Instant Insights for Impact:

Unleashing the Power of Power BI Data Visualization and Project Online to Transform your Resource and Portfolio management

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PMI Rochester Professional Development Day

May 9, 2024

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Learning Objectives

- Understand the framework for using Microsoft Project Online and Power BI for Project and Portfolio visualization and management.

- Provide hot tips that can spark ideas you can bring back to your organization.

- Help you overcome "How do I start" inertia.

You!

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Our Journey

1 — The Microsoft Project Potpourri

2 — Integration & Customization

3 — Visualization & Report Gallery

4 — Lessons Learned
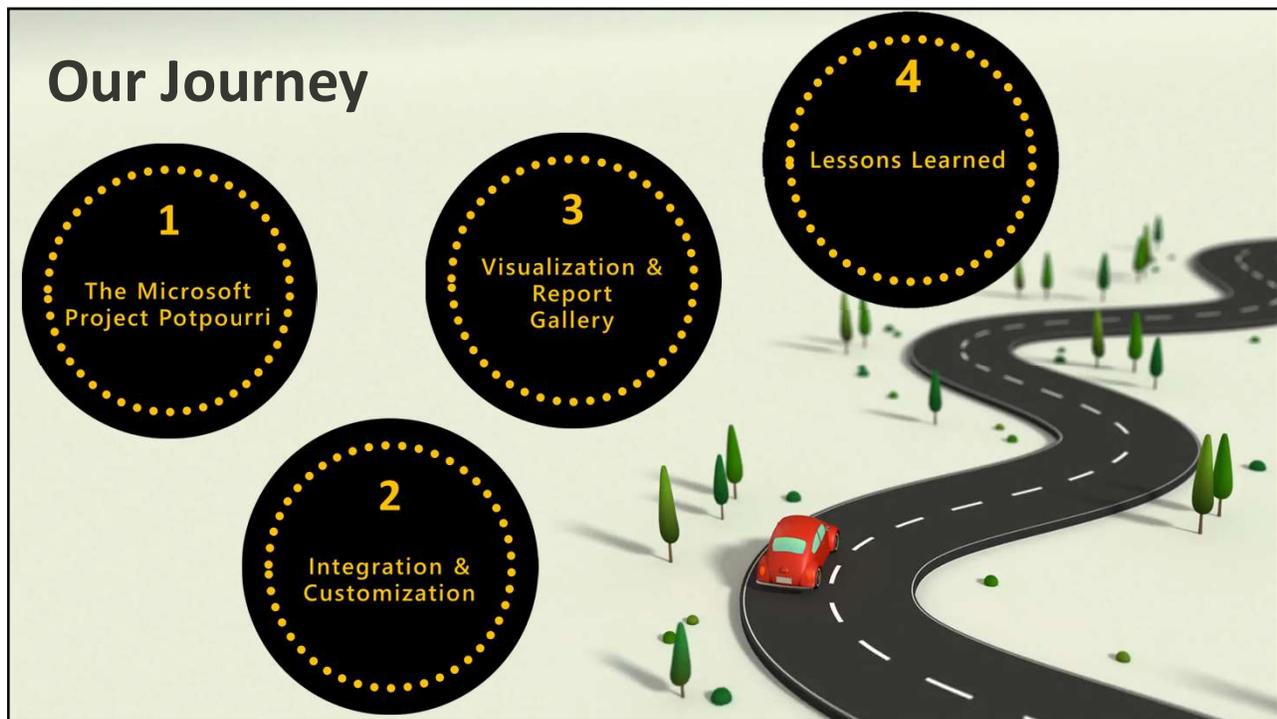
3

Project and Portfolio Visualization and Management

What problem(s) are we trying to solve?

4

Sciforma PMO Outlook Report 2024 Edition

Biggest challenge you face today with managing your portfolio of projects

Resource Management	Project Prioritization	Visibility & Reporting	Project Financial Management
46%	**29%**	**17%**	**8%**

Ref: Sciforma PMO Outlook Report 2024 Edition

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Most Challenging Aspects cited in Sciforma survey

Resource Management
- Capacity Planning (50%)
- Resource Allocation (28%)
- Resource Utilization (16%)

Project Prioritization
- Accurately "Scoring" the Value of Portfolio Projects (28%)
- Saying "No" to Some Projects in the Portfolio (28%)
- Aligning Portfolio Projects with Corporate Strategy (24%)

Visibility & Reporting
- Integrating project-related data from systems the PMO does not control (38%)
- Project portfolio data is not centralized (31%)
- Lack of real-time project portfolio data (19%)

Project Financial Management
- Integrating with an existing financial system (28%)
- Tracking budgets vs actuals (28%)

Ref: Sciforma PMO Outlook Report 2024 Edition

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Vision

Build this …

Centralized project portfolio data + Interactive Visualization

…To get this:

Transparency to project portfolio

Improved collaboration

Enterprise resource management

Project prioritization & alignment to strategy

Improved decision making
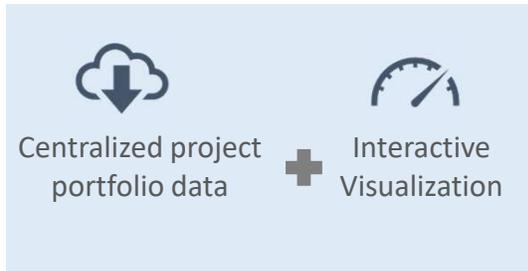
Organizational agility

The goal is to provide visibility to the entire project & portfolio management process.

Identifying	Evaluating	Selecting & Optimizing	Executing

Business Drivers (definition & prioritization)

- Is investment consistent with business priorities?
- How should the portfolio be optimized?
- How is the portfolio affected by changes in strategic direction?

