Microsoft

Azure Chat Bots
Deep Dive

The Rise of AI
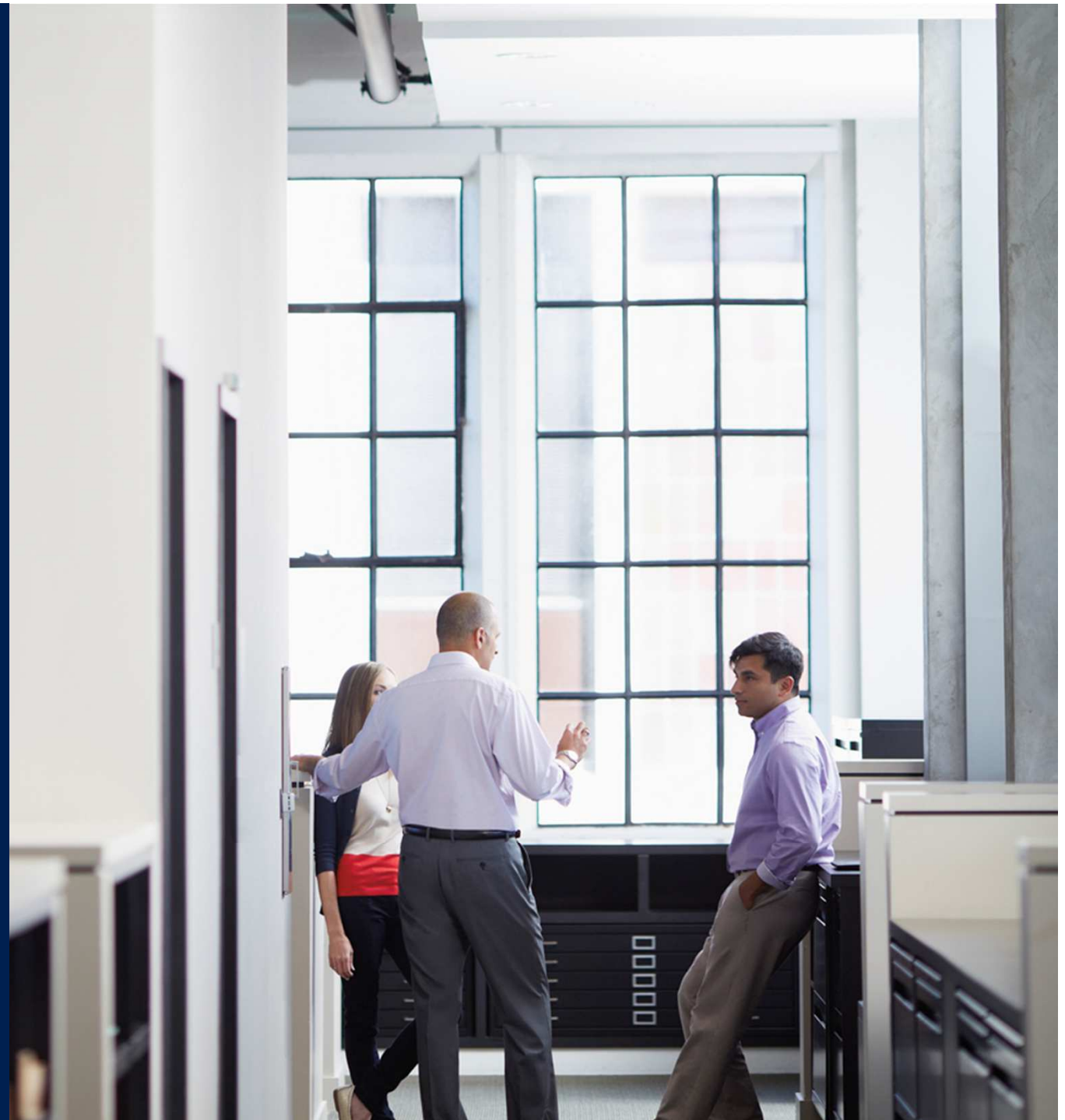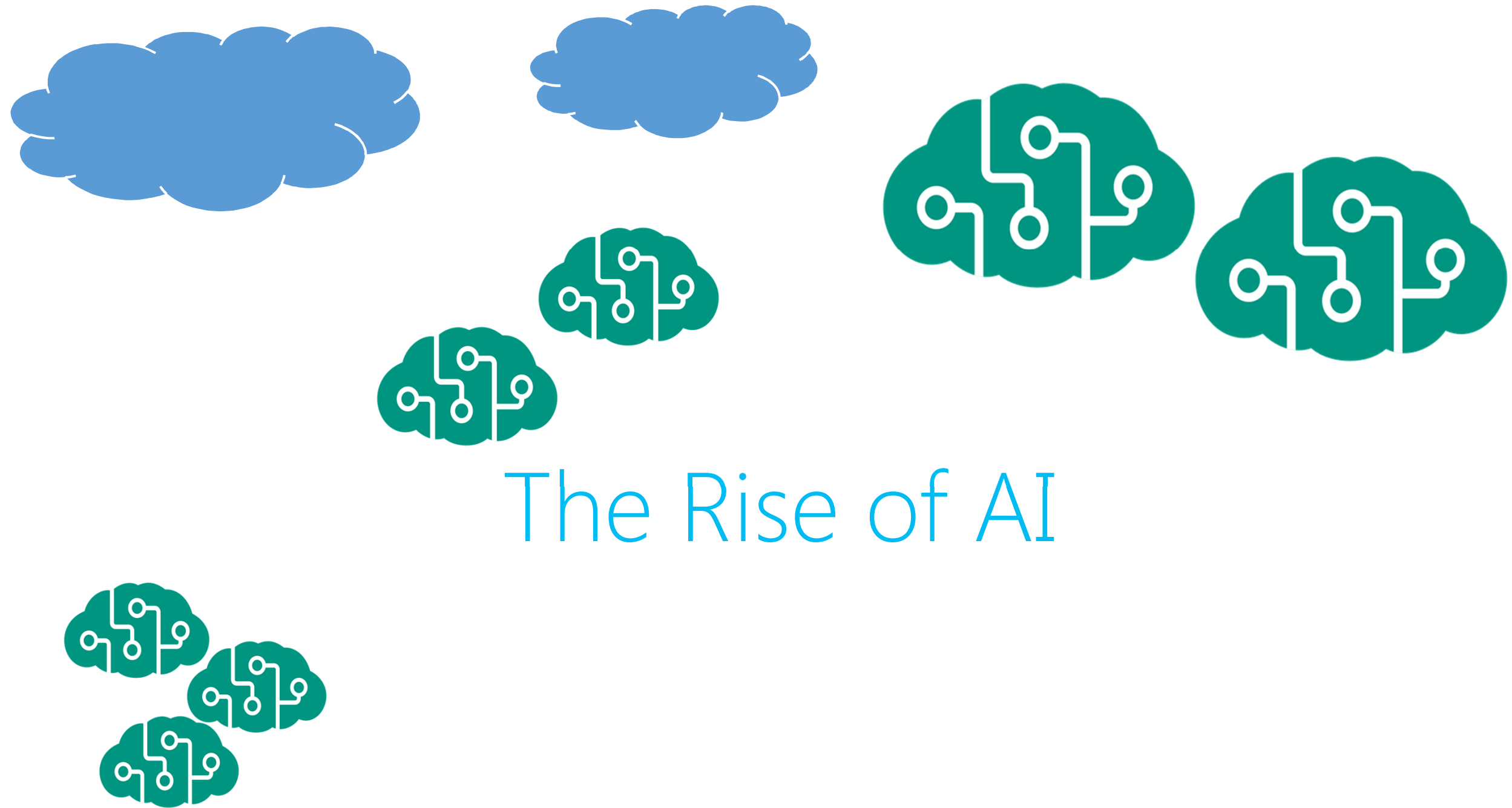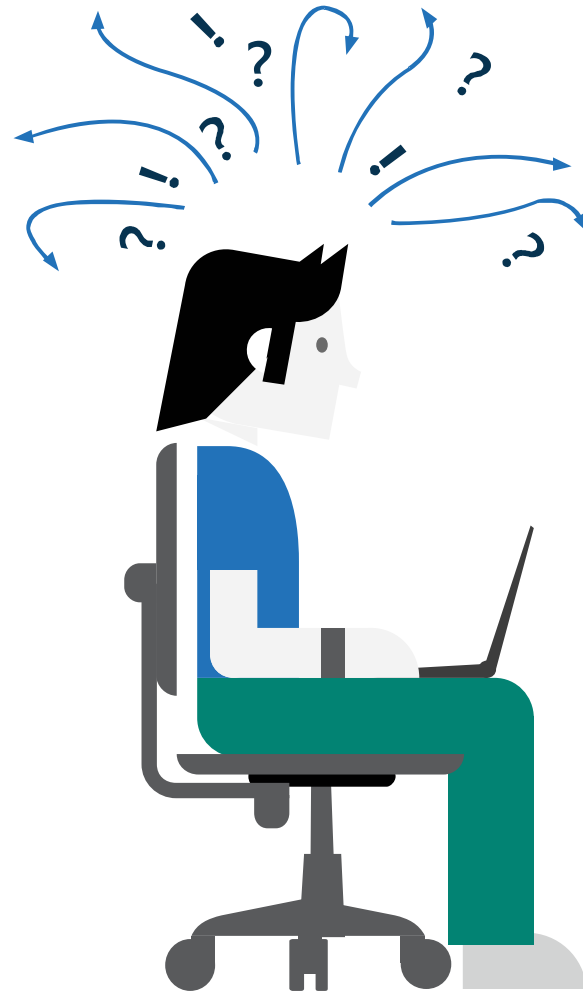
The Rise of AI

