

# Allow Me to Introduce Low-Code

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Charles Lakes,  
*Creative Solution Architect*





# Welcome to the MN M365 Fall Workshop Day 2024!

Please help us drive event awareness by tweeting and posting about your experience at the Workshop:

@M365MN #M365WorkshopDay

Please join us following the sessions for Happy Hour... Admin Ales, Workshop Wine, and more!

Thank you for your participation!

# Thank You to our Sponsors!



Stop by the Booths for "Vendor Bingo" to win prizes!



PLATINUM (Breakfast, Lunch & Happy Hour)



GOLD



DIGITAL



# About Me

- Developer
- Speaker
- Blogger
- Middle-child



# Itinerary

- Learning about low-code.
- Learning about Power BI.  
**@ 10 AM --- 10 min. break**
- Learning about Power Apps.  
**@ 11 AM --- 10 min. break**
- Learning about Power Automate.



# Required

- Power BI desktop.
- Power Apps license.
- Power Automate license.



# Section #1

- Low-code:
  - Overview.
  - vs. pro-code.
  - vs. no-code.
  - Benefits.



# Overview

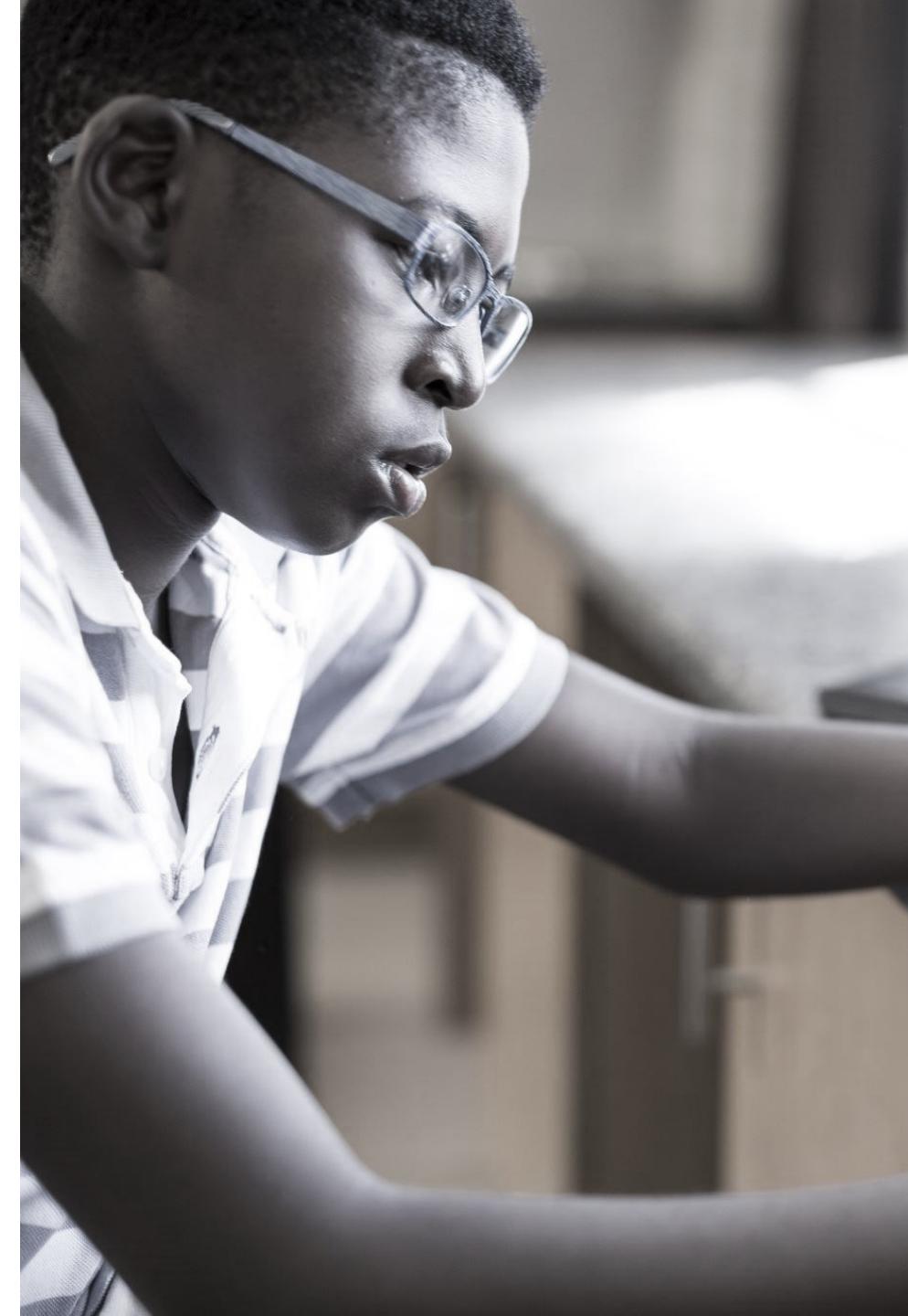
## □ Just right:

- software development.
- traditional dependency.
- formal approach.
- data modeling.



