



# Bowdark Fuse Introduction



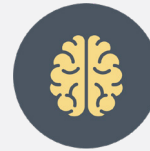
**bowdark**  
TURNING BRIGHT IDEAS INTO REALITY



# About Us

Bowdark's mission is to help our clients run their businesses more efficiently and make life better for the employees through technology.

We specialize in aligning **people, processes, and technology** to maximize efficiency, usability, and value.



## Eye-opening ingenuity

Next-level solutions that work.



## MS + SAP + cloud experts

Published industry thought leaders.



## Customer-centric

Collaboration with, and around, you.



## Genuine people

Wicked smart, yet down to earth.



## More with less

2 people can do the work of 20.





# What is Fuse?

Understanding the Basics of Bowdark Fuse

# Fuse in a Nutshell

- Fuse is designed to extend the reach of your SAP systems: SAP S/4 HANA, ECC, or Business Suite systems
- In a nutshell, Fuse unlocks:
  - Secure API access to SAP backend systems (cloud or on-premises) with end-to-end principal propagation (SSO)
  - Integration with a wide variety of tools and programming environments
  - Access to SAP from low-code development platforms like the Microsoft Power Platform



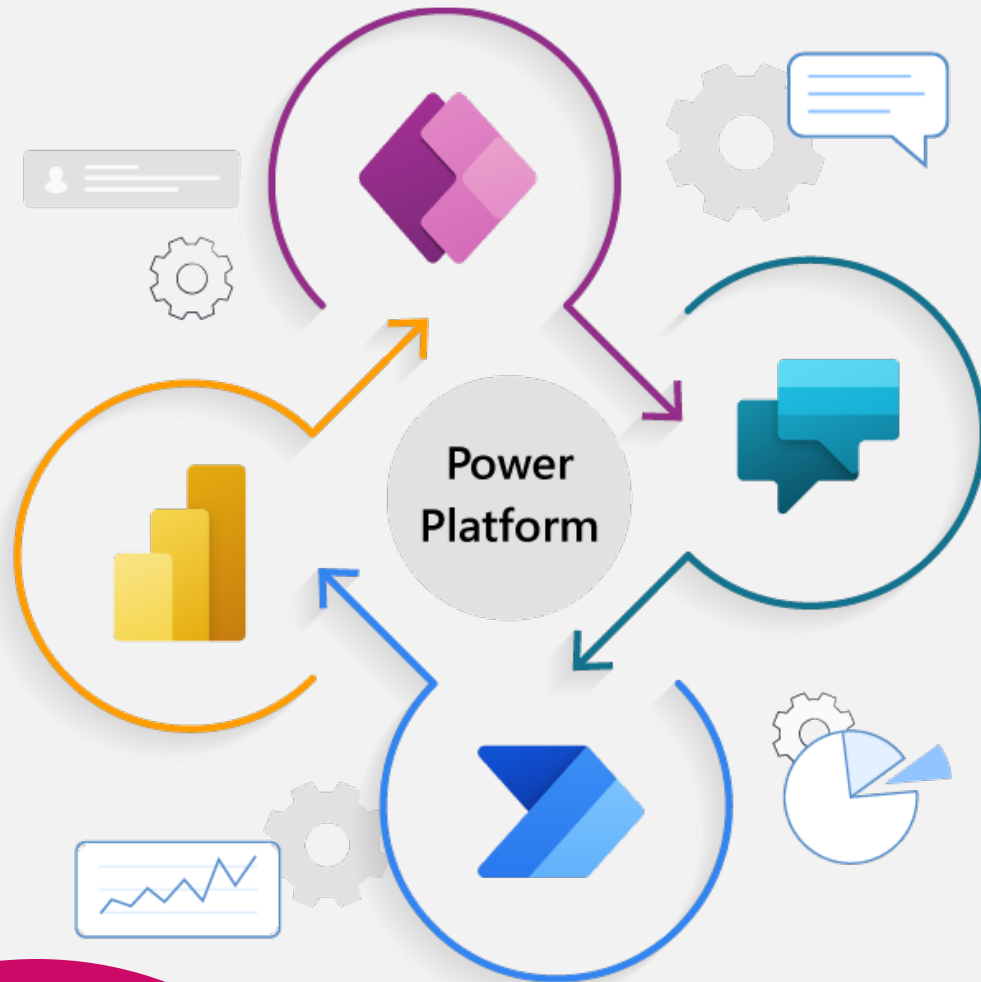
# What Can Fuse Unlock?

- Fuse provides a platform for:
  - Creating a simplified UX on top of SAP
  - Developing commercial grade web and mobile apps
  - Creating customer & supplier self-service portal solutions
  - Rapid interface development
  - Developing workflows and RPA solutions
  - Building intelligent agents / chat bots
  - Performing self-service data analysis using tools like Power BI



