

# M365 SATURDAY BANGALORE 2022



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3 December, 2022

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# A One Day In Person Event

- Hands on sessions by experts and community leaders
- Deep-dive into Microsoft 365 Services
- Focus on:
  - Microsoft Teams
  - Power Platform
  - SharePoint

Win exiting prizes!



Lenovo M10 FHD  
Plus (2nd Gen)



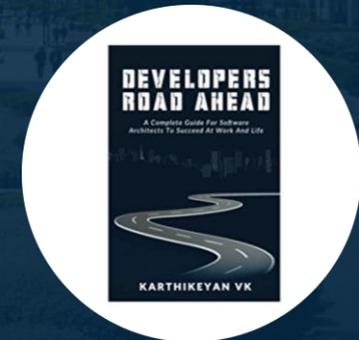
JBL Tune 125TWS



boAt Blaze Smart Watch



Cool Water Bottle



Developer Road Ahead

# Session 6

Track 2

## Developing Dynamic Components using Power Pages

45 Minutes



## SPEAKER PROFILE



**Bhargav Reddy**

Solution Architect

Tata Consultancy Services



<https://www.linkedin.com/in/bhargavreddynuthanakalva>



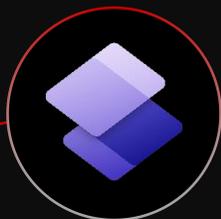
@ronnybhargav



**Power Virtual Agents**  
Intelligent virtual agents



**Power Pages**  
Website Development



**Power Apps**  
Application development



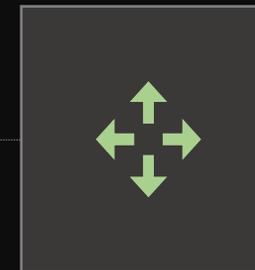
**Dataverse**  
Business data platform



**Power BI**  
Business analytics

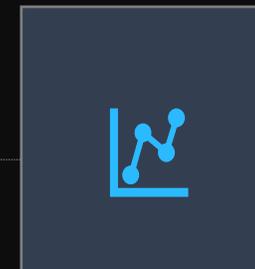


**Power Automate**  
Workflow automation



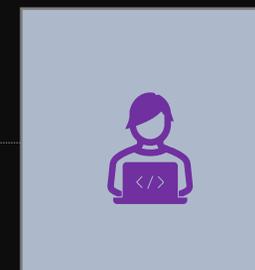
## NO CODE

Drag and Drop Functionality like Power Point aiding in Rapid Productivity



## LOW CODE

Drag and Drop Functionality plus Excel-like Formulas(using Power Fx) for applying business rules and transforming data



## PRO CODE

Solutions developed by Professionals and is extensible across Microsoft such as Office 365, Azure or Windows



# Power Pages

Key capabilities



Low-code website development and business data modeling



Best in class pro-dev tooling to extend and customize



Robust and scalable enterprise-grade hosting platform



Better together



## Best in class Pro-dev tooling in Visual studio code

Build custom controls

Business data layer APIs

Add dynamic content to web pages

Enterprise-grade ALM for CI/CD with GitHub and Azure Dev Ops



# Enhanced security and governance



Turnkey integration with  
Azure Web Application Firewall



Total control over who takes  
the site public



Go Live checklist



Site responsive with turnkey  
Content Delivery Network support



Citizen services



Application processing



Registration



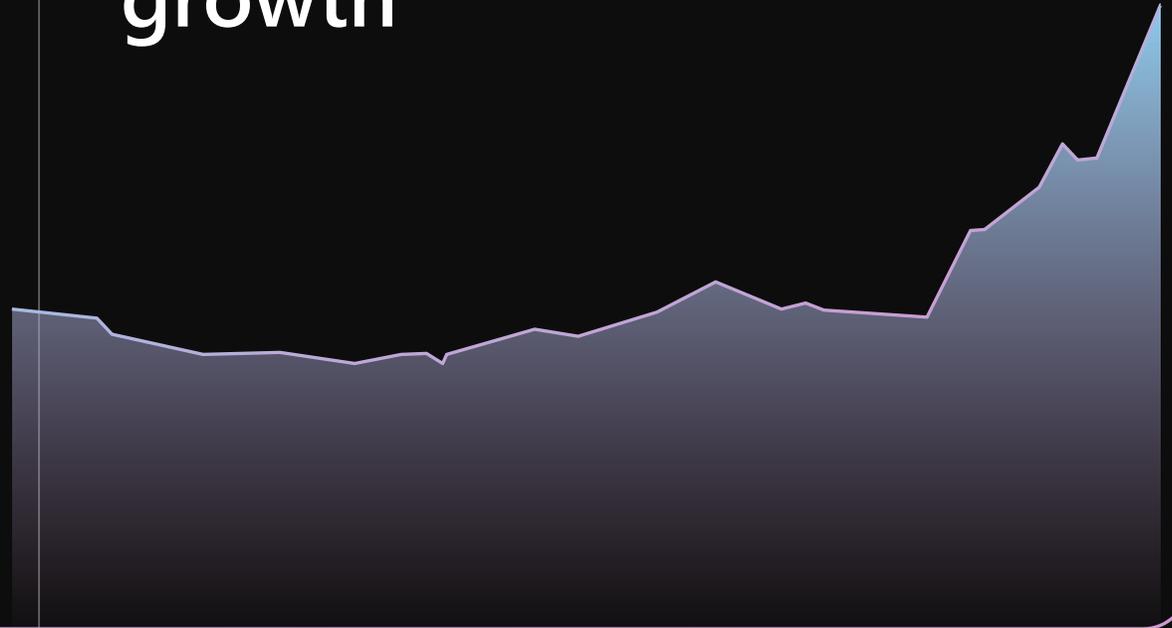
FAQ



Partner portals

# 170%

## year-over-year growth





# The Experience

## Fusion Teams

Microsoft Power Pages is centered around the Low-Code concept, but the biggest difference is that it is connected to a full **enterprise-grade hosting platform** which is the backbone called **Dataverse** that enables Fusion Teams to collaborate and develop cloud and data-centric websites quickly. Fusion Teams are a collaborative group that makes up of three personas



### Low Code Web Site Maker

A Low Code Web Site Maker has enough technical knowledge to understand pages, website interactions, content and can build low code websites.



