

JG Summit – Train the trainer

Microsoft Power Platform

02 June 2023

Power Apps

Power Automate

Microsoft Dataverse

Aroh Shukla

Power Apps

Power Automate

Microsoft Dataverse



Aroh Shukla

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Microsoft
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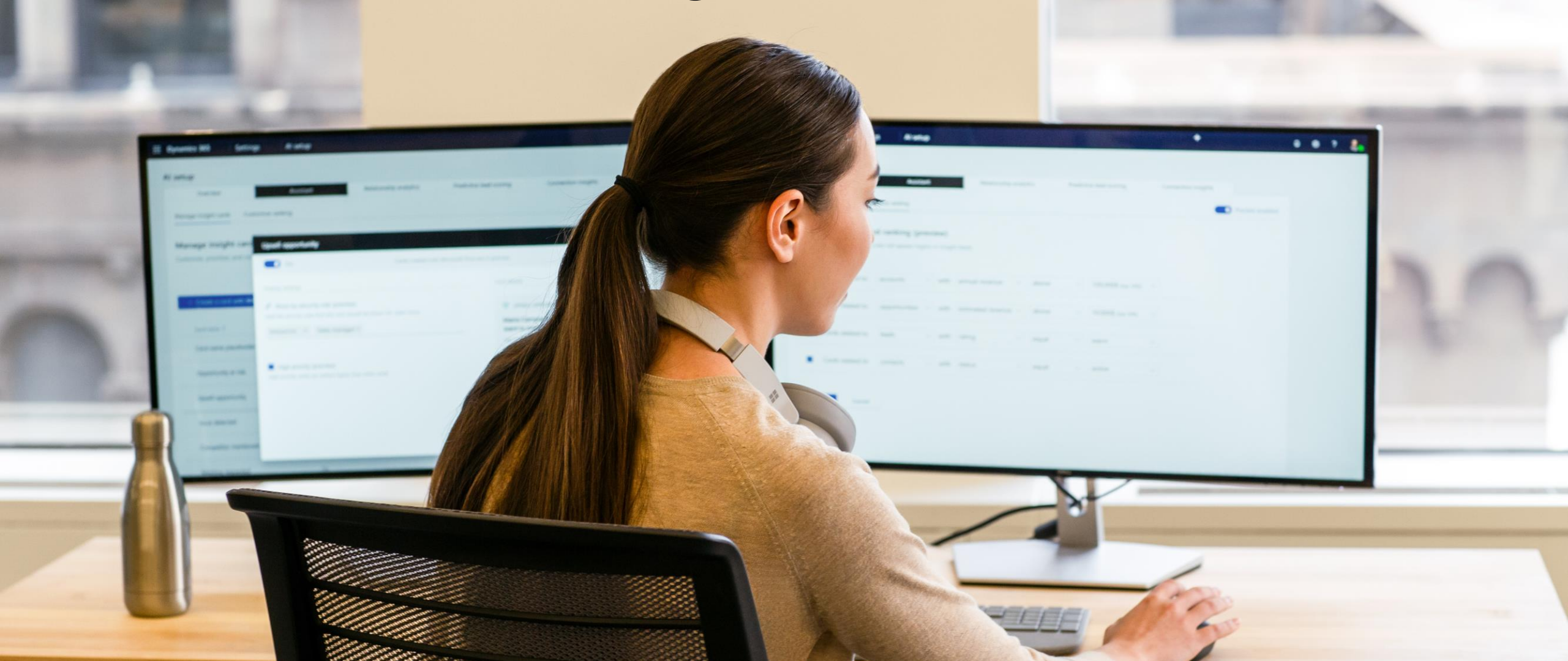
<https://www.linkedin.com/in/arohshukla/>

Introduction

Microsoft Business Applications

Virtual Agenda *(times are approximate and will be fluid with the class)*

| Time | Topic | Details |
|---------------|--|--|
| 8:30 | Introductions | Introductions and logistics; Business Application Platform Overview |
| 8:30 - 9:35 | Power Apps Canvas Apps | Includes presentation, lab and solution discussion |
| 9:35-9:45 | Break 1 |    – <u>10 mins</u> |
| 9:45-11:30 | Microsoft Dataverse | Includes presentation, lab and solution discussion |
| 11:30 – 12:45 | LUNCH | YEAH!! 😊 <u>1 hours 15 mins</u> |
| 13:00 -14:00 | Power Automate | Includes presentation, lab and solution discussion |
| 14:00-14:10 | Break 2 |    – <u>10 mins</u> |
| 14:10-16:15 | Integration of Power Platform & Azure OpenAI | Includes presentation, lab and solution discussion |
| 16:15-16:30 | Wrap up | Hackathon tips |



The need for digital resilience has never been greater.

