Microsoft Azure

Artificial Intelligence

Ramon Ponte
Customer Success Unit Lead
Central and Caribbean Region

Who Am I?

Ramón Ponte

- Customer Success Lead – Caribbean and Central America
  - Ensure customer success through customers digital transformation
  - Establish vision and execution of Microsoft Technical Specialist Team
  - Business development with customers and partners
  - Senior Leadership Team
- 20 Years in Microsoft – 16

Artificial intelligence (AI)

[ar . ti . fi . cial . in . tell . i . gence]

Humans + artificial intelligence

Human Intelligence

- Apply Reason
- Interact with Others
- Intuition
- Self Awareness
- Be Curious, Be Creative
- Perceive, think, learn complex concepts
- Cognitive and Perceptual
- Solve Logic Problems
- Make Decisions
- Acquire Knowledge

Humans + artificial intelligence

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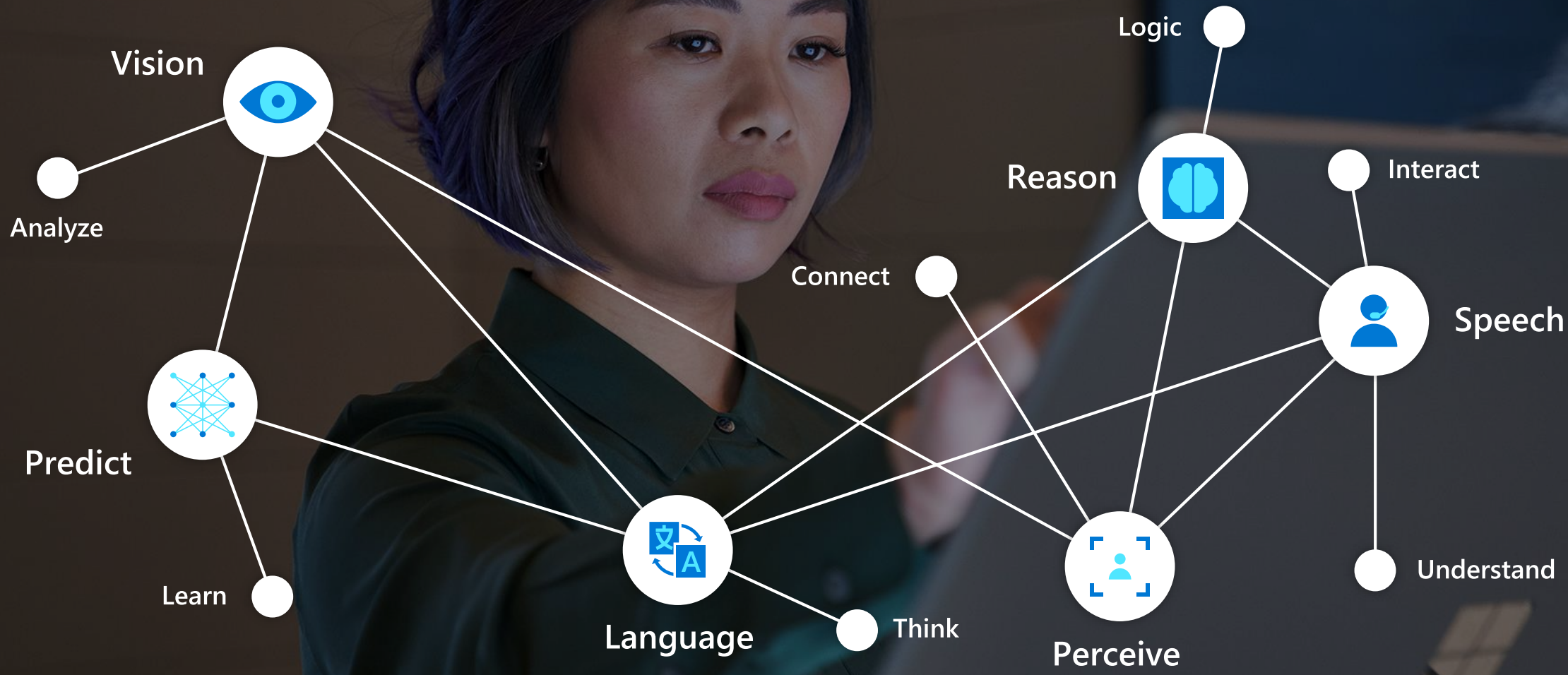
Artificial Intelligence

- Extract Knowledge and from the World and Analyze and Reason
- Cognitive & Perceptual
- Solve Logic Problems
- Make Decisions
- Can Learn from Data and Experiences

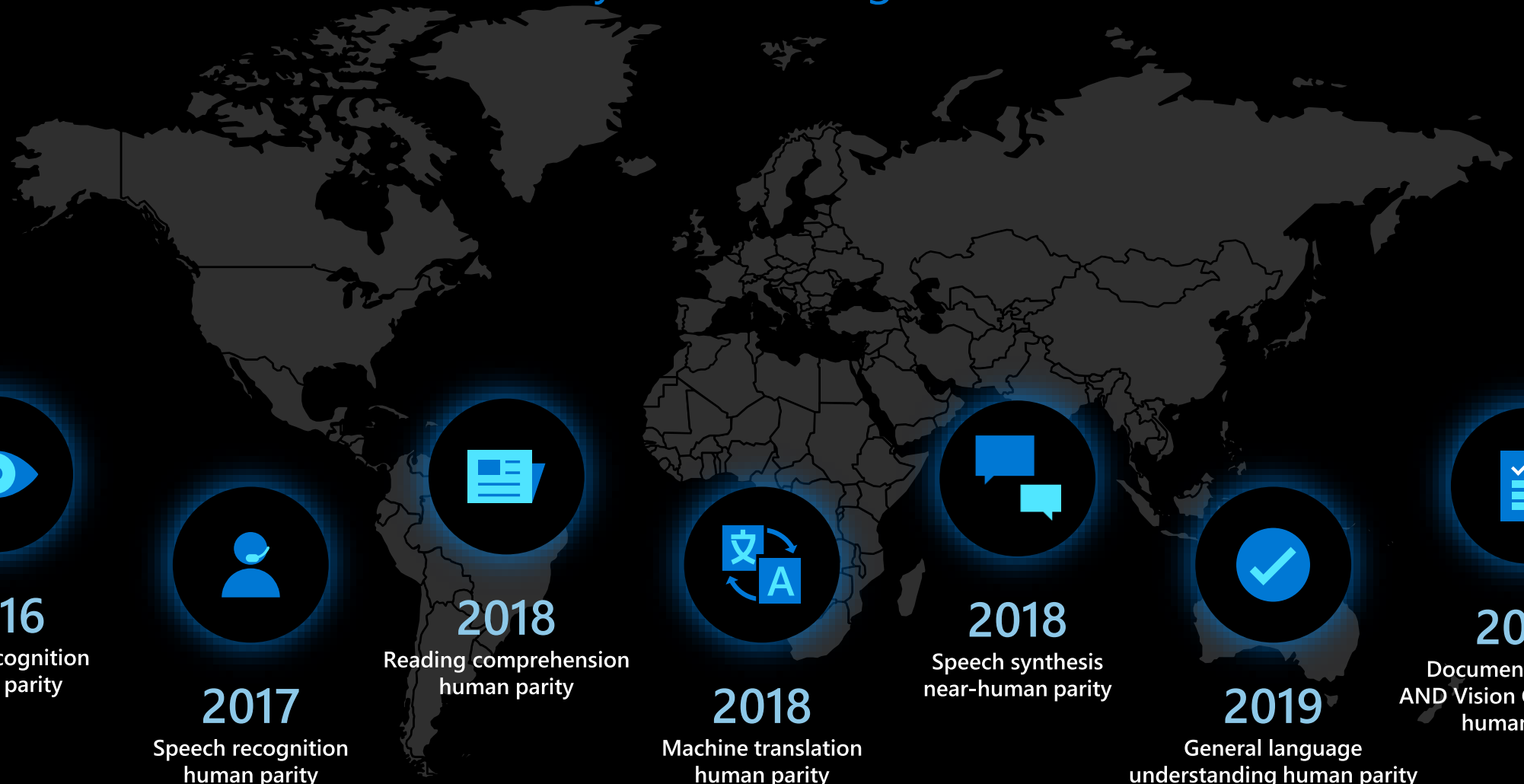
Humans + artificial intelligence

- An Amplifier
- Help Us Make Predictions
- Optimize Outcomes
- Adapt to External Changes
- Augment our Capabilities



