Microsoft

Cognitive services with Python

Mathias Adityo
Maliqi Akbar

JL. MALIOBORO

LIVE JAKARTA

PROFIT

DEDDY PRANAWA ERYANA

KETUA UMUM PHRI YOGYAKARTA

FOUNDER HOTEL RUBA GRAHA YOGYAKARTA

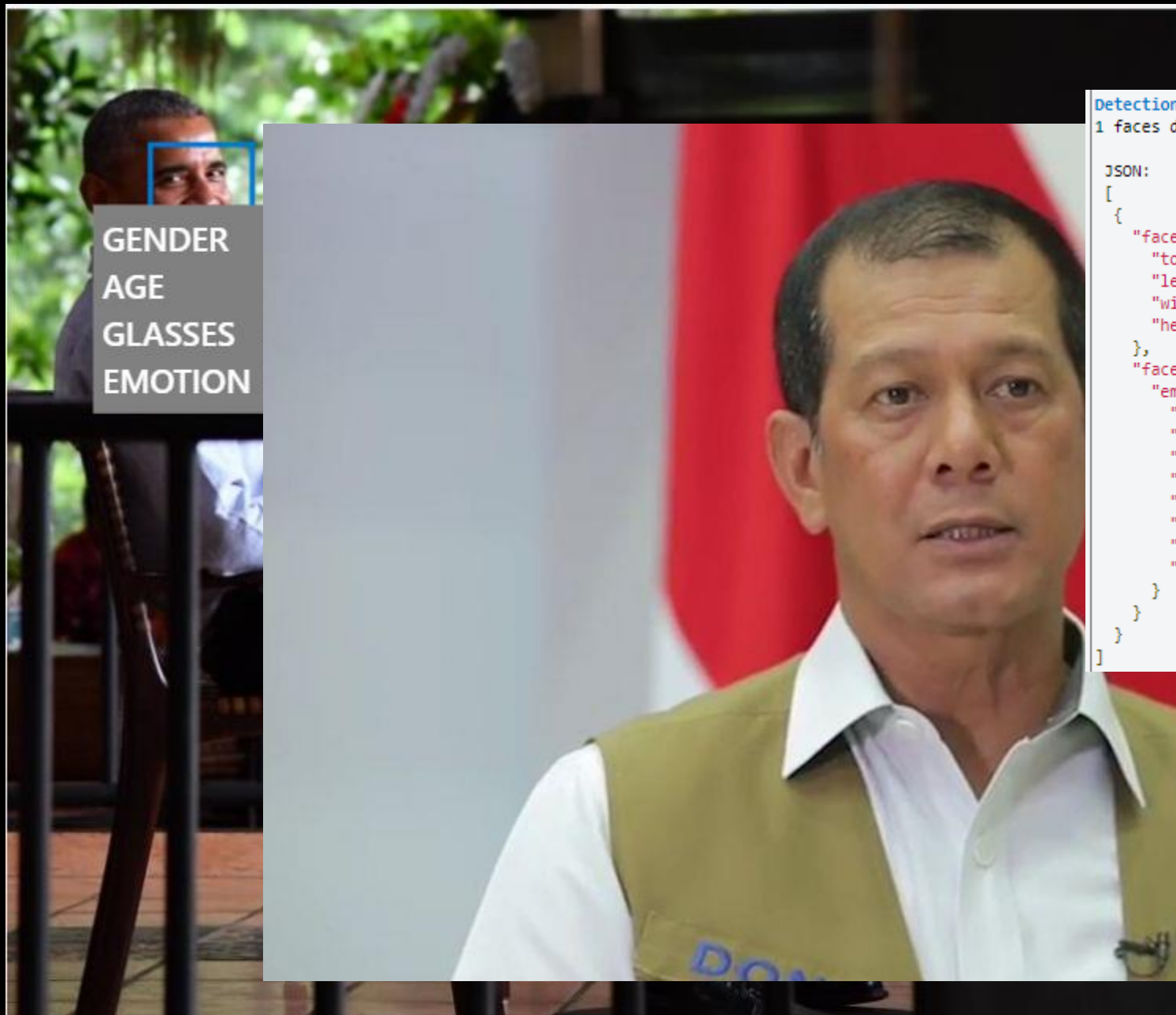S1-HUKUM UNIVERSITAS ISLAM INDONESIA

PROPERTY OF CNBC INDONESIA

PROPERTY OF CNBC INDONESIA

EBLOK 50%

PROFIT   PANDEMI, RATUSAN HOTEL BANGKRUT

GENDER
AGE
GLASSES
EMOTION

Detection result:
2 faces detected
JSON:

Detection result:
1 faces detected

JSON:
[
  {
    "faceRectangle": {
      "top": 120,
      "left": 350,
      "width": 185,
      "height": 185
    },
    "faceAttributes": {
      "emotion": {
        "anger": 0.0,
        "contempt": 0.0,
        "disgust": 0.0,
        "fear": 0.0,
        "happiness": 0.0,
        "neutral": 0.993,
        "sadness": 0.003,
        "surprise": 0.003
      }
    }
  }
]

Microsoft Cognitive Services

Give your apps a human side

Vision

From faces to feelings, allow your apps to understand images and video

Speech

Hear and speak to your users by filtering noise, identifying speakers, and understanding intent

Language

Process text and learn how to recognize what users want

Cognitive Services capabilities

Infuse your apps, websites, and bots with human-like intelligence

Vision

Object, scene, and activity detection

Face recognition and identification

Celebrity and landmark recognition

Emotion recognition

Text and handwriting recognition (OCR)

Speech

Speech transcription (Speech-to-text)

Speech Synthesis (Text-to-speech)

Real-time speech translation

Custom Speech models for transcription and translation

Language

Language detection

Text sentiment analysis

Key phrase extraction

Entity recognition

Spell checking

https://github.com/microsoft/computervision-recipes

https://docs.microsoft.com/en-us/azure/cognitive-services/face/quickstarts/client-libraries?pivots=programming-language-python&tabs=visual-studio
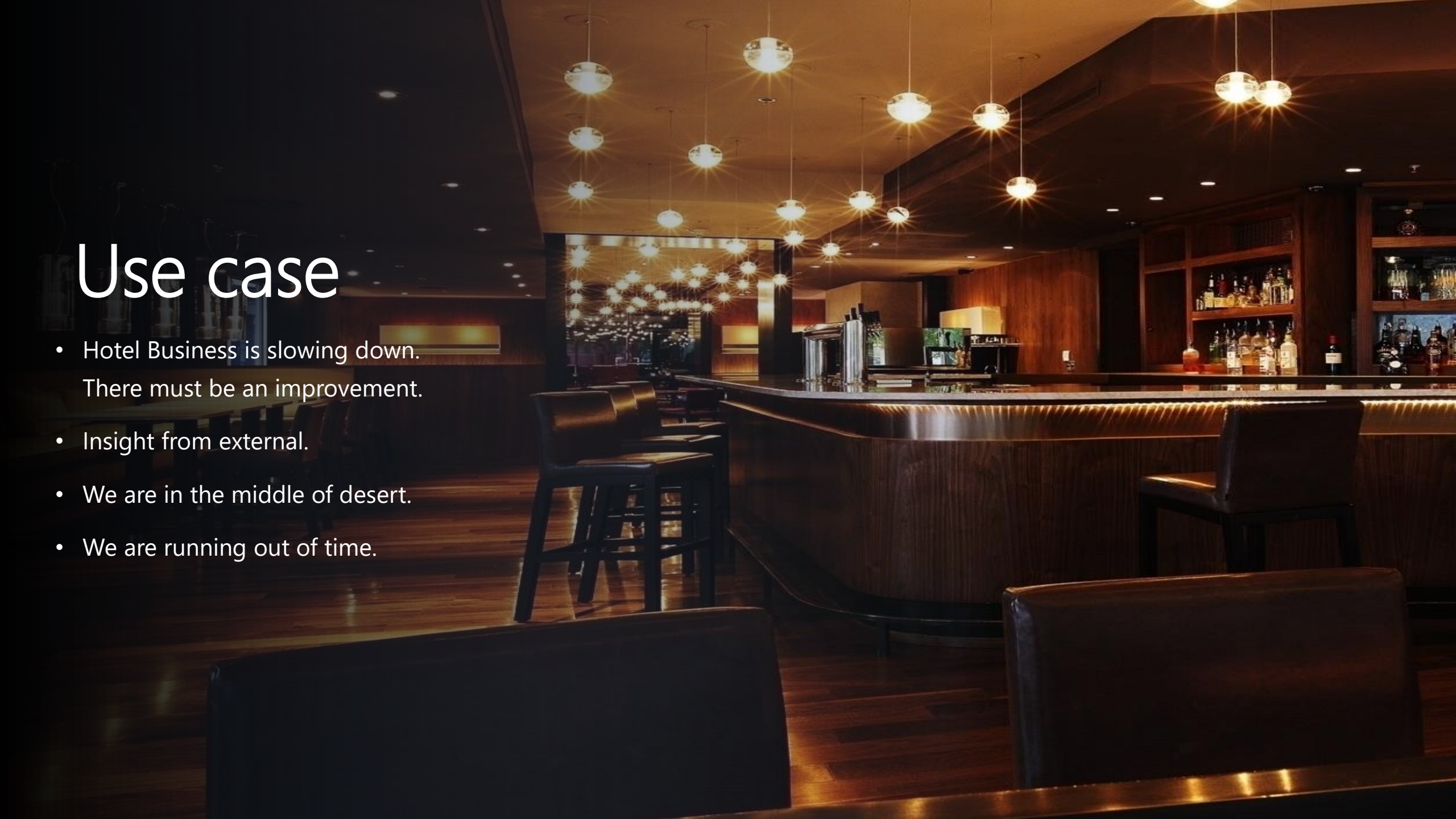
HOLOPORTATION