### Site Administrator

A Site Administrator is responsible for Governance, Security, Compliance and taking actions such as setting up Domains and SSL Certificates.



### Pro Developer

A Pro Developer persona develops using C# Code, API's and other complex work through tools such Visual Studio Code, Power Platform CLI etc.



# Explore

## Tools and Pre-requisites



### Tools needed

#### Site

- Microsoft 365 E5 Trial Account
- Power Platform Community(Developer) Plan
- Dataverse Environment
- Create a Solution for Components

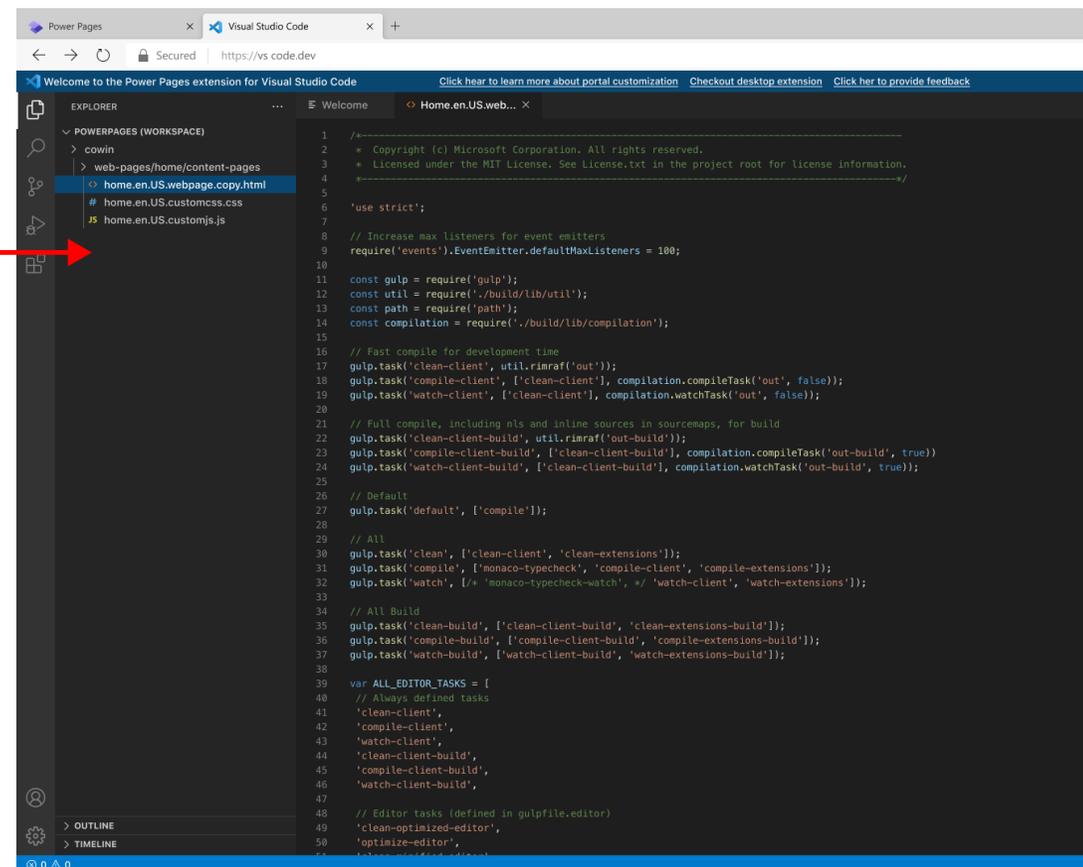
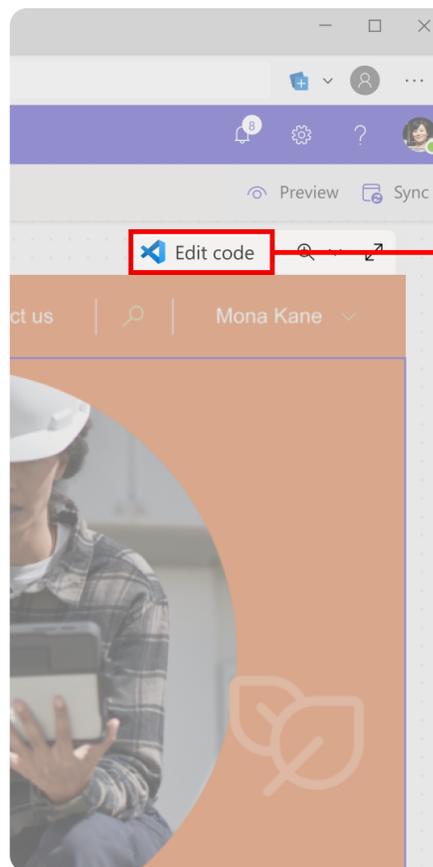
#### Extensibility

- Visual Studio Code
- Power Platform Tools Extension
- Power Platform CLI
- XRMTToolBox