Driving innovation

Fueled by breakthrough research



2016
Object recognition human parity

2017
Speech recognition human parity

2018
Reading comprehension human parity

2018
Machine translation human parity

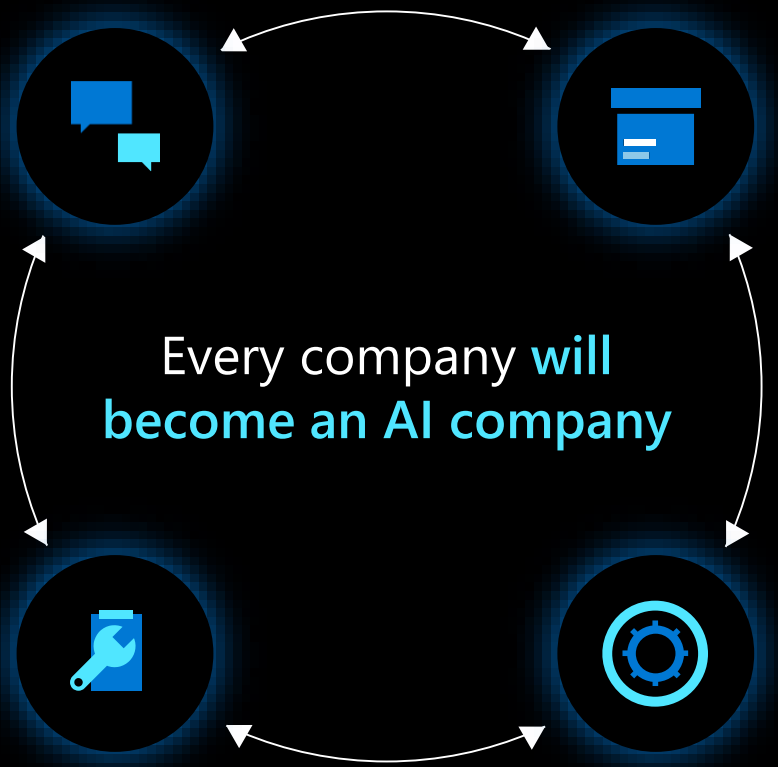
2018
Speech synthesis near-human parity

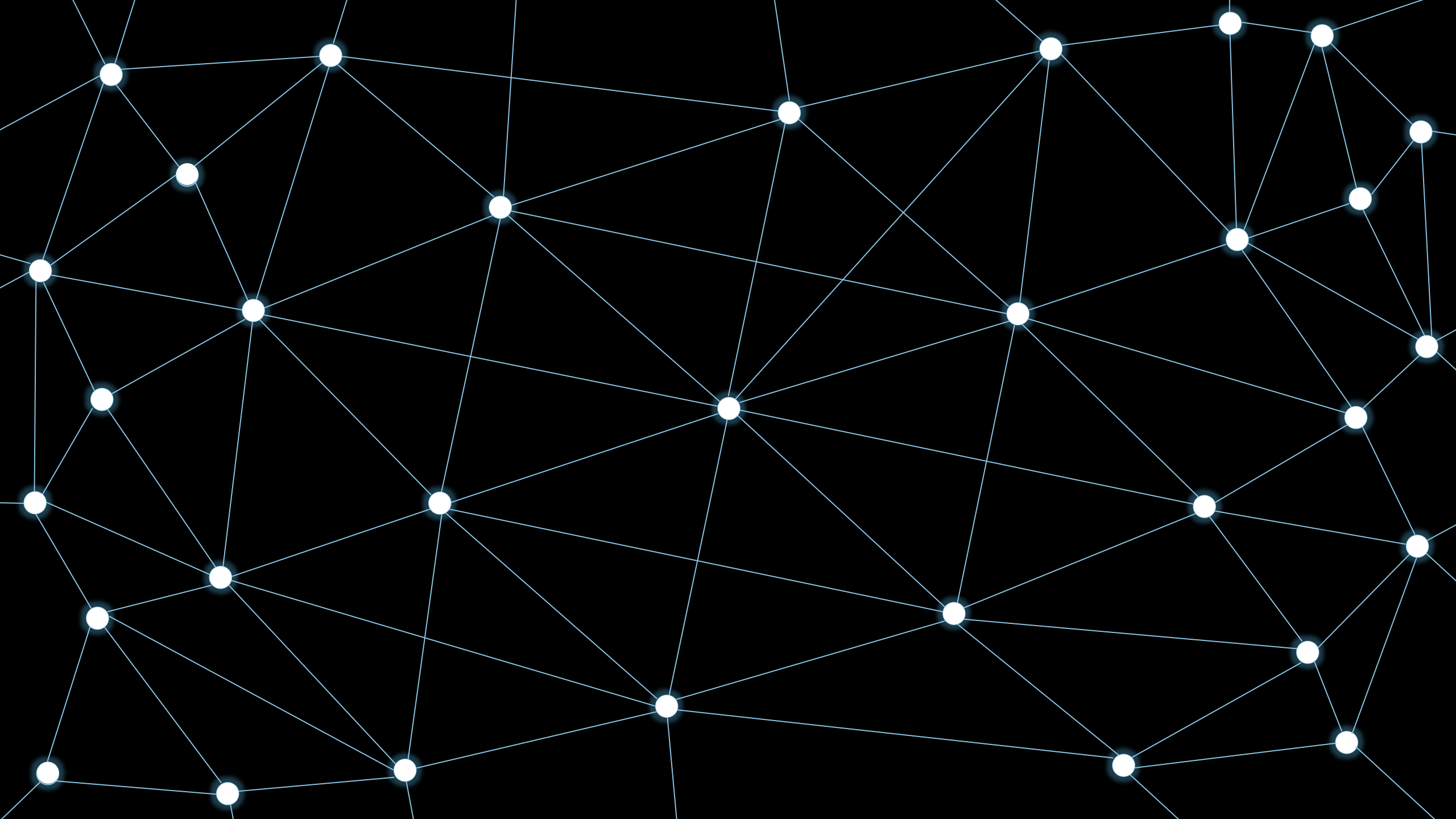
2019
General language understanding human parity

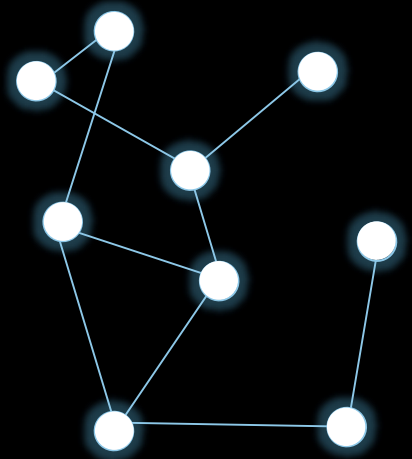
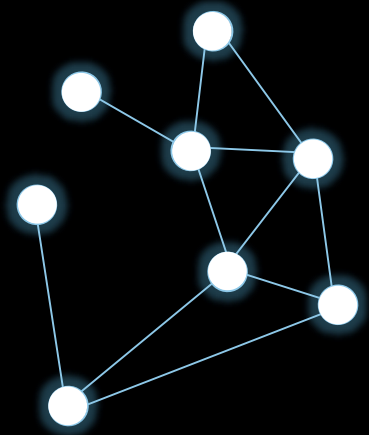
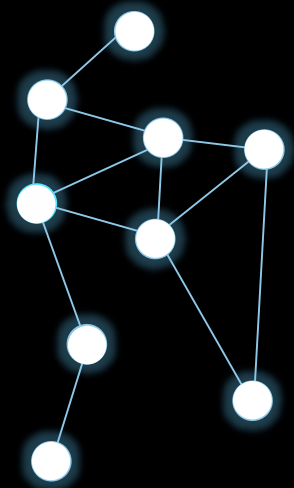
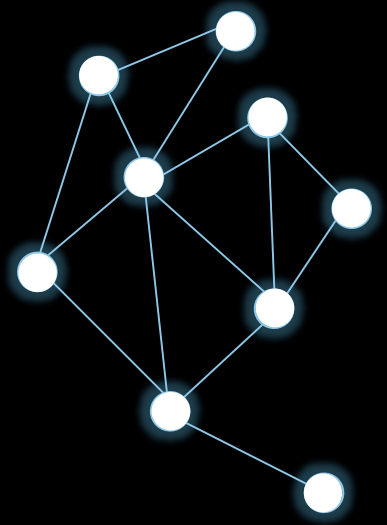
2020
Document summary AND Vision Captioning at human parity

A seismic shift is happening

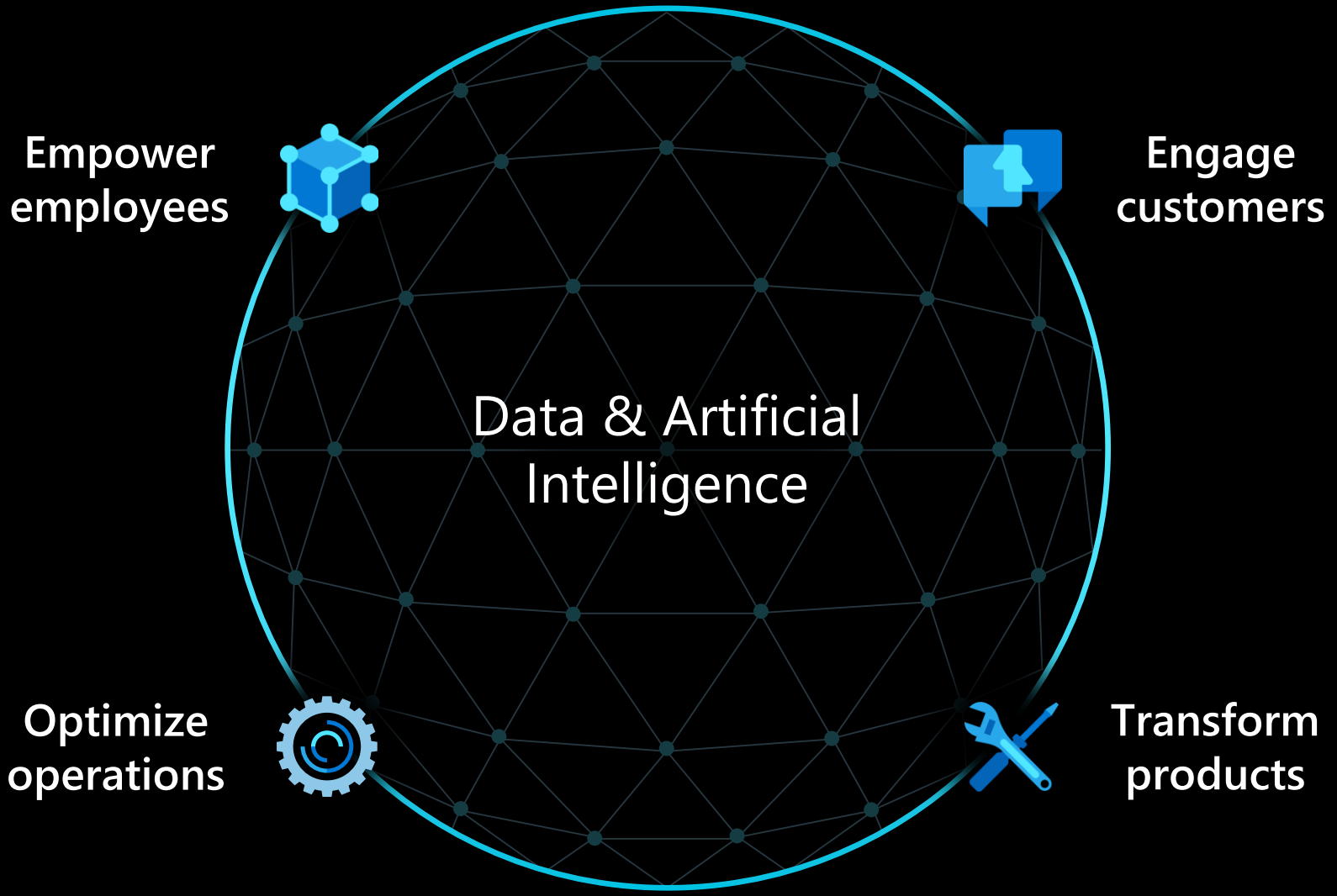
Ubiquitous access to cloud computing, *Everything*-as-a-Service, and changing customer expectations are driving traditional companies to rethink business as usual