Benefits Mgmt

Track Benefits Realized

New Project Requests

Approved or "Must Do" Project Requests

Project Valuation (establish business value)

Project Ranking & Force-ins/Force outs

Portfolio Rebalancing

Optimize Project Portfolio (Constraint & Risk analysis)

Plan, Manage & Deliver Projects in Portfolio

Track Performance

Change Mgmt

Increase Capability with Increased Organizational PPM Maturity

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The Microsoft Project Potpourri

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The Microsoft Project Potpourri

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Project App Options
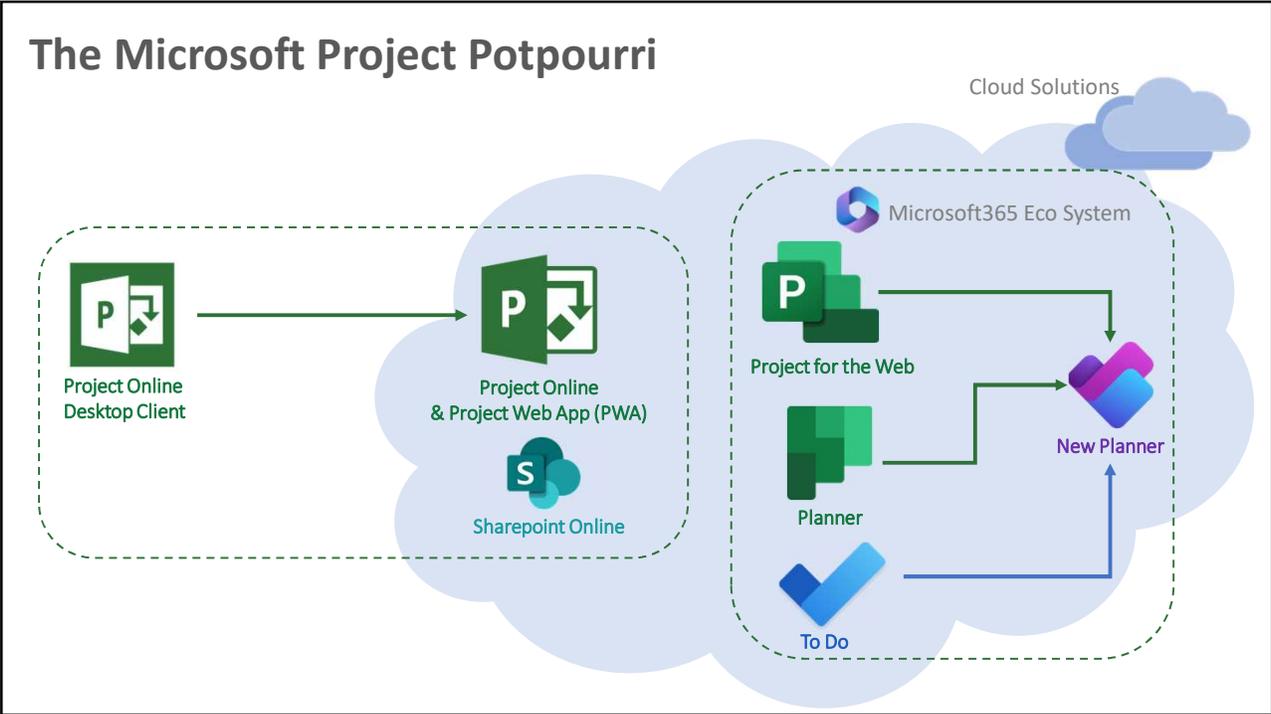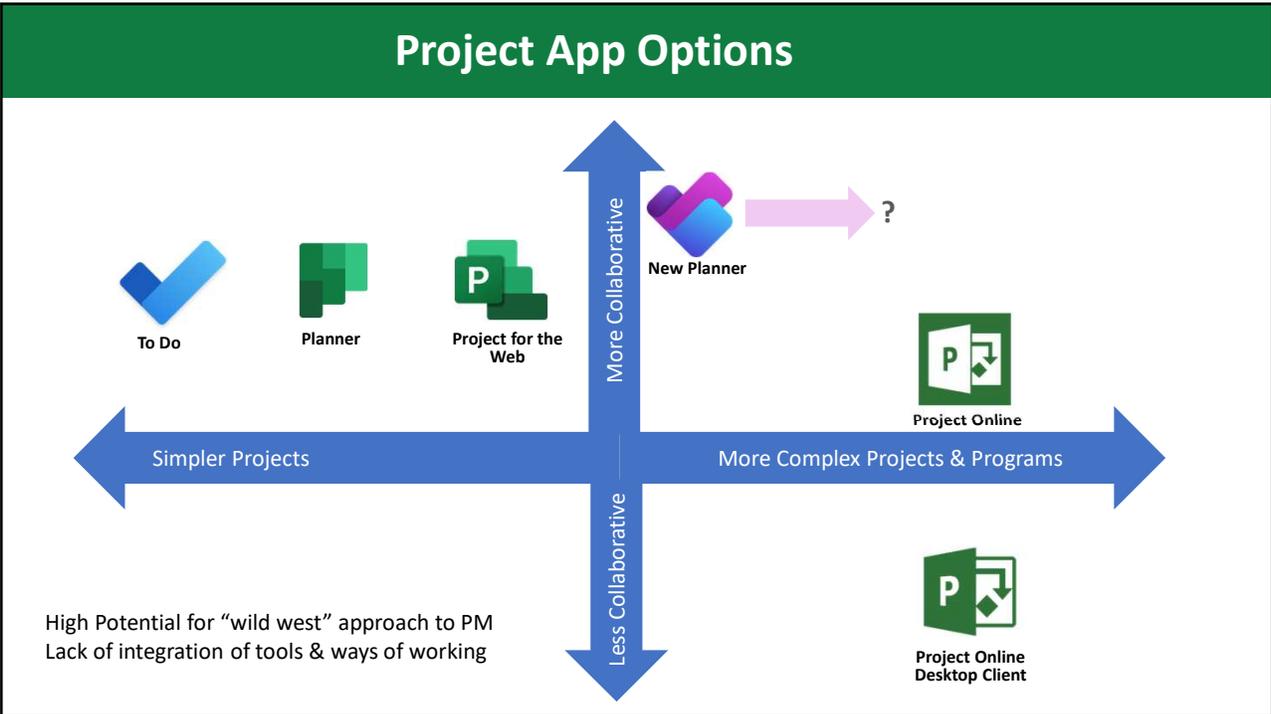
12