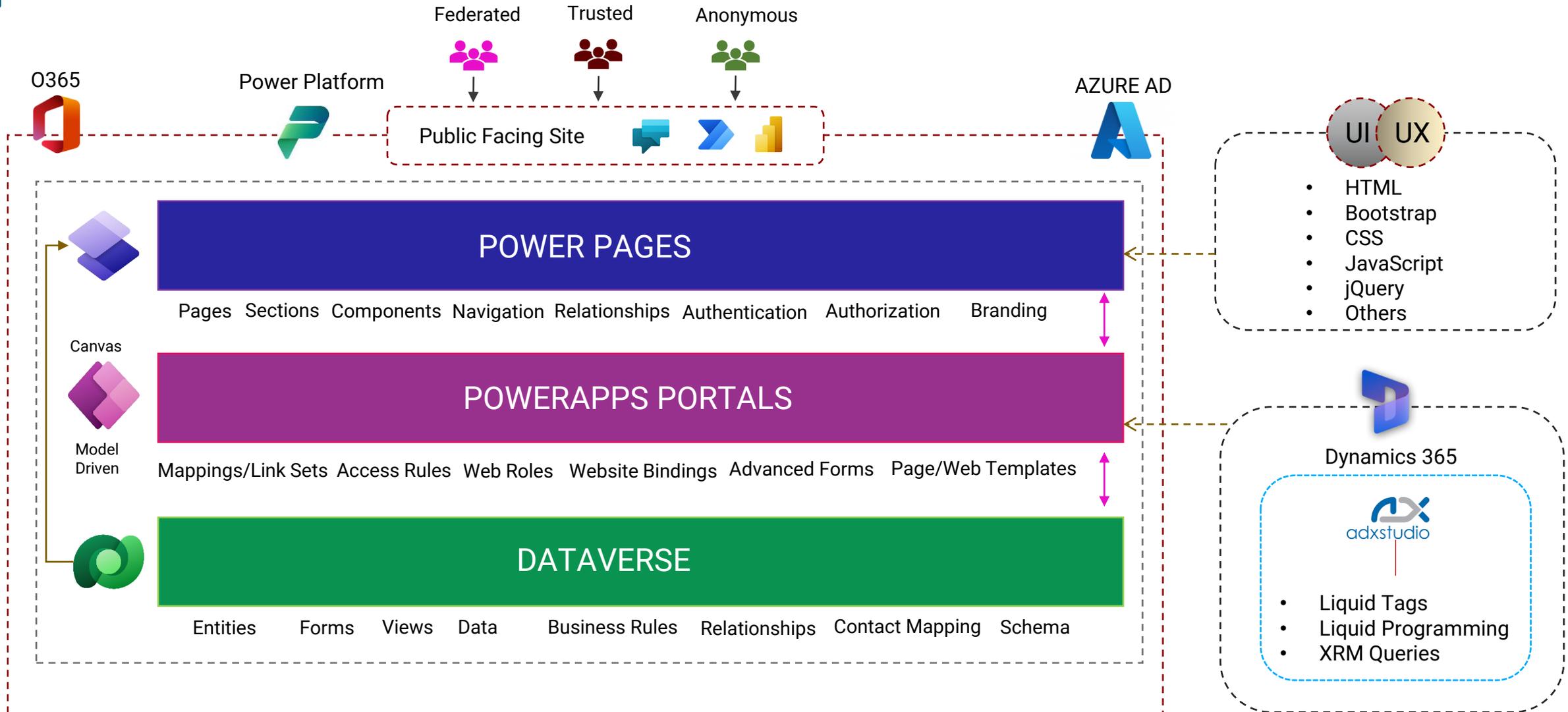
## Best-in-class Pro-dev tooling



Azure Dev Ops



# Current State





# Power Pages Licensing

Power Portals/Pages pricing is based on either the number of login sessions or page views depending on what users are doing on the page. For authenticated users who need to login and access a function, you can pay per user login. For users who simply need to view page content, you can pay per session, or page view. For users who simply need to view page content, you can pay per session or page view.

	<b>COST, Per Month</b>	<b>Capacity</b>	<b>User Type</b>
Portal – Logins	\$200	100 Login sessions	Authenticated
Portal – Page View	\$100	100,000 sessions	Unauthenticated

Tiered pricing for logins is available above the standard 100 login sessions.

	<b>For Businesses that need at least this many logins per month</b>	<b>Price, Per Unit, Per Month</b>	<b>Minimum Unit Requirements</b>
Tier 1	100+	\$200	1 Unit
Tier 2	1000+	\$100	10 Units
Tier 3	5000+	\$70	50 Units
Tier 4	25000+	\$32	250 Units
Tier 5	100,000+	\$12	1000 Units



# Coming soon

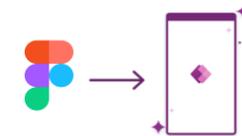
Features that will provide greater flexibility to extend or customize Power Pages for Pro-developers

## PWA's

- Converting functional portals as a cross-platform is supported Progressive Web Application(*Automatic support in Power Pages*)
- Still to evolve in terms of iOS Support

## Express Design

- Integrating the upcoming Power Platform Express Design features such as converting Figma designs, Images or PDF files into Power Pages.
- This ability is already seen through Power Apps Figma UI Kit for PowerApps Development.