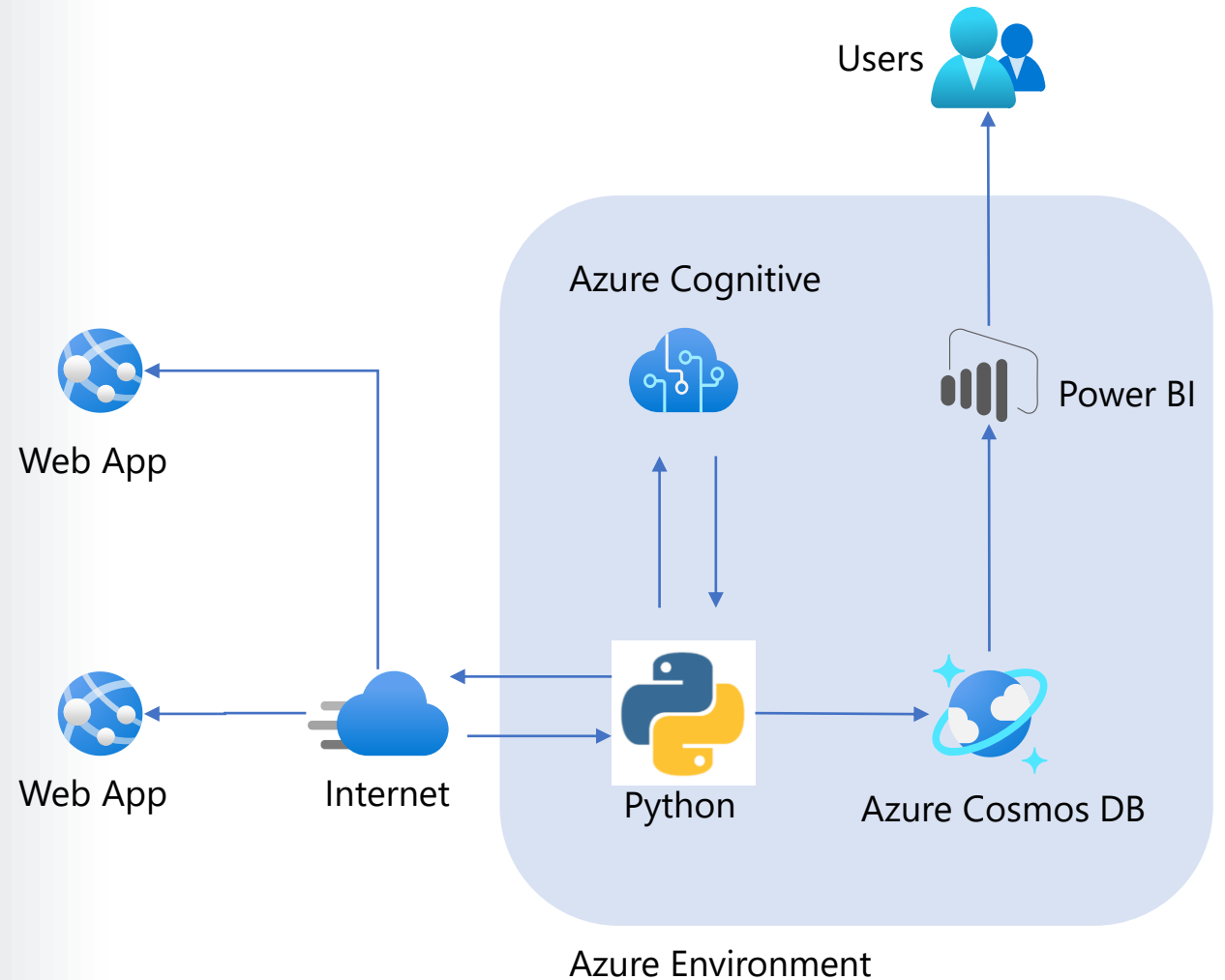https://www.microsoft.com/en-us/research/project/holoportation-3/