The app gap challenge

A growing demand for apps - but not enough developers to build them

500 million

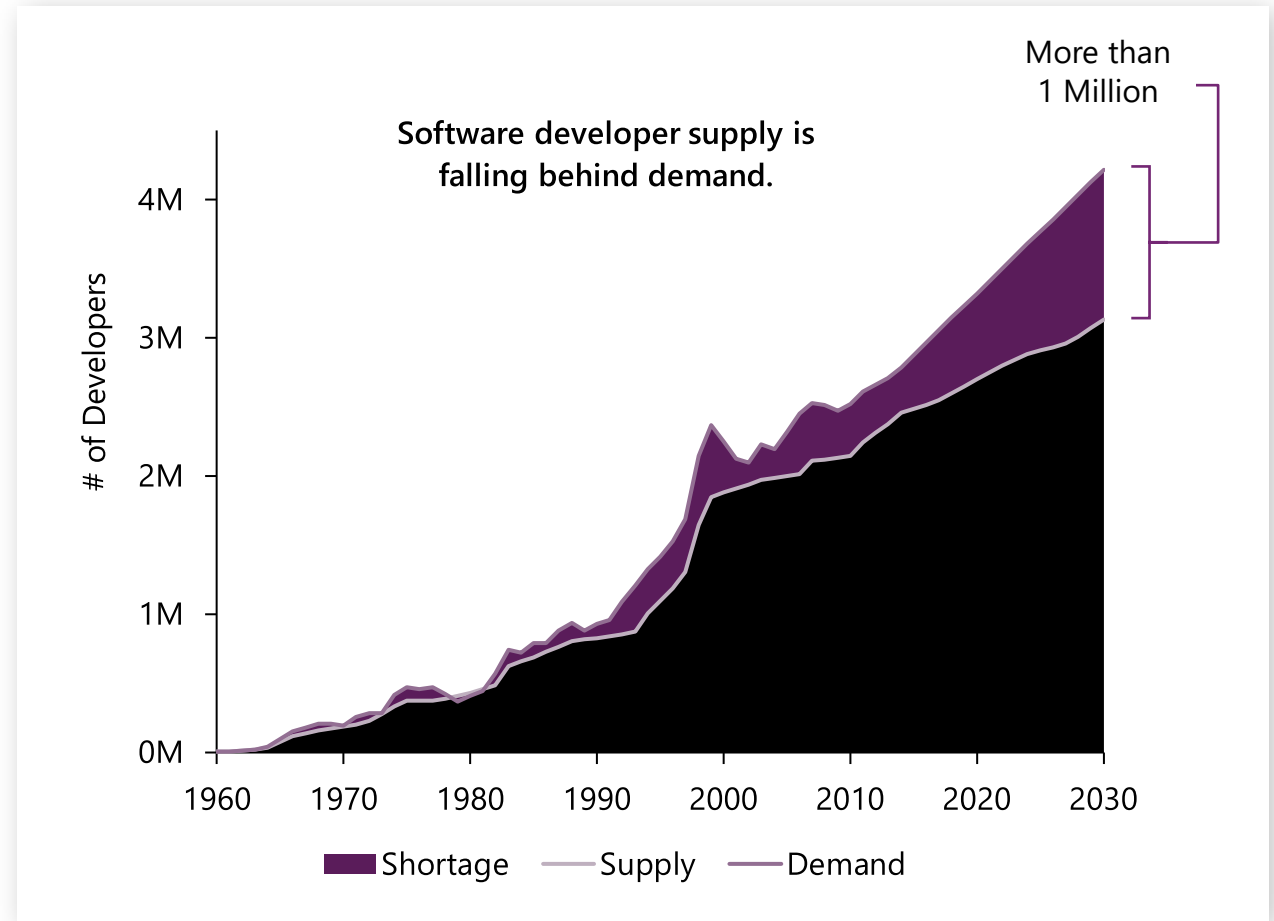
new apps will be built in the next 5 years – more than all apps built in the last 40 years!¹

5x

Faster demand for mobile apps than IT departments can deliver.²

86%

of organizations struggle to find technical talent to build applications.³



¹ IDC FutureScape: Worldwide IT Industry 2020 Predictions. Doc # US 45599219, October 2019

² Gartner, How to Deliver Enterprise Mobile Apps Faster – 2017

³ Patrick Moorhead, [Microsoft goes all-in on hybrid Cloud and Edge at Ignite 2019](#), citing Indeed survey, Forbes.com, Nov 2019

Business and IT challenges



Budget constraints



Time and resource constraints



Rising customer expectations



Paper processes



New digital business models



IT/business partnership



Limited agility



Need for differentiation



Technical skills shortages



Security and compliance risks

Power Apps drives business transformation

Reduce development costs and increase overall productivity

188%

ROI over three years

74%

Reduction in app development costs
over traditional coding services

3.2 hrs

Line-of-business employee
productivity improvement per week

Results are for a composite organization based on interviewed customers. The Total Economic Impact of Power Apps commissioned study conducted by Forrester Consulting, March 2020.

Low Code Application Development

Using the right tool for the job



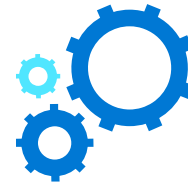
Meet business demand faster

Accelerate frontends and business process development



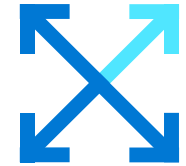
Reduce your costs

Get 74% reduction in app development costs



Seamless app development

Improve security posture and manage application lifecycle seamlessly



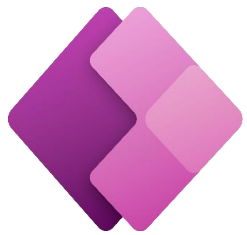
Effortless integration and extensibility

Extend apps with the ultimate flexibility powered by best-in-class Azure services

Power Apps provides a low-code approach to rapidly build apps for any device, while seamlessly working with your Azure-based services through a rich professional developer extensibility model.