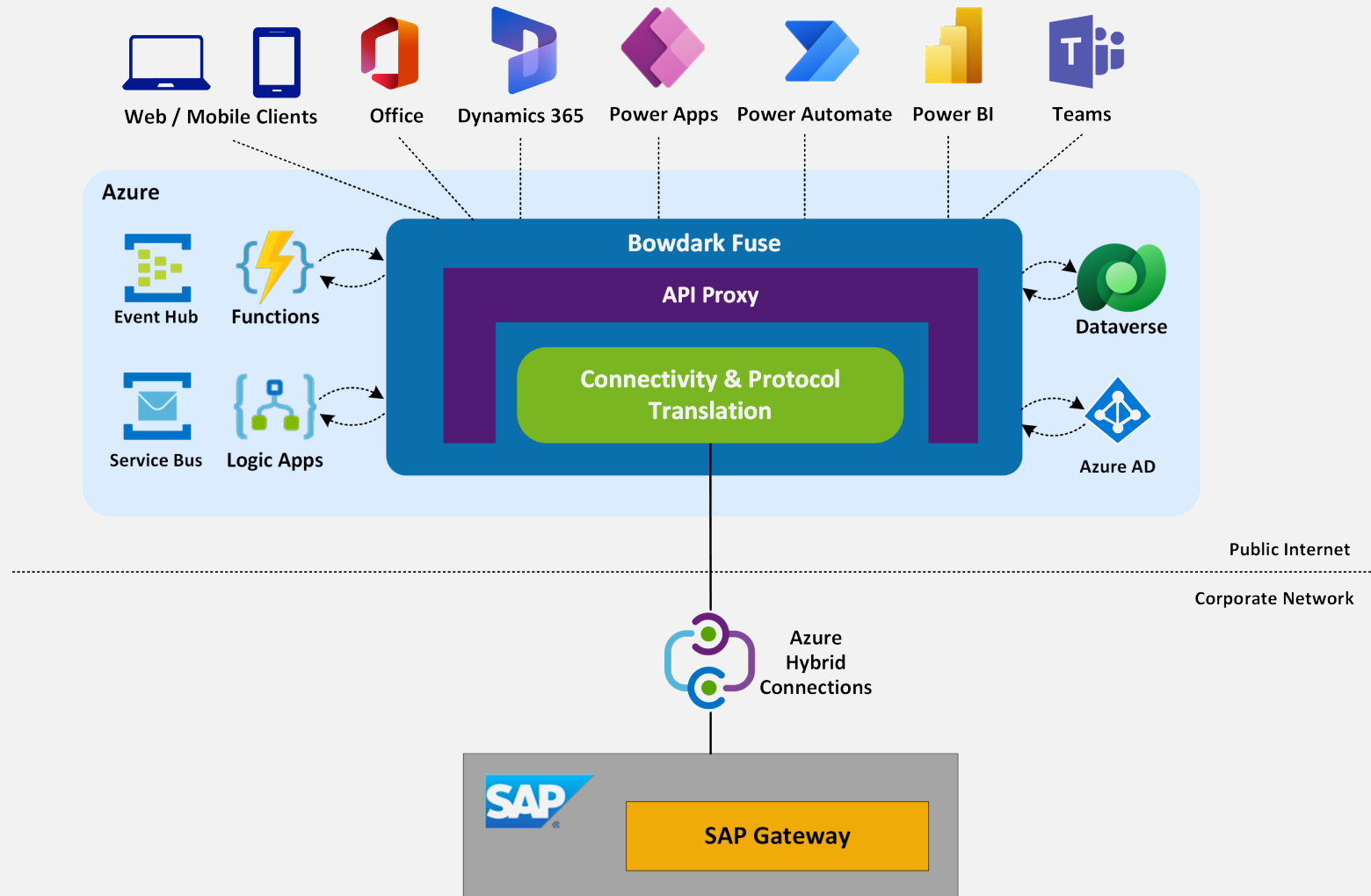


# Fuse ❤️'s Power Platform

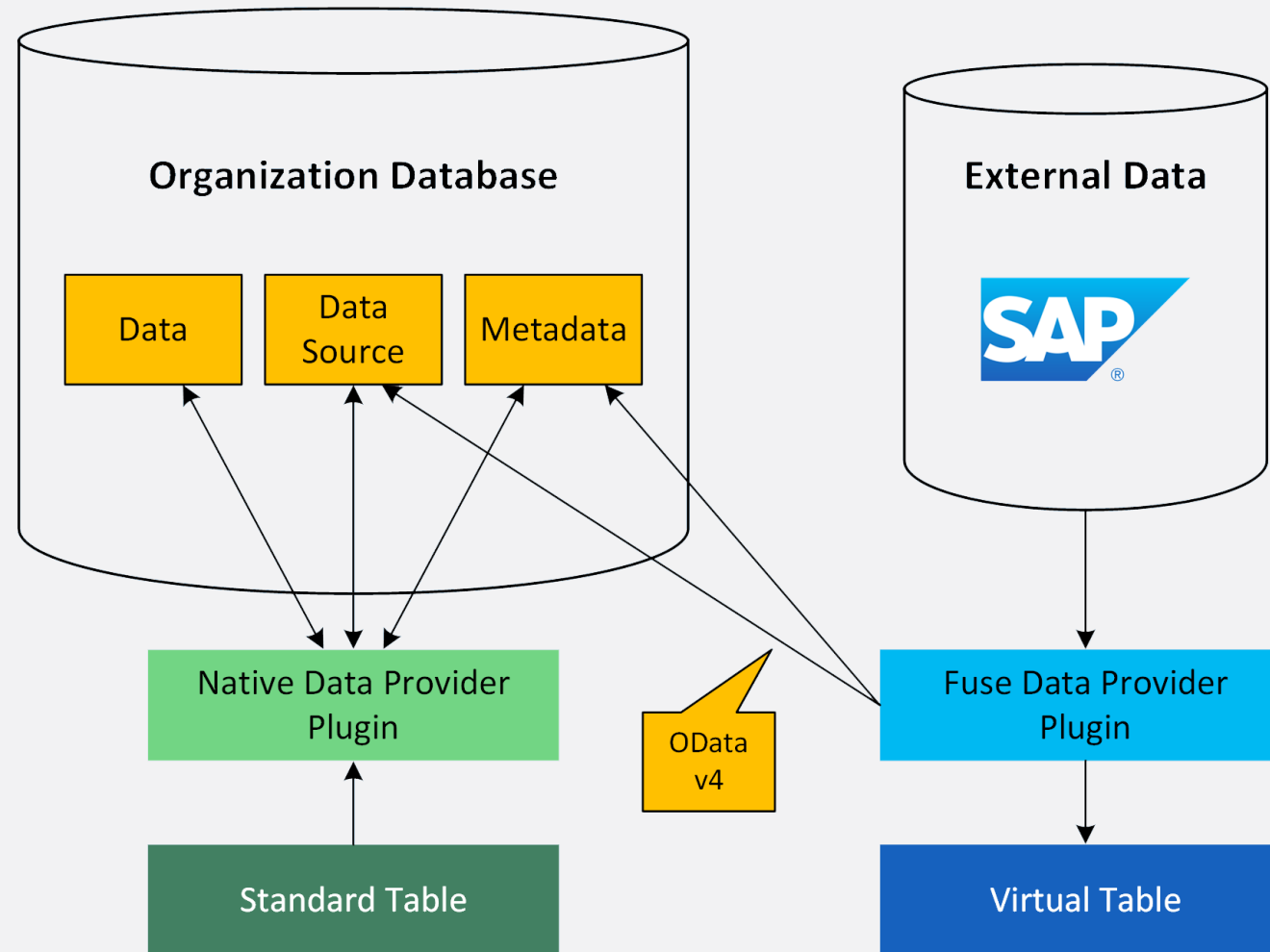


- Part of Fuse's magic is its ability to securely expose SAP OData services to external clients
- This makes it easy to integrate SAP functionality into the Power Platform:
  - Power Apps (Canvas Apps + Model-Driven Apps)
  - Power Automate
  - Power Virtual Agents
  - Power BI

# Fuse Architecture



# SAP <-> Dataverse Integration





# Working with Virtual Tables



Power Apps Environment: D365 Sales for SAP | James Wood

Tables > Service Notification

Table properties: Name: Service Notification, Type: Virtual, Primary column: Short Text, Last modified: 7 months ago

Schema: Columns, Relationships, Keys

Data experiences: Forms, Views, Dashboards

Customizations: Business rules, Commands

Service Notification columns and data

Notification Number	Issue Start	Issue End	User Responsible	Short Text
300000603	10/26/2023			
300000556	9/7/2023			
300000588	9/8/2023		PMODDERMAN	Accepted: agenda review #3
300000040	3/30/2023		AKIEFAT	Bigger Meter Requested
300000476	3/30/2023		KBITSON	Bigger Meter Requested
300000470	3/30/2023		KBITSON	Bigger Meter Requested
300000048	3/30/2023		AKIEFAT	Bigger Meter Requested
300000454	3/30/2023		SARUN	Bigger Meter Requested
300000053	3/30/2023		PMODDERMAN	Bigger Meter Requested

Live SAP in Dataverse with Full CRUD Capabilities