I would like to order some food

Hey, Good to See you back... Would you like to checkout the new Italian Restaurant in the city and try out "Pepperoni Pizza" there ?

Search

Sounds Good, Book It !

I am Glad that I am able to help you today. Have a good day !

28 Years Old, Female
Language – English
Sentiment – Neutral
Seen Before – Yes (Voice, Face)
Context – Good Places to Eat

Search
Sentiment (face, text)
recommendations

Book
Sentiment (face → Happy)
Context – Italian Restaurant Booking

Agenda Topics

1 ✓ Introduction

2 ✓ The What, How and Why of Chat Bot

3 ✓ What are Bots

4 ✓ Microsoft Chat Bot Anatomy

5 ✓ Hello Bot

6 ✓ User Input Bot

8 ✓ Waterfall Bot

9 ✓ Adaptive Card

10 ✓ Cortona Bot

Microsoft

Who are we ?

Srikar Kumar Bhaskara

Azure Data + AI Solutions Architect

Founder & CTO @

JumpStartNinja Technologies

100 % Azure AI Focused

MIT Certified Data Scientist

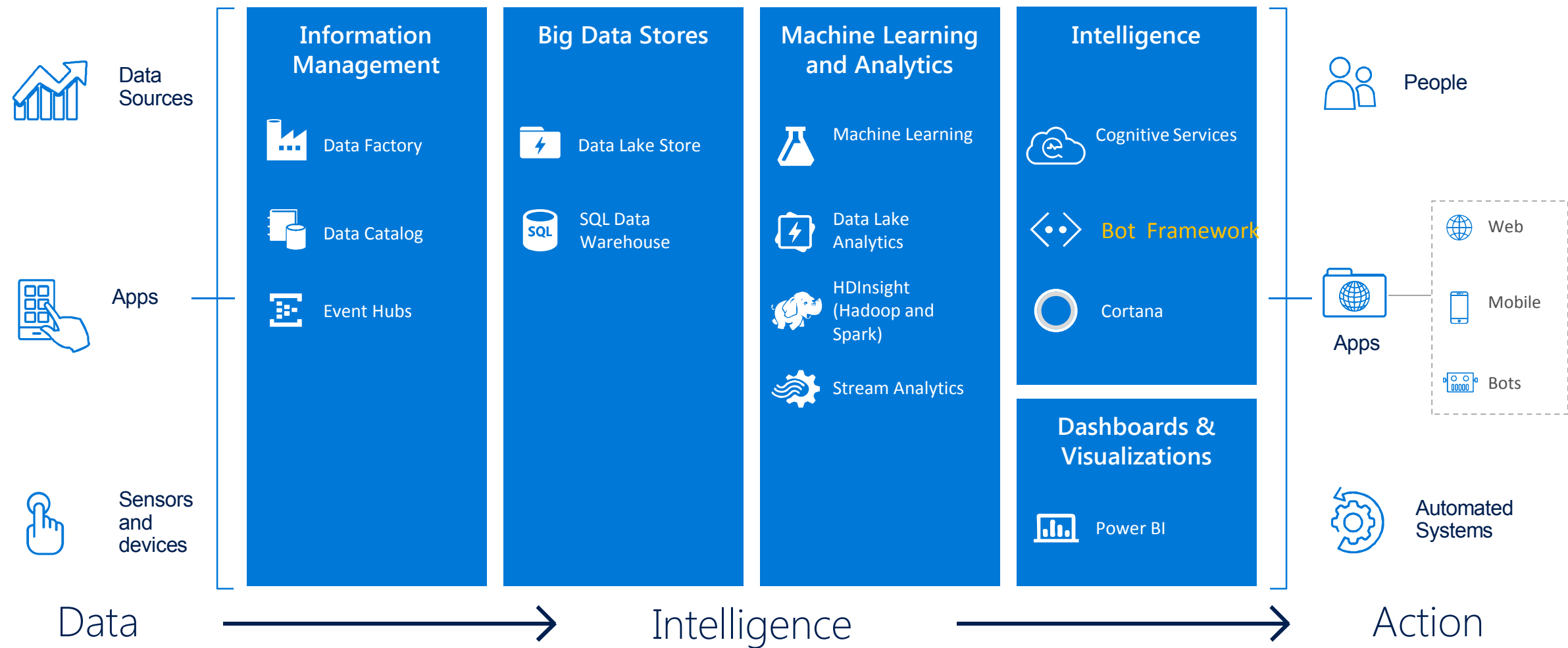Linked In : https://www.linkedin.com/in/srikarkumar