Innovate at the speed of your creativity

With a comprehensive set of multi-experience app capabilities



Power Apps

Physical and
digital
world



IoT
Edge



IoT
Hub



Mixed
reality



Geospatial

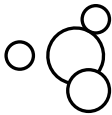


Mapping



Hololens

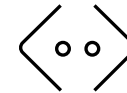
Artificial
Intelligence
solutions



AI
builder



Azure cognitive
services



Robotic Process
Automation



Power
Virtual Agents



Power BI

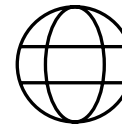
Innovative
Integrations



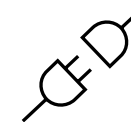
GitHub



Teams



Portals



350+
connectors



API
management

Analyst Recognition FY22 Q3



A Magic Quadrant™ Leader for Analytics and Business Intelligence Platforms

By Austin Kronz, Kurt Schlegel, Julian Sun, David Pidsley, Anirudh Ganeshan, March 2022

The research asserts that spending on the ABI platform market “is growing more slowly” while “the number people using ABI platforms is accelerating massively” influenced by the pandemic and accessible pricing. Cloud data and analytics ecosystems and major cloud vendors influence the market creating “inevitable concerns about lock-in and unforeseen costs” on one hand and drive “openness in their software stacks and the growing importance of multicloud” on the other. Gartner notes the market continues to evolve with augmented analytics capabilities “putting the ABI and data science and ML platform markets on a collision course”.



These graphics were published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner documents are available upon request from Microsoft:

- Gartner Magic Quadrant for Analytics and Business Intelligence ([LINK](#))

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Microsoft Power Platform

One low-code platform that spans Office 365, Dynamics 365, Azure and standalone applications

Dynamics 365



Office 365



Azure



Your business apps & data



Power BI
Business analytics



Power Apps
Application development



Power Automate
Workflow automation



Power Virtual Agents
Intelligent virtual agents



Power Pages
Build websites



Dataverse

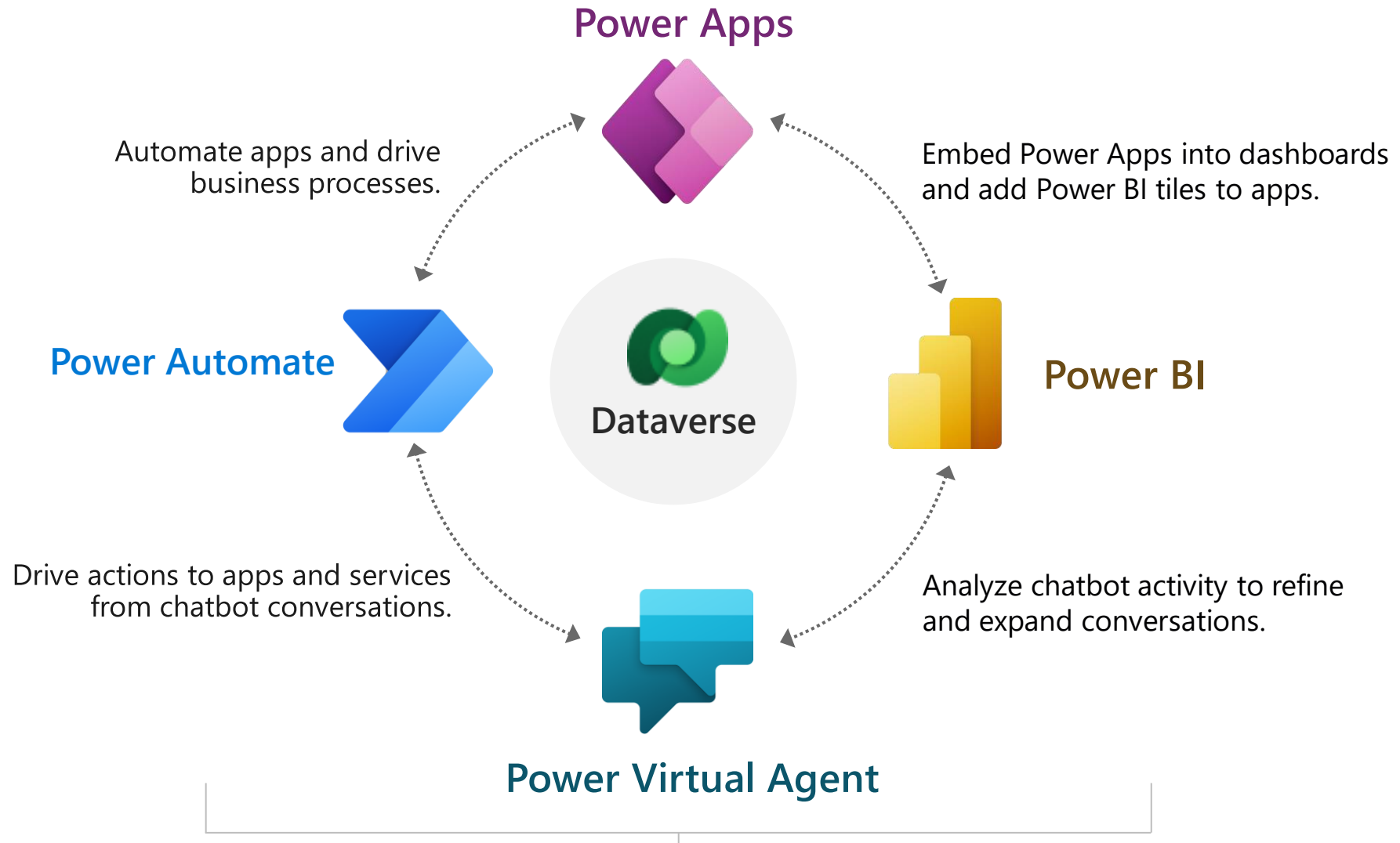


Data
connectors

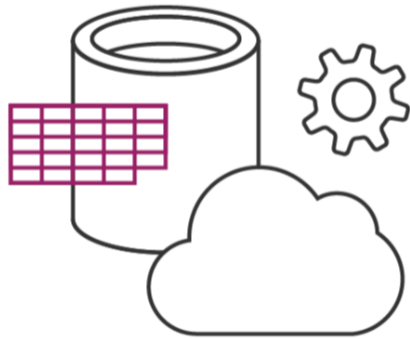


AI Builder

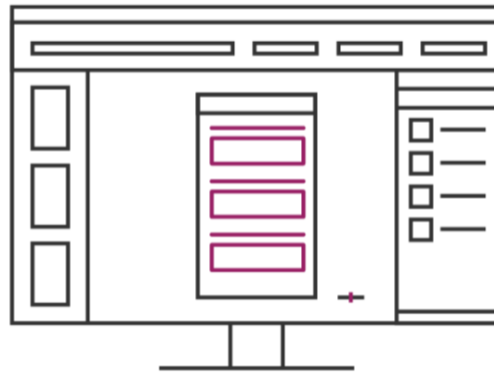
Powerful alone. Even better together.



