



# Modern Solutions with AI Builder

## AI in Power Automate

---

LEAD CONSULTANT

Telstra Purple |  @SomyAyazi |  somy-ayazi

# About Me

---

- ❖ Lead Consultant at Telstra Purple | Sydney | Australia
- ❖ Been around Business Software developments for a while
- ❖ APAC-AI Community Co-organizer
- ❖ The AI Podcast Cohost

# Agenda

---

- ❖ Microsoft Power Platform
- ❖ AI Builder in Power Platform
- ❖ AI (Text, Object, Predictions)

# Microsoft Power Platform

---

## ❖ A business application platform

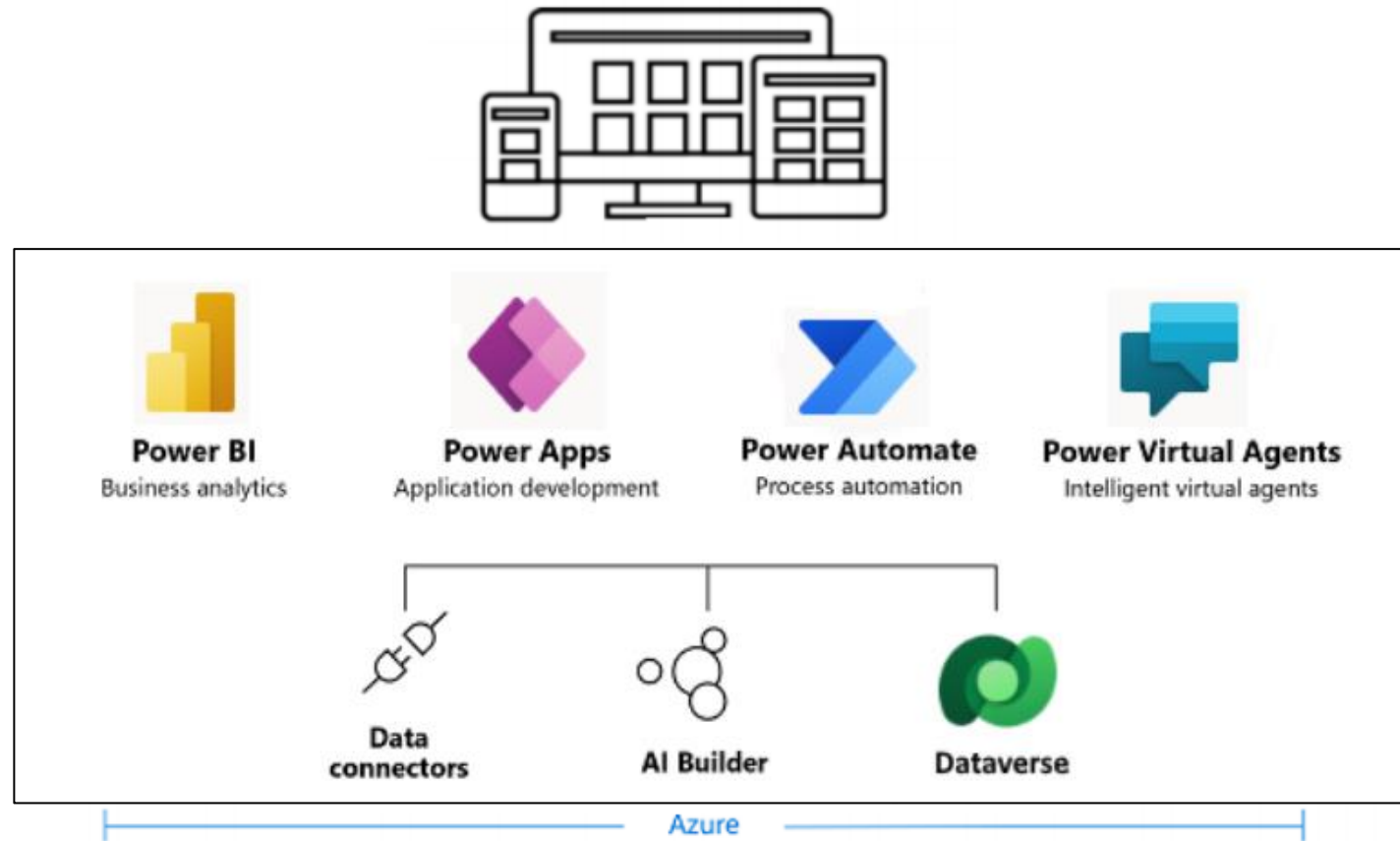
- Easy app building and data insight

## ❖ Fundamental change is that data is now coming first

- Modern businesses are starting with systems of observation and intelligence
- Data would drive the starting point
- Bring all your data together into a common data model
- Ability to integrate with other platform like Salesforce, Workday, SAP, etc

