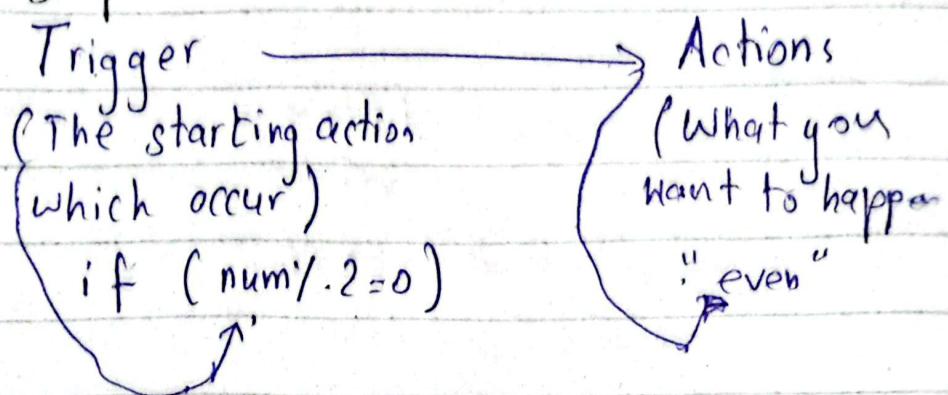


DTE FINAL Notes

POWER AUTOMATE :-

Every day we lose our time on manual task so to reduce time we use powerautomate that is a bridge that connects your far application and services, automate these workflows to reduce time.

2 parts:



Showcase 1 :-

Automated File Clerks

Automatic file downloading, updating, renaming through powerapp It ~~read~~ monitor your mail inbox to save time and upload on cloud DB.

Deconstructing the File Clerk Flow:

Trigger	Action
When new emails arrive	Folder / Path: Shared Doc
<input checked="" type="checkbox"/> : Inbox folder	File Name: Attachment Name (Dynamic Content)
from:	File Content: Attachment Content (Dynamic Content)
Subj: Filter	
Include Attachment: Yes	
Only with Attachment: Yes	

Automation A team Sport: Scaling Impact by sharing.

It shouldn't be a shared asset. Sharing automations ensures they continue even if creator leaves, allows for team collaboration on improvements

Key Benefits

- 1) Continuity
- 2) Collaboration
- 3) Collective Ownership

How to Share & Collaborate with Coowners:

- 1) Go to my flows, find flows and select share icon
- 2) In Coowners section, enter name, email or group you want to add.
- 3) Select user or group from the list. They are now a coowner

What Coowners can do:

- View run history
- Manage properties
- Edit the flows definition
- Add or remove other coowners
- Delete the flow
 - Once a flow is shared with you, it moves from Cloud flows to "shared with me" tab.

Packaging Your Solution:

for moving flows between different work areas or for sharing a standardized template, you can package flows as a single file.

- 1) Export → 2) Send → 3) Import

• Export zip Share zip with colleagues Import in target environment

Triggering flows with a tap:

Not all are automatic. "button flows" are flows you trigger manually from power Automate mobile app whenever you need.

Use Case Examples:

-) Tap a button to send yourself a reminder in 15m
-) Instantly log work hrs to excel sheet
-) Quickly send pre written "Running late" msg to team channel.

Sharing Button flows:

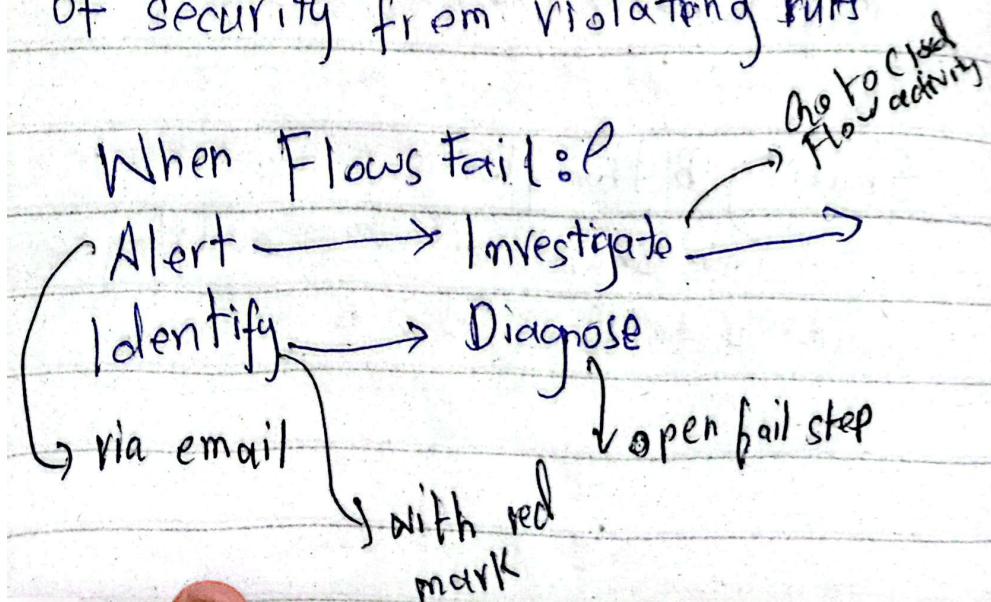
can share with team and they can run it with their devices