Kevin McCarty

30+ years in the industry with 20+ years of experience in data science and data analytics

Azure Expert

Microsoft Certified Trainer

Linked in: https://www.linkedin.com/in/kevin-mccarty

5

The What, How and Why of Cognitive Services

Cortana Intelligence Suite | Overview

Data Sources

Apps

Sensors and devices

Data → **Intelligence** → **Action**

Information Management
- Data Factory
- Data Catalog
- Event Hubs

Big Data Stores
- Data Lake Store
- SQL Data Warehouse

Machine Learning and Analytics
- Machine Learning
- Data Lake Analytics
- HDInsight (Hadoop and Spark)
- Stream Analytics

Intelligence
- Cognitive Services
- Bot Framework
- Cortana

Dashboards & Visualizations
- Power BI

People

Apps

Automated Systems

- Web
- Mobile
- Bots

What is Bot ?

Bots are users embedded inside a communication platform, But the users are not human but software that interact with the external world and help perform their work or day to day activities
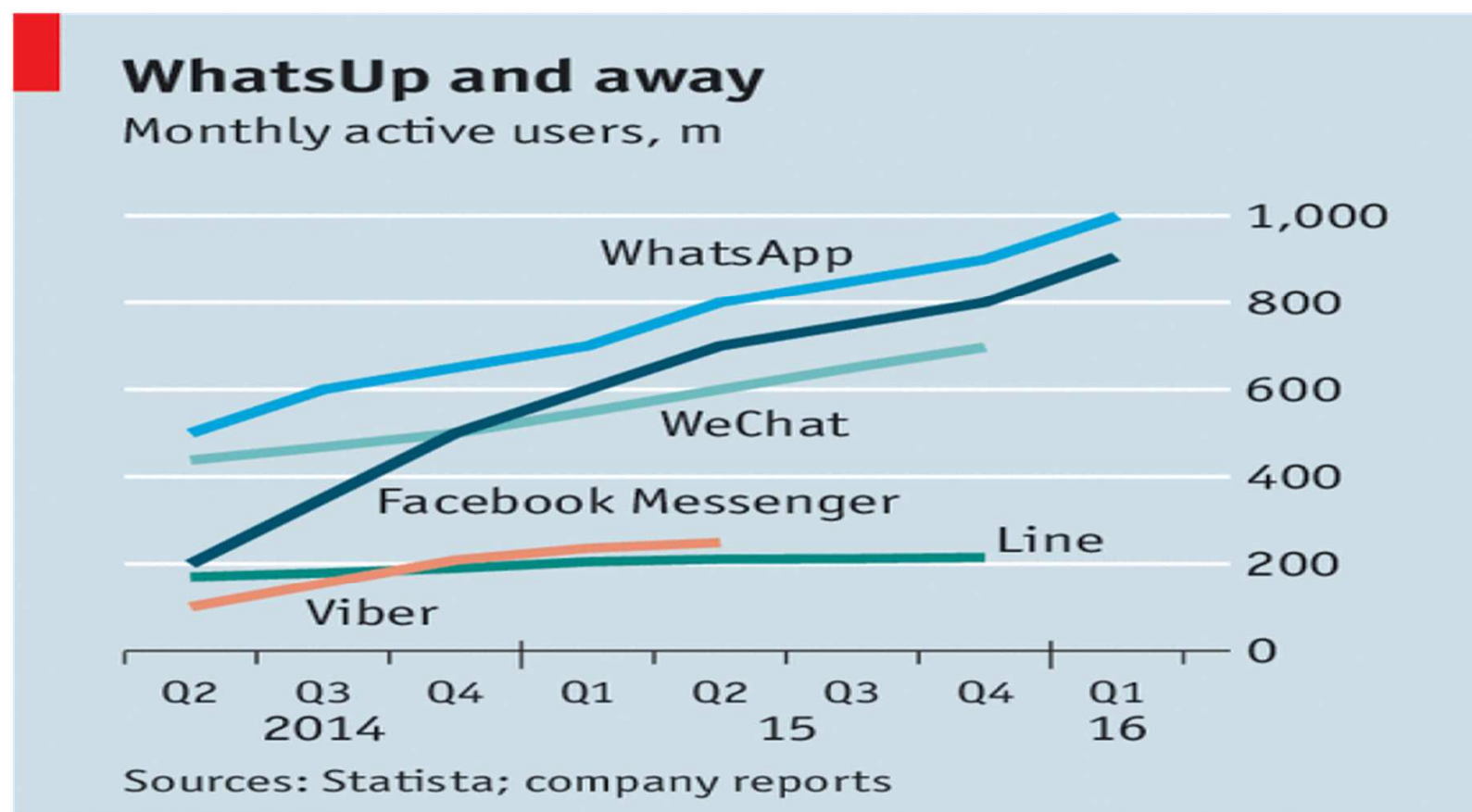
A piece of program that acts like the "First Class Citizen" and provides all support for a particular line of business

A business shift from Desktop to Web to Mobile App to Message Apps

Just another Cross Hair Syndrome Effect ?

