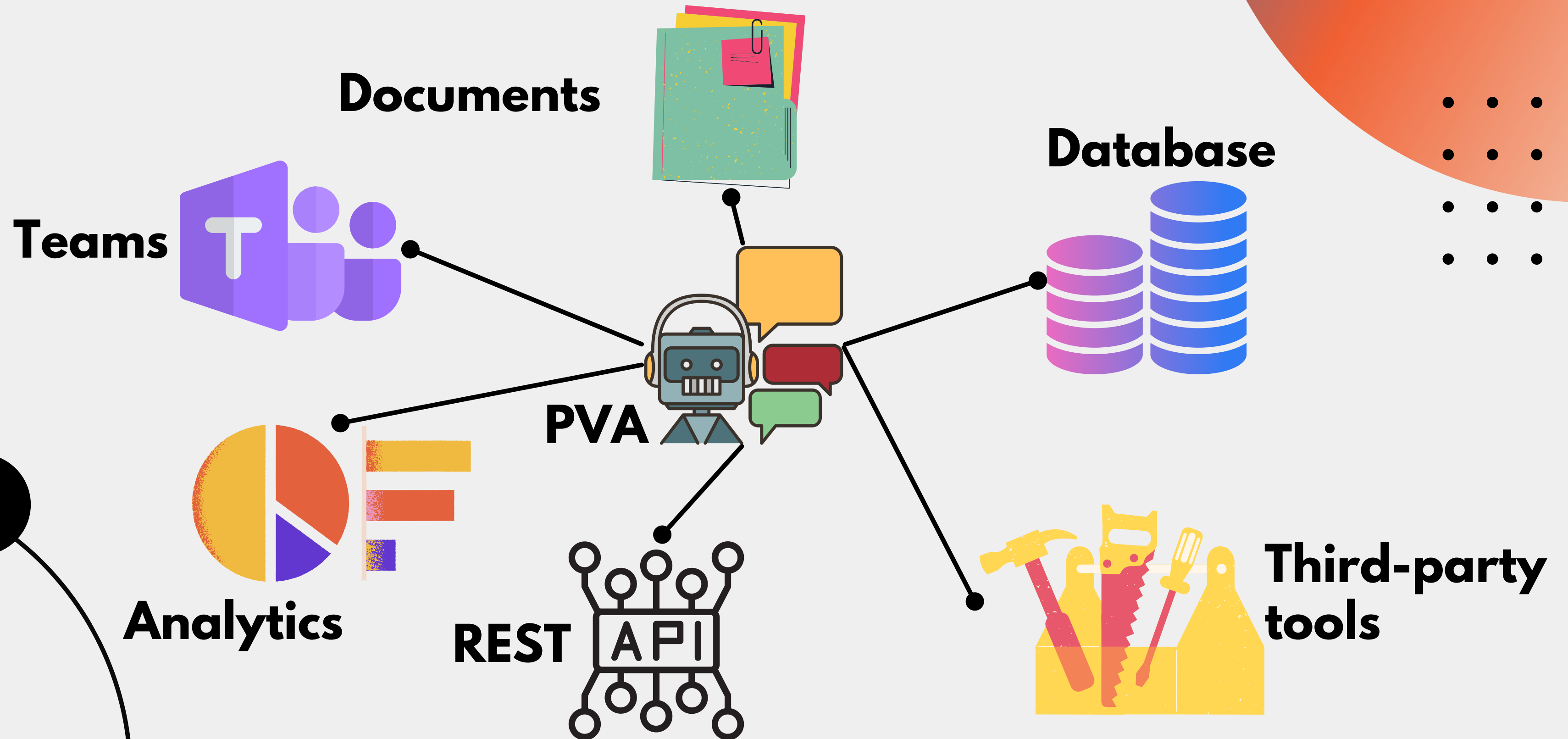
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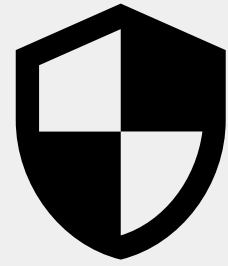
Hackbot - Power Virtual Agent (PVA)

