

# Automation: The Microsoft Way



# Who am I?

- I have been working on SharePoint for the last nine years first as a Consultant, then as Lead Developer for a local utility company, then back as a consultant.
- Outside of the office, I spend my free time taking down Dragons, and exploring Dungeons. I also hike the beautiful parks in Louisville, KY, with his wonderful wife Samantha, and adventurous puppy Lucas.



# Who is HMB?

## Employment Model

Over 250 FTE consultants. All had an intense interview process.



## HMB Delivery Network

Our consultants can work on site, off site or even off shore.

## Consultant Support

All of our consultants are supported with on-going education and certifications.



## Customer +

Your access to regular thought leadership content, strategic workshops and custom training.

## Layered Experience

We are not a staff aug firm. When you work with HMB, you have access to a network of expert consultants.



## Regional Partner

We were founded and our headquarter office is right here in the Columbus area! We are committed long term meaningful partnerships.

# Overview

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Automation Basics

AI in Automation

Machine Learning

Intelligent Automation



# What is Automation?

Technology by which a process or procedure is performed with minimal human assistance.

# Why use Automation?

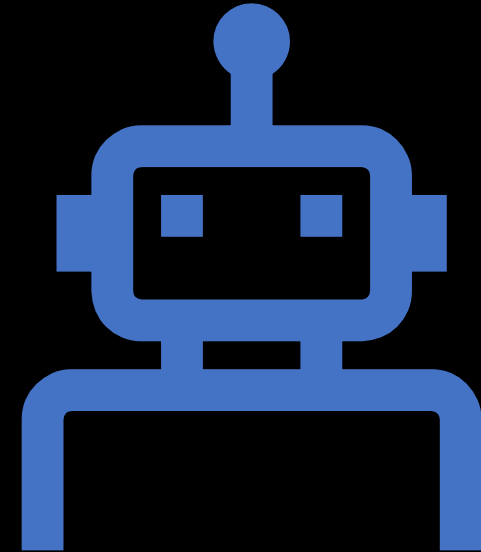
- *By 2024, organizations will lower operational costs by 30% by combining hyperautomation technologies with redesigned operational processes.*

*\*Gardner's IT Automation Predictions for 2020*

# Defining Characteristics of Automation

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- Artificial Intelligence
- Machine Learning
- Intelligent Automation



# Artificial Intelligence

## Azure Cognitive Search

Extract Insights from all your content

## Azure Cognitive Services

Pre-trained models that can be customized with your data.

## Bot Service

Use the above services to build out bots for your organization.



# Azure Cognitive Search

Scalable with  
minimal  
investment

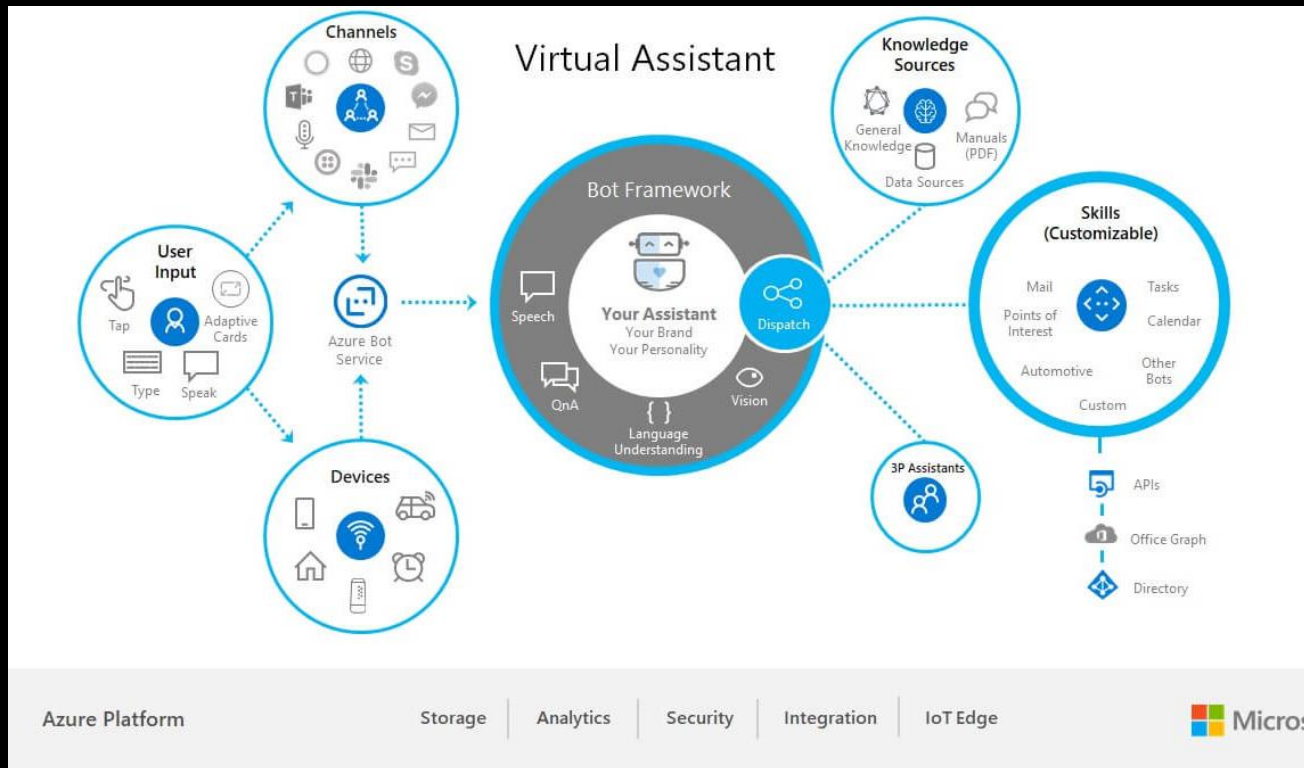
Searchable  
content with  
integrated AI