# WYSIWYG Designer Experience



The screenshot shows the Power Apps WYSIWYG designer interface for a form titled "New Equipment". The interface is divided into several sections:

- Top Bar:** Includes the Bowdark logo, "Power Apps | Form", a search bar, environment information ("Environment D365 PO Test"), user name ("James Wood"), and navigation icons for Back, Forward, Undo, Redo, and Save/Publish.
- Left Pane (Table columns):** A list of available data fields for the form, including "Created By", "Created By (Delegate)", "Created On", "Currency", "0.0 Exchange Rate", "Modified By", "Modified By (Delegate)", "Modified On", "Owning Business Unit", "Purchase Price (Base)", "Status", and "Status Reason". A red arrow points from the "Currency" field in this list to the "Purchase Price" field in the main form.
- Main Design Area:** Displays the form layout for "New Equipment". It is organized into sections: "General" (Name, Category, Description, Vendor), "Manufacturing Information" (Manufacturer, Model Number, Serial Number, Order Number), "Price and Assignment" (Purchase Date, Purchase Price, Assigned To, Assigned On), and "Customer Information" (Customer Asset, Customer).
- Right Side:** A vertical label "Equipment main form" is visible on the right edge of the design area.
- Bottom Bar:** Shows the device view ("Desktop (1920 x 1080)"), a "Show Hidden" toggle (currently Off), and a zoom level of 64%.