# The Power Platform

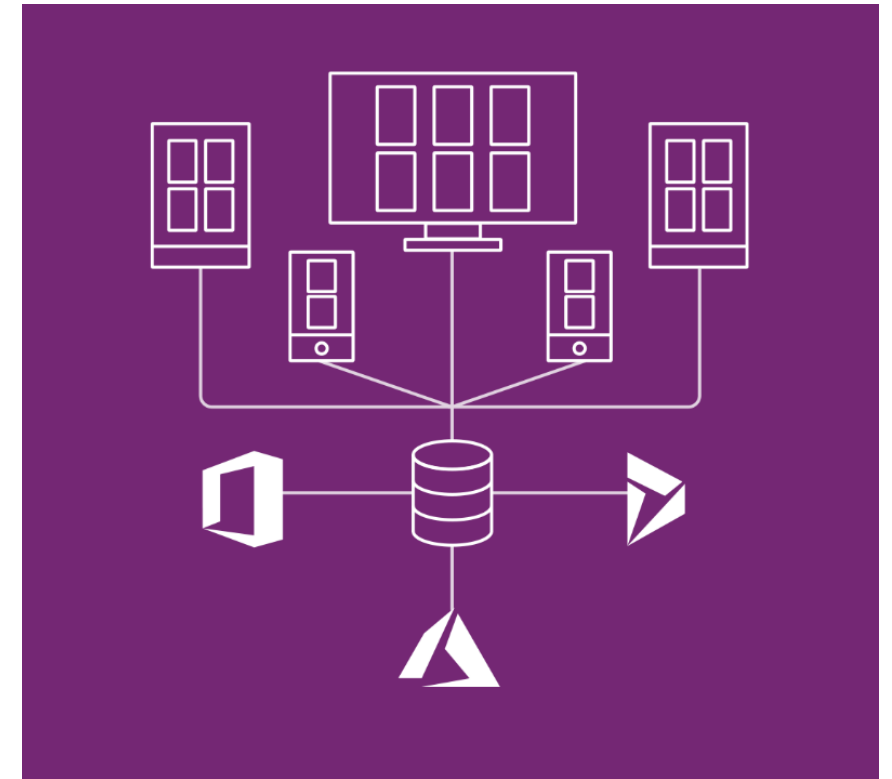
---



# Dataverse

---

- ❖ Cloud based managed Container
- ❖ Based on 200 standard business tables
  - Sales, services, Finance, Operations, Marketing, Education, Healthcare, etc
- ❖ Foundation for Dynamics 365 and Power Platform
- ❖ Create custom tables and populate them with data using Power Query
- ❖ Benefits
  - Easy to manage.
  - Easy to secure
  - Access your Dynamics 365 Data
  - Rich metadata
  - Logic and validation
  - Productivity tools



# AI Builder



- ❖ Offers pre-built machine learning models that can be added onto either Power Apps or Power Automate
- ❖ Leverages Azure AI and ML technologies
- ❖ Low-code AI capability in the Power Platform
- ❖ Customizable for broad range of industries
- ❖ Automate the process and predict the outcome
- ❖ AI Builder is licensed as an add-on to your Power Apps, Power Automate, or Dynamics 365 license.

## Refine a model for your business needs

<b>Category Classification</b> Categorize text by its meaning so it's easier to analyze.	<b>Entity Extraction</b> Recognize specific information about your business from data.	<b>Form Processing</b> Read and save information from standard documents.	<b>Object Detection</b> Recognize and count things in images.	<b>Prediction</b> Predict whether something will happen.