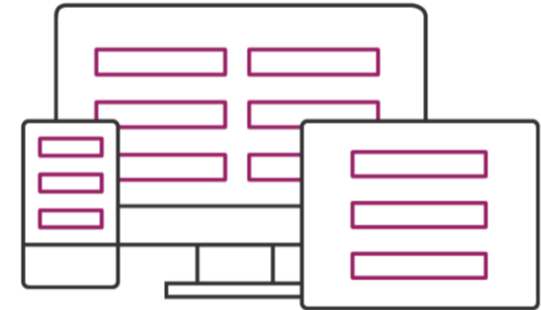
Canvas Apps help business power users to create and use custom business apps across platforms using Excel and PowerPoint skills



Connect to data & systems you're already using *easily*

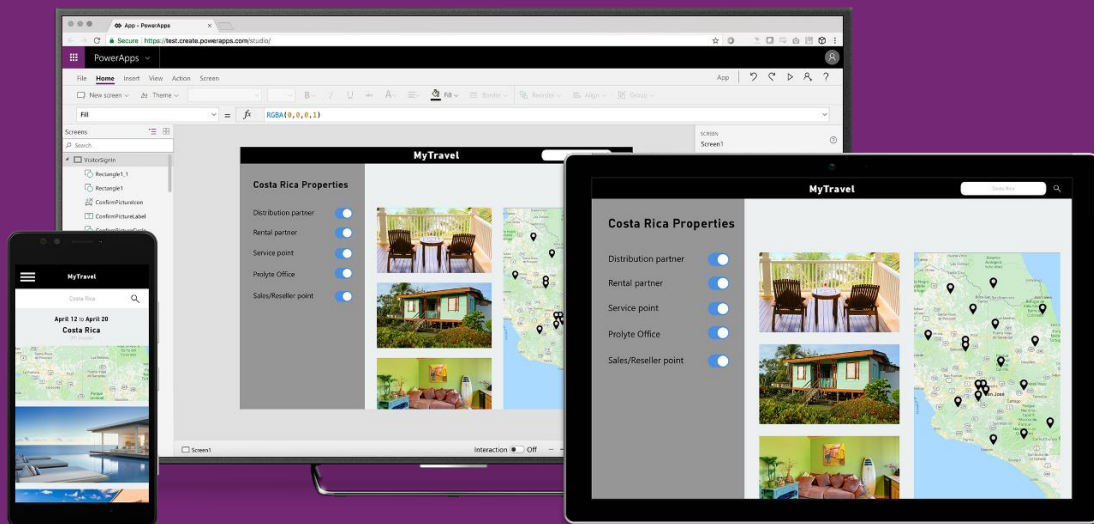


Create apps, forms, and workflows *without writing code*



Use apps *on any device* – both web and mobile

Apps for web and mobile



Build **standalone** web and mobile apps, or **customize** existing apps in Office 365 and Dynamics 365 to deliver a seamless experience **across channels**

Craft **pixel-perfect experiences** from a blank canvas for highly customized, task and role-based apps

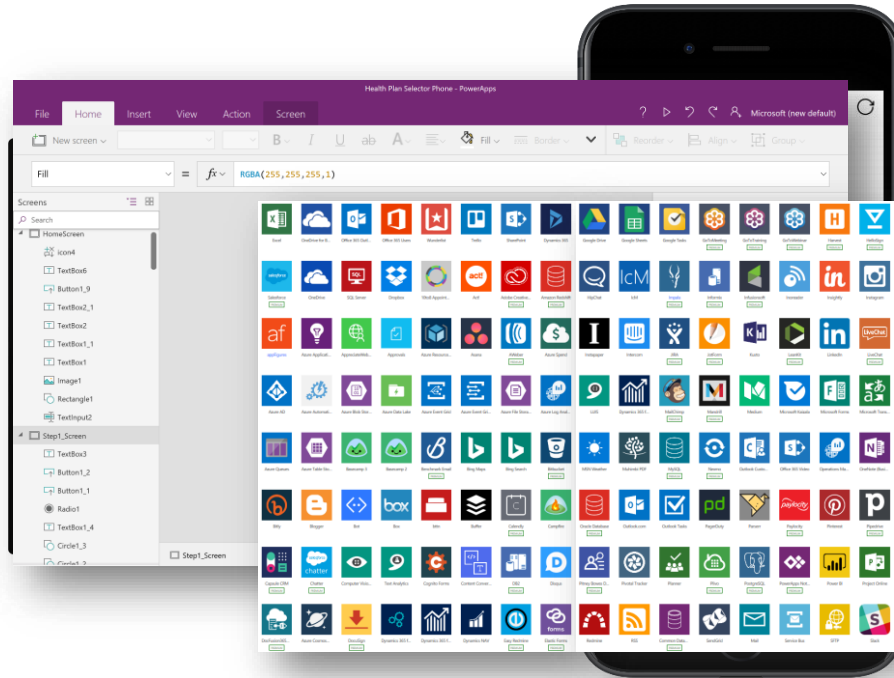
Generate immersive, **declarative, responsive apps** from a rich data model and workflow engine