# Why Fuse?

- Fuse is not just another SAP connector
- Although Microsoft's standard SAP ERP Connector is very powerful, its aim is different than Fuse
- With Fuse, the primary focus is on the developer (or maker) experience
- By directly integrating with Microsoft Dataverse, Fuse provides an abstraction layer that makes it possible for makers to build solutions without requiring deep SAP knowledge
- In this sense, Fuse can be seen as *complementary* to Microsoft's standard SAP connector(s)

# SAP ERP Connector vs. Fuse



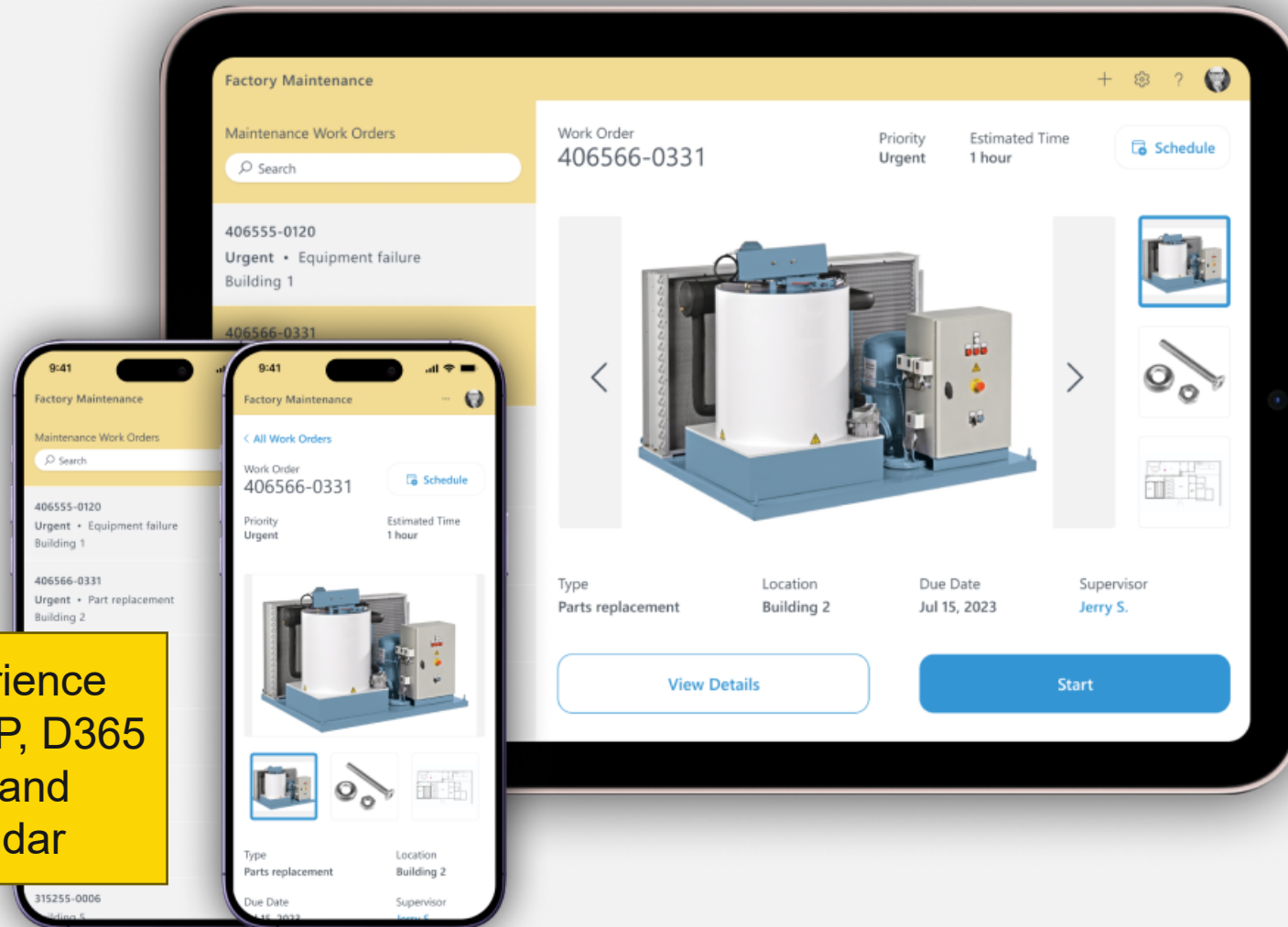
	Strengths	Weaknesses
<p>Microsoft SAP ERP Connector</p> 	<ul style="list-style-type: none"><li>✓ Enables developers to leverage SAP standard RFCs and BAPIs</li><li>✓ Plug-and-play to kickstart development projects</li><li>✓ Can leverage pre-existing SNC infrastructure</li></ul>	<ul style="list-style-type: none"><li>✓ Requires deep functional &amp; technical knowledge of SAP</li><li>✓ Difficult to use in certain Power App scenarios (e.g., model-driven apps)</li><li>✓ Serialization of ABAP data types with JSON can be cumbersome</li><li>✓ On-Premises Data Gateway limits data volumes</li></ul>
<p>Bowdark Fuse</p> 	<ul style="list-style-type: none"><li>✓ Integrates directly with Dataverse as Virtual Tables</li><li>✓ Streamlines integration with Power Platform, Azure, and other consumer types</li><li>✓ Protocol translation simplifies integration with custom connectors</li></ul>	<ul style="list-style-type: none"><li>✓ Requires some OData service development in SAP Gateway</li><li>✓ Requires setup of Azure Hybrid Connections</li></ul>