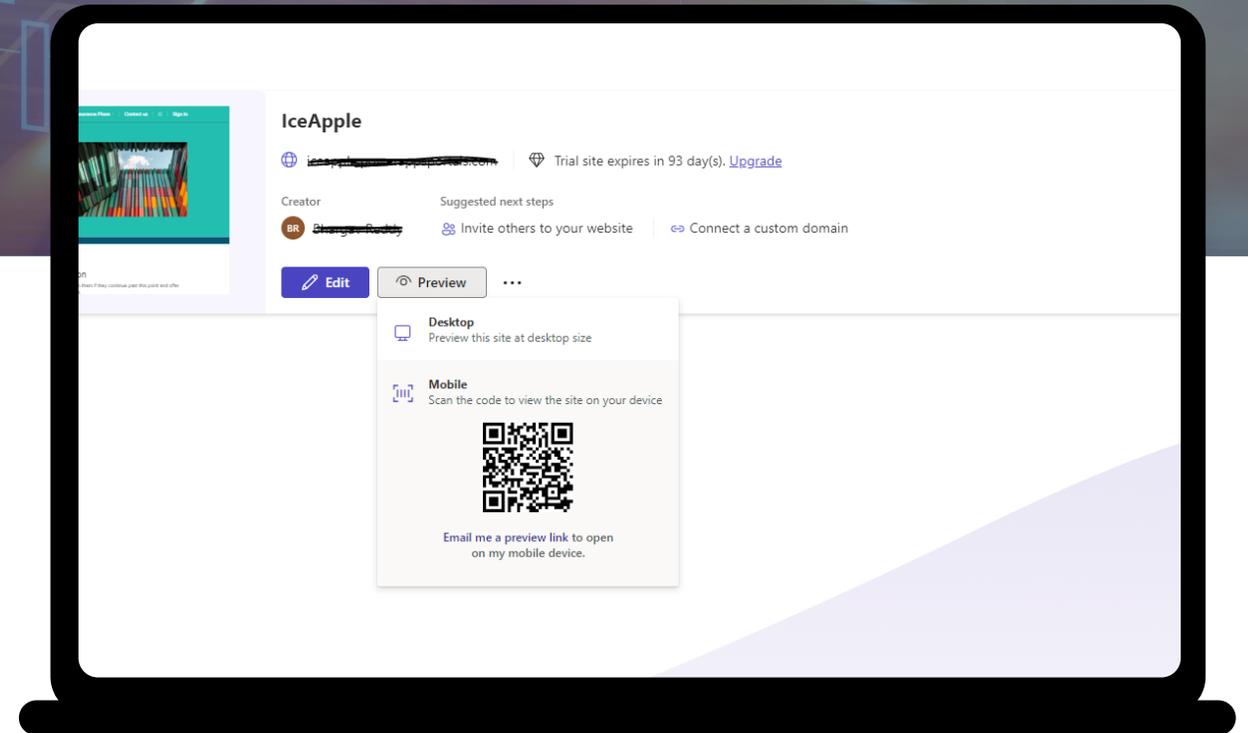




# Home Tab

The Home tab of Root URL lists all the sites that are created and provides the following abilities.

- Create a New Site(*dependent on available capacity*)
- Share, Manage & Delete Existing Sites
- Preview Existing Sites

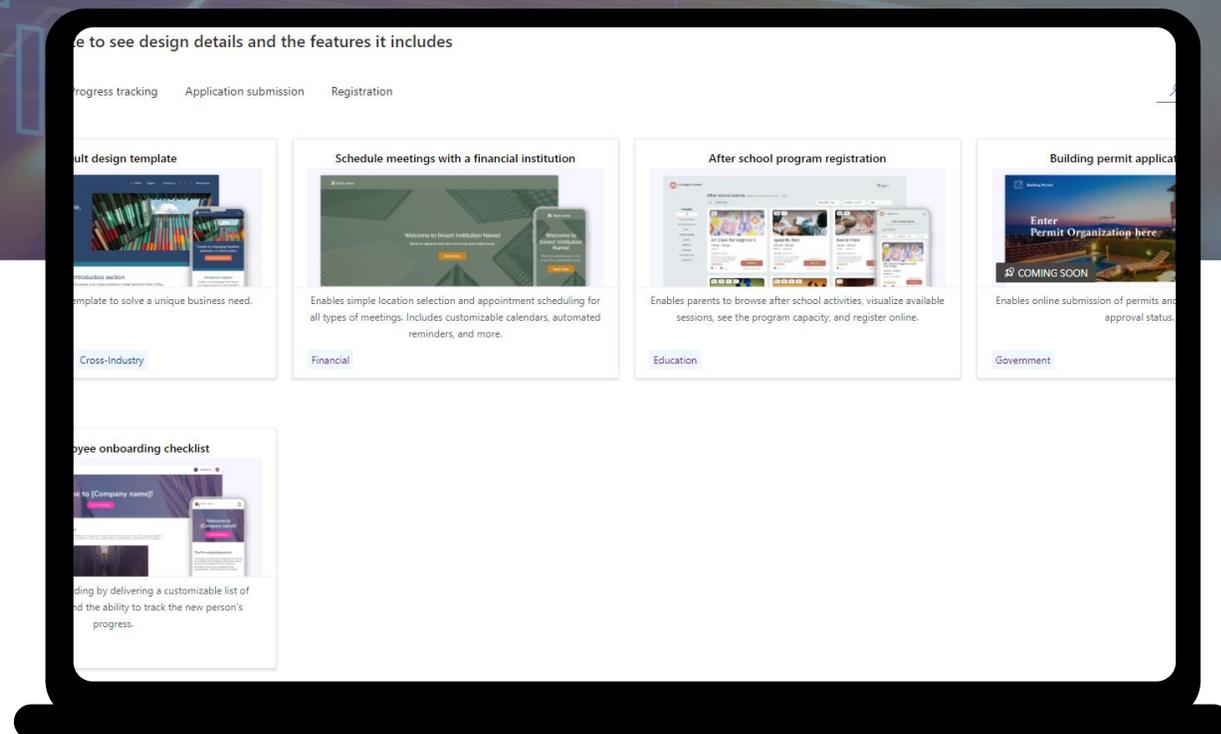




# Available Templates

There are five readily available templates that can be leveraged to create sites from the Root URL.

- [Default Design Template](#)
- [Schedule Meetings with a Financial Institution](#)
- [After School program registration](#)
- [Building Permit Application](#)
- [Employee Onboarding Checklist](#)
- [Site Design Series](#)