Project Subscription Comparison

Feature	Project Plan 1	Project Plan 3	Project Plan 5
Project Home centralized location Grid view / board view / Gantt chart Timelines Microsoft Teams Collaboration Project Planning and scheduling - co-authoring Pre-built reports Project for the Web	Project Plans 1, 3 & 5		
Timesheet submission capability Resource management capability Access to roadmap Project Online Desktop client Project Online / Project Web App	Read-only	Project Plans 3 & 5	
Portfolio selection and optimizing Demand management capability			Project Plan 5

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Project Online & Project Web App – Home Screen

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Project Online & Project Web App – PWA Settings

15
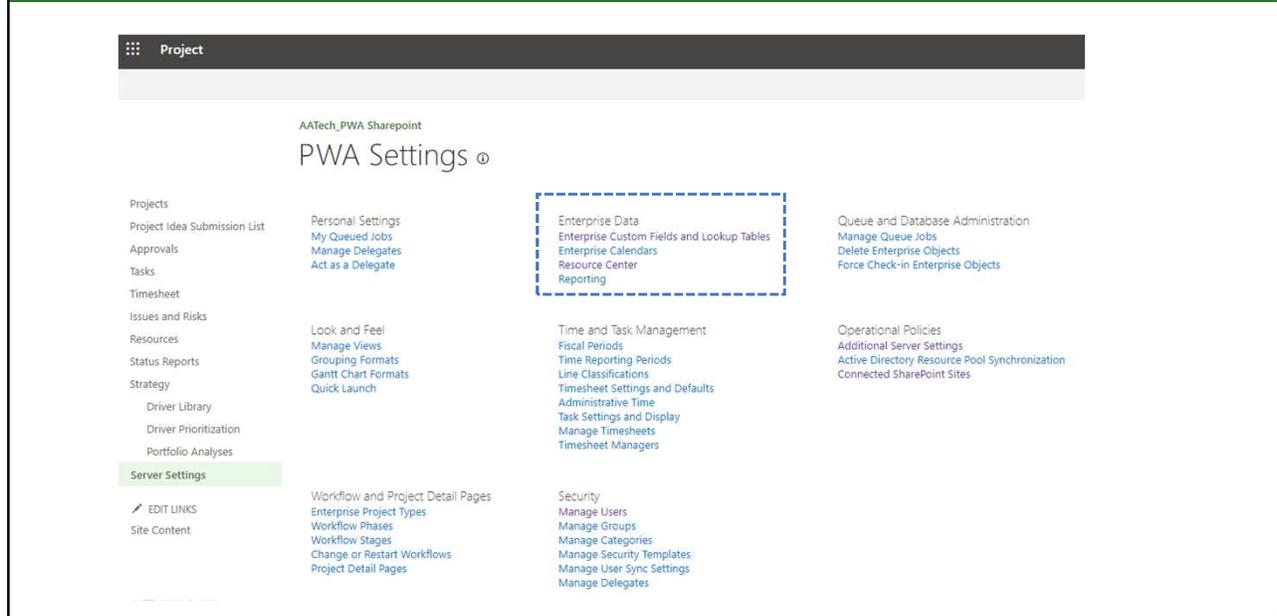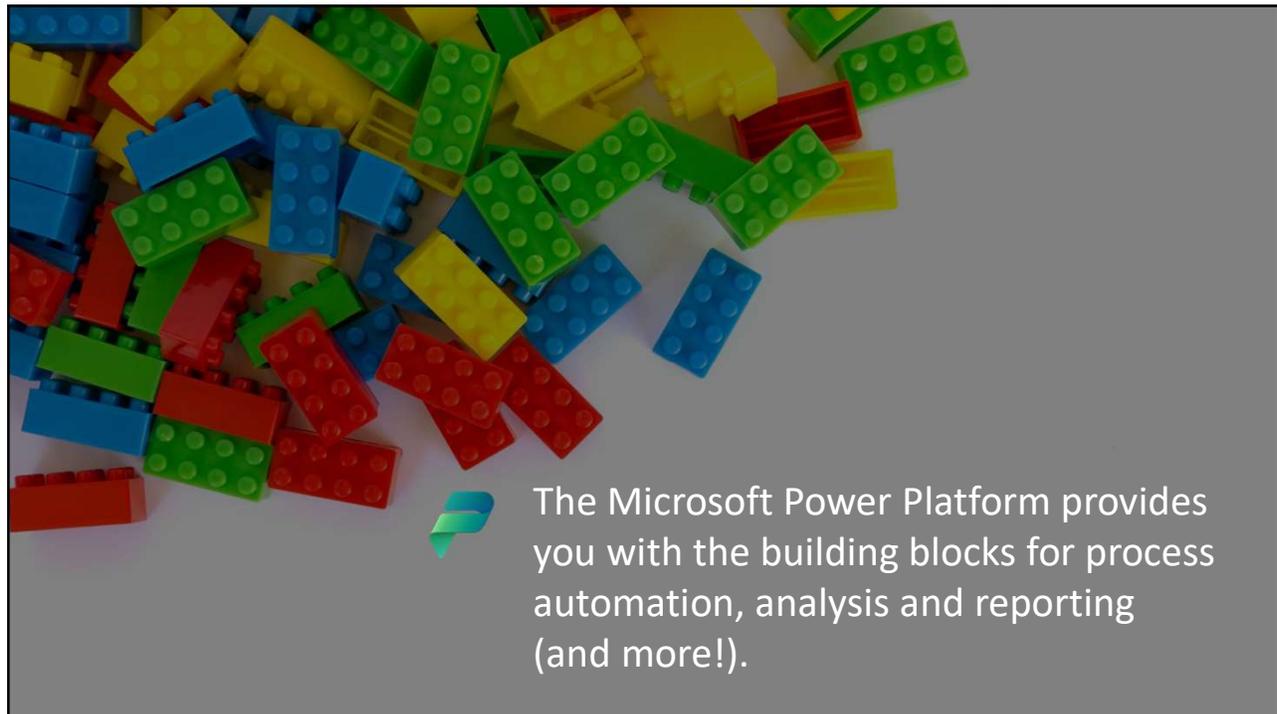
The Microsoft Power Platform provides you with the building blocks for process automation, analysis and reporting (and more!).