Control Tower; Manage Automation in the Admin Center

central location for managing organization strategy ensuring secure, organized & compliant

1) Environment: container for your flows, apps & data. Use them to separate work based on needs such for Test and Production, specific teams or departments, or different global branches.

2) Data Policies: guardrails for automations. A global optional layer of security from violating rules



Common Fixes & Pro:

→ Authentication Failure: 401, 403, Unauthorized

Cause: password change/expire

→ In flow's details, find connection & select Fix connection. Verify you

Action Configuration Issue: 400, 404, Bad request, Not found

Cause: ~~File moved~~ file moved, incorrect setting

Sol: Edit the flow & resubmit.

Temporary Glitch: 500, 502

Cause: temporary issue with service

Sol: wait moment & resubmit

Trigger → Action → Build → Share →

Manage → Maintain,



Power Apps \rightarrow Transform manual process
into digital solution.

\rightarrow building suite of apps/services/connectors,
without code

Key Capabilities:

-) Build Quickly: Connect to data to ~~create~~ functions
-) Connect Everywhere: Integrate with hundreds of ~~ini~~
services and data sources.
-) Share Instantly: Deploy apps to coworkers for
use on web browsers, phones
& tablets.

Real World Scenarios

- 1) Field Equipment: use apps to look equipment
- 2) Employee Management: For managing employees

Great App Isn't Built, It's Designed!

Before Opening Portal everything
should be designed properly, to avoid
errors / confusion

4 Pillars of App Design

1) Understand User Needs

2) Define Business Requirements

3) Select Right Data Model

Ensuring the user experience (UX/UI)

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into digital solution.

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4 Pillars of App Design

- 1) Understand User Needs
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- 3) Select Right Data Model
- 4) Design the User Experience (UX/UI)

SharePoint
more robust than
Excel.

Choosing Data Foundation:

a) Excel / SharePoint:

best for: learning, small-to-medium dataset, and apps with fewer concurrent users

b) DataVerse: → no API

best for: ~~big~~ Scalable solutions, large datasets, and leveraging AI features

c) SQL: best for: Enterprise grade app organization with existing SQL infrastructure → connect to on-premises DB

Choose Path: AI Assisted Vs Manual Craft

Craftsmanship

→ Accelerator, Create with Copilot

→ Start from a blank canvas or template for complete control over every element

→ Use AI to generate functional app from your data in minutes

Best for: Rapid prototyping, simple data entry apps, & leveraging DataVerse.

Best for: Custom layouts, complex business logic, & tailored user experience

→ Maximum Speed & Simplicity

→ Maximum Control & Customization

Path 1: Instant App with Copilot & Excel.

- ① In Maker Portal, select "start with data" and upload excel file.
- ② Copilot analyzes the spreadsheet & automatically creates a DataVerse table, guessing data types for each column.
- ③ Use Copilot chat pane to modify the table with natural language prompts.
- ④ Select "Save & open app". Copilot generates a fully functional, responsive, single screen application.

Path 2: Crafting Canvas App:

→ UI controls to your data source, give full control.

- ① Insert a Vertical Gallery:

- ② Insert an Edit form:

- ③ Link Gallery to Form:

Item → Gallery.IsSelected.



Refining User Experience

Transform autogenerated layout into a purpose built interface by tailoring fields and controls to your users need.

- Customizing gallery
- Optimizing the form.

Making it Smart with Power Fx

Formulas:

Power Fx is the low-code formula language used across power platforms. Use it to add dynamic logic & alerts formatting to your apps controls.

→ Formatting Data for Clarity

goal: Display row number as currency value

control: To text label in gallery.

Property: 'Text' Formula: Text(Value(ThisItem), '\$ * 00');

→ Add Dynamic Visual:

goal: Change text color

control: A Text label in gallery

Property: color

Formula: Color.Value(ThisItem.PrimaryColor);

Making Usable with Screen Navigation.

Guide users through your app by linking screens with navigation functions tied to button controls.