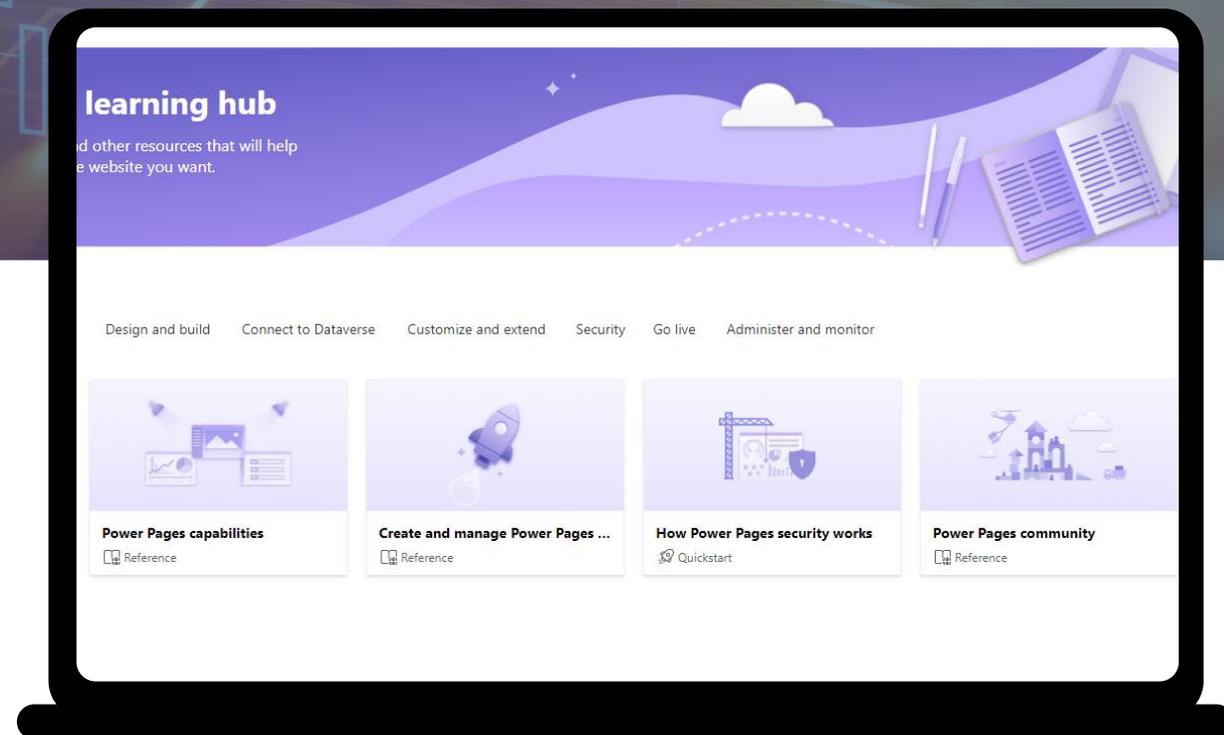


# Integrated Learning Hub

The root URL to access power pages is as below and contains a dedicated tab for Learning all the latest happenings around Power Pages and accessing all existing resources.

Root Url:

<https://make.powerpages.microsoft.com>

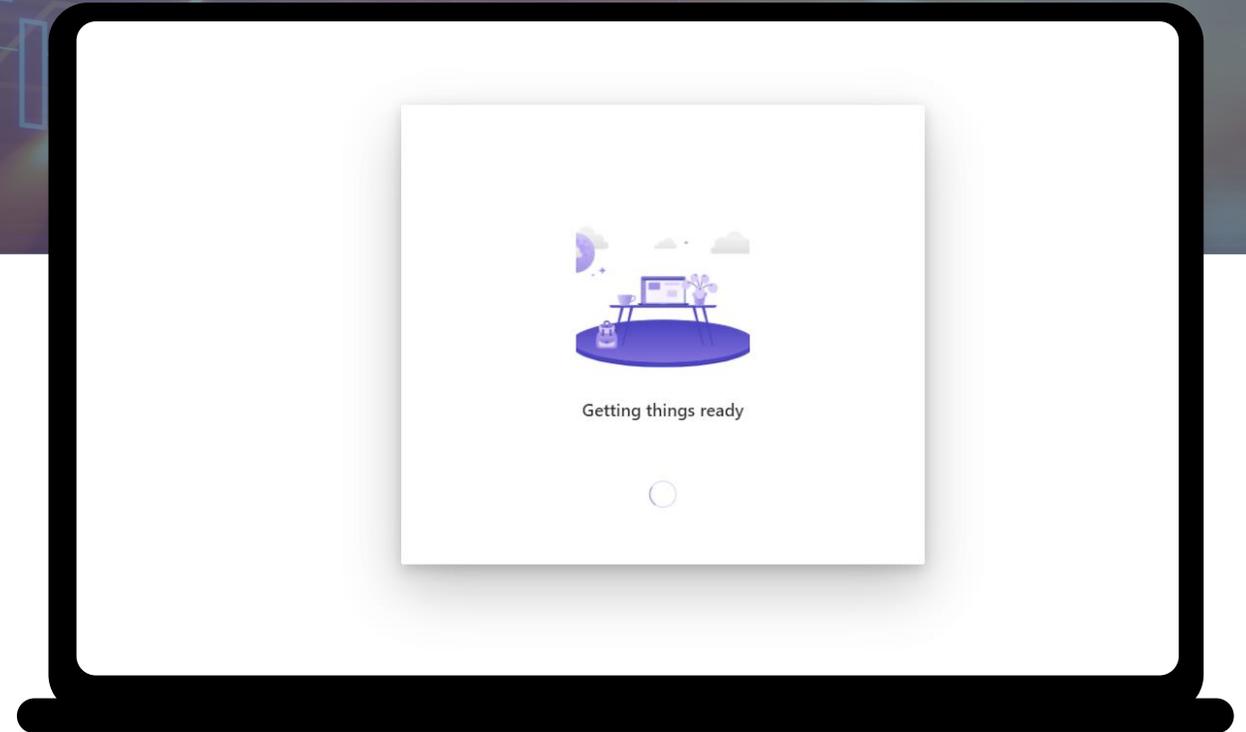




# Workspaces

When a particular site is chosen to be edited, below are some available tabs/options. Microsoft will be adding more integration ends to these workspaces.