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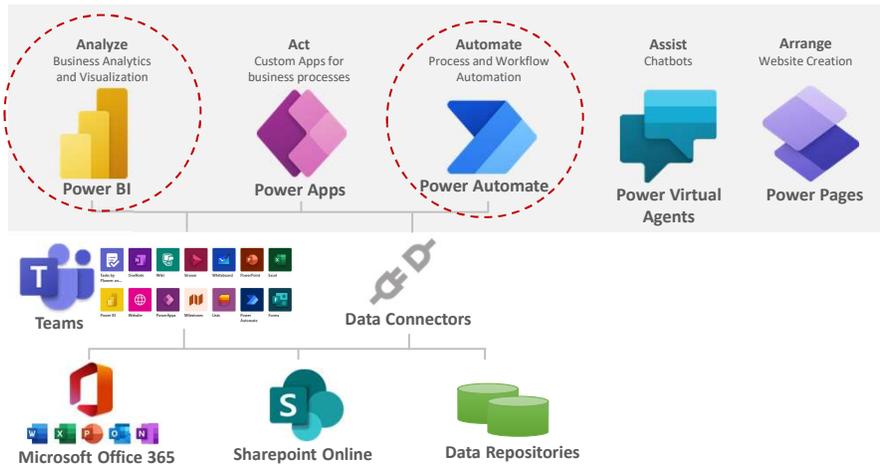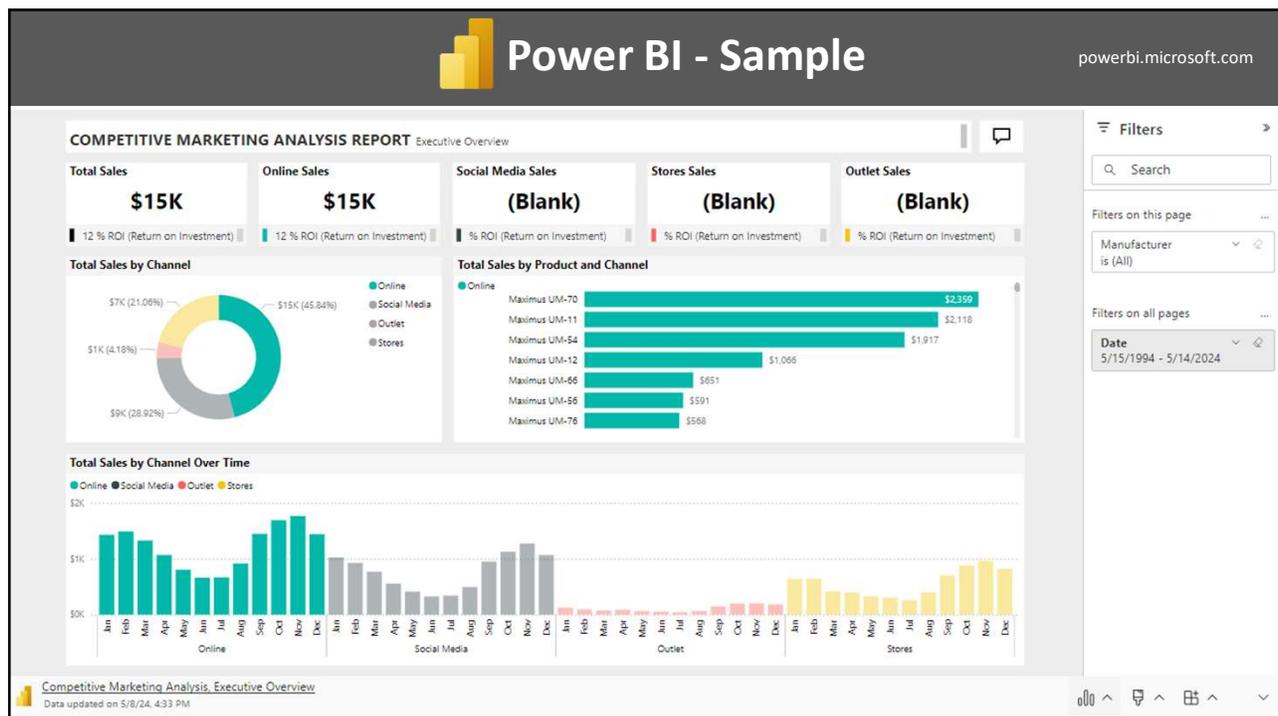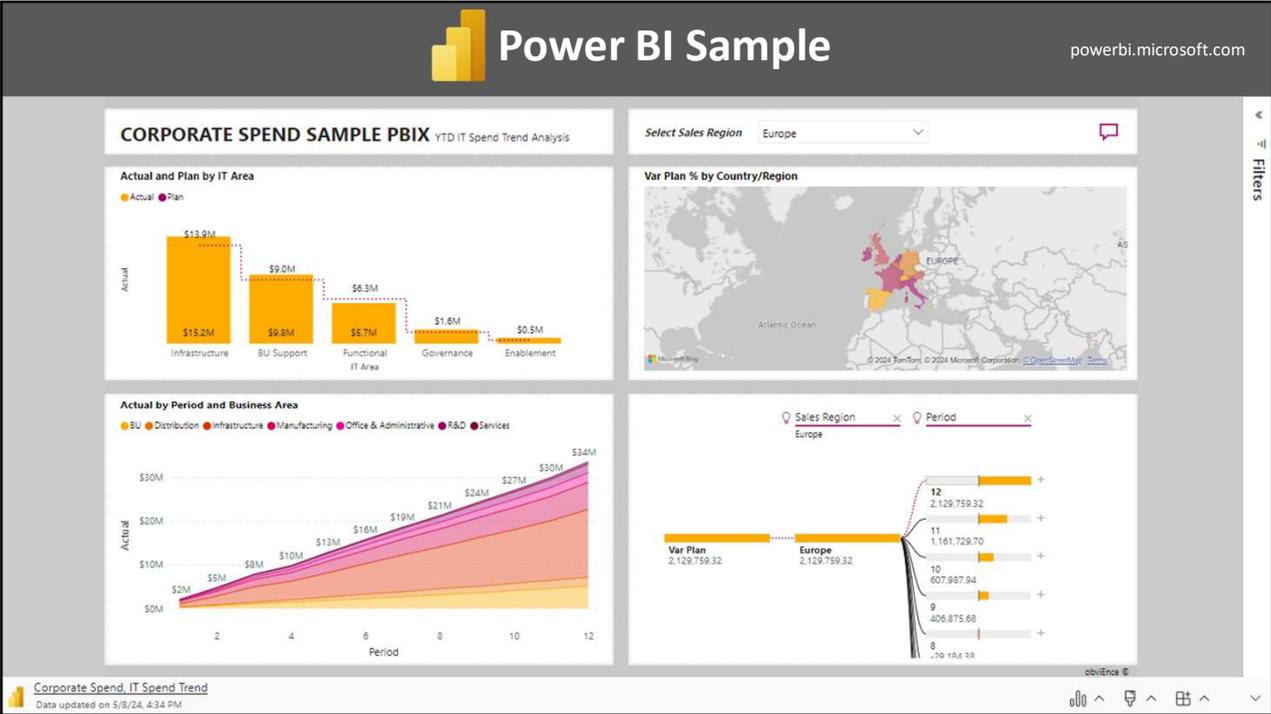
Tons of templates to kickstart your solution!