Customizable  
for your  
business needs

# Azure Cognitive Services

- Decision Engine
  - Make smarter decisions faster with Anomaly Detection, Content Moderation, and personalized experiences
- Language Service
  - Extract data from unstructured text with LUIS AI, Text Analytics, and Translator services
- Speech
  - Integrate speech processing into your apps and services. To enable Text to Speech, Speech Translation, and Speaker recognition.
- Vision
  - Identify and analyze content using Computer Vision services to analyze your content.
- Web Search
  - Bring the web to your applications using Bing Web Searches.

# Azure Bot Service



Deliver a personalized experience to your organization by building a virtual assistant.

Robotty the  
conversational  
robot



# Machine Learning

Accelerate Model  
creation with automate  
machine learning

MLOps bring Dev Ops  
functionality to  
Machine Learning  
streamlining the ML  
lifecycle.

Use ML to understand,  
protect, and control  
your data, models and  
processes.

# Intelligent Automation

- Quickly automate business processes with Power Automate
- Orchestrate business processes across hybrid environments with Azure Automation Services.

# Power Automate



Build business processes that scale according to your need



Manage approval processes from a centralized location



Automate applications without the need of API's

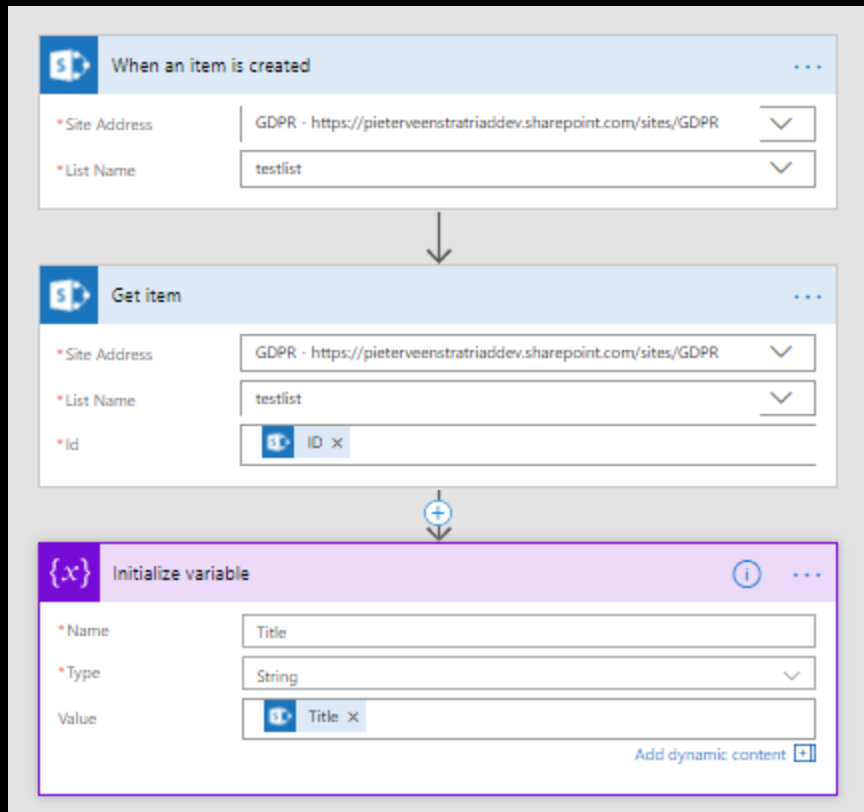


Accelerate your citizen development program with an easy, intuitive UI

# Triggers

| TRIGGER TYPE                                   | DESCRIPTION  |
|--|--|
| Polling, such as the <b>Recurrence</b> trigger | When the flow is turned on again, all unprocessed/pending events are processed. Delete your flow if you don't want to process pending items. |
| Webhook  | When the flow is turned on again, it only processes new events that are generated after the flow is turned on.                               |





# Actions

- Perform operations such as Create, Update, Delete, Assign, or Perform an Action
- Examples include sending an email, Initializing a variable, Retrieving data, and many more.