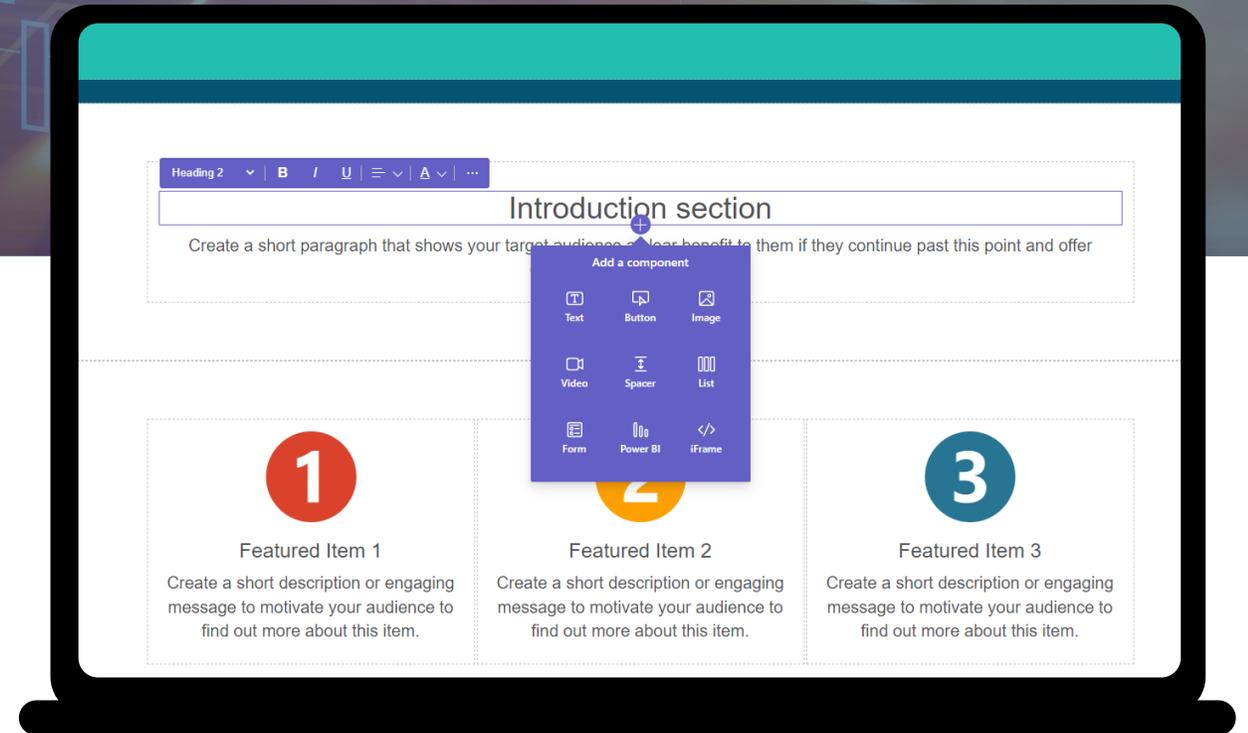
- Pages Workspace
- Styling Workspace
- Data Workspace
- Set up Workspace
- Admin Workspace(...)





# Pages Workspace

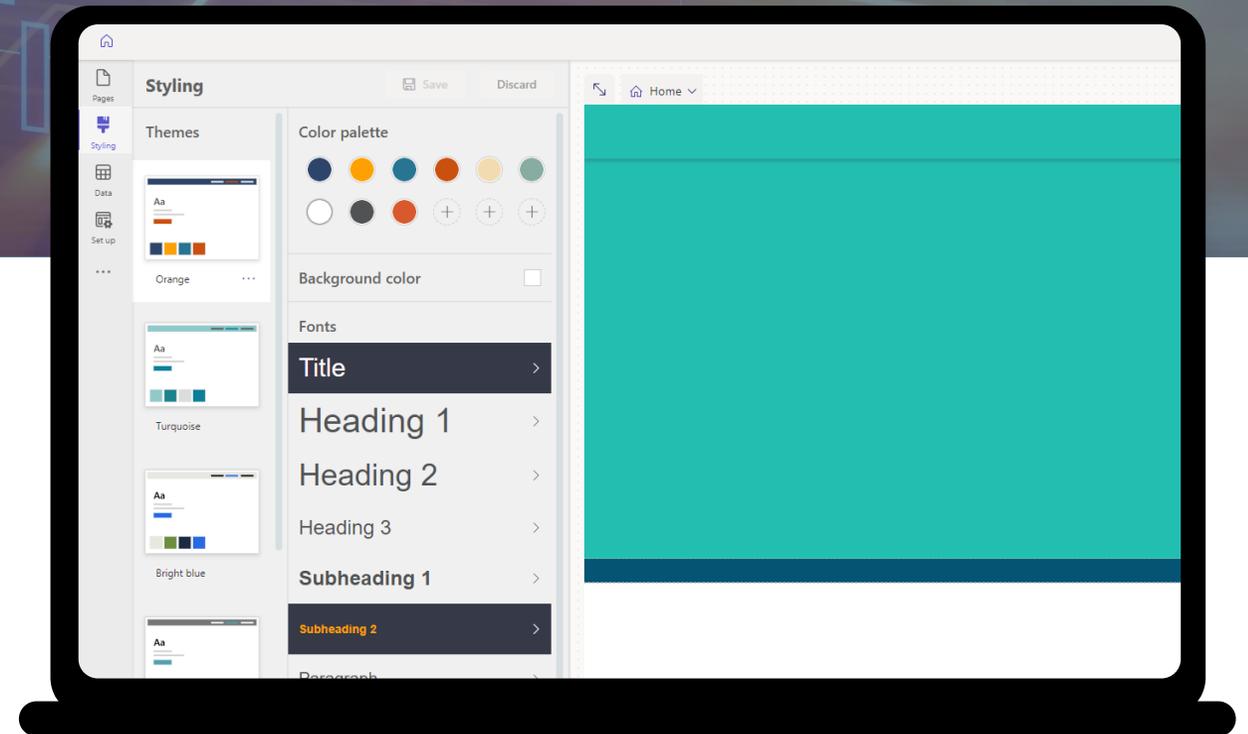
- A dedicated workspace to create, modify, manage the site pages along with the site navigation
- Also, provides the ability to create sub pages
- A WYSIWYG Editor to add sections to the pages(1, 2, 3 column layouts..) components such as Text, Image, Button, Video, Spacer, List, Form, Iframe, PowerBI