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Integrating the Microsoft Apps
Solution leverages standard Microsoft applications
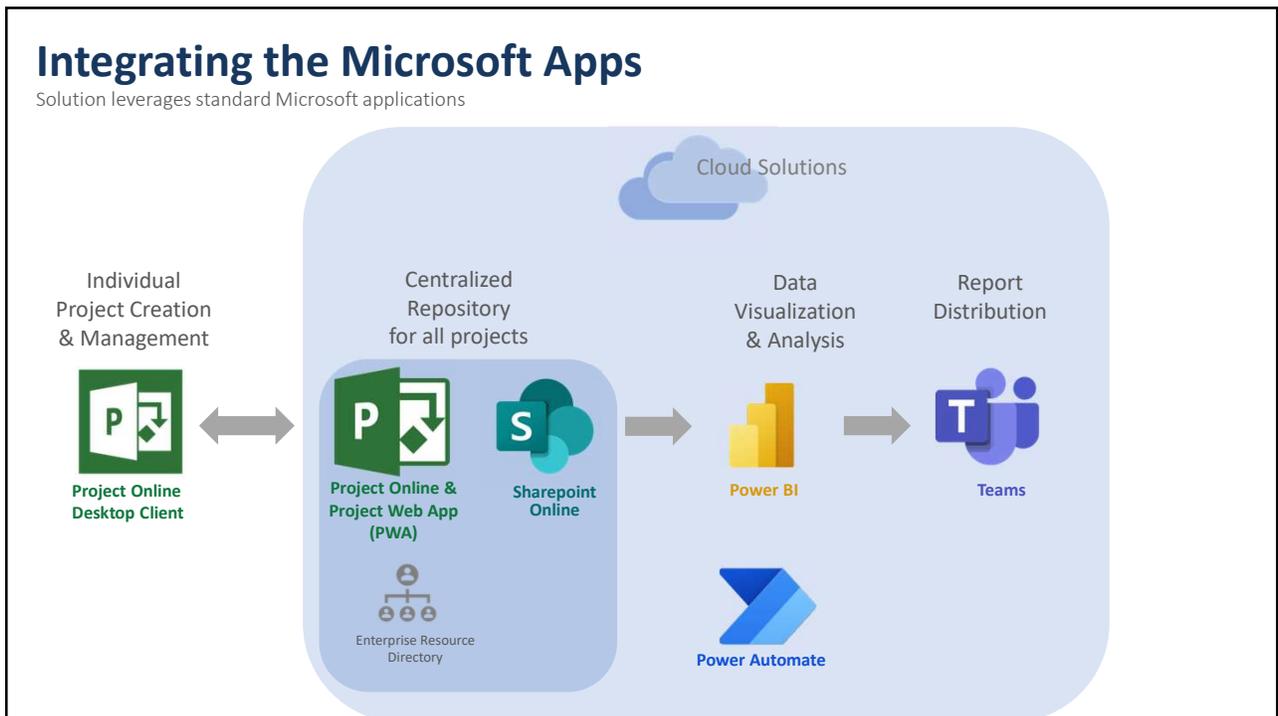
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Project Online – Custom Project Server Fields
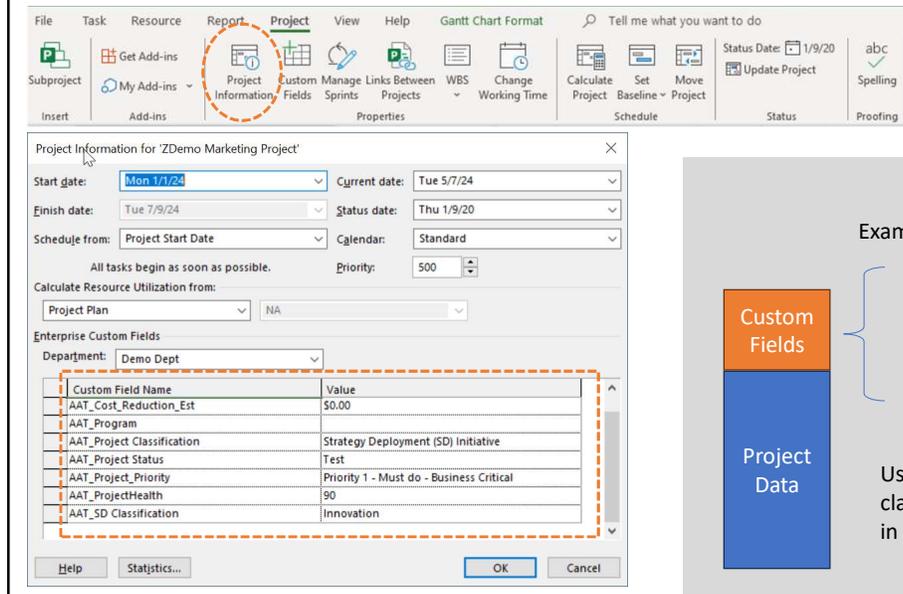
Project Online Desktop Client Menu

Example fields:

Custom Fields
- Program Name(s)
- Project Type
- Project Status
- Project Priority
- Project Health
- Strategy Category

Project Data
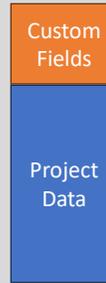
Use the custom fields to classifying projects for filtering in Power BI.