# Design

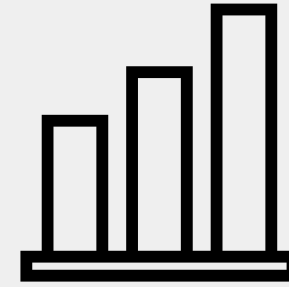
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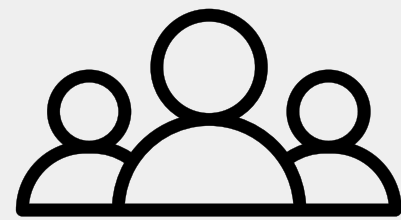
# Features



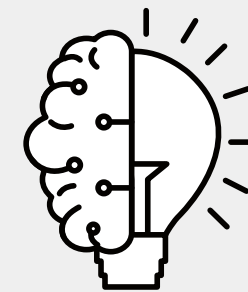
Secure and Reliable



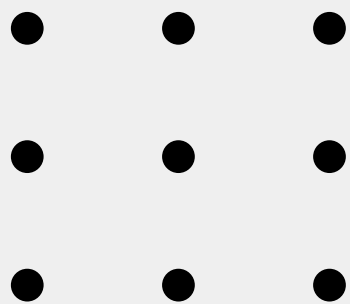
Analytics



User Friendly  
Interactions

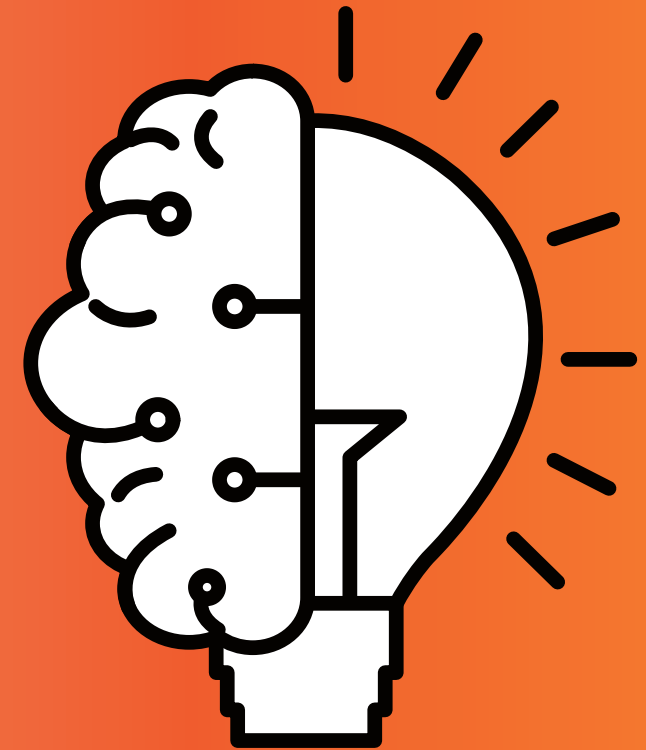


Intelligent



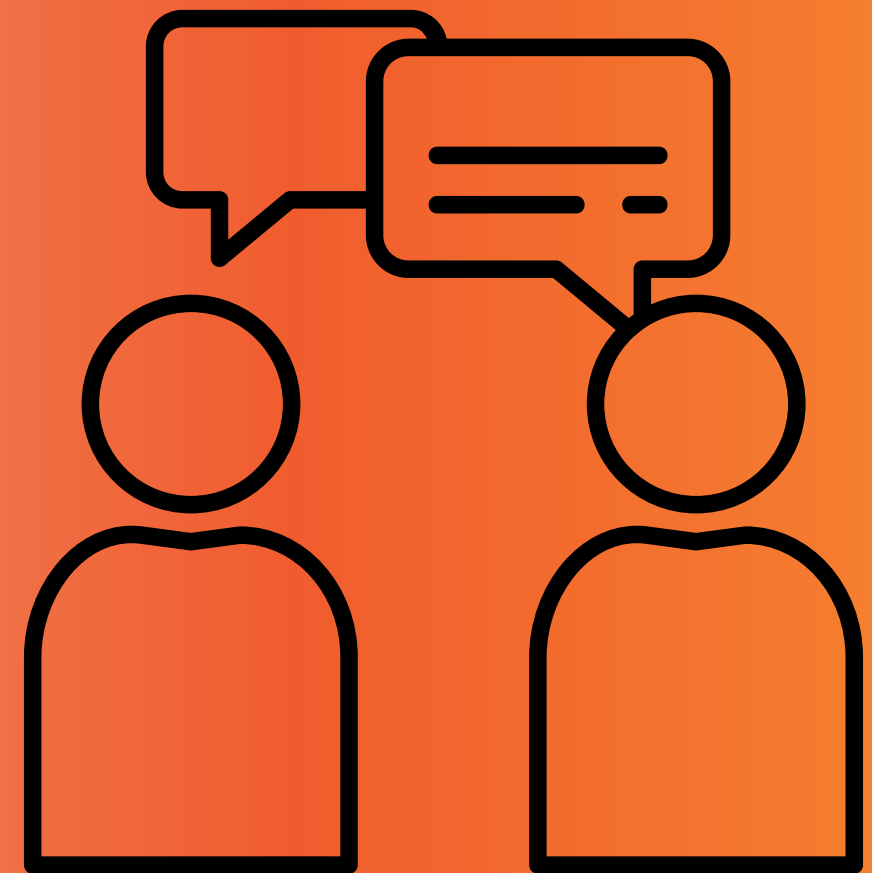
# Intelligence

- 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

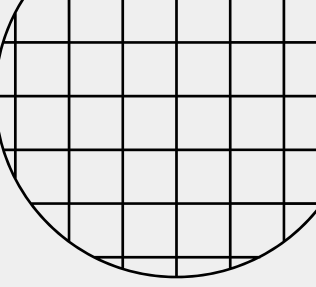
- The Hackbot was created using Power Virtual Agent by Microsoft, a SaaS solution, and thus security is handled by the cloud.