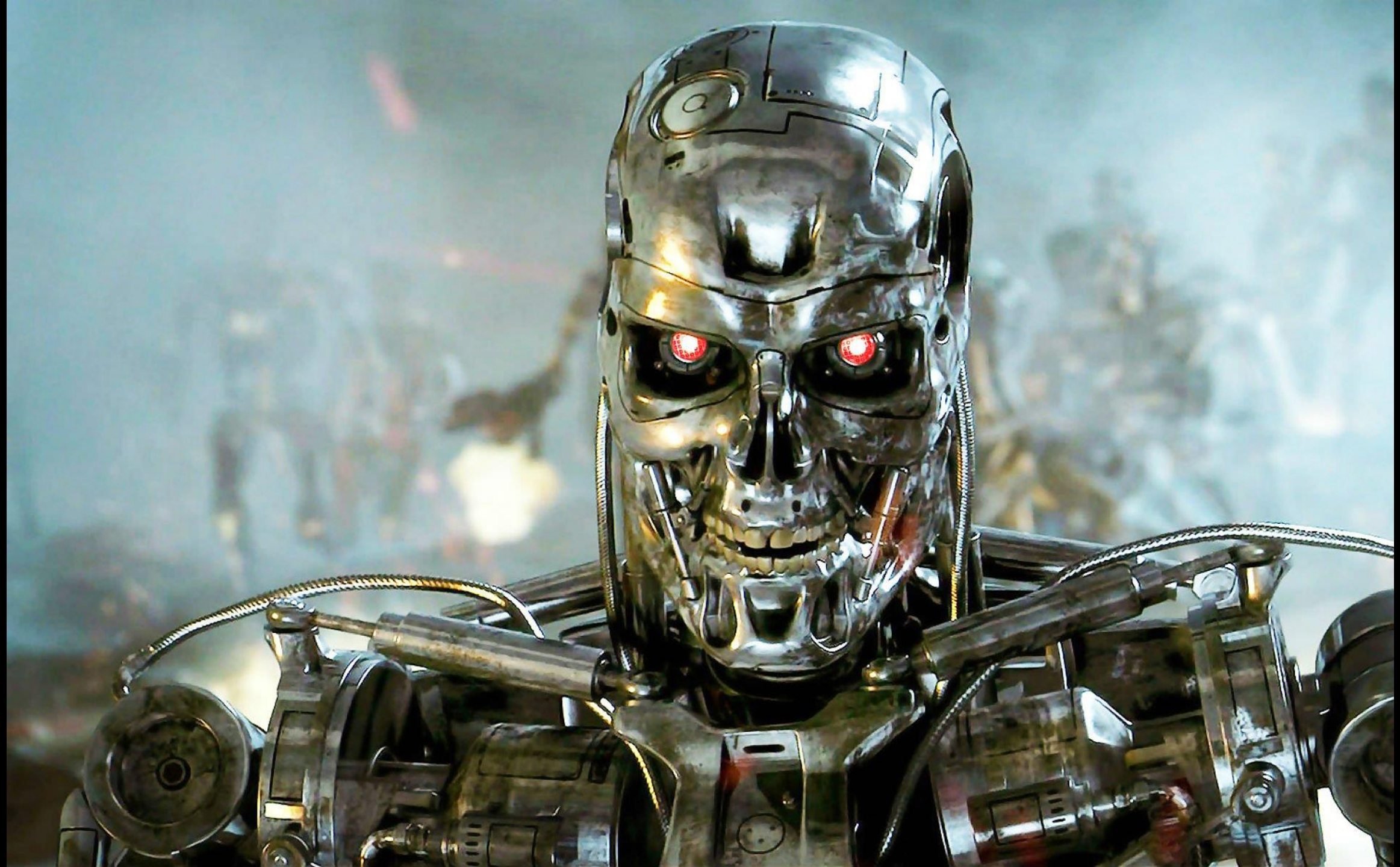


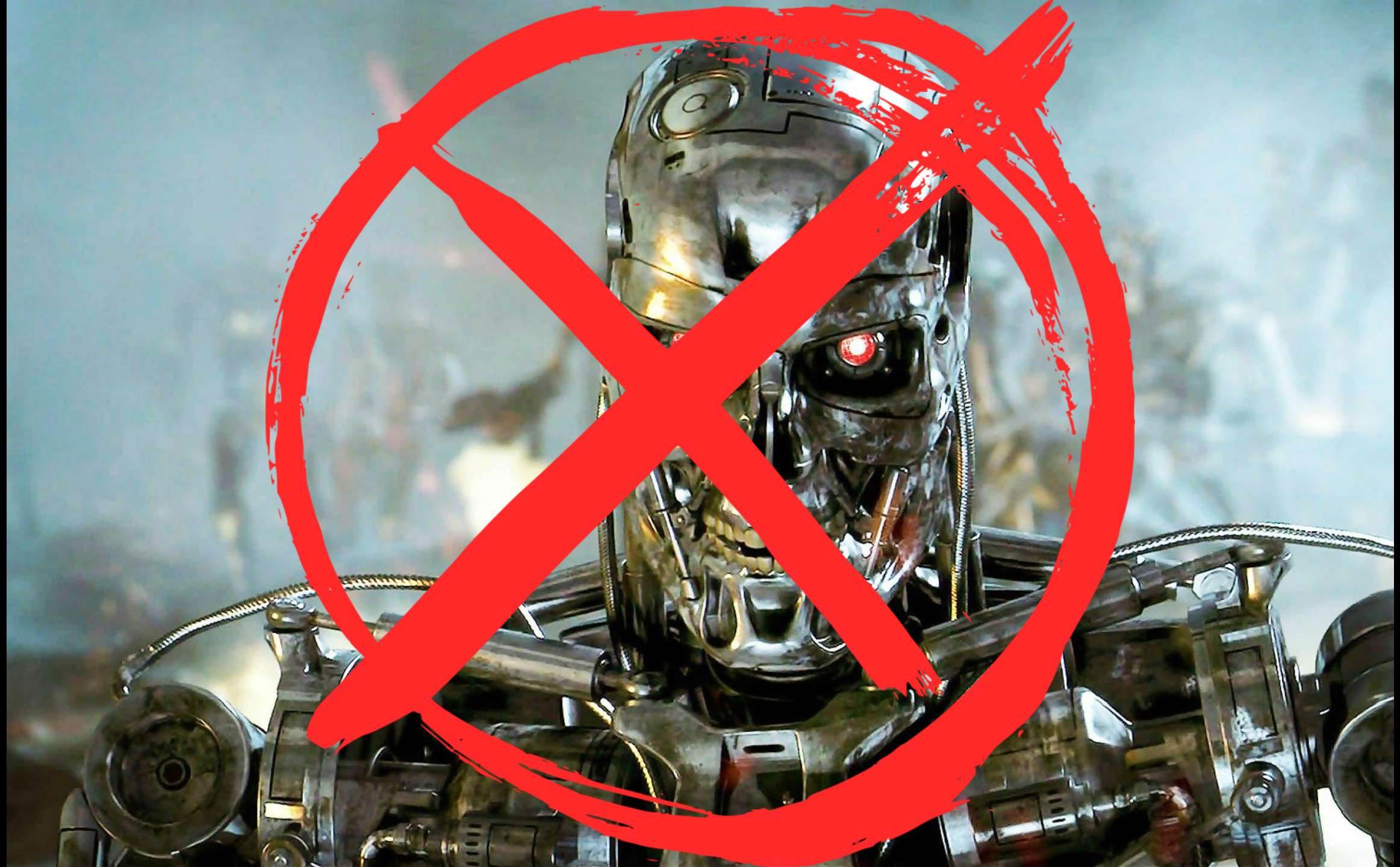


Digital Feedback Loop







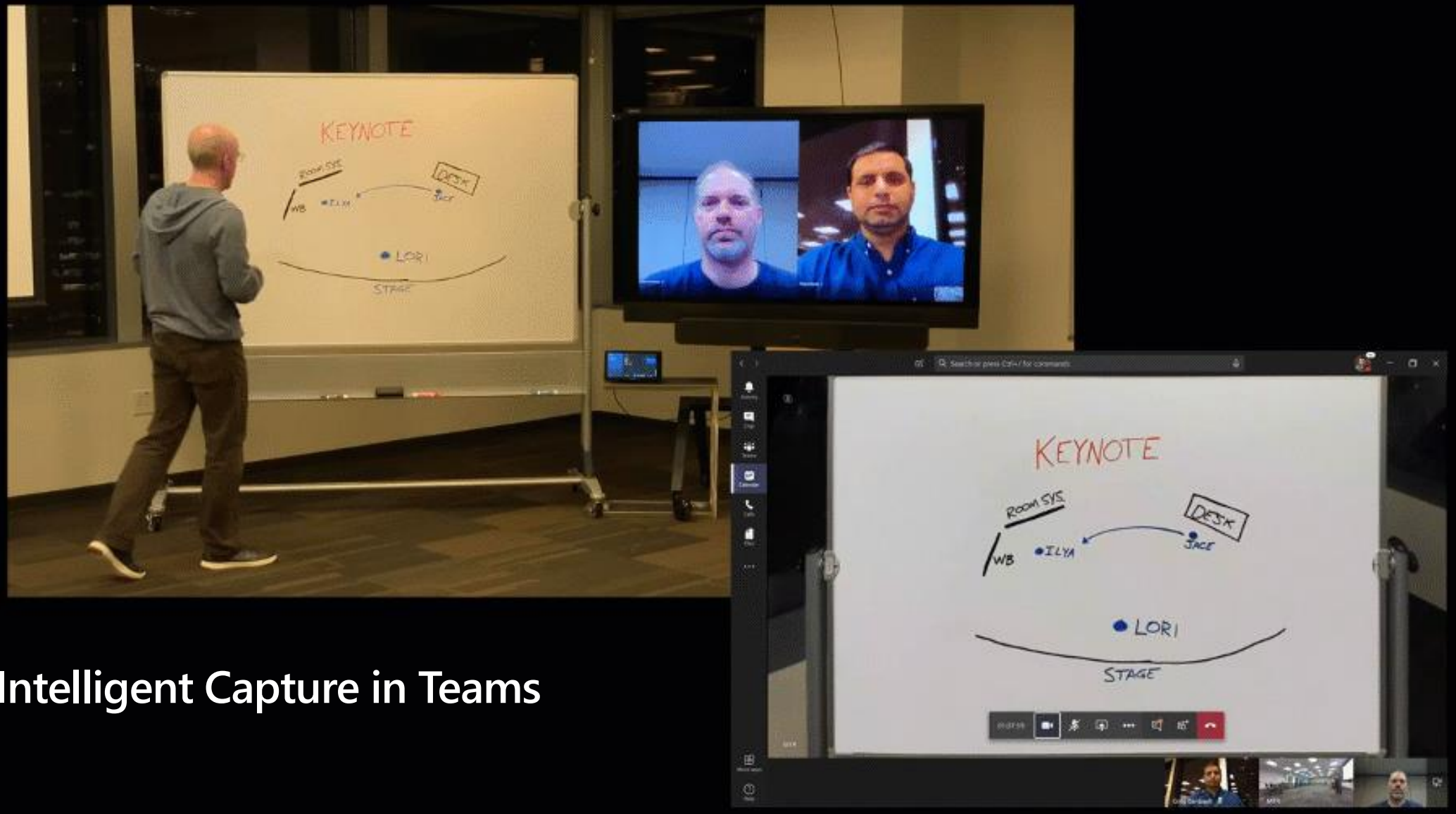
“Good AI makes life easier. Great AI gets out of the way.”