# Practical Use Cases for Fuse

Leveling Up SAP User Experiences Across the Enterprise

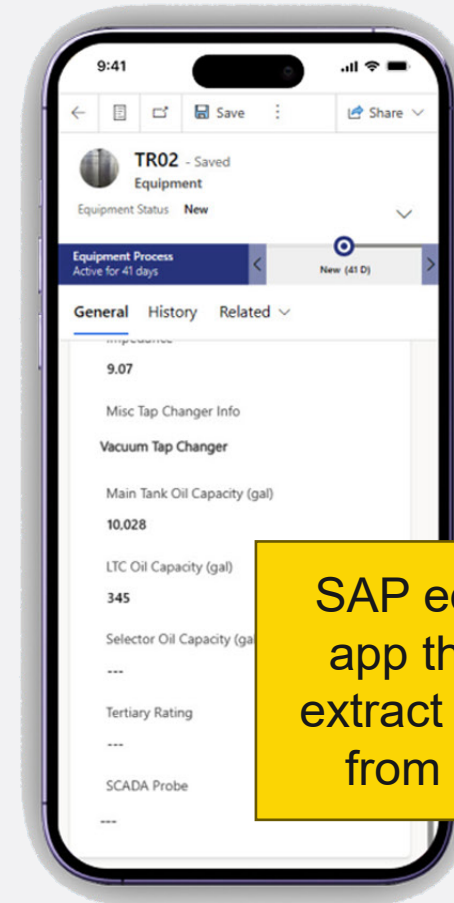
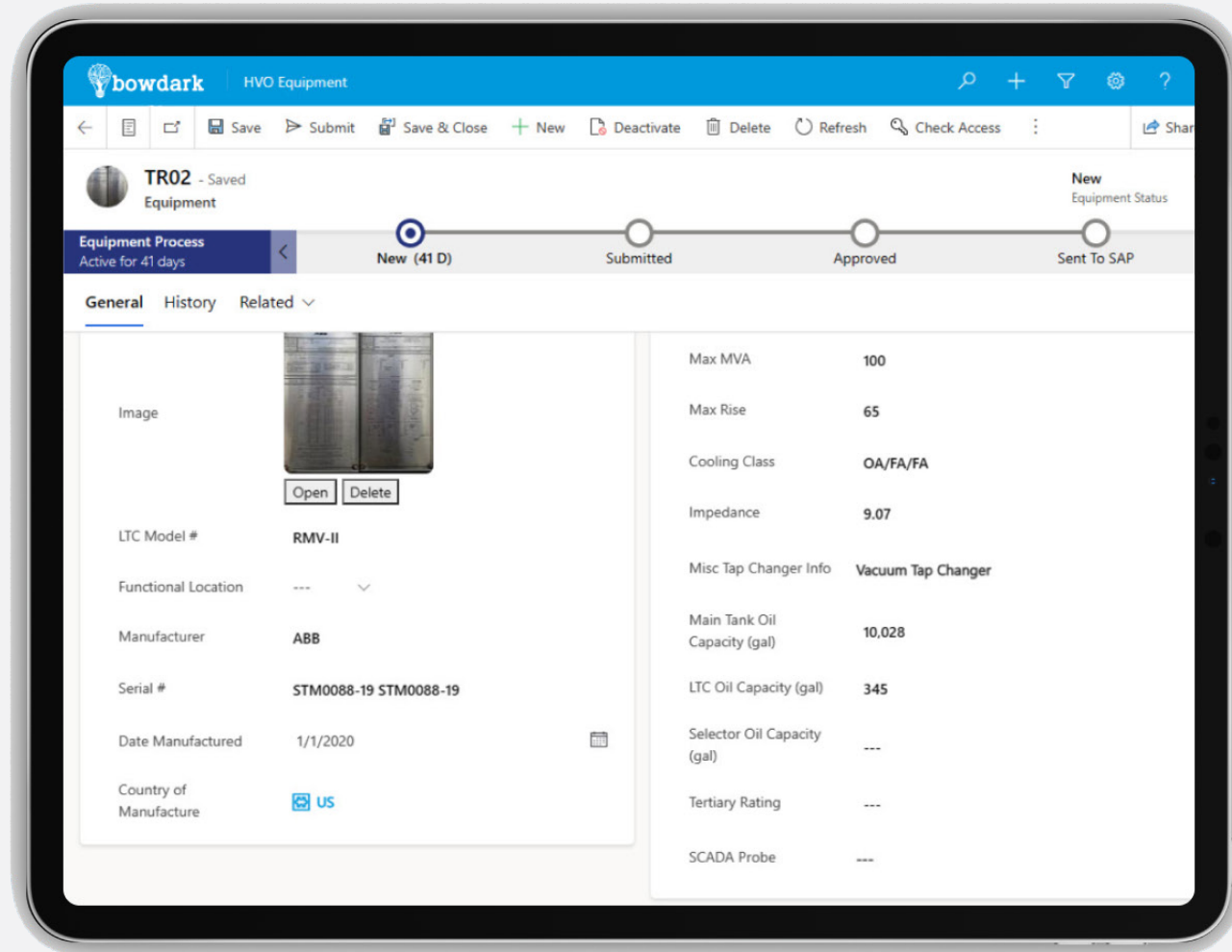
# Power Apps Canvas Apps