- Furthermore, there are additional features such as authentication and web channel security.



# 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



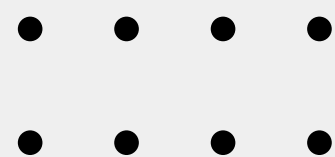


# Implementation

The detailed implementation is provided in the "EXLHackbot\_Documentation.pdf" attached in the zip file

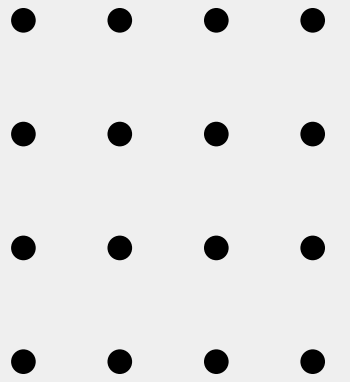
Demo Link of Hackbot:-

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





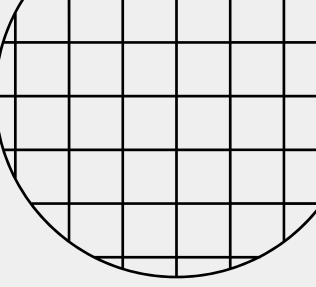
# Future Scope



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)

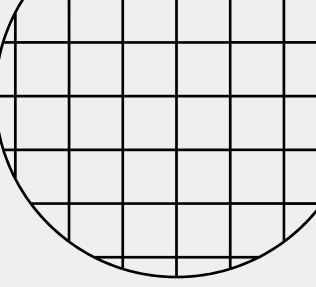
For Cross-selling: -

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.