# Robotic Process Automation

- Increase Efficiency and Accuracy
- Simplify your business processes
- Build and Maintain scripts in a secure environment

# Types of RPA

- Attended
  - Runs on a local workers PC allowing the worker to correct any errors as needed.
  - Best if Human intervention is required
- Unattended
  - Runs with no user logged in
  - Triggers in the background based on events
  - Best for high volume repetitive tasks



HMB

# Azure Automation

Automate

Automate frequent time-consuming cloud management tasks

Manage

Manage hybrid configurations with PowerShell configuration tasks

Orchestrate

Orchestrate installation of updates across your organization

Utilize

Utilize runbooks to integrate systems or services across the organization

# Common Scenarios

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- Runbooks
- Build and Deploy Resources
- Configure VM's
- Knowledge Transfer
- Inventory Management
- Monitor
- Governance

Common Scenarios that are well defined



Runbooks

Three Types

Graphical

PowerShell

Python

# Desired State Configurations



CENTRALIZED  
LOCATION



EASES MANAGEMENT  
WOES



BUILT IN PULL SERVER

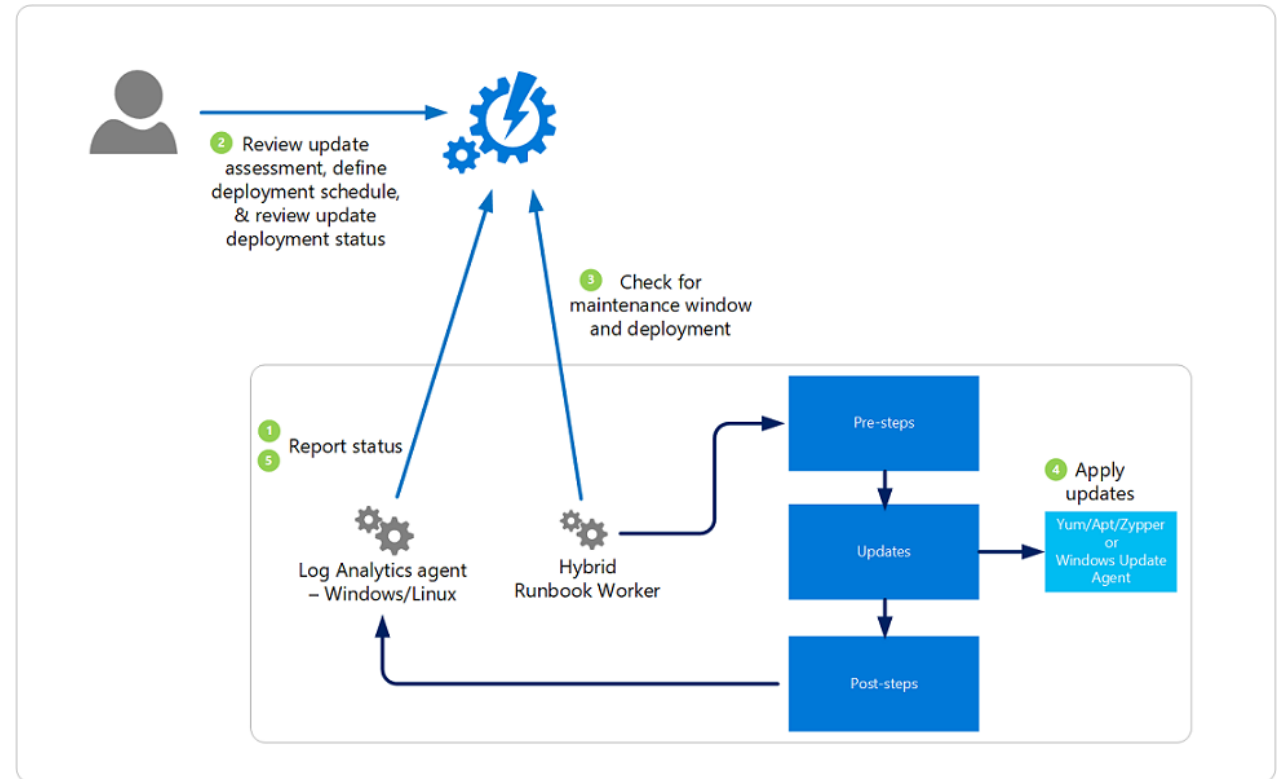


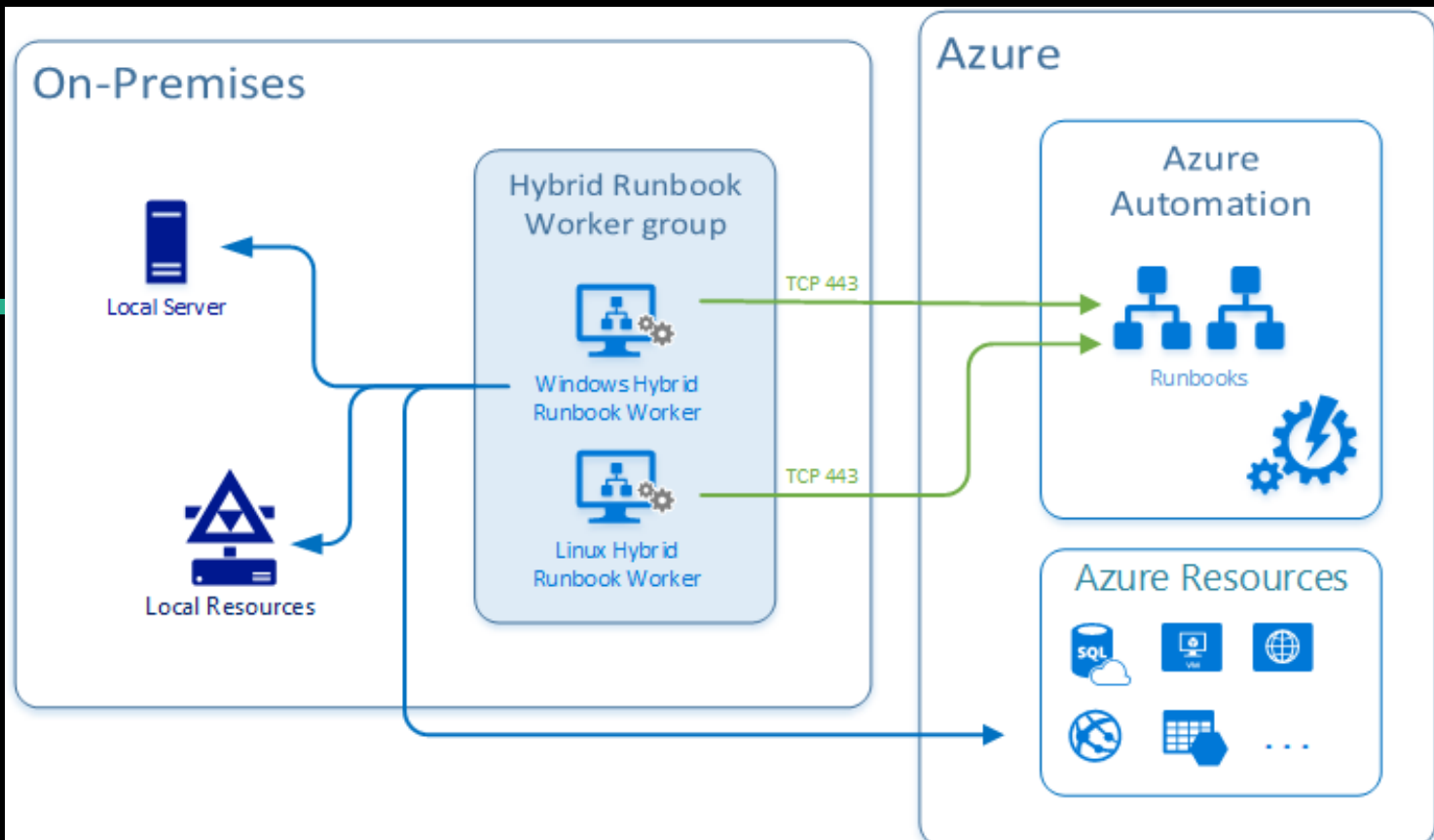
BUILT IN COMPLIANCE  
LOGGING



# Manage VMs

- Manage Operating System Updates for Windows and Linux Machines in various environments
- Ability to quickly assess the status of available updates on all agent machines





- Allows you to continue running Runbooks and Desired State Configurations using Workers on your local network.

# Hybrid Environments



Azure Automation  
\*Come up with  
catchy title

# Power Virtual Agents

Empower your team

Allow your citizen developers to build bots without coding or AI expertise

Reduce Cost

Automate common inquiries

Improve Customer Satisfaction

Allow your customers to self help and resolve their issues quickly 24/7

# What are Power Agents?

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- SaaS Product
- Intuitive, Code-Free Graphical Interface
- Conversational AI
- Enable Bots to take action on issues without human intervention
- Built-In Monitoring



DND Answer Bot