A one app experience that integrates SAP, D365 Field Service, and Outlook Calendar



# SAP Mobile Apps



SAP equipment inspection app that uses Azure AI to extract characteristic values from nameplate images

# Line-of-Business (LoB) Apps



**O/H SWITCHING ORDER**

**ORDER # 1132**

SVC CTR: [ ] SAP# [ ]

CIRCUITS: [ ]

CLEARANCE: [ ]

HOLD: [ ]

REF S/O: [ ]

**OUT**

WRITTEN BY/DATE: [ ]

GIVEN BY: [ ]

START TIME: [ ]

EXECUTED BY: [ ]

DATE: [ ]

COMPLETE TIME: [ ]

SWITCHING ORDER

SWO-000001403 - Saved

Switching Order - Information

Switching Order Status: Active for 3 days

Setup | **Assigned (3 D)** | Pending Review | Pending Start Time | Field Working | Field Executed

General | Out | Restore | Additional Forms | Attachments | Related

Name	* SWO-000001403	Assigned To	* C_Dawn Clark (Offline)
Order #	* 1403	Status Reason	* Assigned
Build Type	* 3PH MUG	Requested Start Time	---
Service Center	---	Priority	---
Circuit	fry45	Is Checked	No
SAP / Event #	---	Notes	---
Crew Phone	---	Caution Notes	---
ORMap Ref Location	---		

Related

Request: SWOR-000001087

Tones Made: ---

SWITCHING ORDER | HOLD | HOLD 2 | HOLD 3 | HOLD 4 | CLEARANCE | CLEARANCE 2

Ready | Scroll Lock | Accessibility: Investigate | Display Settings

A spreadsheet replacement solution that streamlines switching order processing in SAP ECC

# Line-of-Business (LoB) Apps



IN-100000000 - Saved  
Incident  
Draft Status James Wood Owner

General **Location** Conditions People Investigation Environment Vehicles Equipment Property ...

**Location Address**

Address Line 1	2830 Village Parkway
Address Line 2	---
City	Highland Village
Postal Code	75077
Country	United States
Region	Texas
Latitude	33.0749649865
Longitude	-97.0819330215

**Location Map**

Map Satellite

Walmart Supercenter  
TJ Maxx & HomeGoods  
Delhi6 Indian Kitchen & Bar  
Whole Foods Market  
Latin Cuisine  
Academy Sports + Outdoors  
Lowe's Home Improvement  
Best Buy  
Hillside Fine Grill  
Heritage Elementary School - LISD

Integrated incident management system for EH&S departments

# Line-of-Business (LoB) Apps



The screenshot displays a web application for Resource Management. The main view shows a table of 'Active Job Requisitions' with columns for Job Requisition Number, Resource Req Coordinator, and Created By. A search dropdown is open, showing recent searches and categories like Job Candidates, Job Requisitions, Companies, Worker Types, and Recruiting Reasons. A detailed view of a job candidate (RES-0000037) is shown on the right, including fields for Supplier, SAP Contract Number, SAP PO Number, Regular Time Hours, Regular Time Pay Rate, Supplier Name, IFS Contract Number, SAP PO Item Number, Overtime Hours, and Overtime Pay Rate.

Job Requisition Number	Resource Req Coordinator	Created By
REQ-0000052	Rosalie Noguera	Yvonne Wu
REQ-0000060	Debra Griffin	Yvonne Wu
REQ-0000056	Debra Griffin	Yvonne Wu
REQ-0000065	Debra Griffin	Yvonne Wu
REQ-0000077	Debra Griffin	Yvonne Wu
REQ-0000070	Debra Griffin	Yvonne Wu
REQ-0000072	Rosalie Noguera	Yvonne Wu
REQ-0000057	Debra Griffin	Yvonne Wu
REQ-0000049	Debra Griffin	Greg Heinz

Number of Openings	Target Hire Date	Target End Date	Requisition
2	9/4/2023	9/18/2023	Conf...
1	9/11/2023	9/22/2023	Conf...
1	9/5/2023	9/29/2023	Initia...
1	9/4/2023	9/18/2023	Conf...
1	9/4/2023	9/18/2023	Conf...
1	9/4/2023	9/25/2023	Close...
1	9/4/2023	9/25/2023	Conf...
1	8/28/2023	9/25/2023	Conf...
1	8/13/2023	12/28/2023	Close...
1	8/13/2023	12/28/2023	Close...
1	8/20/2023	12/28/2023	Close...
1	8/20/2023	12/28/2023	Close...
1	8/30/2023	10/27/2023	Initia...
1	9/1/2023	9/29/2023	Close...