Artificial Intelligence

Changing The Way We Work, Learn and Live

Artificial Intelligence

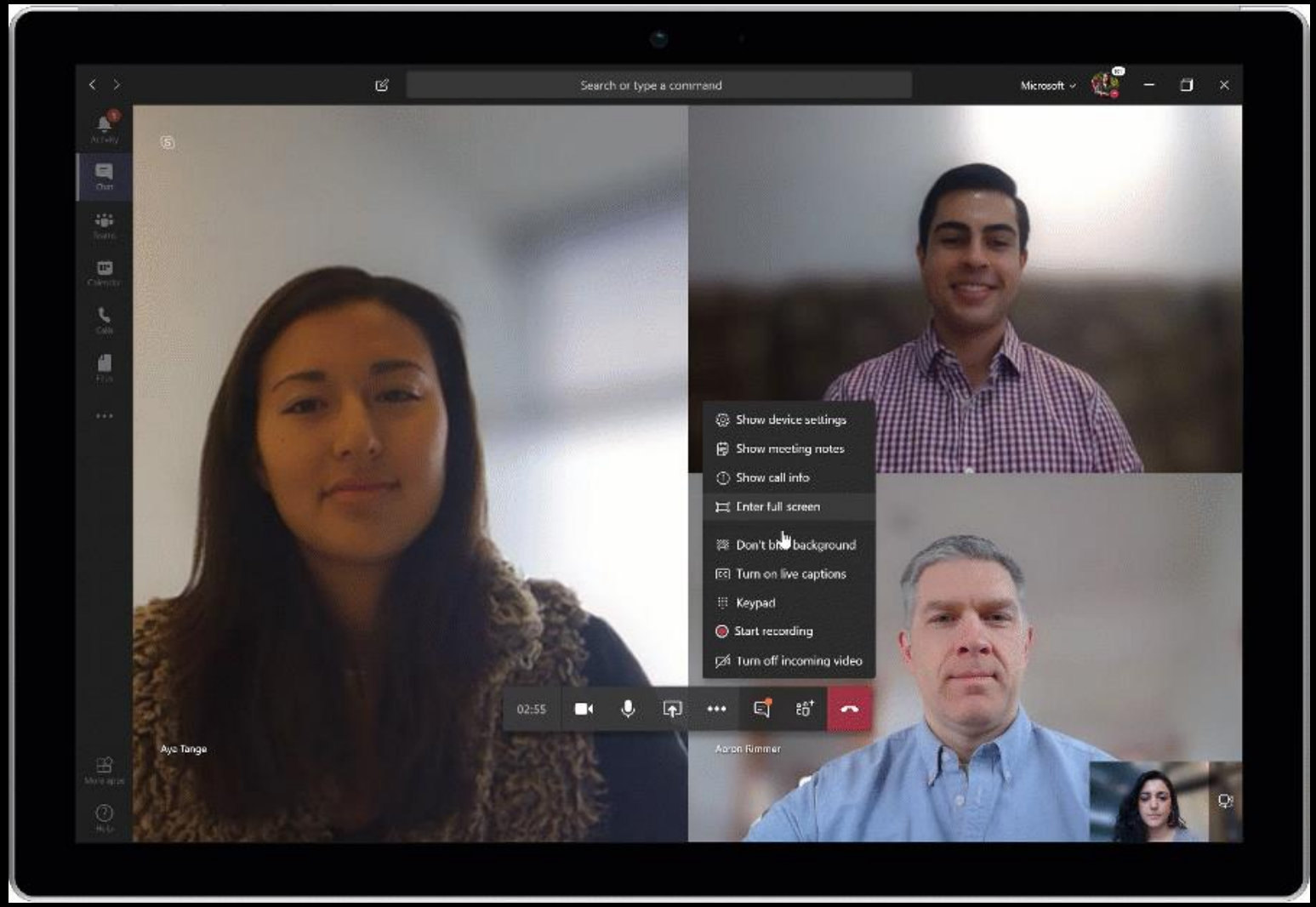
Changing The Way We Work, Learn and Live



Intelligent Capture in Teams

Artificial Intelligence

Changing The Way We Work, Learn and Live



Live captions and subtitles in Teams meetings

Artificial Intelligence

Changing The Way We Work, Learn and Live

Add data to Excel
directly from a photo
via Android or iOS

Artificial Intelligence

Changing The Way We Work, Learn and Live

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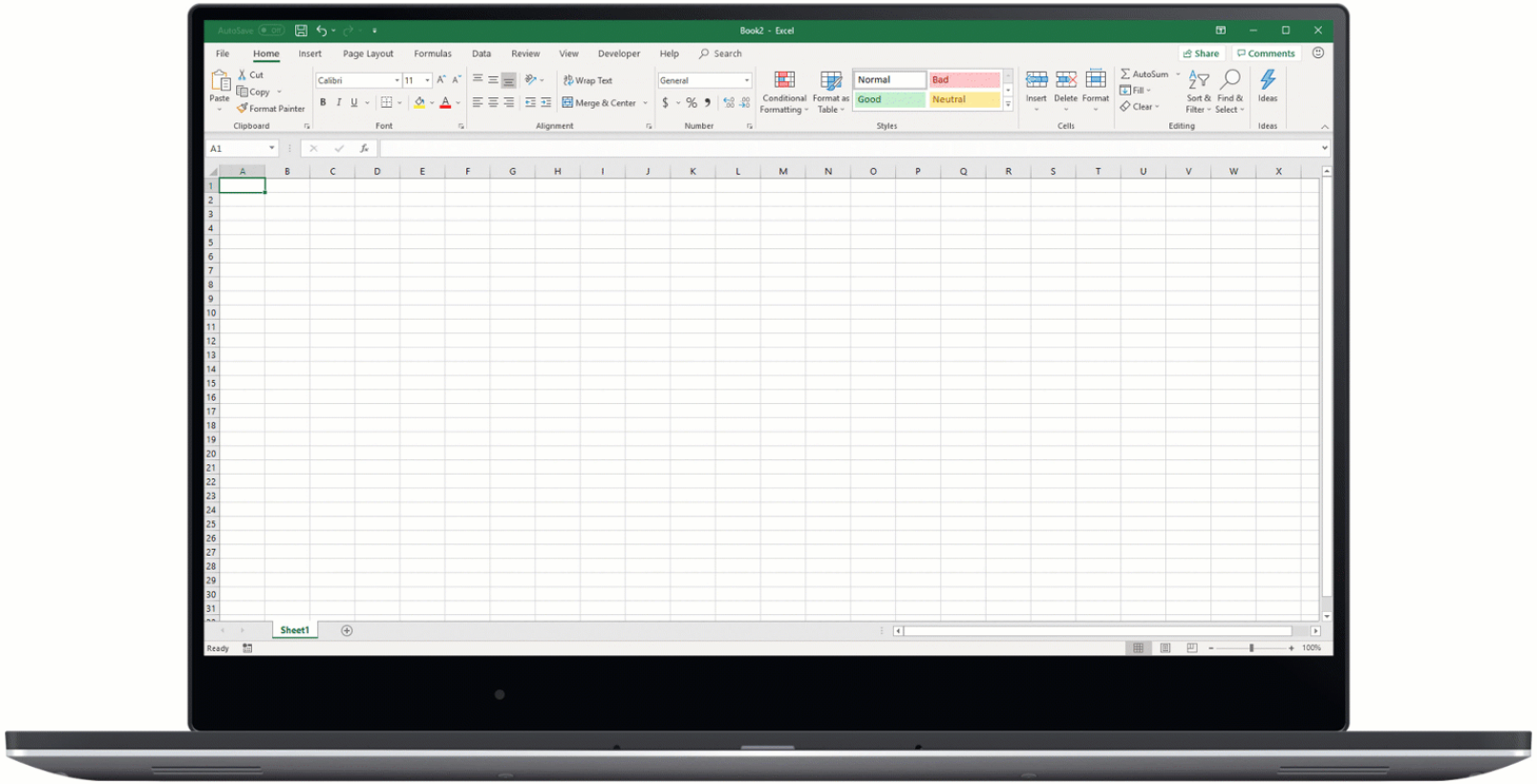
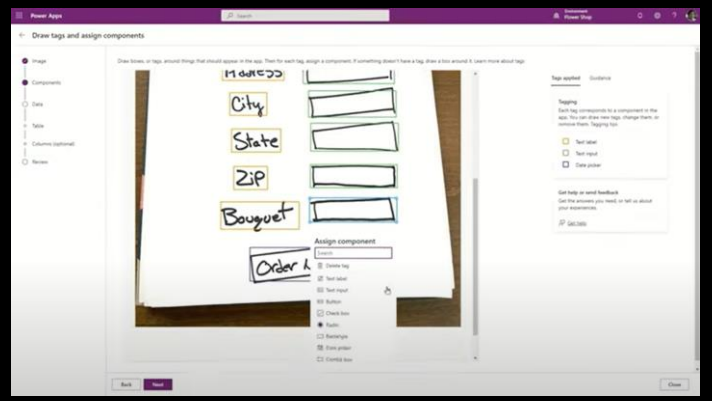
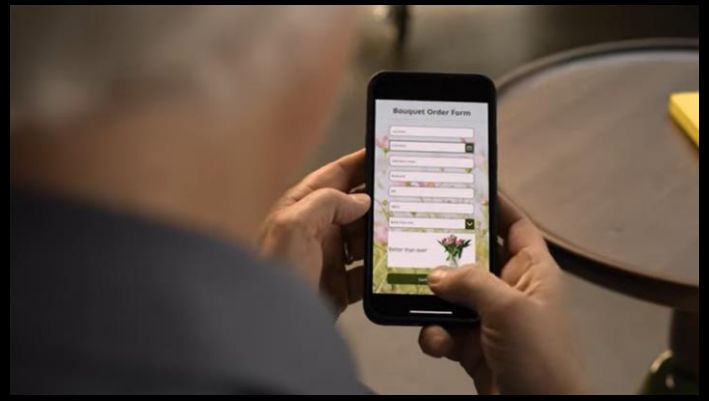