What do you think ?
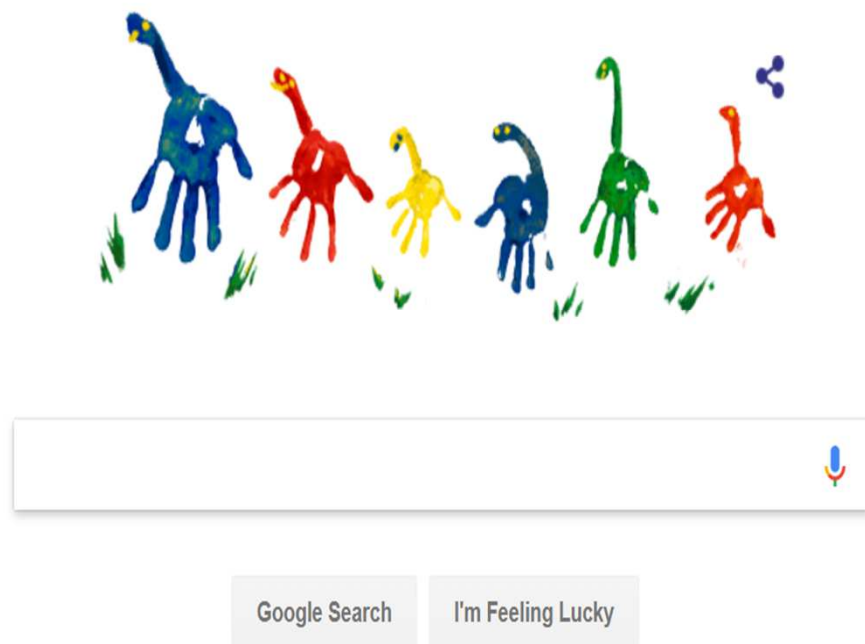
App Economy to Bot Economy

Conversational Commerce

"Messaging" - You've got people just spending time in messaging apps.

We all use messaging apps - Whatsapp, Facebook, Kik, SMS.

We live in these messaging apps

Bots, Chatbots - You can't go anywhere without seeing the hype of Bots and chatbots, ML, AL and NLP and for good reason

Users are tired of Search Bars

2005: Seek Reponse

User: I ordered a book 2 days back. Not yet delivered

Care: The book has been dispatched. You should get it delivered by today.

2015: Interact

When to Replace Search Bar ?

Book a cab ?

Order Food ?

Get the status of your Order ?

Pay your Phone Bill ?

Plan and Book a Holiday Package ?

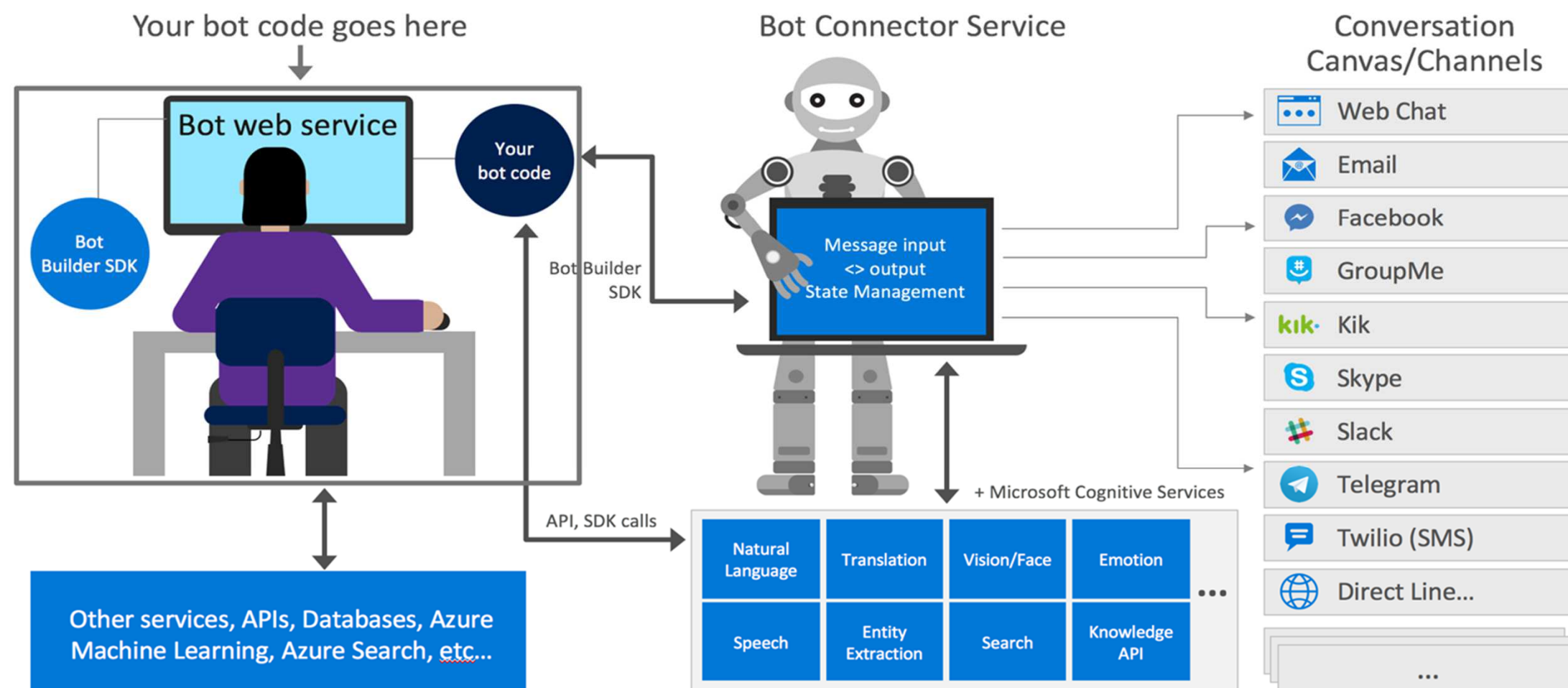Resolving Issue in a services that's being provided ?

Replace FAQs ?