# vs. Pro-code

- Too complicated:
  - syntax.
  - data types.
  - data structures.
  - architecture.



# vs. No-code

- Too limited:
  - development.
  - testing.
  - delivery.
  - architecture.





## Power Platform

Create apps and workflows across your organization with low-code tools.



### Microsoft Power BI

Guide decision making with stunning reports and real-time insights from across your organization.

[Learn more](#)



### Microsoft Power Apps

Build and launch professional-grade apps and automate workflows without additional coding.

[Learn more](#)



### Microsoft Power Automate

Boost productivity by automating repetitive tasks and workflows with process automation.

[Learn more](#)



### Microsoft Power Pages

Create websites and customer solutions fast while securely storing and managing data.

[Learn more](#)



### Microsoft Copilot Studio

Transform customer and employee experiences when you build custom copilots.

[Learn more](#)

# Benefits

- Increased Productivity**
  - 300+ manual-entry hours saved.
  - 3 weeks to develop the solution.
- Improved Scalability**
  - Create datasets from disparate data.
  - Common data model.
- Greater ROI**
  - 117k hours saved.
  - 30% time savings.



# Section #2

## □ Power BI

- Data sources.
- Power Query.
- Extract, Transform, Load.  
( Power Query )
- Visualizations.
- Measures.
- Data Analysis Expressions.
- Better practices.



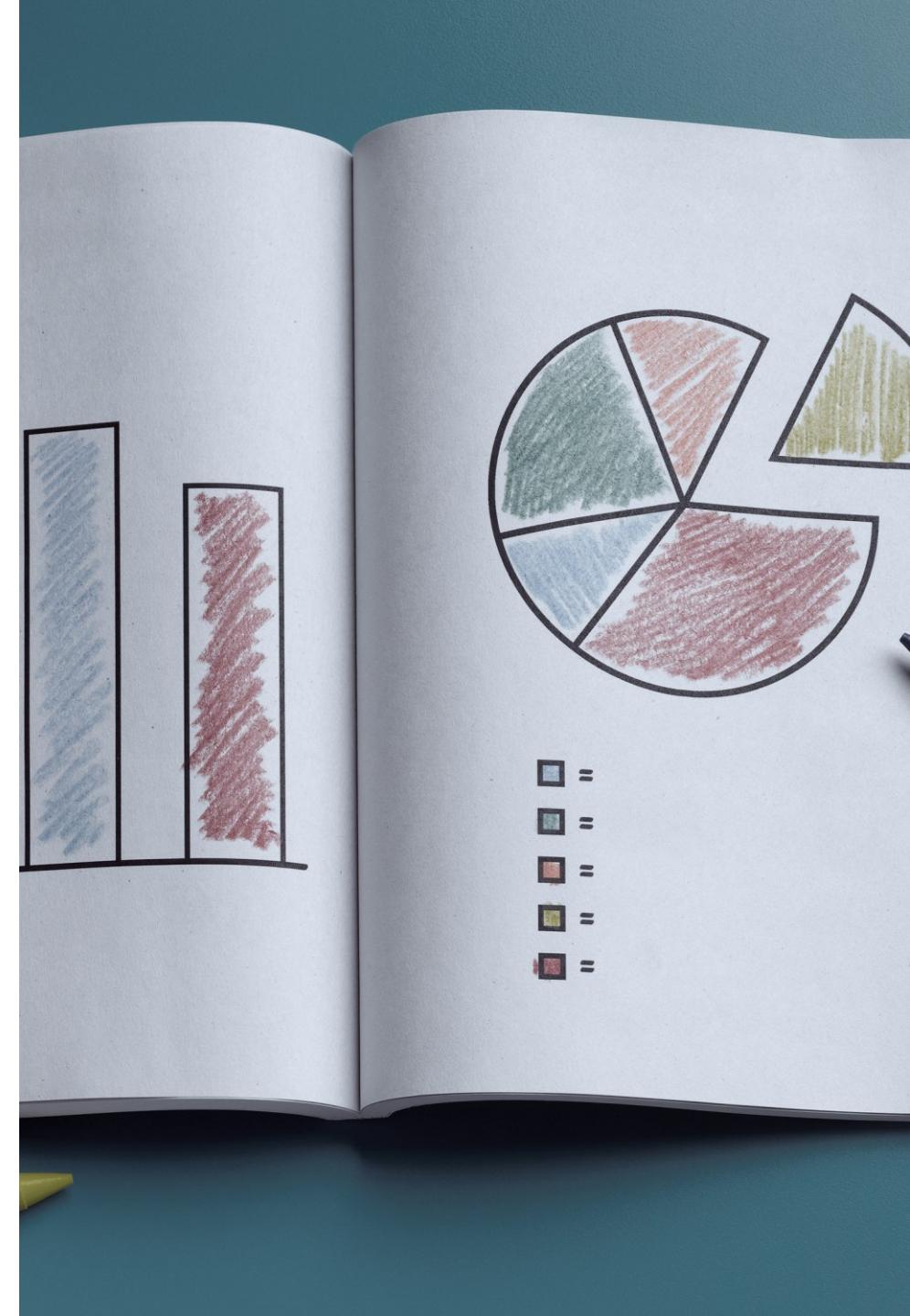
“Imagine this dream scenario. You already have all the data you need... You gather client insights, and... send them to the buyer.”