Artificial Intelligence

Changing The Way We Work, Learn and Live





Technology
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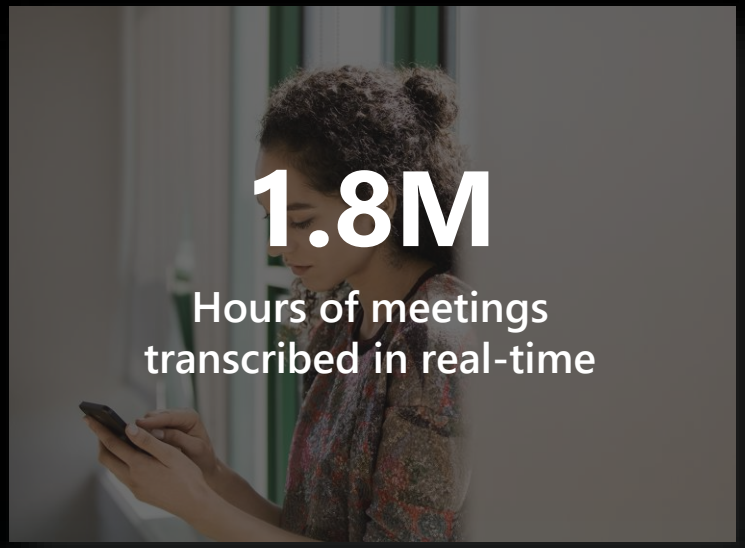
https://sketch2code.azurewebsites.net/

Artificial Intelligence

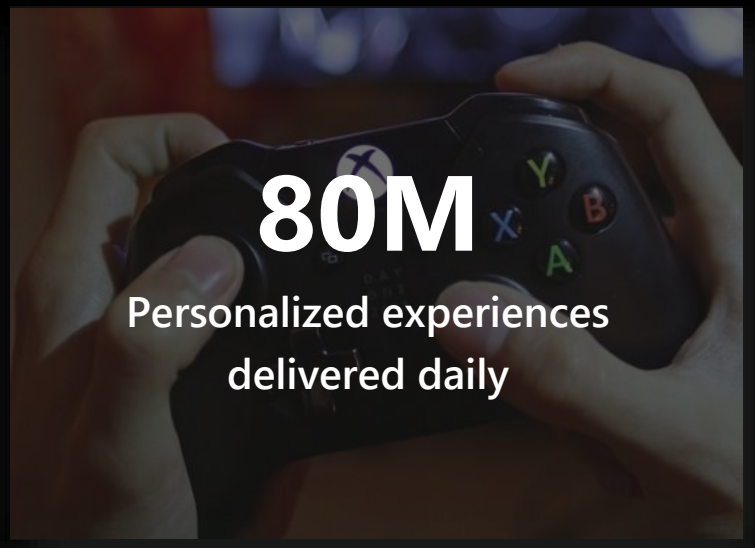
Changing The Way We Work, Learn and Live

Microsoft Teams



Microsoft 365

XBOX



Built on breakthrough AI research

Example of AI in Microsoft Products

Amplify skills and foster teamwork

- Designer in PowerPoint
- Editor in Word and Outlook
- Focused inbox in Outlook
- Learning Tools in OneNote and Word
- Morph in PowerPoint
- Researcher in Word
- Smart attachment in Outlook
- Smart lookup in PowerPoint
- Tap in Word
- Tap in Outlook
- Tell Me in Office Apps
- Translate in Office Apps
- Zoom in PowerPoint

- Automatic Alt Text in PowerPoint
- Automatic Alt Text in Word
- Eye Control in Windows 10
- Presentation Translator add-in for PowerPoint
- QuickStarter in PowerPoint
- Automatic video transcription and face detection in Microsoft Stream

- Background Blur in Microsoft Teams
- Dictate in Office Apps
- Editor in PowerPoint
- Forms design intelligence
- Ideas in PowerPoint
- Ink to text and shapes in PowerPoint
- Inline message translation in Teams
- Intelligent file recommendations
- Intelligent sharing in SharePoint and OneDrive
- Learning Tools in Edge
- Meeting recording transcription in Teams
- Mobile companion mode in Teams
- Resume Assistant in Word
- Smart room suggestions in Outlook
- Suggested replies in Outlook
- Text in image search in SharePoint and OneDrive
- To-dos and @mentions in Word

- Acronyms in Word
- Automatic captions for Live Events
- Live captions and subtitles in PowerPoint
- Video and audio transcription in SharePoint and OneDrive
- Customized backgrounds, Intelligent capture and Live captions & subtitles for Teams meetings
- Ideas in Word
- Meeting Insights and Suggested reply with a meeting in Outlook on the web.

Uncover hidden insights and improve decisions

- Summary cards in Outlook

- Group Insights in Yammer
- Time to leave in Outlook
- Workplace Analytics

- AI capabilities in Power BI
- Analytics in Sway
- Data Insights in SharePoint and OneDrive
- Data Types in Excel
- Microsoft Search in Office.com and Bing
- Nudges in MyAnalytics

- File Insights in SharePoint and OneDrive
- Ideas in Excel
- Insert data from picture in Excel
- LinkedIn highlights in Outlook
- Meeting Insights in Outlook
- Microsoft Search in Windows 10
- Microsoft Search in Office apps
- MyAnalytics insights from Teams, SharePoint and OneDrive
- Focus plan in MyAnalytics

Proactively secure your data and devices

- Cloud App Security
- Secure Score
- Windows Hello
- Conditional Access

- Safe-links in Outlook
- Threat Intelligence

- Conditional Access for OWA

Principles to Empower Every Individual and Organization to harness the Potential of AI

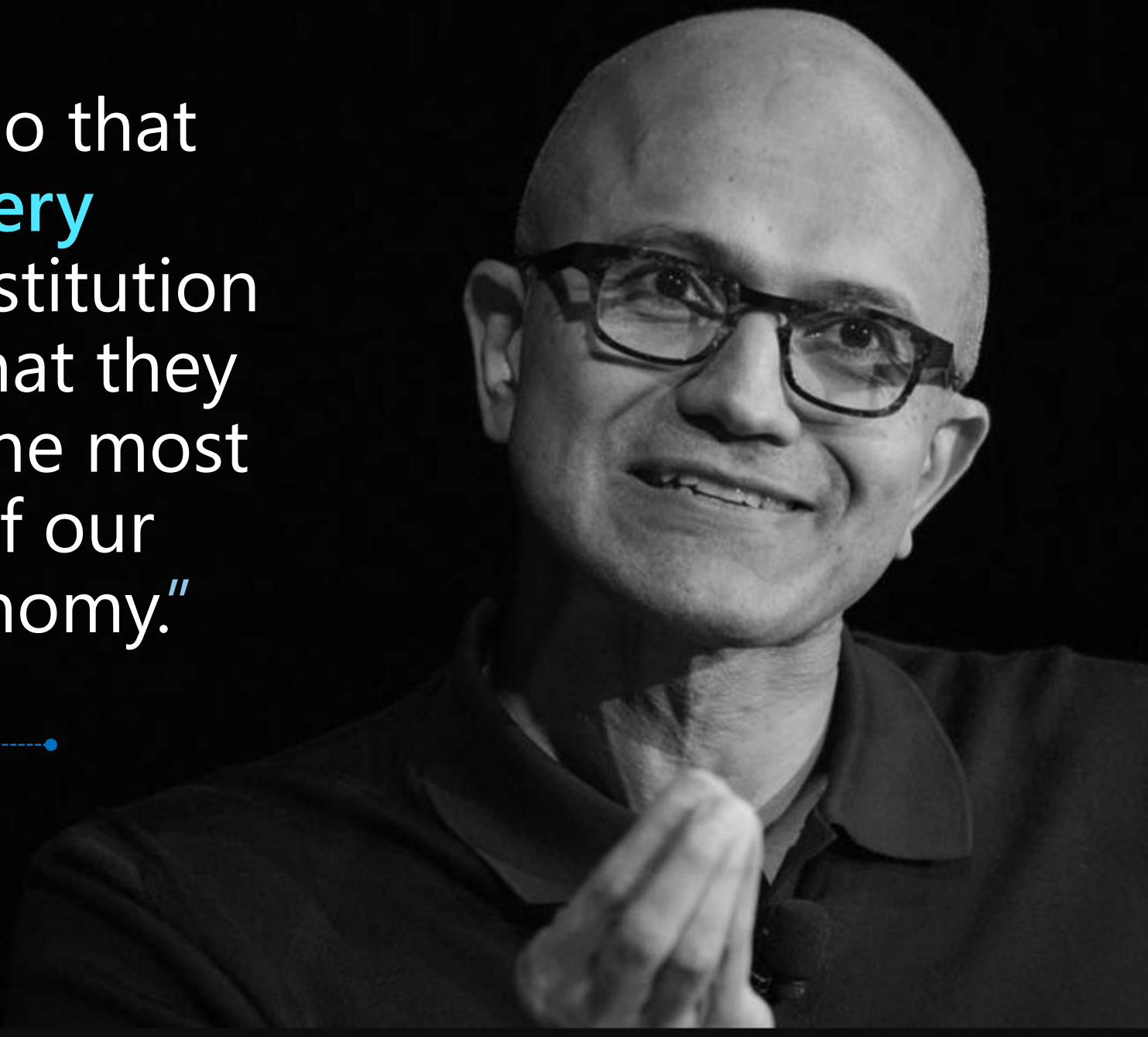
On your terms

Mission Critical

Responsible

"We are pursuing AI so that we can empower **every** person and **every** institution with tools of AI so that they can go on to solve the most pressing problems of our society and our economy."