Connect to **hundreds of data sources** for events and actions, from Microsoft and other vendors

Leverage native mobile capabilities like **camera, GPS, push notifications, add custom** components and more to build consumer grade applications

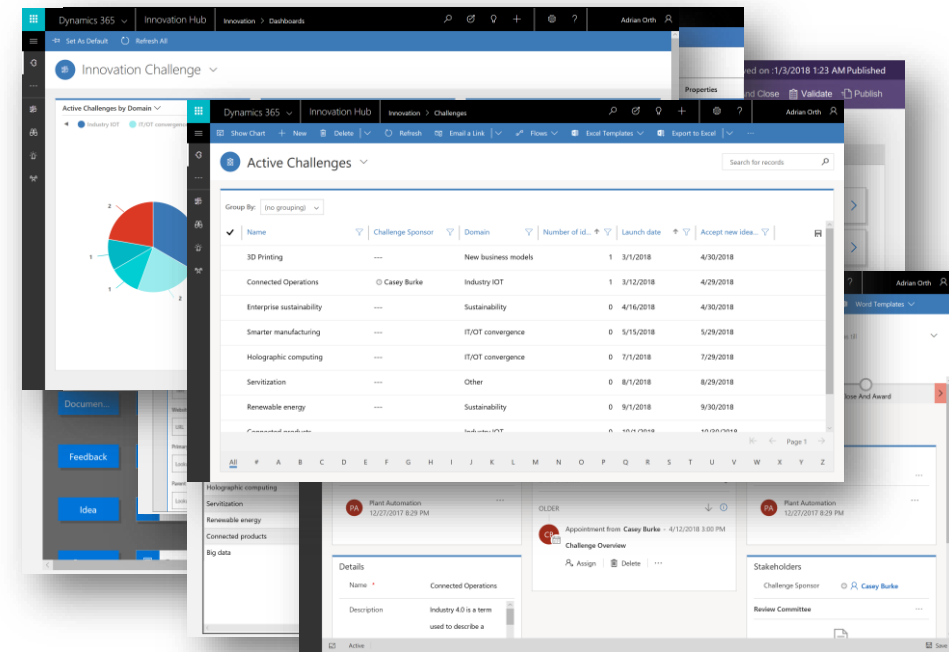
Build with intelligence including **Natural Language Processing**, image detection, and other built-in cognitive services powered by Azure

Starting with Power Apps



Canvas apps

Start with user experience
WYSIWYG designer
Task-based & role-based apps
Mash-up data from hundreds of sources

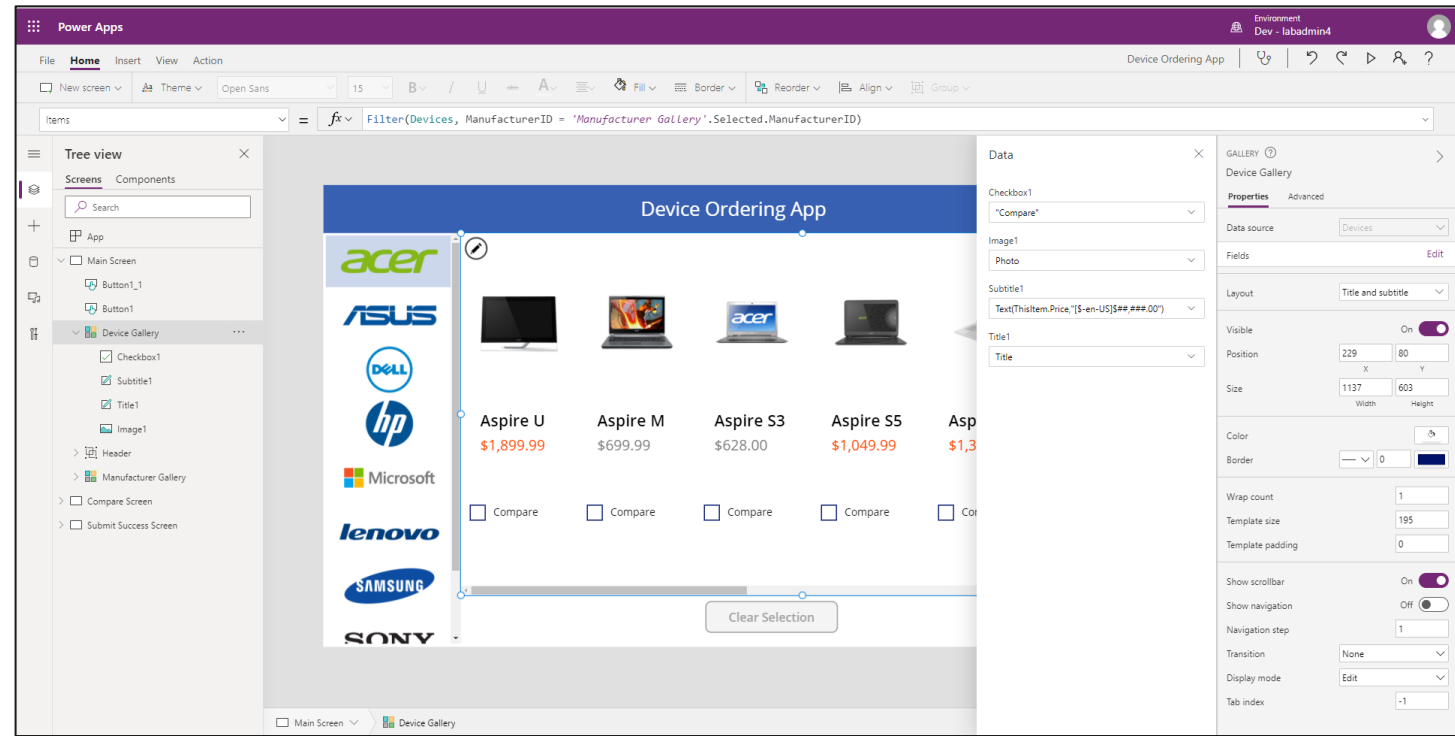


Model-driven apps

Built on Dataverse
Start with a data model, relationships, and business processes
Build End-to-End business applications