# Styling Workspace

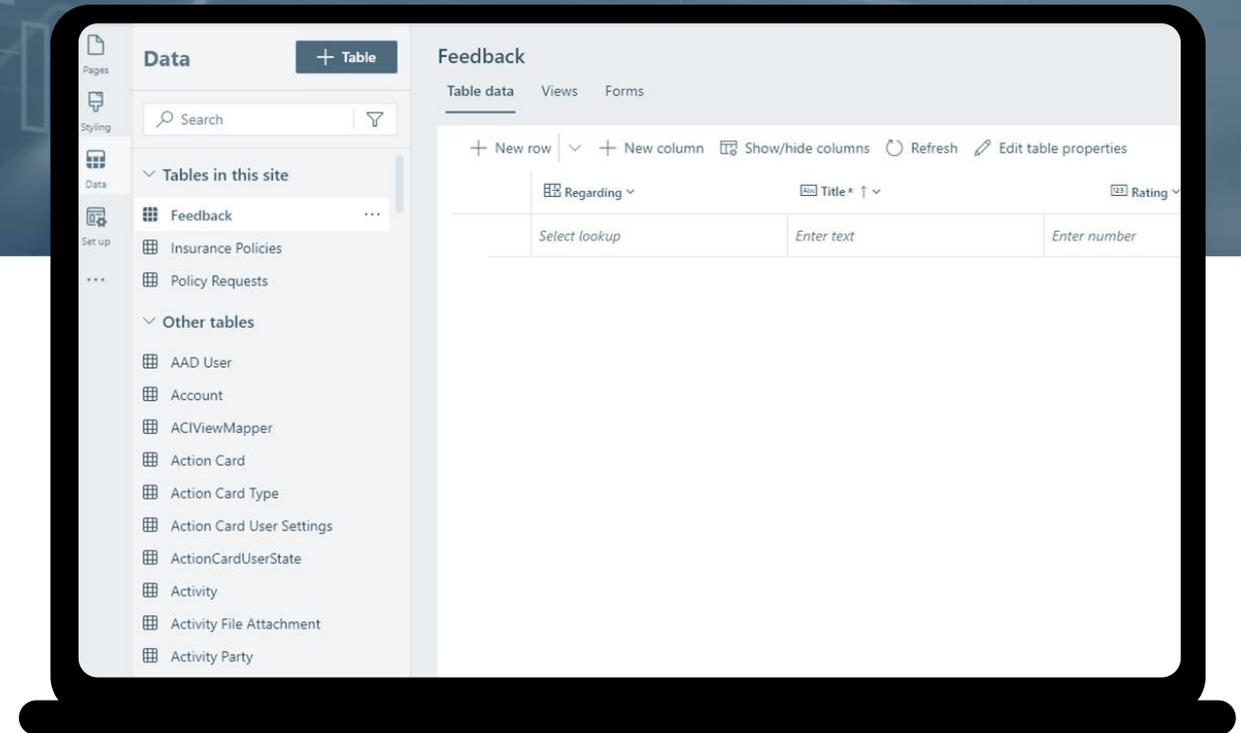
- A dedicated workspace to modify themes and apply styling elements to the site.
- Several OOB themes are available and option for creating Custom Themes using Custom CSS is enabled too.





# Data Workspace

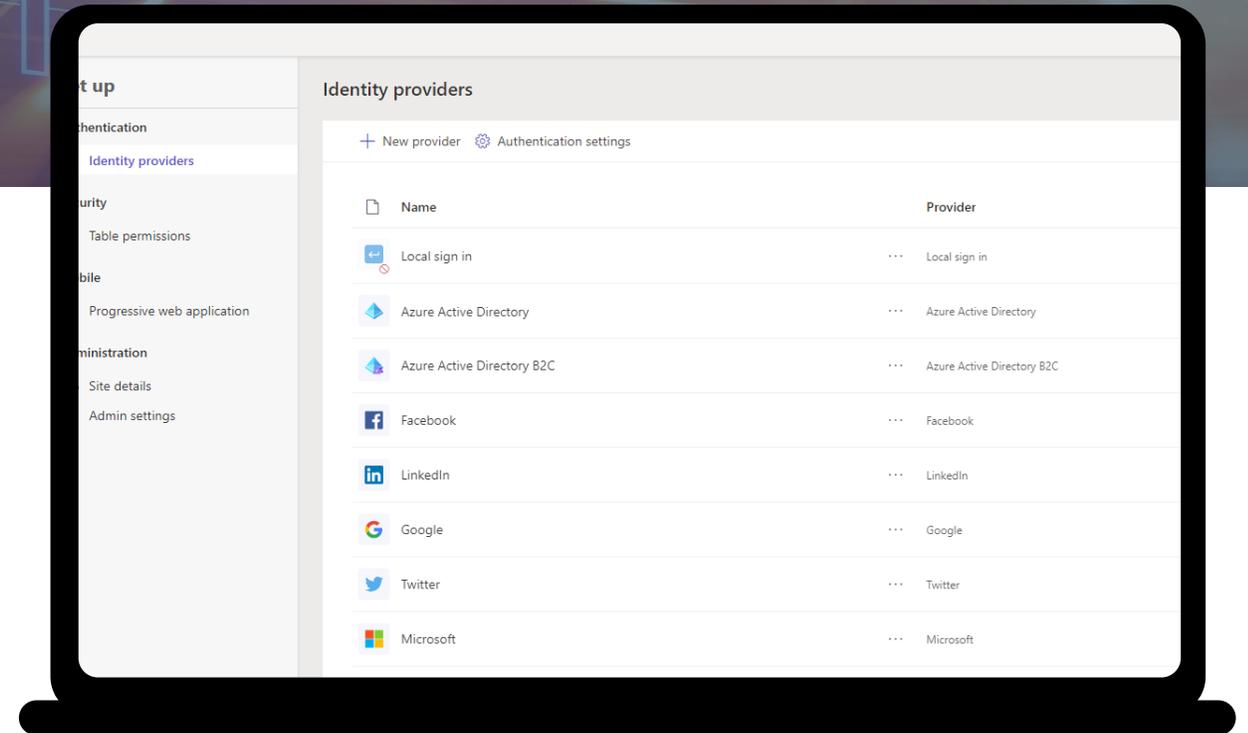
- A dedicated workspace that currently loosely integrates with Microsoft Dataverse
- It provides the ability create, modify, manage the Dataverse Tables and their properties and permissions
- It also provides the ability to access the Standard Dataverse Tables apart from the Custom Tables