Satya Nadella



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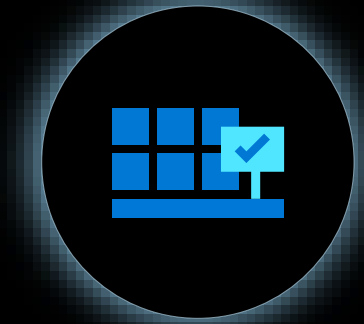


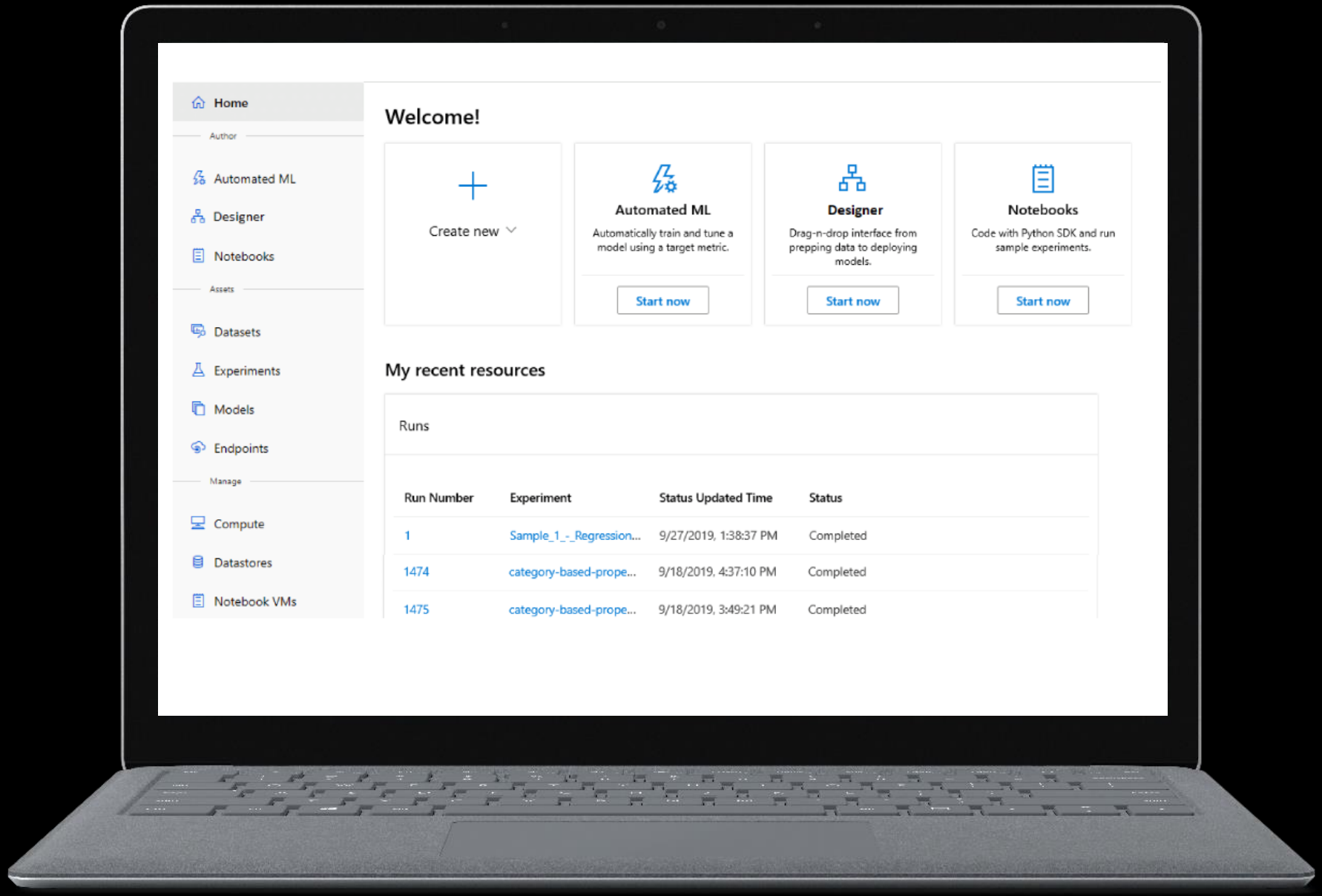
On your terms

- Data Scientist
- Developer
- Business User

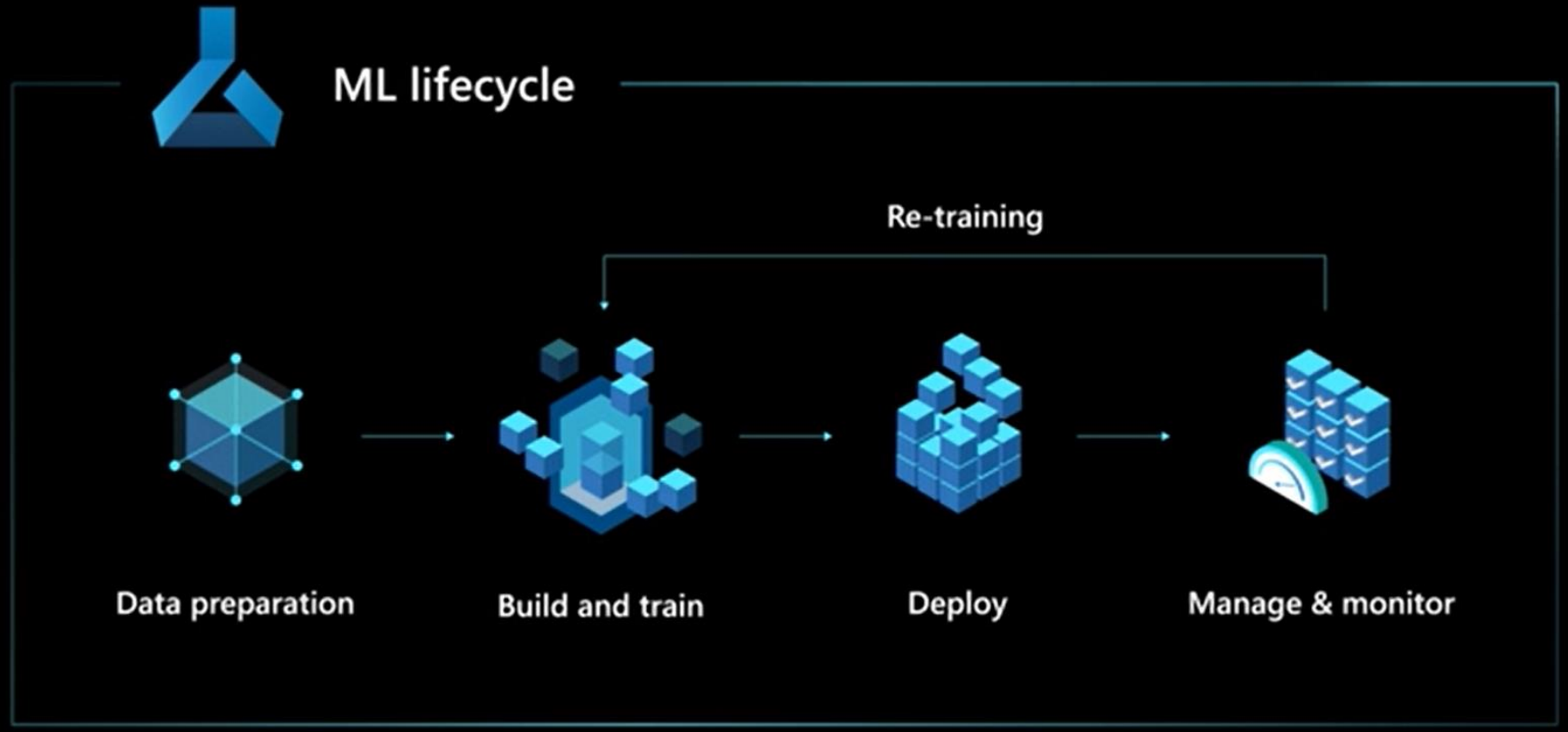
Mission Critical

Responsible

On Your Terms – Data Scientist



On Your Terms – Data Scientist



Data Labeling -> Data Preparation -> Dataset Definition

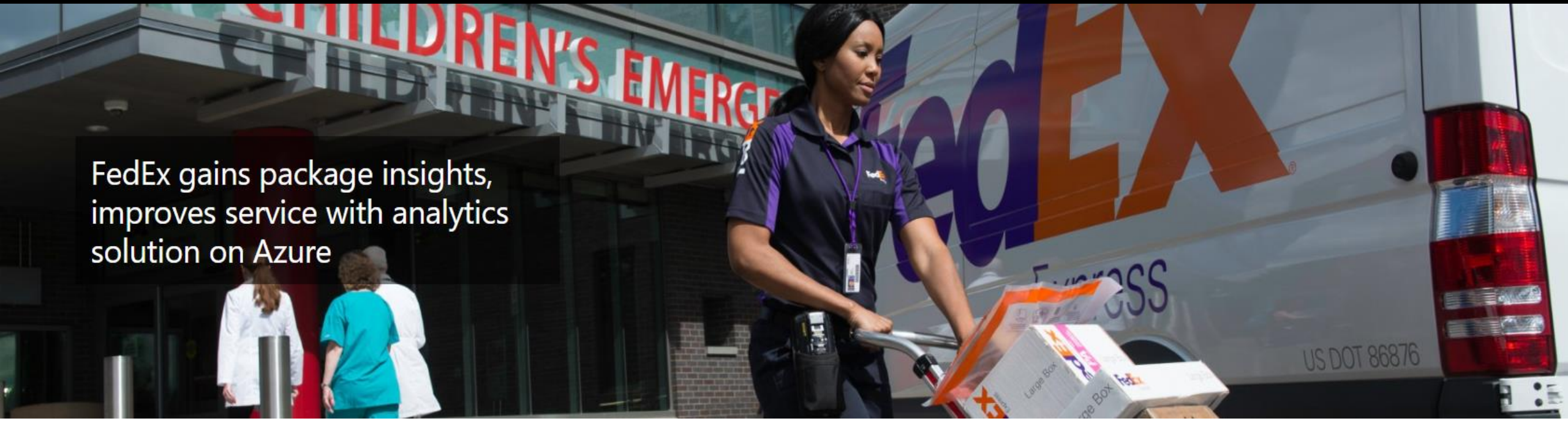
Endless Machine Learning Scenarios

Sales Forecasting
Lead Generation
Personalized Marketing
Next Best Action
Call Classification
Fraud Detection
Customer Risk Profile
Credit Lending & Scoring

Billing
Price Adjusting
Patient Data Analytics
Early Diagnosis
Assisted Prescriptions
Hiring
Retention
Predictive Maintenance
Inventory Optimization