Four Levers of a Super Experience Bot

Extract the Intent

Build the Context

Personalize and Assist
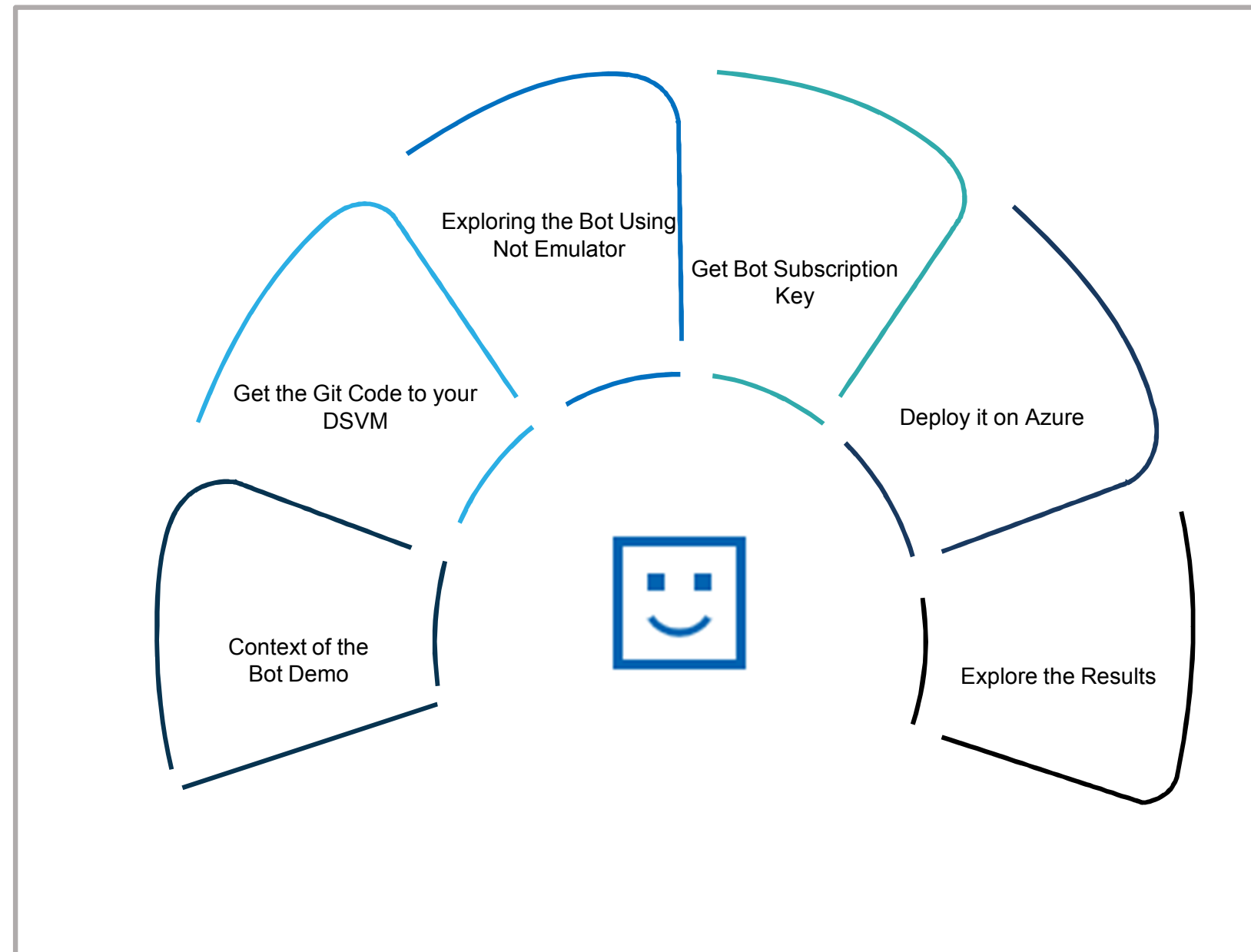
Provide Relevant Results

The Anatomy of Microsoft Bot

Your bot code goes here

Bot web service

Bot Builder SDK

Your bot code

Bot Builder SDK

API, SDK calls

Other services, APIs, Databases, Azure Machine Learning, Azure Search, etc...

Bot Connector Service

Message input <> output State Management

+ Microsoft Cognitive Services

| Natural Language | Translation | Vision/Face | Emotion |
| Speech | Entity Extraction | Search | Knowledge API |

Conversation Canvas/Channels

Web Chat

Email

Facebook

GroupMe

Kik

Skype

Slack

Telegram

Twilio (SMS)

Direct Line…

…

14

Types of Bot Service

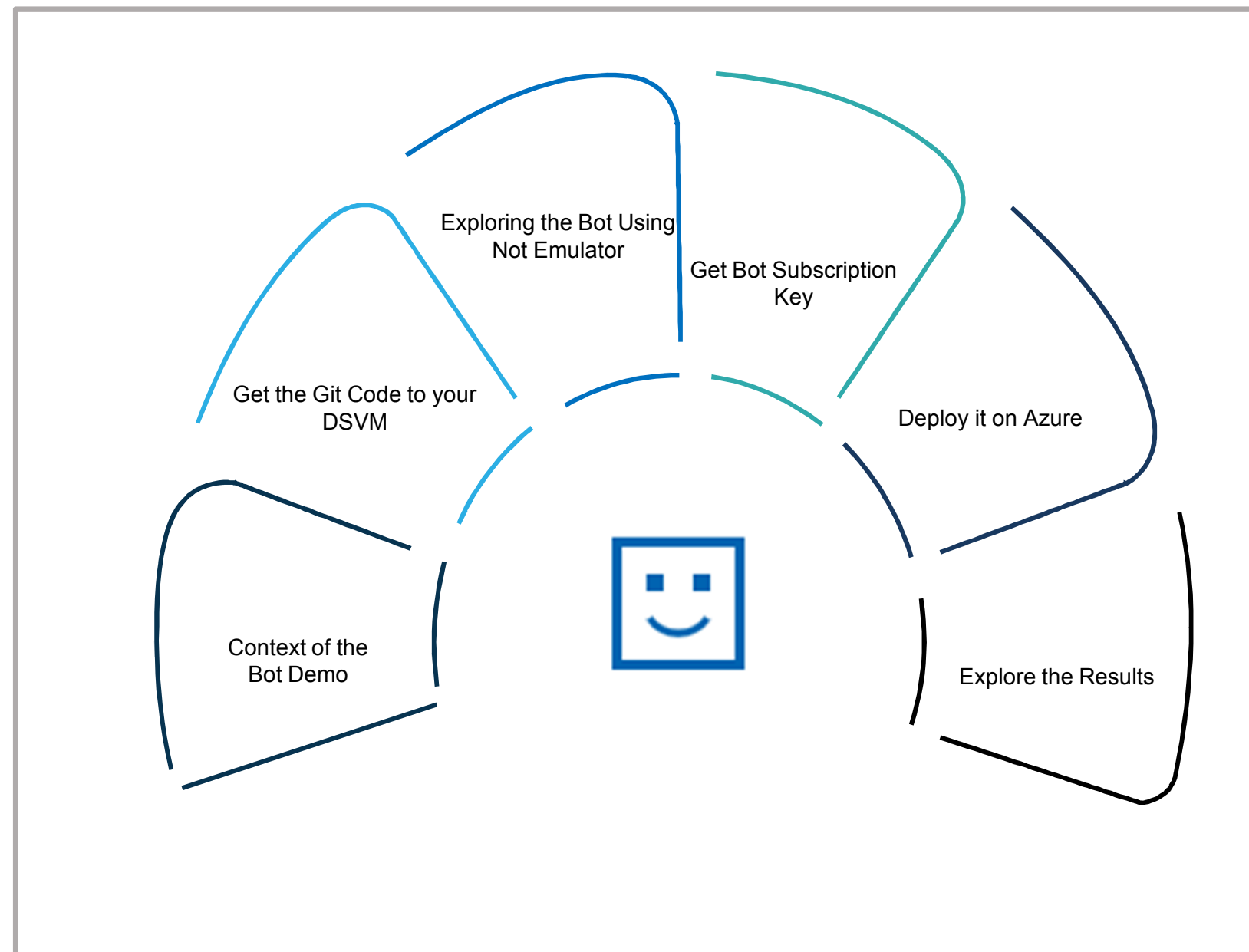| Template	Description
Basic	Creates a bot that uses dialogs to respond to user input.
Form	Creates a bot that collects input from a user via a guided conversation that is created using FormFlow (in C#) or waterfalls (in Node.js).
Language understanding	Creates a bot that uses natural language models (LUIS) to understand user intent.
Proactive	Creates a bot that uses Azure Functions to alert users of events.
Question and Answer	Creates a bot that uses a knowledge base to answer the user's questions.