# Setup Workspace

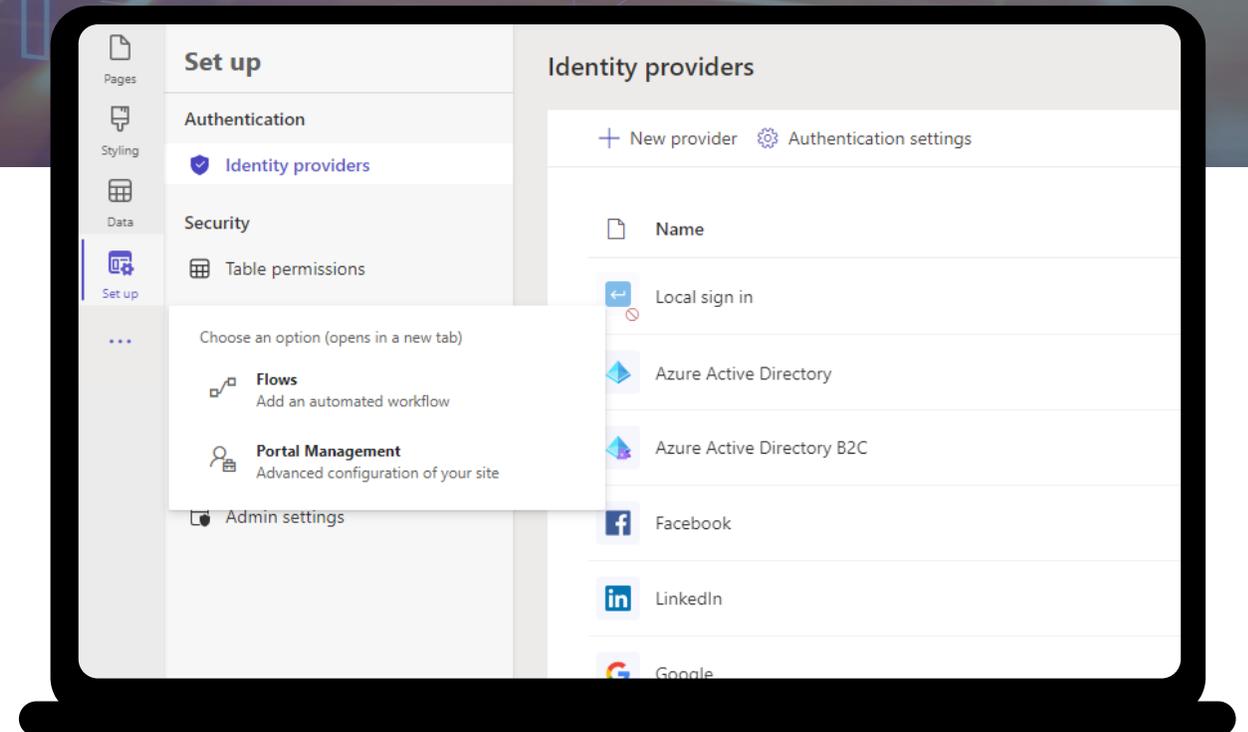
- A dedicated workspace to handle Authentication, Security, Mobility and Administration aspects of the Entire Site.
- Provides ability to configure authentication for a few providers such as Google, LinkedIn, Twitter, Microsoft etc.
- Ability to add Custom authentication providers is enabled such as SAML, OIDC etc.





# Admin Workspace

- A dedicated workspace to create, modify, manage Flows but still largely relies on the root URL for Microsoft Power Automate and redirects currently
- For some key features, Pages foundation is still largely reliant & redirected to Power Portal Management App





# Power Pages Authentication

Power Portals/Pages provides the following options to enable authentication on the site.

+ Add provider Authentication Settings

Apps > Contoso > Identity providers

**Identity providers** + Add provider

Provider name		Provider type	Status
Local sign in	...	Local sign in	Enabled
Azure Active Directory	...	Azure Active Directory	Enabled
Azure Active Directory B2C	...	Azure Active Directory B2C	Configure
Facebook	...	Facebook	Configure
LinkedIn	...	LinkedIn	Configure
Google	...	Google	Configure
Twitter	...	Twitter	Configure
Microsoft	...	Microsoft	Configure



| It is just after lunch, wake me up please!

Quiz 1: Which is the nearest star to Earth?

- a. Proxima Centauri
- b. Wolf 359
- c. Helios, Sun or Sol
- d. Sirius A



**DEMO 1: Building a Dynamic Image Carousel using Dataverse Entity Data using Fetch XML and Liquid!**

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# | Right, One more wake up call!

Quiz 2: In the famous American television sitcom “The Big Bang Theory, who does Jim Parsons play?

- a. Rajesh Koothrapalli
- b. Leonard Hofstadter
- c. Howard Holowitz
- d. Sheldon Lee Cooper



**DEMO 2: Building a Page that uses Portals Web API to bind Entity List Data to a jQuery Data Tables!**

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| Okay, Last wake up call!

Quiz 3: Who is the first Indian amongst the below to win a Nobel Prize and when?

- a. Sri Aurobindo in 1950
- b. C V Raman, 1930
- c. Rabindranath Tagore, 1913
- d. Har Gobind Khorana in 1968



**DEMO 3:** Building a Page that displays Bing Map Coordinates stored in Dataverse Entity Data using Liquid, Fetch XML and JavaScript!

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# QUESTIONS



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@ronnybhargav

Or drop in an email to [ronnybhargav@gmail.com](mailto:ronnybhargav@gmail.com)

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## Diamond:



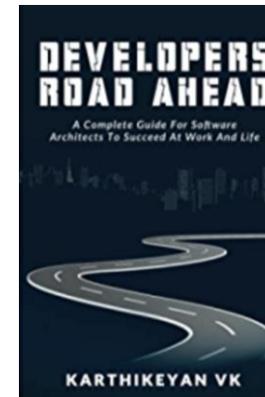
## Platinum:



## Gold:



## Learning Partner:



# Next Session

Track 2

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## Hands on with automating Azure AD with MS Graph

45 minutes

## SPEAKER PROFILE



**Anustup Mukherjee**

AI Software Engineer

Newton School