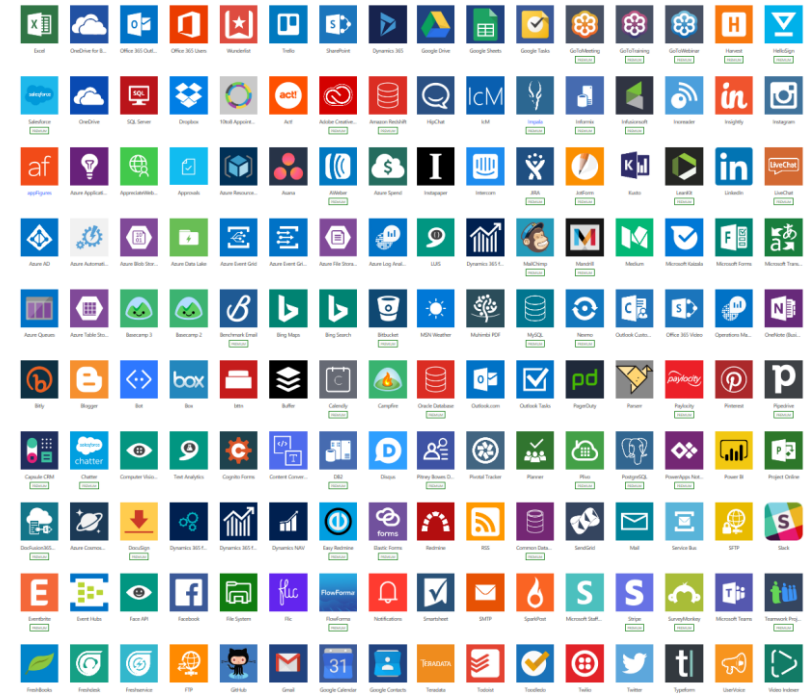
Easy Authoring

- Truly WYSIWYG – full control over user experience, use it as you build it
- Create app logic with familiar Excel-like expressions
- Mash up data from multiple sources right at the app level



Cloud and on-premises connectivity

- Built-in connectivity to hundreds of cloud services, files, databases, web APIs, etc.
- Seamless hybrid connectivity to on-premises systems via the on-premises Data Gateway
- Build custom connectors for everyone to leverage



Hands-on-lab introduction

Business scenario



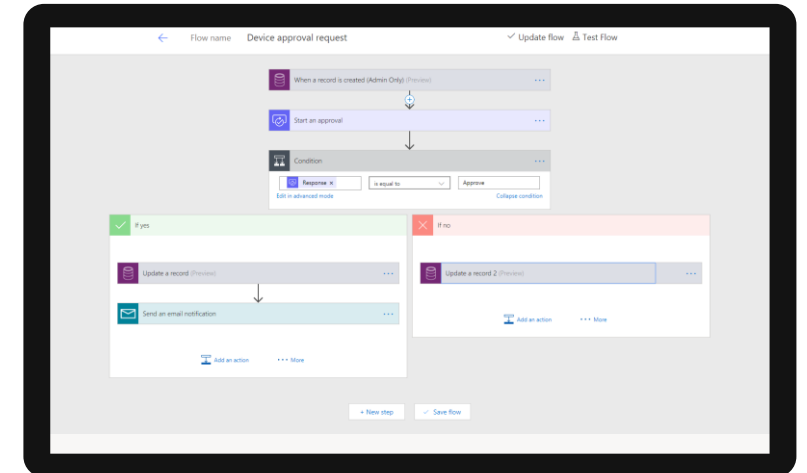
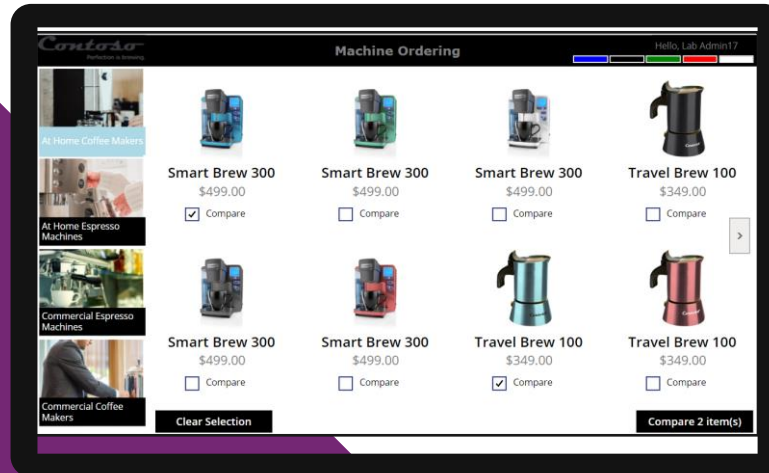
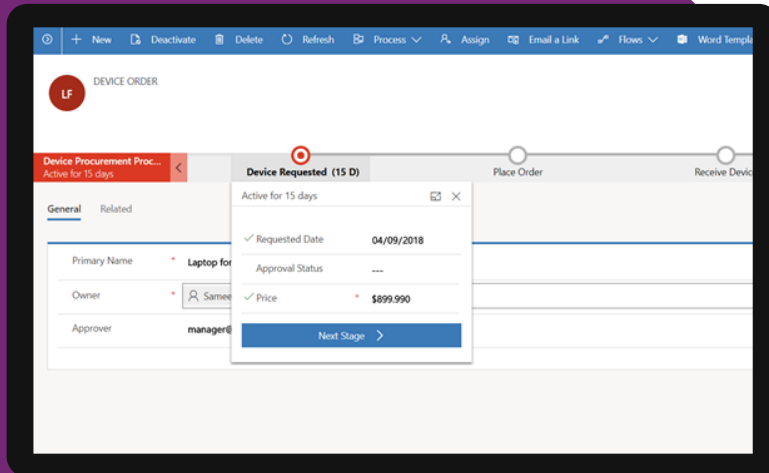
Imagine an organization where every few years the **employees request** an updated **coffee machine for their employee break room**