"Hello World" Bot Demo

Hands on Lab

- Simple "Hello Word" Demo

Exploring the Bot Using
Not Emulator

Get Bot Subscription
Key

Get the Git Code to your
DSVM

Deploy it on Azure
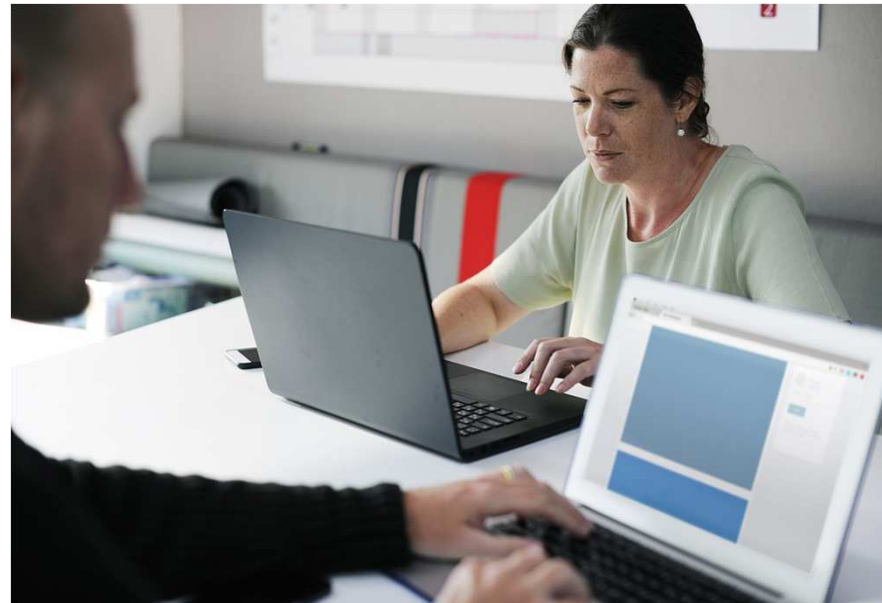
Context of the
Bot Demo

Explore the Results

User Input Bot 1 Demo

- Prompting User for an input as text

- Responding back to the user with stored value

Exploring the Bot Using Not Emulator

Get Bot Subscription Key

Get the Git Code to your DSVM
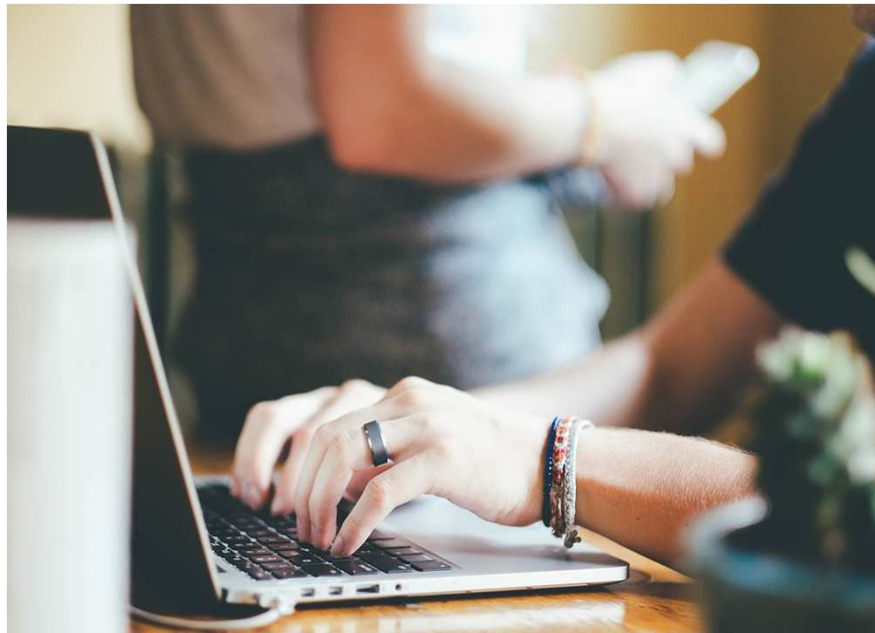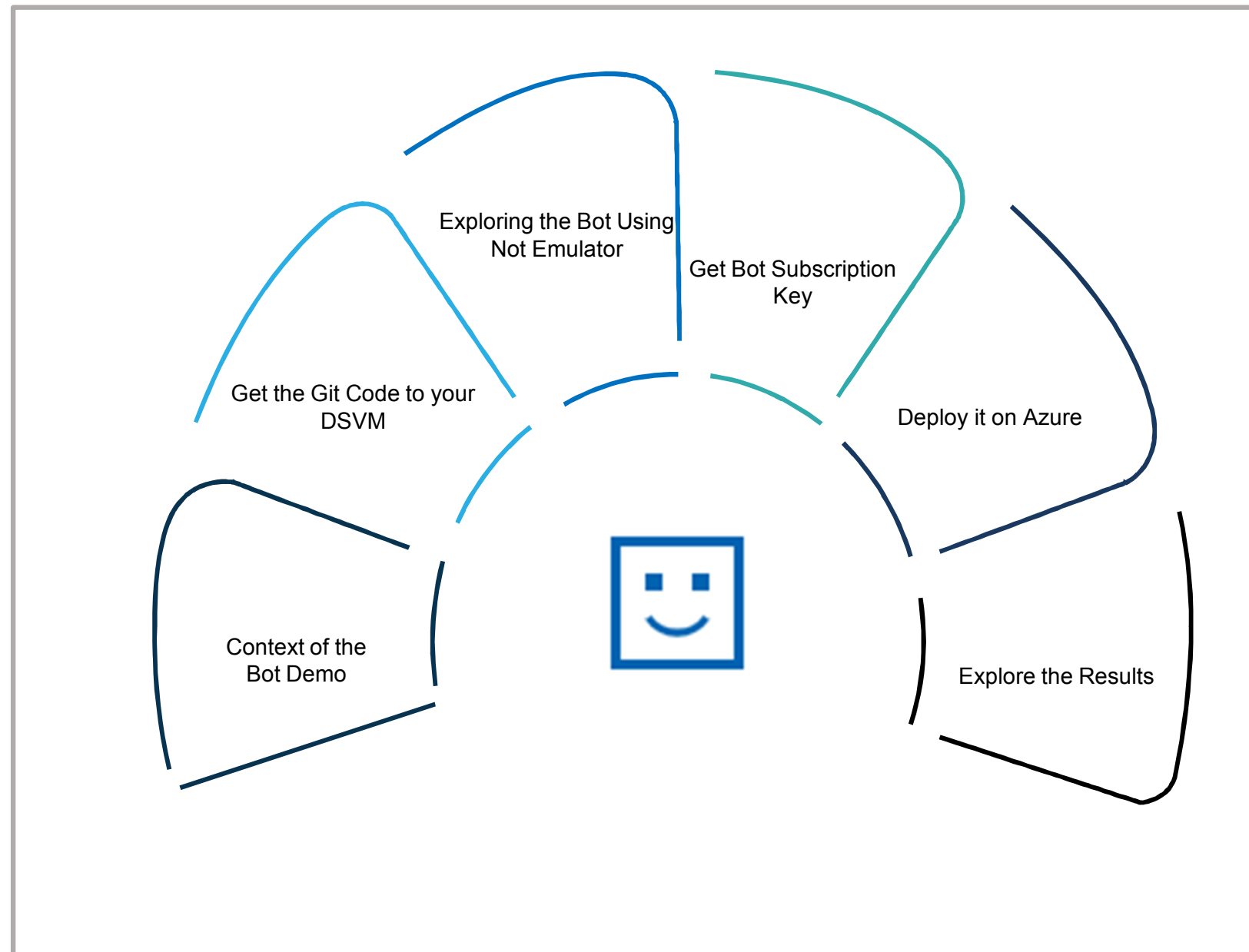
Deploy it on Azure