Field	Value
Supplier	0005002422
SAP Contract Number	---
SAP PO Number	---
Regular Time Hours	400.00
Regular Time Pay Rate	\$45.00
Supplier Name	ATR International Inc
IFS Contract Number	---
SAP PO Item Number	---
Overtime Hours	50.00
Overtime Pay Rate	\$60.00

Contingent labor management solution that integrates SAP, IFS, and Workday

# SAP <-> Dynamics 365 Integration



The screenshot displays the Dynamics 365 Sales Hub interface for the account 'Fabrikam, Inc.'. The left sidebar shows navigation options like Home, Recent, Pinned, My Work, Customers, Sales, and Collateral. The main content area is divided into 'ACCOUNT INFORMATION' and 'Timeline'. The 'ACCOUNT INFORMATION' section includes fields for Account Name, Account Number, Phone, SAP Location, Website, Parent Account, Ticker Symbol, Incident, and Brand Logo. The 'SAP Location' field is highlighted in yellow, and a tooltip is visible showing a list of locations with their IDs and timestamps. The 'Timeline' section shows a list of events, including appointments and opportunities. A yellow callout box in the bottom right corner contains the text 'Deep Integration with Dynamics 365'.

Field	Value
Account Name	Fabrikam, Inc.
Account Number	67890
Phone	423-555-0103
SAP Location	Look for SAP Location
Website	
Parent Account	LOC-0000000001 9/13/2023 4:42 PM
Ticker Symbol	LOC-0000000002 9/13/2023 4:47 PM
Incident	LOC-0000000003 9/13/2023 4:48 PM
Brand Logo	LOC-0000000004 9/13/2023 4:51 PM

Timeline events:

- Modified on: 2/7/2023 8:19 AM  
Appointment from: James Wood (Overdue)  
Test  
View more
- Modified on: 3/14/2022 8:08 AM  
Appointment from: Jeremy Johnson (Closed)  
Review the final quotation  
View more
- Opportunity: 10 Café A-100 Automatic Espresso Mac...  
View more
- Modified on: 3/14/2022 8:08 AM  
Appointment from: Jeremy Johnson (Closed)  
Review the final quotation  
View more
- Opportunity: 12 Café A-100 Automatic Espresso Machines for Fabrikam

# Power Automate Cloud Flows



The screenshot shows the Power Automate interface. At the top, there's a blue header with 'Power Automate', a search bar, and user information for 'James Wood'. Below the header, a flow is being edited. The first step is 'Manually trigger a flow'. A second step, 'Add a new row', is being added below it. This step is configured to connect to a Dataverse table named 'Service Notifications'. The configuration form for 'Add a new row' includes the following fields:

* Table name	Service Notifications
* Short Text	Short Text
Address Name 1	Address Name 1
Address Name 2	Address Name 2
City	City
Company Code (Companies)	Company Code
House Number	House Number
Issue End Date	Issue End Date
Issue End Time	Issue End Time
Issue Start Date	Issue Start Date
Issue Start Time	Issue Start Time
Latitude	Latitude
Longitude	Longitude
Notes	Notes
Notification Number	Notification Number

Enable makers to seamlessly connect to SAP from cloud flows using Dataverse



# Power Pages Portal Solutions



**CenterPoint Energy** Home | Electric Service Request Form | FAQ | Contact Us | Q | Sign in

[Home](#) > **Electric Service Request Form**

## Electric Service Request Form

Instructions found in the tooltip. Please see the [FAQ](#) for more information.

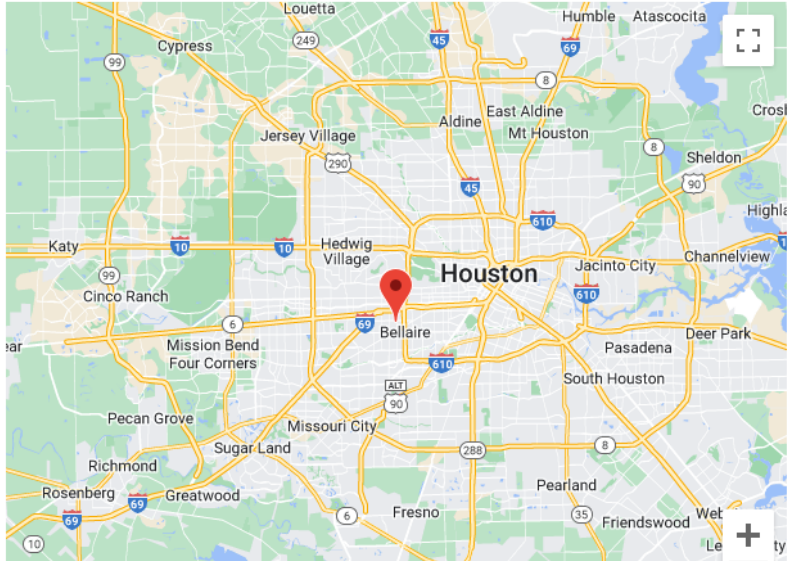
1 Service Address   2 Primary Contact   3 Electrician   4 Service Information   5 Attachments

**Street Address (or nearest address) \***

**City \***

**Zip Code \***

**Business Name (if applicable)**



A customer self-service portal integrated with SAP Customer Service & Esri ArcGIS

# Teams Applications



**Service Order #54391673**  
Last updated Wed, May 17 at 11:11 AM (CT).  
Requested Date Thu, May 18 2023  
Priority **Highest**  
Order Type **HDC1 - New Construction**  
Status **In Design**  
Description **DDPU\_10\_CC03\_30181\_SOH\_E09065\_19200**  
Functional Location **DIS-030181**