* Key Functions:

- `Navigate()`: Move user to different screen
- `Back()`: return to previous screen

Key Control:

→ Gallery Control:

- OnSelect
- `ThisItem.isSelected`

→ Form Control:

- Data Source:

→ Item:

→ Default & Update:

→ Button Control:

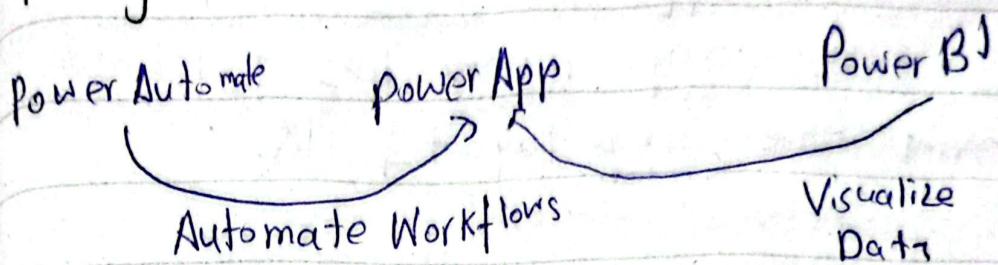
- OnSelect

`SubmitForm(F1)`

`Navigate(Screen1)`

`Back()`

Integration with PowerPlatform



PowerPlatform Synergy in Action

When to Use Automate: When business logic goes beyond what Power Apps can do natively.

When to Use PowerBI: for alert analysis

Power Apps Builder Journeys:

BluePrint → Build → Polish



Model Driven Apps

Canvas Apps:

App maker has total control over the app layout & UX.

Model Driven Apps:

Layout is largely generated for you based on the components you added on underlying data model.

5 phases:

- 1) Model Business Data
- 2) Define Business Processes
- 3) Compose the App
- 4) Configure Security Roles
- 5) Share the App.

Step 1: Data Foundation with Data Model

- 1) Tables
- 2) Columns
- 3) Relationships
- 4) Choice Columns

Step 2: Construct UI:

Forms

Views

Sitemap (Navigation for app)

Step 3: Install Smart Systems with Business logic
Business Rules : kia cheez chahiye kia req hai (columns, data) ki

Business Process Flow:

step by step guide.

e.g. Lead → Opportunity → Quote → Order

Type Of Logic	Description	Design
BPF	online step by step guide	BPF designer
Workflow	Automate process with dataverse	Business rule designer
Business Rule	Applies logic to set col reqs, validate data using UI	Power Automate
Power Automate Flow	Cloud based App services to automate workflows	

Power Apps automatically creates items for you

Step 4: Visualize Your Data

- 1) Charts
- 2) Dashboards
- 3) Embedded Power BI

Composing the App:

After modelling data & defining process

You build your app in App Designer

- 1) Start with a page design: choose a layout, such as a blank page with navigation.
- 2) Add pages: based on dataverse

- 3) Select components: specify forms, lists & charts

- 4) Publish: one click save your changes and makes app available

Step 5: Configure Security Roles:

Access depends on security roles.

means who control what data and edit what data.



Security Privileges

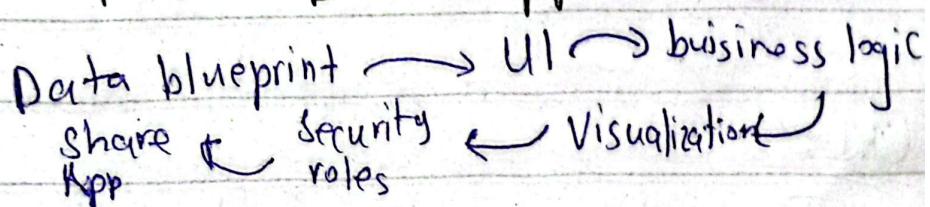
- Create • Read • Write • Delete • Append
- Append To • Assign • Share.

Last Step : Sharing App

- 1) Assign Security Roles to Users
- 2) Share the App with Users



Process Driven App



Copilot

b/c need of instant, accurate info
for better decision, reduce time
& cost save

Low Code Platform for Building Intelligent Agents:

guided, no code graphical interface
without needing to rely on data scientists
or developers.

→ Empower Your Teams

→ Reduce Cost

→ Improve Satisfaction

Ch1:

Topics: How agent conversations evolve.
Each topic specific issue.

Trigger Phrases: Phrases or keywords that teach the agent when to use specific topic. We need 5-10 for good coverage.

e.g:

Topic Name: Event Contacts

Phrases:

- Who are event contacts
- event contact info
- Who to contact for the event.

Trigger phrase → Message →
End of conversation.