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📊 Project Online Power BI Template App

OPTION 1
This option has limited editing in Power BI online
Download from: appsource.microsoft.com
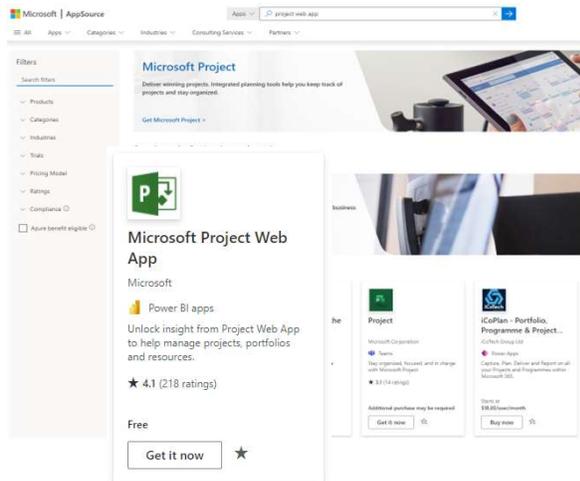
OPTION 2
This template will allow full editing template file in Power BI Desktop.
Download from the Project Online Home Screen or Github link below.

https://github.com/OfficeDev/Project-Power-BI-Templates/blob/master/Project%20Online/Microsoft%20Project%20Online%20Power%20BI%20Content%20Pack.pbit
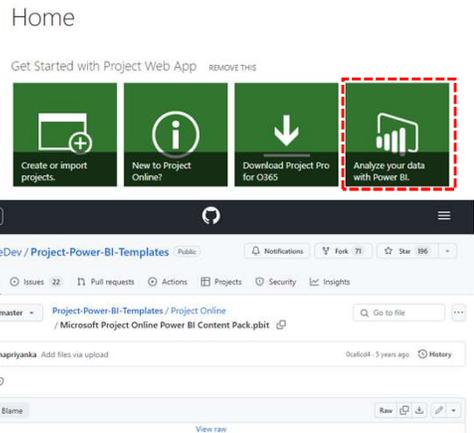
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Project Online Power BI Template App – Sample Visuals

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Project Online Power BI Template App – Data Model
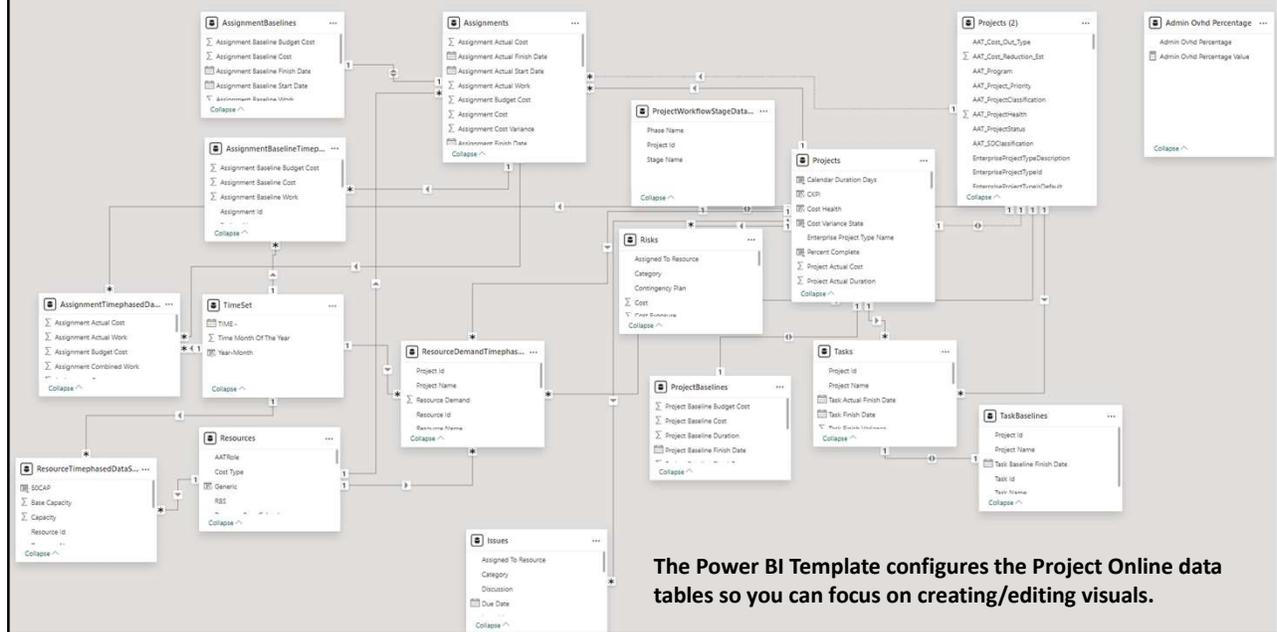
The Power BI Template configures the Project Online data tables so you can focus on creating/editing visuals.