Context of the Bot Demo

Explore the Results

User Input Bot 2 Demo

- Prompting User for an input as a Choice

- Responding back to the user with stored value

Exploring the Bot Using Not Emulator

Get Bot Subscription Key

Get the Git Code to your DSVM

Deploy it on Azure
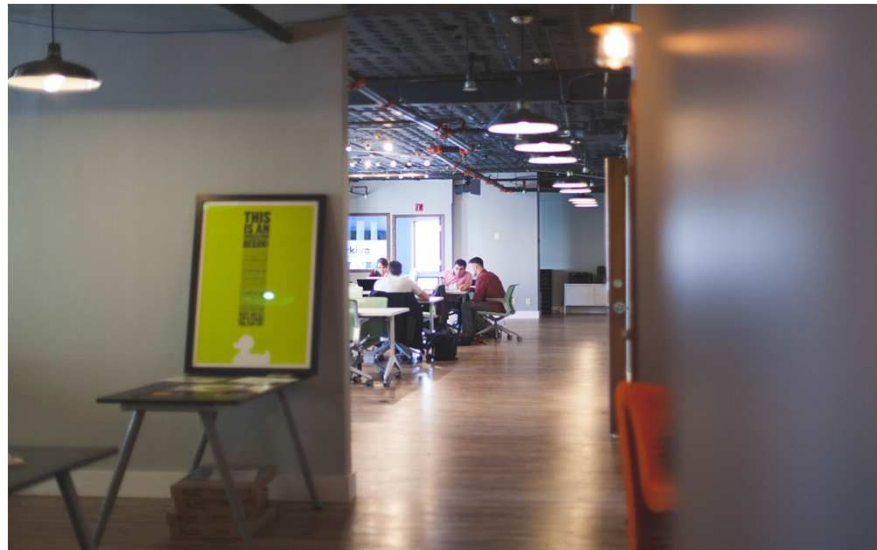
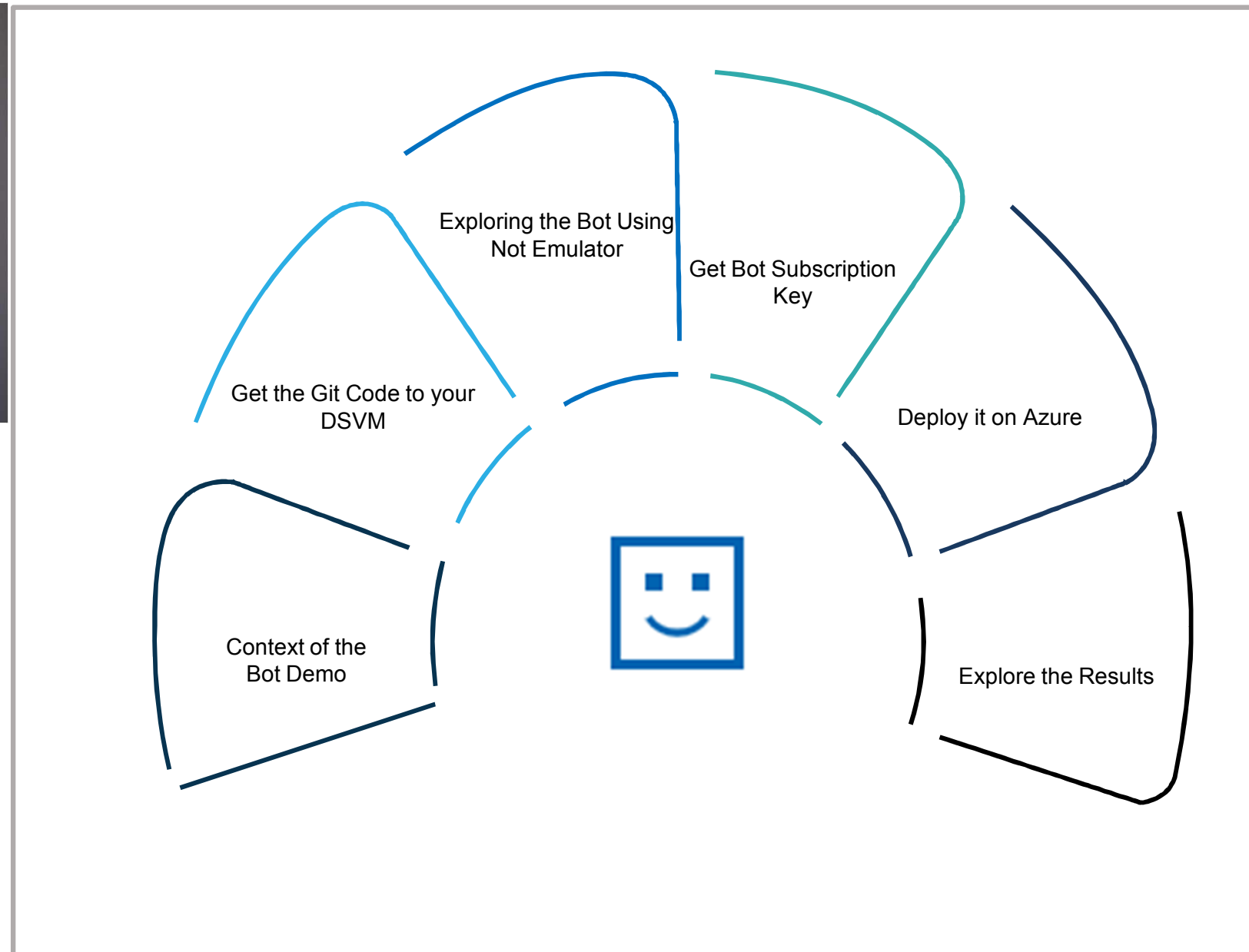Context of the Bot Demo