## Get straight to productivity

<b>Business Card Reader</b> Automatically process business card information	<b>Category Classification (preview)</b> Categorize text by its meaning so it's easier to analyze	<b>Entity Extraction</b> Extract entities and their types from text	<b>Identity Document Reader</b> Read and save information from identity documents	<b>Invoice Processing</b> Read and save information from invoices
<b>Key Phrase Extraction</b> Extract the key talking points from text	<b>Language Detection</b> Identify the language being used in text	<b>Receipt Processing</b> Read and save information from receipts	<b>Sentiment Analysis</b> Analyze positive/negative sentiment in text	<b>Text Recognition</b> Automatically process text from images



# AI Model Types

---

## ❖ Prebuilt AI Model

- Business Card Reader (Vision API)
- Text Recognition (Vision API)
- Category Classification (Language API)
- Key Phrase Extraction (Language API)
- Language Detection (Language API)
- Sentiment Analysis (Language API);
- Receipt Processing (Vision API)
- Text Translation (Language API)

## ❖ Custom AI Model

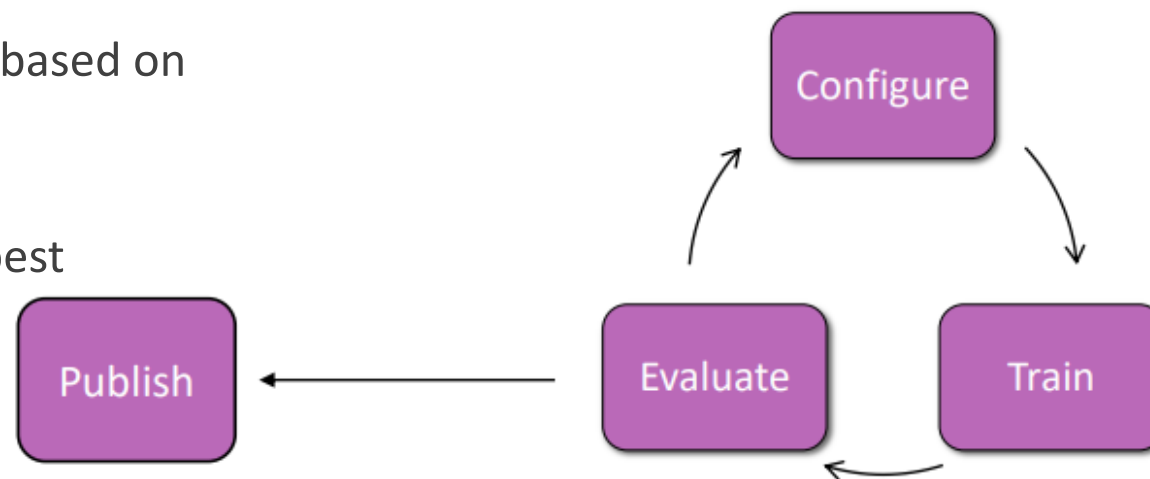
- Category Classification (Language API)
- Entity Extraction (Language API)
- Form Processing (Vision API)
- Object Detection (Vision API)
- Prediction (Decision API)





# How

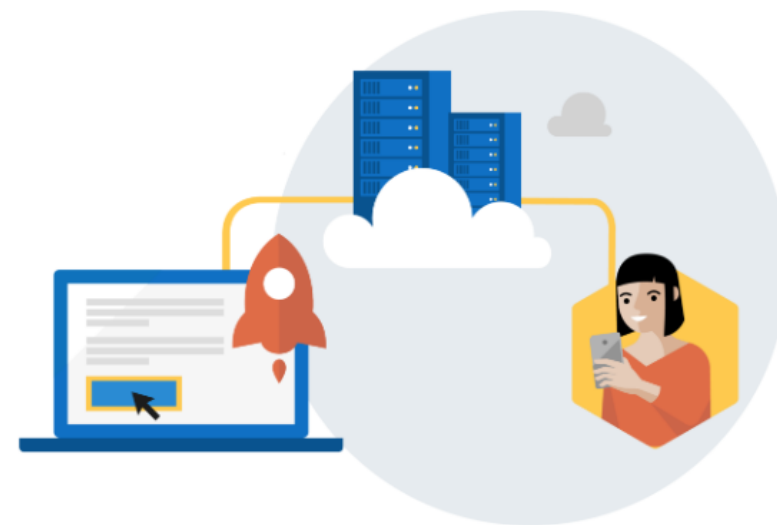
- ❖ Choose a model based on the business need (Pre-built or Custom)
- ❖ Configure your model
- ❖ Train Model
  - Result vary depend on the configuration and data provided to train
  - Rapidly train and optimize decision making based on trend changes
  - and feedback
  - Use context to rank options and make the best decisions
- ❖ Evaluate (performance and quality)
- ❖ Publish and Score Model