Cristian Spuza, Head of Customer Development, Kraft Heinz

# Exercise

## □ Power BI

- We are organizing a workshop, and people are registered from across the country. As the “data engineer,” you’re asked to create a report showing:
  - ✓ Attendees by home state.
  - ✓ Power Platform preferences.
  - ✓ Total opt-ins for lunch.
  - ✓ Total opt-ins for raffle.



Untitled - Power BI Desktop Charles Lakes II

File Home Insert Modeling View Optimize Help

Cut Paste Copy Format painter Clipboard

Get data from workbook Get data from OneLake Get data from data hub Get data from SQL Server Enter data into Dataverse Refresh recent sources Transform data New visual Text box More visuals Insert New visual calculation New measure Quick measure Sensitivity Publish Share Copilot

Clipboard

Add data to your report

Once loaded, your data will appear in the Data pane.

Import data from Excel Import data from SQL Server Paste data into a blank table Use sample data

Get data from another source →

Filters

Search

Filters on this page Add data fields here

Filters on all pages Add data fields here

Visualizations

Build visual

Search

You haven't loaded any data yet. [Get data](#)

R Py ...

Values

Add data fields here

Drill through

Cross-report Off

Keep all filters On

Add drill-through fields here

# Section #3

## Power Apps:

- Data sources.
- App screens.
- App controls.
- Power Fx.
- Environments.
- Better practices.

**@ 10:00 AM**



**“Microsoft Power Apps allows us to create return on investment that exceeds any of our expectations going into this.”**

David Rice, Global COO, HSBC



# Exercise

## Power Apps:

○ We are organizing a workshop, and we need to be organized to help make it a success. As the “developer,” you’re asked to create a mobile app that allows everyone to:

- ✓ Check-in attendees.
- ✓ Confirm their lunch opt-in.
- ✓ Confirm their raffle opt-in.





Power Apps

Search

Environment  
The II Lakes Group, LLC ...