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- • • •



# 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.

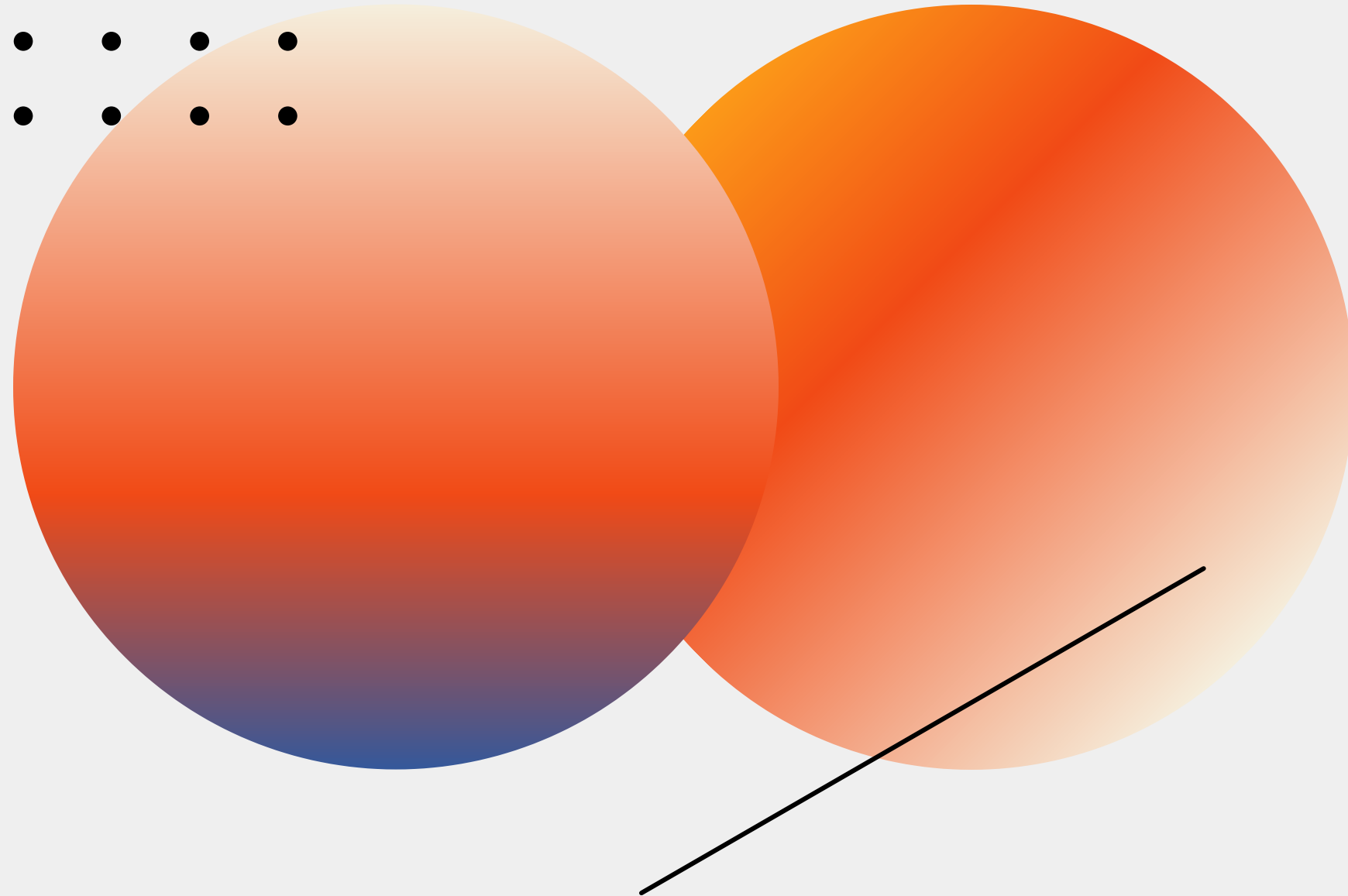
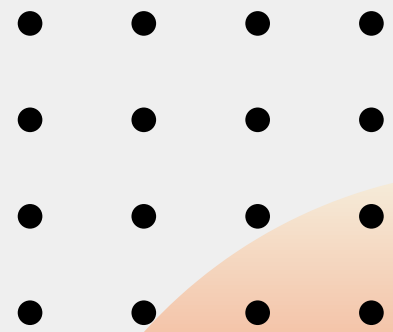
For Upselling: -

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

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# Conclusion

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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?