# AI Builder in Action

---





# AI Builder Benefit

---



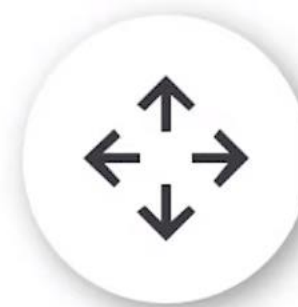
## Easy to use

Guided point and click AI applications



## Empowering

AI for every skill level



## Extensible

Embedded within the Power Platform and Dynamics 365



No need to manage AI infrastructure & complexity



Security, compliance, user roles



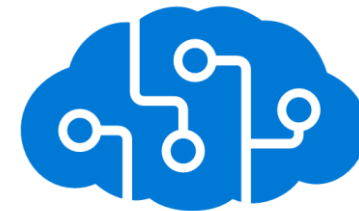
# What is AI

---

AI is the creation of software that imitates human behaviours and capabilities and the ability to interact intelligently with the user.

Key element:

- ❖ **Machine learning** - The way we "teach" a computer model to make prediction and draw conclusions from data.
- ❖ **Anomaly detection** - The capability to automatically detect errors or unusual activity in a system.
- ❖ **Computer vision** - The capability of software to interpret the world visually through cameras, video, and images.
- ❖ **Natural language processing** - The capability for a computer to interpret written or spoken language and respond in kind.
- ❖ **Conversational AI** - The capability of a software "agent" to participate in a conversation



# Behind the scenes of AI Builder

---

❖ A collection of Artificial intelligence APIs



## **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



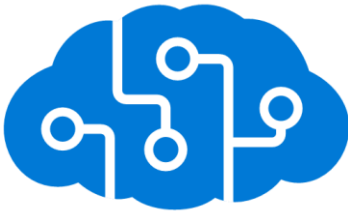
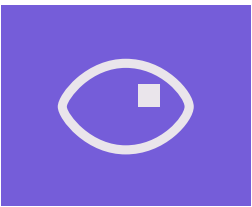
## **Knowledge**

Map complex information and data in order to solve specific tasks



## **Search**

Access billions of web pages, images, videos, and news with the power of Bing



# Vision

---



## **Computer Vision**

Distill actionable information from images



## **Video Indexer**

Process and extract smart insights from videos



## **Face**

Detect, identify, analyze, organize, tag faces in photos, and even recognize emotions



## **Content Moderator**

Machine-assisted moderation of text and images, augmented with human review tools



## **Custom Vision**

Customizable web service that learns to recognize specific content in imagery



# Speech

---



Use speech to identify and verify individual speakers



## Translator Speech

Easily conduct real-time speech translation with a simple REST API call



## Custom Speech

Overcome speech recognition barriers like speaking style, background noise, and vocabulary



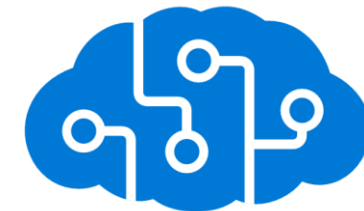
## Unified Speech service

Unified speech service for **speech-to-text** (general and custom speech models), **text-to-speech** (general and custom voice models) and **speech translation** (general and custom translator)



## Bing Speech

Convert speech to text and back again to understand user intent



# Language

---



## Text Analytics

Detect sentiment, key phrases, language, and extract top entities from your text



## Bing Spell Check

Detect and correct spelling mistakes within your app



## Translator Text

Easily perform speech and text translation



## Language Understanding

Teach your apps to understand commands from your users



# To Know More

---



- ❖ Tutorials: <https://docs.microsoft.com/en-gb/ai-builder/>
- ❖ AI Platform : <https://azure.microsoft.com/en-us/overview/ai-platform/>
- ❖ AI School: <https://www.microsoft.com/en-us/ai/ai-school>
- ❖ AI Lab: <https://www.microsoft.com/en-us/ai/ai-lab>
- ❖ AI in Power Automate: <https://docs.microsoft.com/en-us/ai-builder/use-in-flow-overview>
- ❖ AI in Power App: <https://docs.microsoft.com/en-us/powerapps/use-ai-builder>



Figure: QR Code for Feedback

# Thank You!



Figure: QR Code for SSW Rewards



---

|  @SomyAyazi |  somy-ayazi