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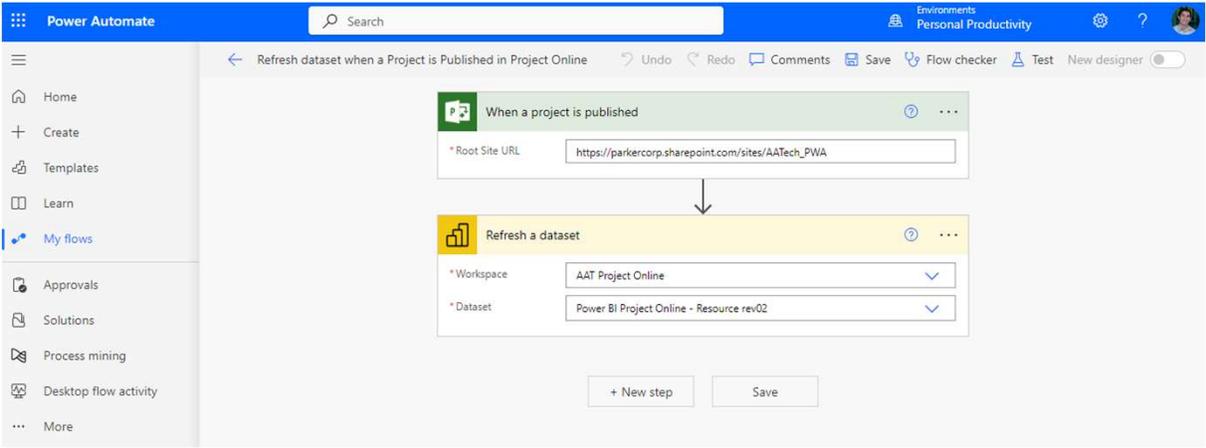
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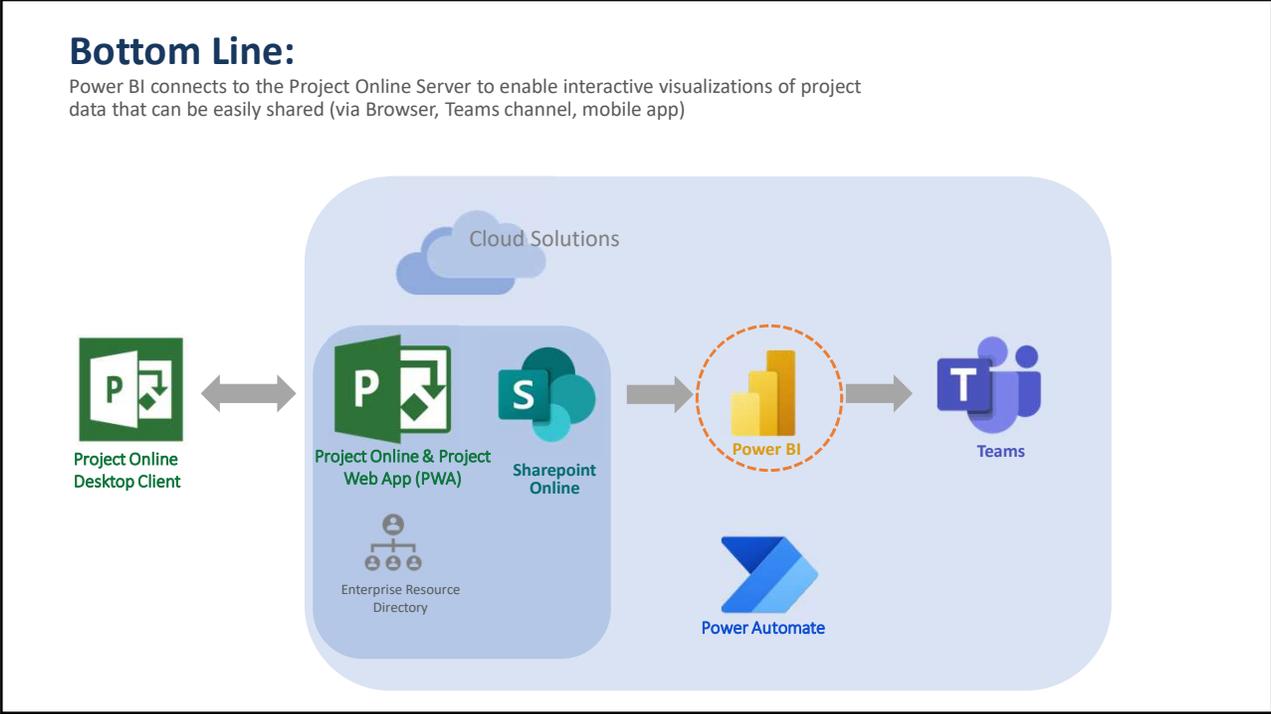
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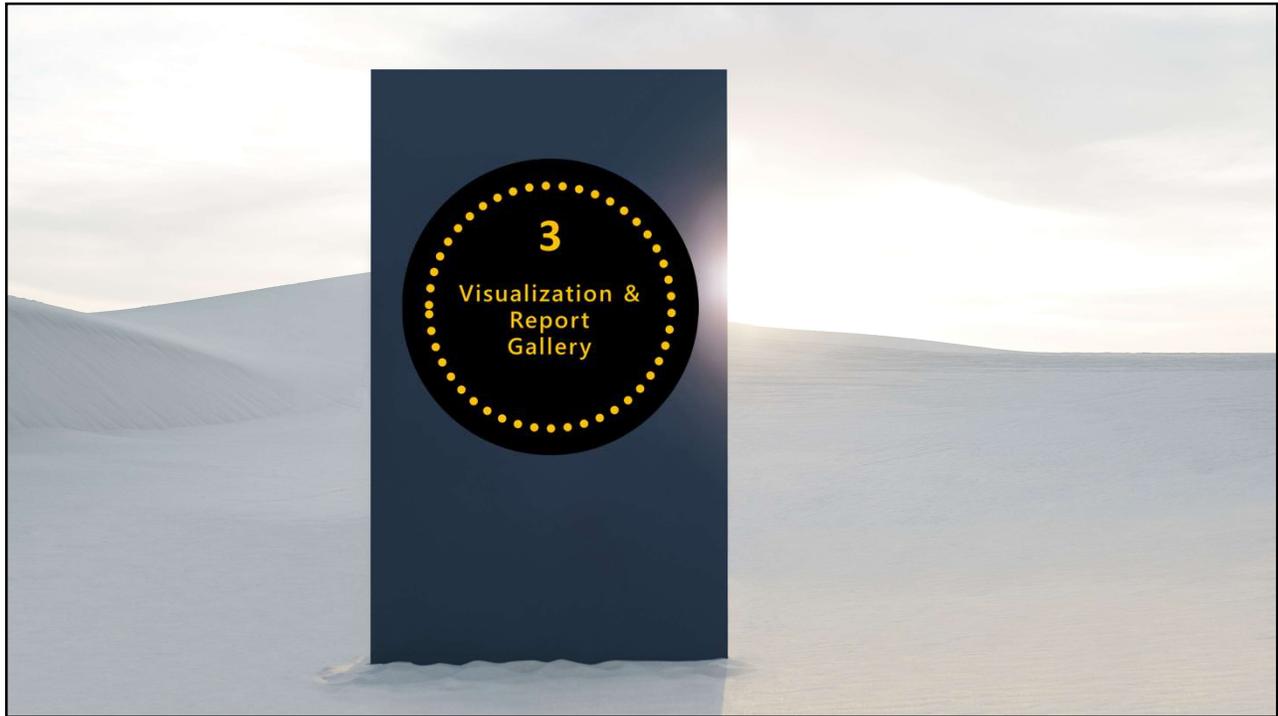
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Project Online: Power BI Report Pages