We will streamline the **device order, procurement and approval process** and **view aggregate reports**



The employee-facing **device ordering app** needs to run in a **web browser and on mobile devices**

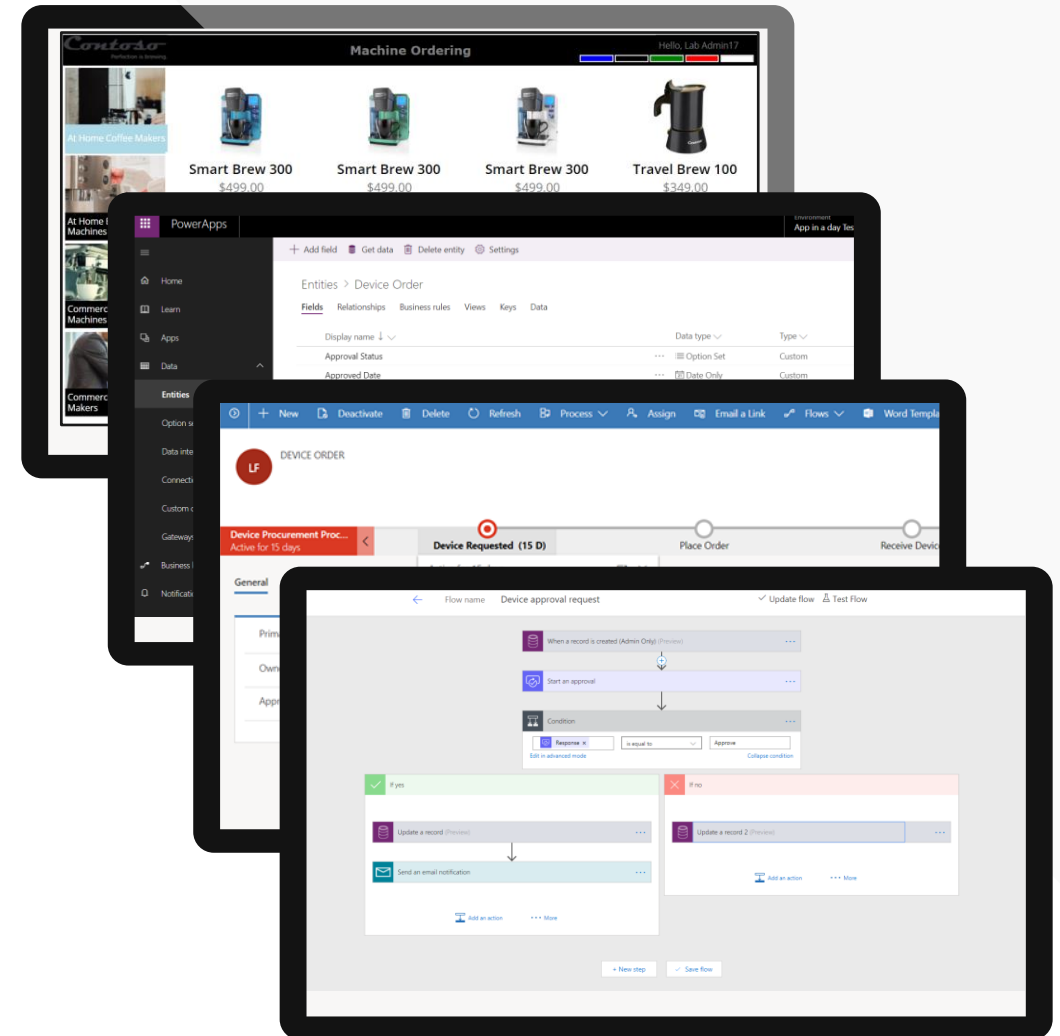


Lab objectives

Build a **Power Apps Canvas app** for employee facing device ordering experience

Use **Dataverse** to store the device orders in the cloud

Use **Power Automate** to build an approval workflow for device approval



Lab content

Package: <http://aka.ms/appinaday>

Unzip the package on your local machine

Follow instructions: "00-AppinaDay Lab Overview.pdf"



Contains 4 modules with a lab doc for each

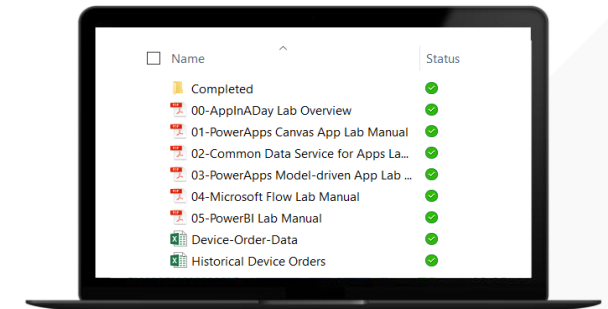
- 01-Power Apps Canvas App
- 02-Dataverse
- 03- Power Automate
- 04- **Power Platform + Azure OpenAI**