Explore the Results
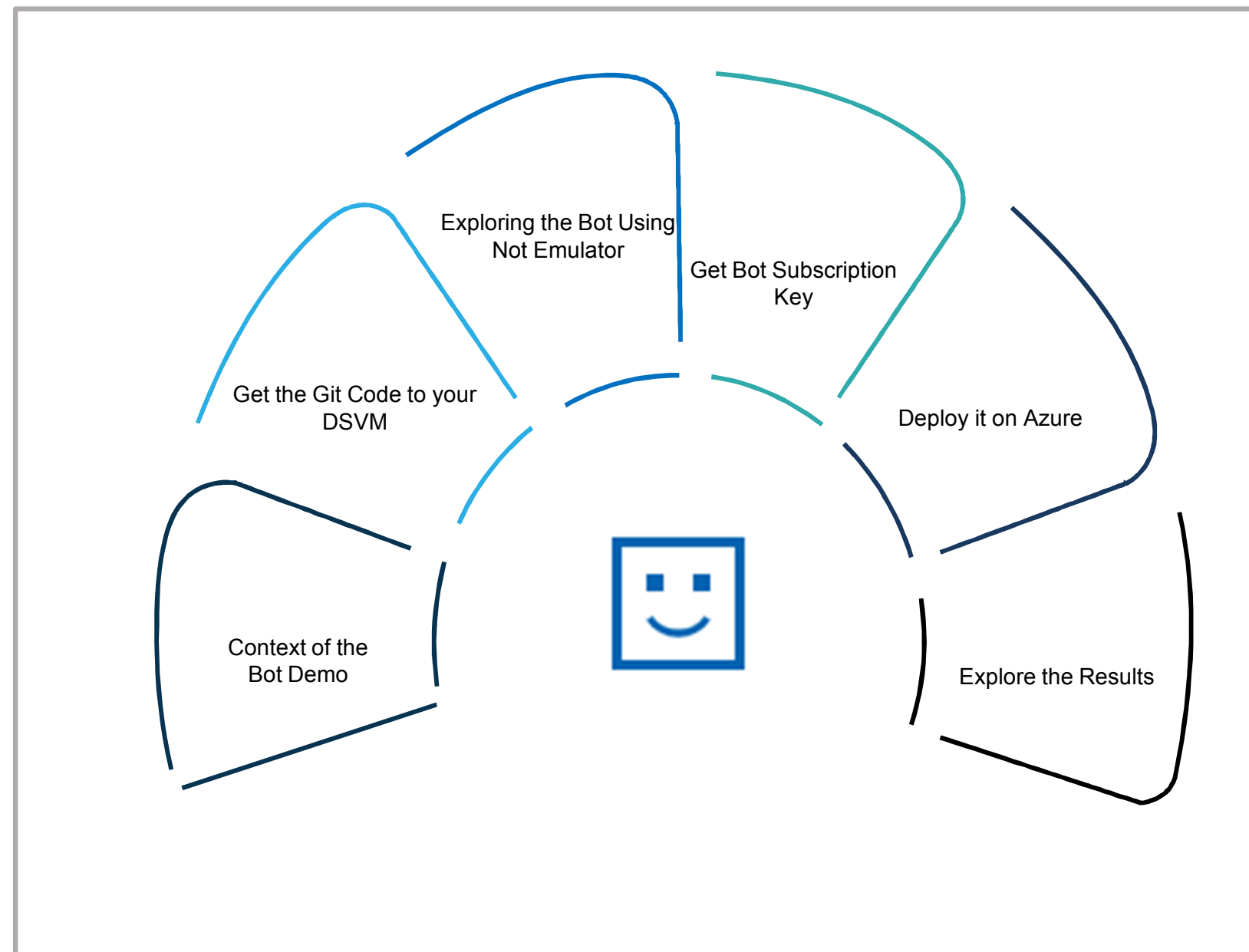
Waterfall Bot Demo

- Prompting the User for Series of Inputs

- Responding back to the user with the summary of stored values

Exploring the Bot Using Not Emulator

Get Bot Subscription Key

Get the Git Code to your DSVM

Deploy it on Azure

Context of the Bot Demo

Explore the Results

Adaptive Card Bot

Building Beautiful UI to Bot

Exploring the Bot Using Not Emulator

Get Bot Subscription Key

Get the Git Code to your DSVM

Deploy it on Azure

Context of the Bot Demo

Explore the Results

Cortana Bot Demo

- Analyze Image
- Find a Celebrity
- Find a Landmark

Exploring the Bot Using Not Emulator

Get Bot Subscription Key

Get the Git Code to your DSVM

Deploy it on Azure

Context of the Bot Demo

Explore the Results