Home

Create

Learn

Apps

Tables

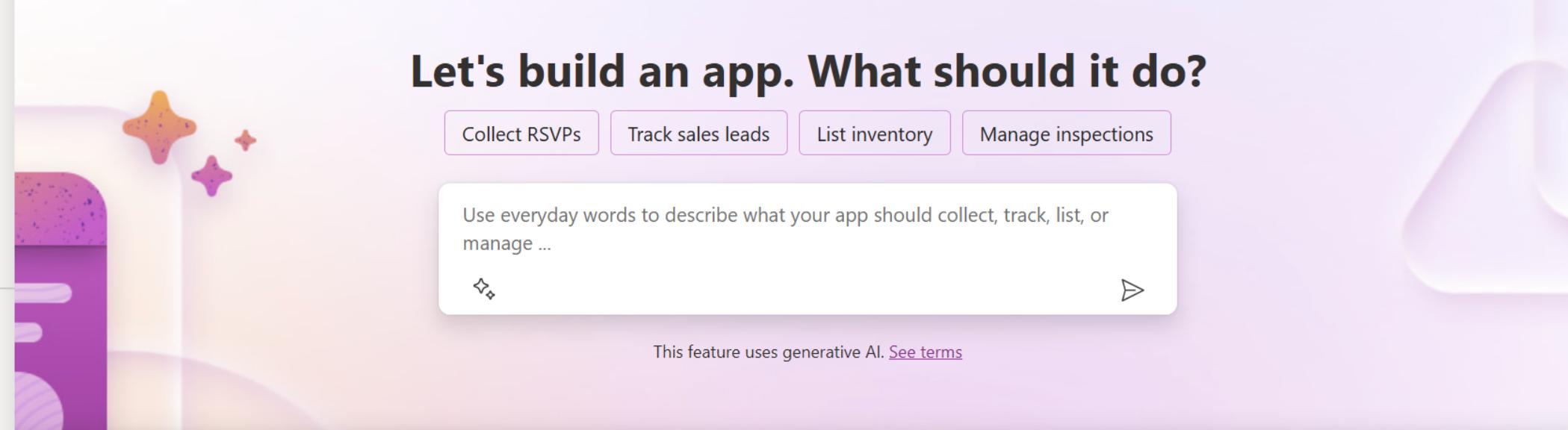
Flows

Solutions

More

Power Platform

# Let's build an app. What should it do?



Collect RSVPs   Track sales leads   List inventory   Manage inspections

Use everyday words to describe what your app should collect, track, list, or manage ...

This feature uses generative AI. [See terms](#)

## Other ways to create an app



### Start with data

Create new tables, select existing tables, or connect to external data sources.



### Start with a page design

Select from a list of different designs and layouts to get your app going.



### Start with an app template

Select from a list of fully-functional business app templates. Use as-is or customize to suit your needs.

## Your apps

⋮	Name	Modified	Owner	Type
	Power Pages Management	1 year ago	SYSTEM	Model-driven
	Solution Health Hub	2 years ago	SYSTEM	Model-driven

# Section #4

## □ Power Automate

- Triggers + actions.
- Service connectors.
- Data variables.
- Conditional logic.
- Better practices.



KOMATSU

"[Power Automate] allowed us to optimize the way we work. The team is now able to focus on high-value tasks."

Eric Cheng, Digital Solutions Architect, Komatsu Australia

@ 11:00 AM



# Exercise

## □ Power Automate

- We are organizing a workshop, and the organizers would like to automate some tasks. As the “workflow engineer,” you’re asked to create automations that will:
  - ✓ Welcome registrants after check-in.
  - ✓ Prompt registrants for session feedback.
  - ✓ Prompt registrants for conference feedback.





- Home
- Create
- Templates
- Learn
- My flows
- Approvals
- Solutions
- Process mining
- AI hub
- Automation center (previe...)
- Desktop flow activity
- More

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- Power Platform

# Create your automation with Copilot

Get started by selecting an example or describing your own automation idea.

Every month, copy all files from OneDrive folder to another OneDrive folder

Copy all rows from an Excel file to another excel file with a click of a button

When a new item is created in SharePoint, send me an email

Describe in detail how you want your automation to work

Generate

## Learning for every level [See all](#)



Analyze process mining reports in Power Automate

Beginner

45 min



Analyze your business process with Microsoft...

Beginner

43 min



Register for free 1-day automation workshop

Beginner

8 hr



Automate processes with Robotic Process...

Intermediate

2

# Recap

- ✓ Low-code is. . .
  - “a **visual approach** to software development that enables faster delivery of applications through **minimal hand-coding.**” - *IBM*
- ✓ Power BI is. . .
- ✓ Power Apps is. . .
- ✓ Power Automate is. . .



# Recap

- ✓ Low-code is. . .
- ✓ Power BI is. . .
  - “combines business **analytics**, data **mining**, data **visualization**, data tools and infrastructure, and best practices to help organizations **make more data-driven decisions.**” - *Tableau*
- ✓ Power Apps is. . .
- ✓ Power Automate is. . .



# Recap

- ✓ Low-code is. . .
- ✓ Power BI is. . .
- ✓ Power Apps is. . .
  - “**programs that companies use** to perform tasks and manage different aspects of their operations. These applications **help businesses work more effectively**, make better decisions, and better serve customers.” - *University of Cincinnati*
- ✓ Power Automate is. . .



# Recap

- ✓ Low-code is...
- ✓ Power BI is...
- ✓ Power Apps is...
- ✓ Power Automate is...
  - “**structured series of steps** that take you from the beginning to the end **of a process**. Workflows show stakeholders what tasks are complete, when they get done, and who is responsible for them—increasing visibility and efficiency across teams.” - *Asana*



# Workshop Survey

<https://mn365.org/survey>





# Charles Lakes II

Charles is a technical speaker and low-code advocate with a pro-code background. He has a passion for sharing his knowledge and experiences, solving complex problems, and engineering creative solutions. He helps organizations of all sizes modernize their business architecture and reimagine their legacy processes.

| Software Engineer Plus Ultra  
| Soufside



 /charles-e-lakes-ii

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# Thank You