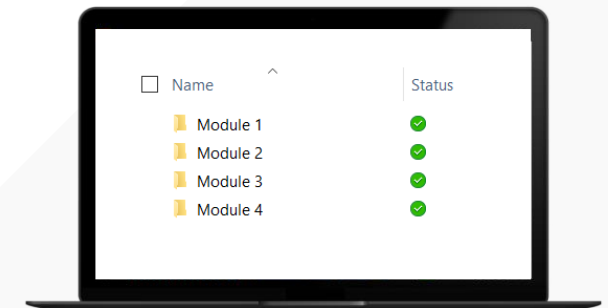
Completed Modules

- The \Completed folder contains solution packages that you can import
- e.g. To work on Module 4 without completing previous modules -> see \Completed\Module3

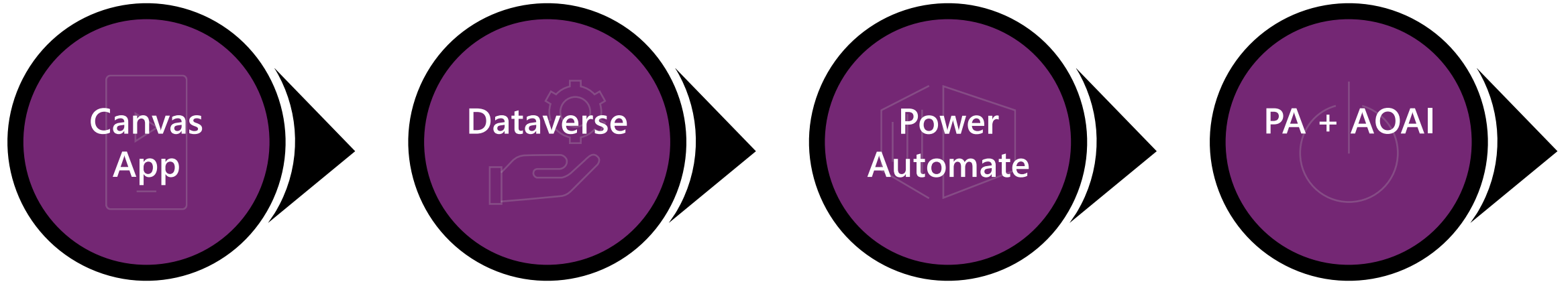
Lab docs:



Completed modules:



Lab overview



Hands-on-lab 1

Module 1: Power Apps Canvas App

Module 1: Learning objectives



Sign-in and create a new canvas app



Connect to data sources



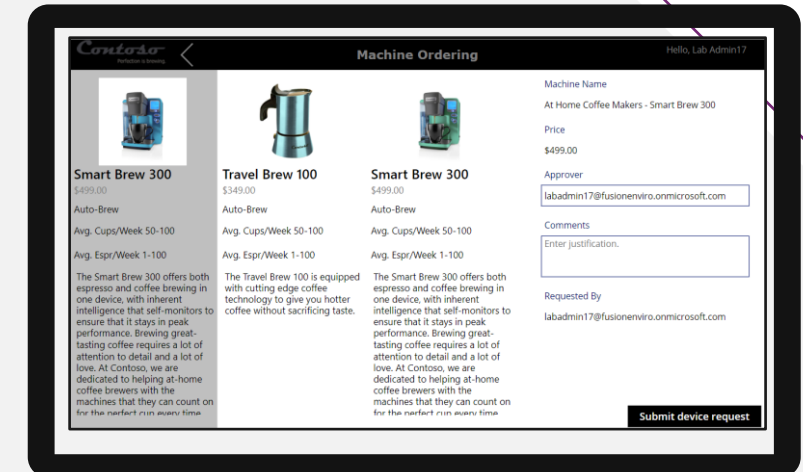
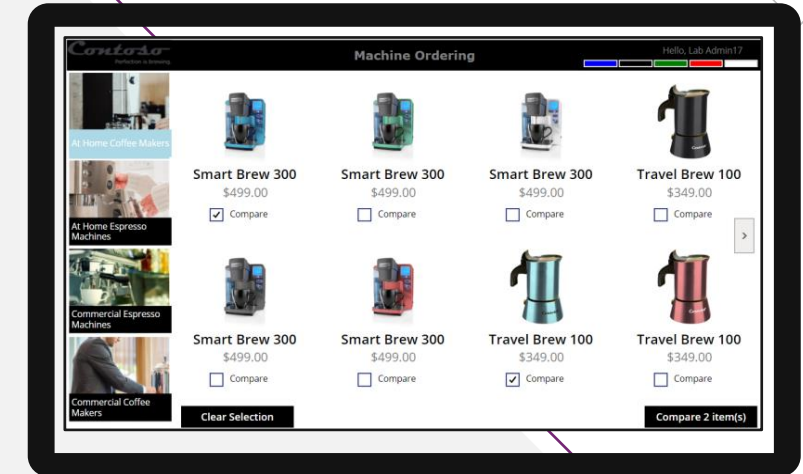
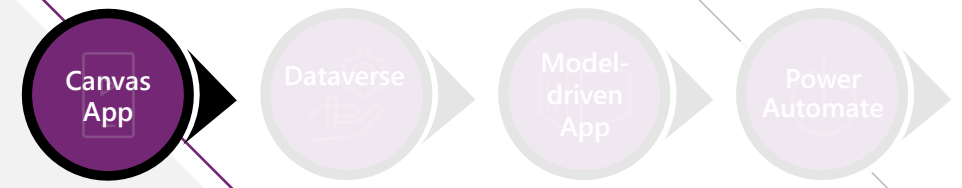
Filter data



Work with multiple screens and navigation



Customize the user experience – galleries and controls





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