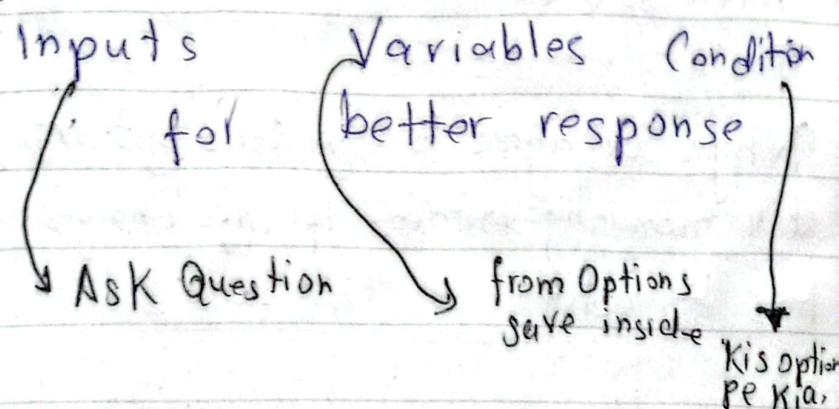
Simple Hard coded Response:

- 1) Trigger Phrases: Entry point
- 2) Show a message: Static response

Moving from Static Text to a
Dynamic Conversation:

The "Why": Our first agent is too
rigid. It lists all at once.

"What" - Our New Tools:



Steps:

- Add an 'Ask a question' node
- Define Options
- Create Variable

Result: Copilot automatically creates condition nodes for each option, branching conversation path based on value of variable.

Version 2.0: Interactive, Branching Agent:

New Conversation Flow

- Ask a question
- Save value to a variable
- based on variable it follows a condition path
- Each path has its own message

Ch 3: From Hardcoded logic to like, ~~get data~~
Data Source.

Why: Our agent is smarter - but info is still manually entered. If info changes clearly has to edit

Solution:

- 1) Dataverse for teams
- 2) Power Automate
- 3) Call an Action Node.

↳ component that runs power automate flow.

How To Connect the Agent to a Dataverse Table:

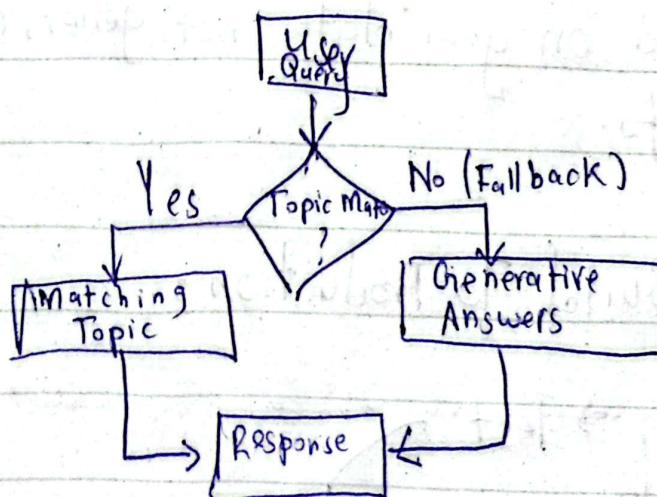
Step 1: Create the DataSource in PowerApps
for Teams (Tables, rows, cols)

Step 2: Build Power Automate Flow.

- Add call an action → Apply to each
- Initialize var → Return values to GP list
- List Rows Studio.

Ch 4: SuperCharging with Gen AI :P

What Happen There Isn't Any Topic



If no topic then agent uses AI to generate a response from your specified knowledge sources.

Powering Generative Answers with Your Knowledge:

The Process: Enable Gen AI in agents settings to act as fallback

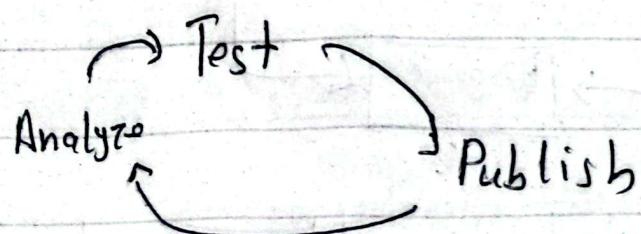
Available Knowledge Sources:

You can ground AI in your own data to provide relevant, contextual answers

Key Considerations:

The agent uses this 'grounding data' to provide context. Answers will be based on your data not generic public info.

Ch 5: Build To Production:



Go live Checklist :-

- Use the Test Panel. (Enable Track ^{Topics})
- Publish Your Agent (By Publish button)
- Analyze Performance (provide KPIs)

Static Bot → Intelligent Assistant