Use case

- Hotel Business is slowing down. There must be an improvement.

- Insight from external.

- We are in the middle of desert.

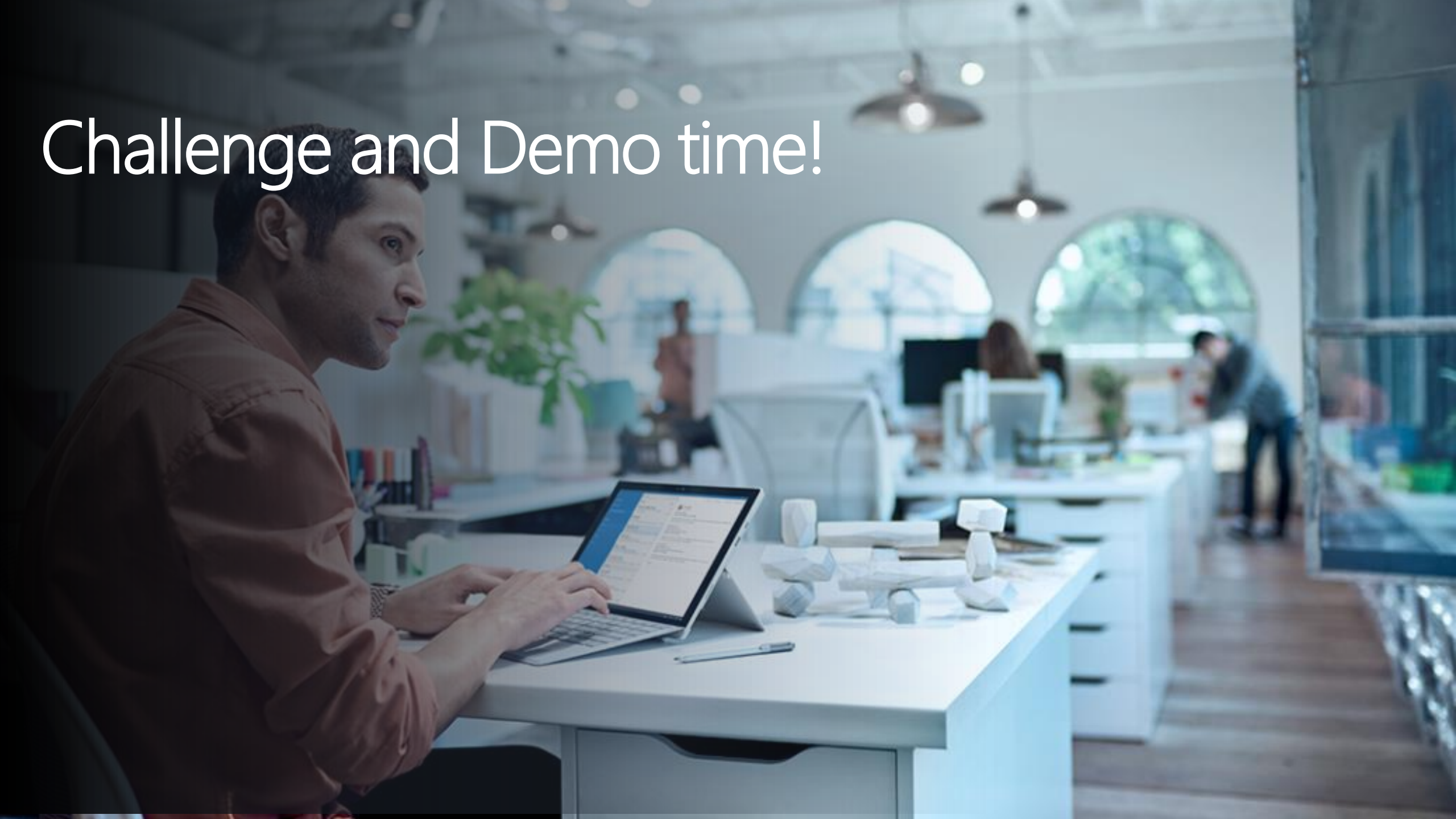- We are running out of time.