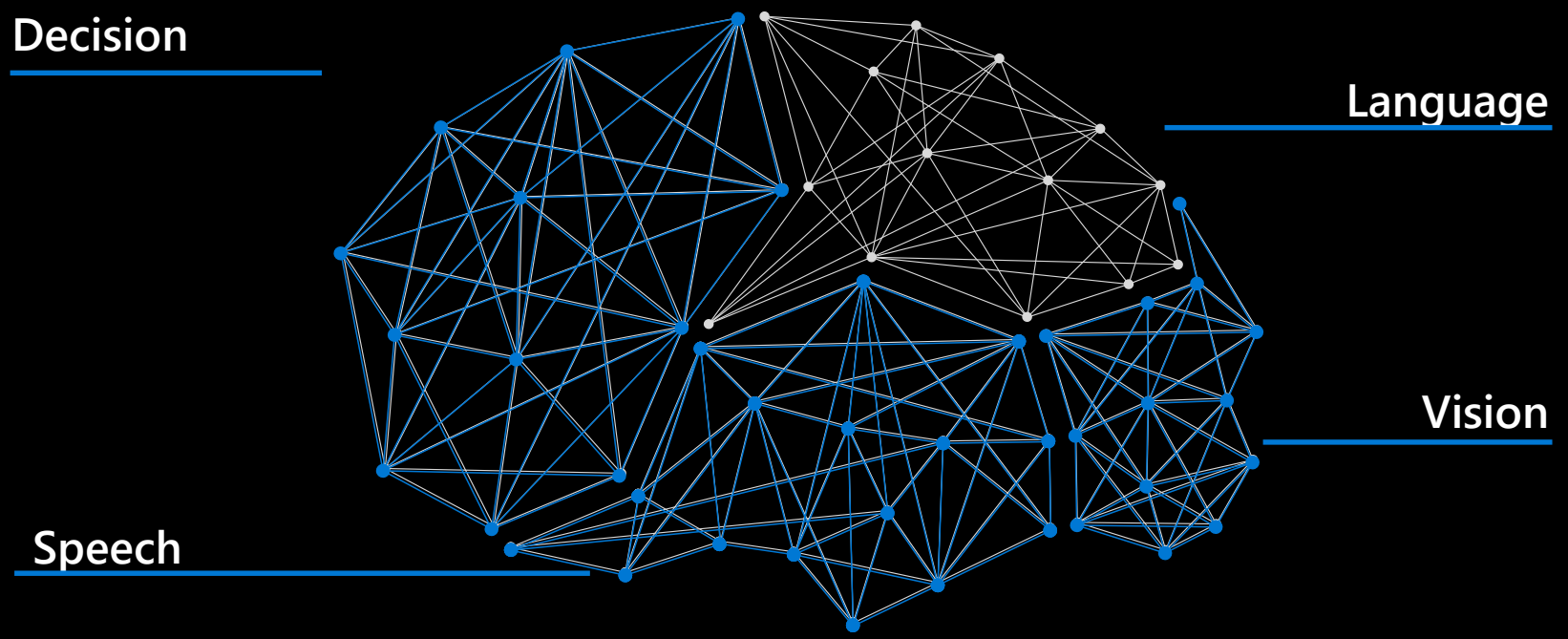
On Your Terms – Data Scientist

Machine Learning



FedEx Express handles more than 6.5 million packages a day in 220 countries and territories. As the business grew and technology evolved, its customers' expectations changed, too. To streamline operations and meet customer needs, FedEx developed a package analytics solution using the machine learning operations. The company reduced customer service calls, improved real-time visibility, and laid the foundation for continued innovation.

On Your Terms – Developer
Cognitive Capabilities



On Your Terms – Developer

Cognitive Capabilities

Speech

Speech to text

Transcribe audible speech into readable, searchable text.

Text to speech

Convert text to lifelike speech for more natural interfaces.

Speech translation

Integrate real-time speech translation into your apps.

Speaker recognition

Identify and verify the people speaking based on audio.

Language

Entity recognition

Identify commonly-used and domain-specific terms.

Sentiment analysis

Automatically detect sentiments and opinions from text.

Question Answering

Distill information into easy-to-navigate questions and answers.

Conversational language understanding

Enable your apps to interact with users through natural language.

Translator

Translate more than 100 languages and dialects.

Vision

Computer Vision

Analyze content in images and video.

Custom Vision

Customize image recognition to fit your business needs.

Face API

Detect and identify people in images.

Decision

Anomaly Detector

Identify potential problems early on.

Content Moderator

Detect potentially offensive or unwanted content.

Personalizer

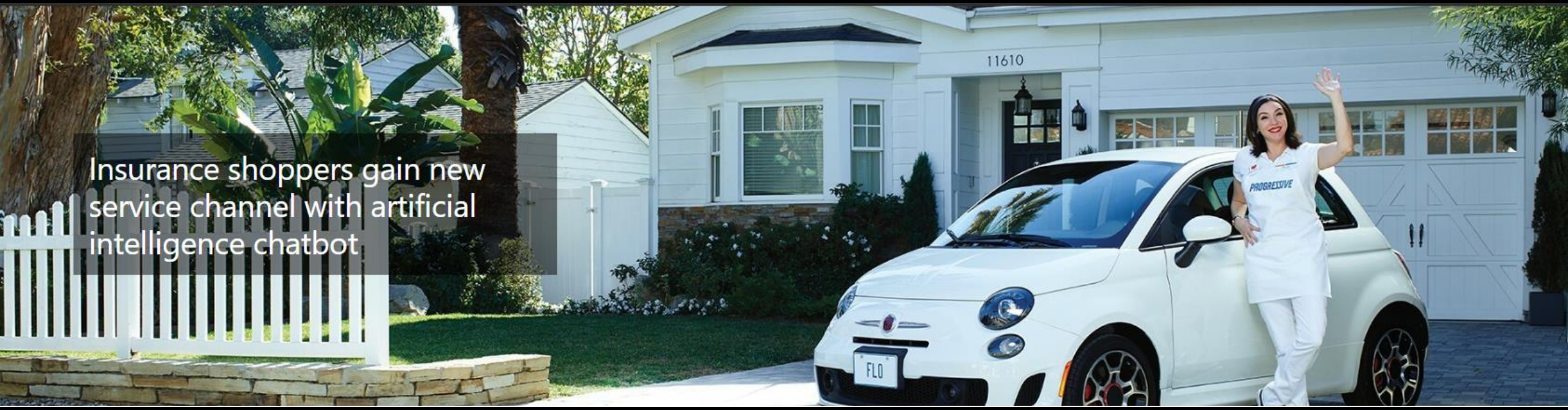
Create rich, personalized experiences for every user.

On Your Terms – Developer

Spatial Analysis

On Your Terms – Developer

Intelligent Bots



Major auto insurance provider Progressive may be best known for Flo, its iconic spokesperson. The company wanted to take advantage of customers' increasing use of mobile channels to interact with its brand. So Progressive used a Bot Service and Cognitive Services to quickly and easily build the Flo Chatbot - provides answers to customer questions, provides quotes, and even offers a bit of witty banter in Flo's well-known style

PROGRESSIVE®

By using Microsoft Azure Bot Service and Cognitive Services … we've been able to continue our own Progressive journey of digital innovation and do it in an agile, fast, and cost-effective way. Matt White, Marketing Manager – Progressive Insurance