5.6 miles

Tasks Show completed

<input type="checkbox"/> Name	Status	Available Documentation
<input type="checkbox"/> <a href="#">Install materials</a>	Not started	Manufacturer's Guide + 2 more
<input type="checkbox"/> <a href="#">Remove material</a>	In progress	Device Removal Instructions
<input type="checkbox"/> <a href="#">Tree trimming</a>	In progress	Tree Trimming Guidelines

View and update SAP data in real time directly within MS Teams

# Surface Hub Apps



← [Icons] Clone Save Save & Close + New Deactivate Delete Refresh Check Access Assign Share Email a Link

**Resource Plan for: 10/11/2022** - Saved 10/11/2022 8:00 AM  
Plan Date

Resource Plan

General Controller View Related

Crews

Resources Baytown Morning Publish Tue Oct 11 2022

Search People Search Equipment Search Shifts by Person Hide Resources

C\_Daniel Perla  
Supervisor  
Available

0001  
X  
Available

0002  
D  
Available

0003  
Single Bucket  
Available

0004

Create a Crew Assignment

0003  
Single Bucket  
Available

Mark Unavailable  
Drop Resources Here

Integrated Planning  
Solution based on SAP,  
Service Suite, and ADMS

# SAP Workflow & Alerts



Search or type a command

Northwind Traders

Design Posts Files Wiki +

Team Confidential ... Meet

long history with them, I just ask that we all give one last push to really polish our deck and pitch. This is a really important account and it is very important that we win this.

Several of you have asked, but the current agenda is still TBD as we are waiting for the [redacted] feedback (TBD)

Reply

**Charlotte de Crum** 9:30 AM  
Can you guys please send me the options that we are proposing to the client tomorrow?

4 replies from Maja, Franz, and Miguel

**Daniela Mander** 9:34 AM  
I'm not confident in recommending option 2 or 5 again and feel that we should cut those options with the client before and she believes those are too costly for the brand she may lose confidence in our recommendations.

Reply

**Babak Shamm** 10:00 AM  
**Pete**, Daichi mentioned that the client had some changes to our design for the July promotion before our Wednesday client sync?

5 replies from Franz, Giselle, and Inna

**Kadji Bell** 10:23 AM  
I thought the client wanted to include a section about the buy one get one offer as we mentioned she got the budget approved for July.

Reply

Type a new message

Use the Approvals app & adaptive cards to create new user experiences

Search

Bowdark Consult...

General Posts Files Wiki Task List +

Meet ...

Reply

James Wood via Power Automate 4:23 PM

**Work Order TE4139599: On Hold**

Customer Address

2500 Victory Ave, Dallas, Texas, 75219

Issue

Cable Failure - Cause Unknown

Notes

On hold - assigned technician unavailable due to unexpected illness

Available Technicians

Daniel Perla

Reassign Order Contact Customer

Reply

New conversation

Live work order data in SAP

# Virtual Agents with SAP & GPT



Power Virtual Agents | SAP Customer Service Agent

Environment: D365 Sales for SAP

James Wood

Topics > Greeti...

Save response as: {x} RequestType choice

Condition: {x} RequestType choice is equal to New Service Request

Condition: {x} RequestType choice is equal to Stop Service

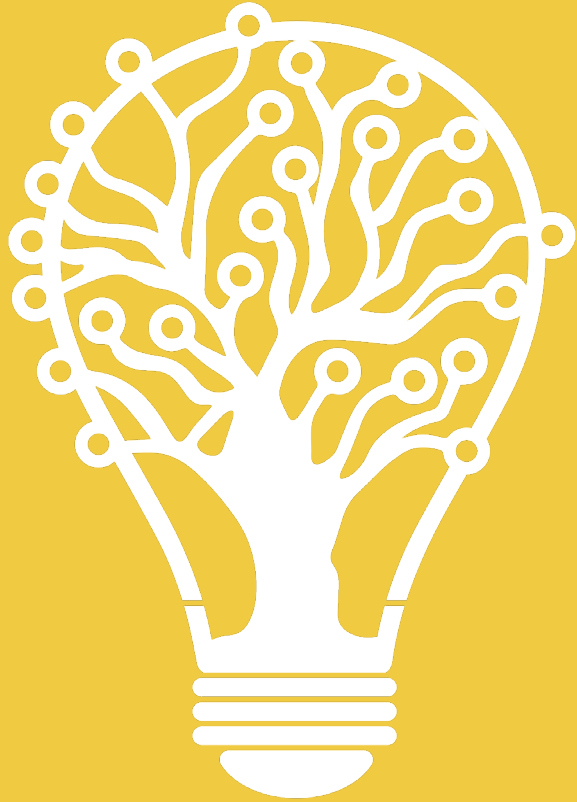
Condition: {x} RequestType choice is equal to Billing Service

Select an action: Create a flow (Launches Microsoft Flow), Skill or Skill action (Go to Skills to add a skill to your bot), Search Dynamics 365 know... (Disabled)

Chat: Hello, I'm SAP Customer Service Agent. How can I help? (5 minutes ago)

Use Azure Knowledge Mining to surface SAP data for agent training

Incorporate callouts to SAP from Power Automate / Fuse



**bowdark**

Let's be brilliant together.

CALL US

[763-291-3748](tel:763-291-3748)

ASK A QUESTION

[abrasket@bowdark.com](mailto:abrasket@bowdark.com)