What is the idea?

- Python & Selenium (Web Scrapping)

- Azure Text Analytic (Sentiment Analysis)

- Cosmos DB (NoSQL with Gremlin, Mongo DB, Cassandra, SQL, Azure Table)

- Power BI (Faster time to market)

Users

Azure Cognitive

Power BI

Web App

Web App

Internet

Python

Azure Cosmos DB

Azure Environment

Open discussion

Challenge and Demo time!

Developer Services

Visual Studio Team Services   Azure DevTest Labs   VS Application Insights*   HockeyApp   Developer Tools

Management & Security

Azure Portal   Scheduler   Automation   Log Analytics   Key Vault   Security Center*

Compute	Web & Mobile	Data & Storage	Analytics	Internet of Things & Intelligence	Media & CDN	Identity & Access Management
Virtual Machines	Web Apps	SQL Database	Data Lake Analytics*	Azure IoT Suite	Media Services	Azure Active Directory
Virtual Machine Scale Sets	Mobile Apps	DocumentDB	Data Lake Store*	Azure IoT Hub	Content Delivery Network	B2C*
Cloud Services	Logic Apps*	Redis Cache	HDInsight	Event Hubs		Domain Services*
Batch	API Apps	Storage: Blobs, Tables, Queues, Files and Disks	Machine Learning	Cortana Intelligence Suite		Multi-Factor Authentication
RemoteApp	API Management	StorSimple	Stream Analytics	Cognitive Services*		
Service Fabric	Notification Hubs	Search	Data Factory			
Azure Container Service	Mobile Engagement	SQL Data Warehouse*	Data Catalog			
	Functions*	SQL Server Stretch Database*	Power BI Embedded*			

Hybrid Integration

BizTalk Services   Service Bus   Backup   Site Recovery

Networking

Virtual Network   ExpressRoute   Traffic Manager   Load Balancer   Azure DNS*   VPN Gateway   Application Gateway

Aka.ms/DevCon21

Hashtag : #DevCon21 #BerdayakanIndonesia #readyfordevcon21

aka.ms/azureforstudents

Thank you!

maadityo@microsoft.com

mumaliqi@microsoft.com