Over 1.5M messages daily across all customized instances of the Healthcare Bot

NewsTarget.com
NaturalNews.com

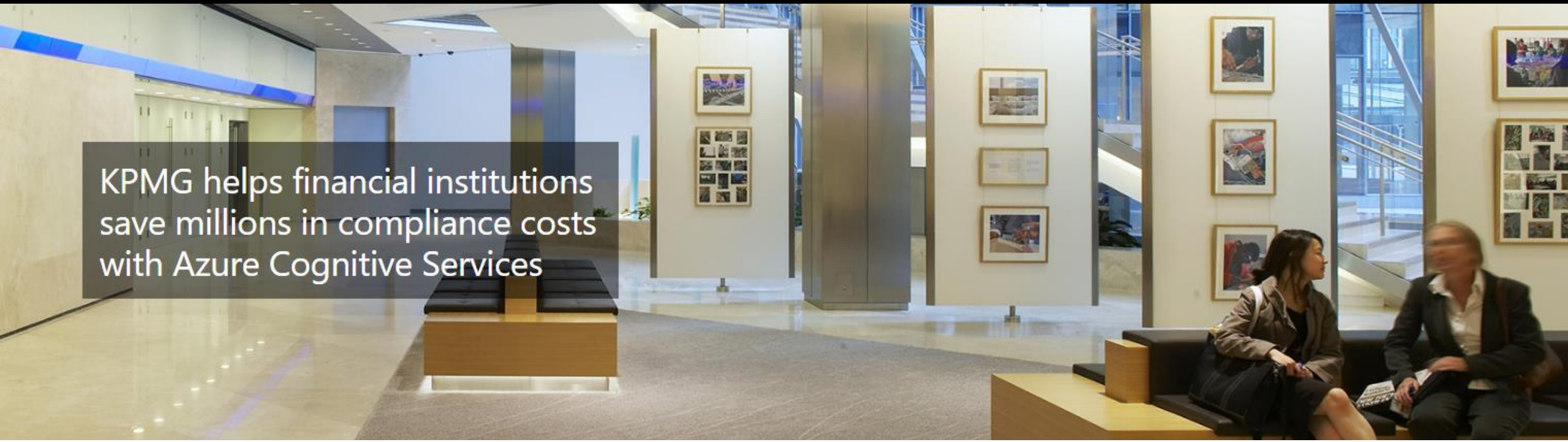
On Your Terms – Developer

Knowledge

https://jfk-demo.azurewebsites.net/#/

On Your Terms – Developer

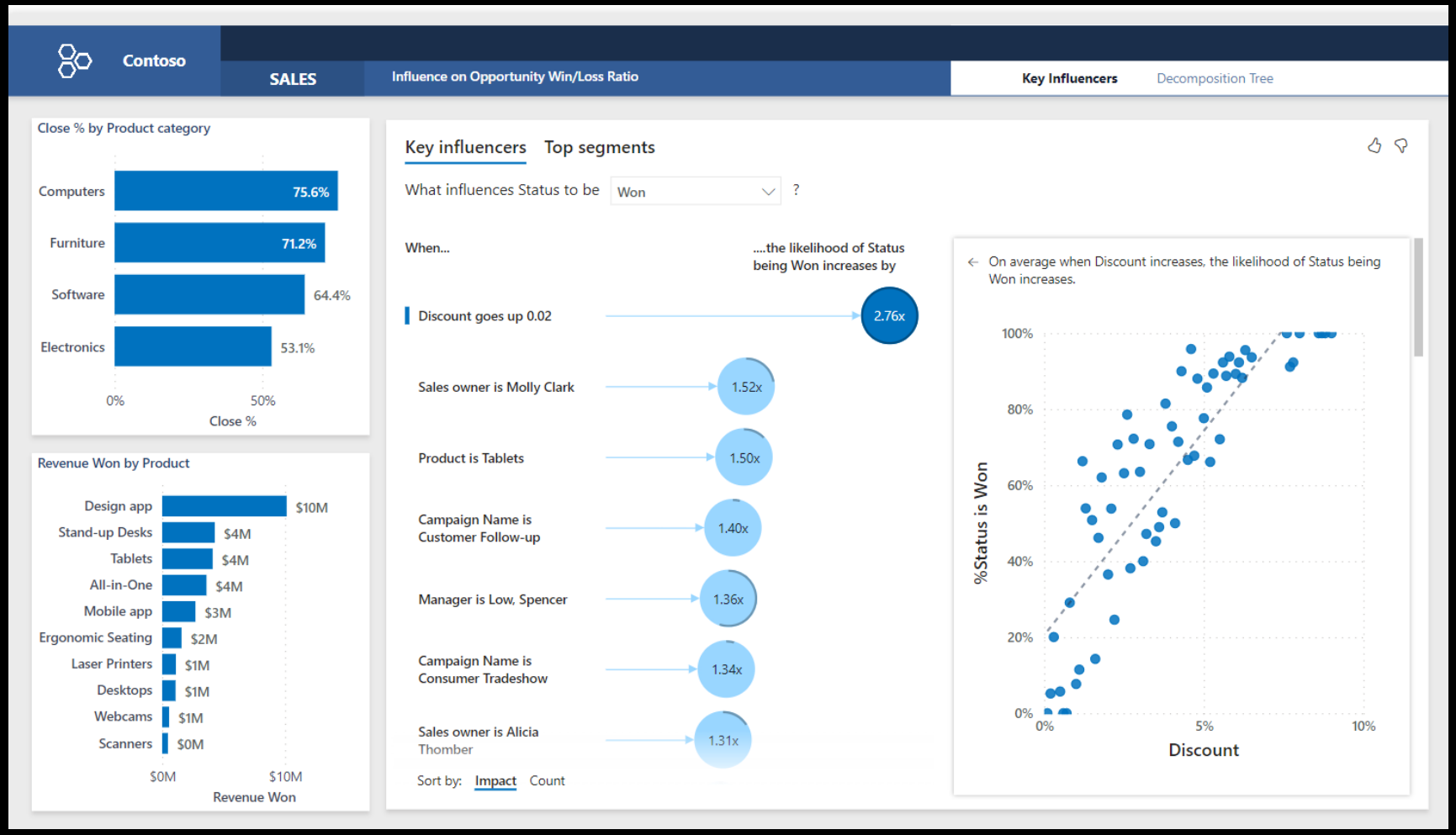
Speech to Text



How would your business meet a requirement to review and catalog hundreds—or thousands—of hours of recorded calls? It's a challenge KPMG is helping financial institutions solve with AI. This risk analytics solution **uses AI to streamline call transcription, translation, and fraud analytics**, **cutting time, cost, and effort by as much as 80 percent**.

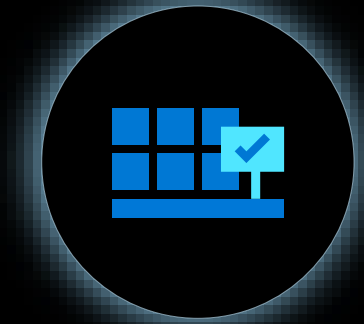
We're are now able to get transcription accuracy of **90 percent or better**. It's supporting improved analytics services and leading to improved outcomes—for our clients and for us. Steve Wells: Director, Forensic Data Analytics - KPMG

On Your Terms – Business User / Data Analyst



Artificial Intelligence in Business Intelligence

Principles to Empower Every Individual and Organization to harness the Potential of AI



On your terms

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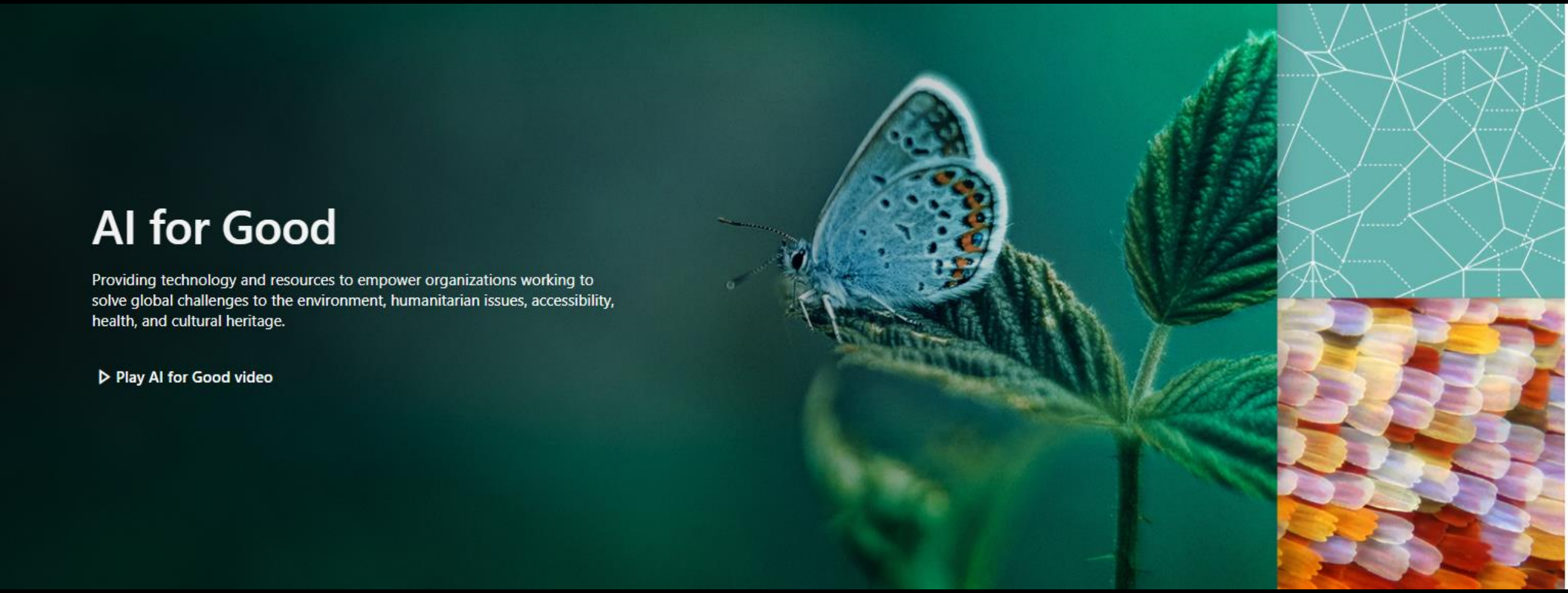
Mission Critical

Responsible

Responsible AI

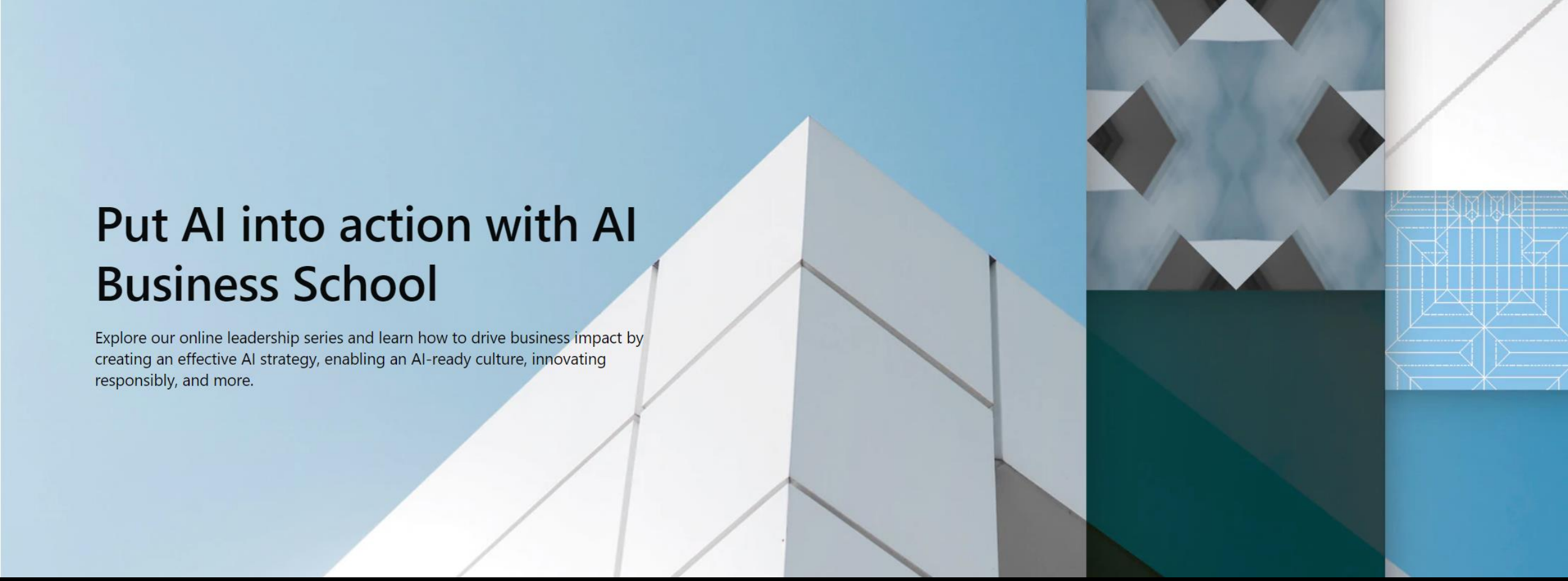
AI For Good

https://www.microsoft.com/en-us/ai/ai-for-good



AI For Earth AI For Health AI For Accessibility AI For Humanitarian Action AI For Cultural Heritage

Data for Society



AI Business School Artificial Intelligence Courses - Microsoft AI

https://www.microsoft.com/en-us/ai/ai-business-school

Certifications

Exams	Description
AI-900	Microsoft Azure AI Fundamentals
A-102	Designing and Implementing a Microsoft AI Solution
DP-900	Microsoft Azure Data Fundamentals
DP-100	Designing and Implementing a Data Science Solution on Azure
DP-203	Data Engineering on Microsoft Azure

THANK
YOU

Microsoft Research

Turning ideas into reality for 29 years

8 MSR Labs

1k+ Researchers

20+ Fields

4k+ WW Patents

22k+ Papers