Resource Reports	Project Reports	Portfolio Reports
Resource Availability	Project Status	Portfolio Dashboard
Resource Overview	Project Risks & Issues	Portfolio Timeline
Resource Assignments		Portfolio Costs
Resource Details		Portfolio Milestones
Resource Demand Forecast		Portfolio Risks
		Portfolio Issues

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Resource Management | Capacity Management | Demand Management

Definitions

| More Tactical – Individuals & Projects | More Strategic – Organization & Portfolio |

Resource Management

Identifying resource requirements & timing and allocating appropriately (right person, right time)

Optimizing resource utilization to avoid overallocation or conflicts.

Resource Management is tactical focusing on optimizing use of resources.

Capacity Management

Understanding the limits of what the organization can achieve with its current resources & ensuring the organization has the capability to meet current and future workloads

Capacity management helps in planning resource expansion or reallocation to meet upcoming demands.

Demand Management

Prioritizing and controlling the intake and execution of new work based on the organization's strategic objectives & capacity to deliver. (Right project, Right time)

Aligning the work undertaken with the organization's priorities and capacity,

Instant Insights for Impact, S Munechika, 2024

Resource Reports – Standard Report Pages

Resource Availability

Resource Assignments

Resource Overview

Resource Details

Resource Demand Forecast
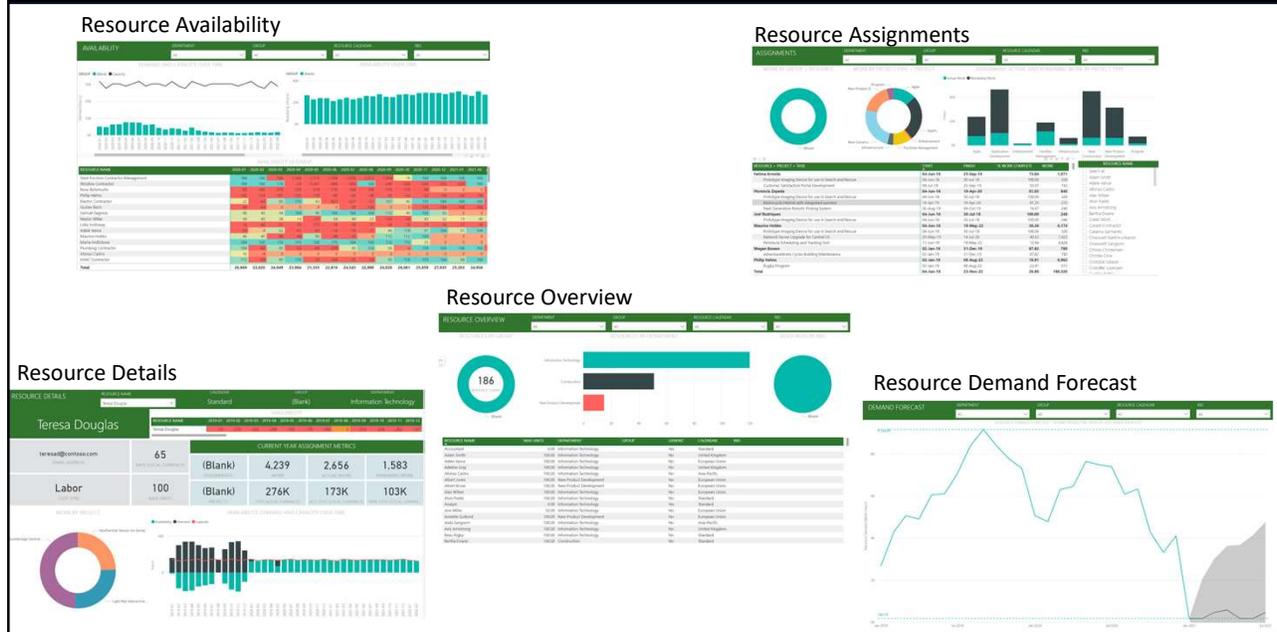
Customized Page: Resource Heat Map & Project Tasks

What's good about it – easy to see where there are overloaded resources – forecasted demand and capacity.

What's challenging – dependent on timely and accurate resource allocation in project plans.

Remaining Capacity for Value-Added Project Work
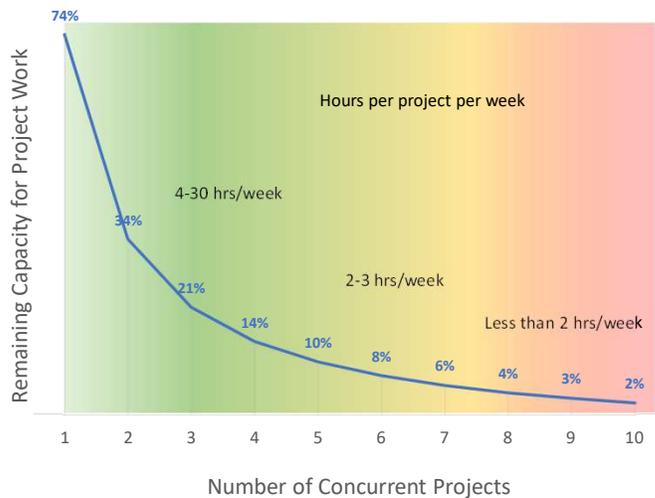
Notes & Assumptions:

- 20% used for operational work (non project)
- 2.5% for project overhead (e.g. meetings, 1 hr /week)
- 3% Task-switching loss (e.g. 15 min per project per day)

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Factors affecting how many projects you can handle concurrently
Some guidelines suggest a range of 2 - 5 simultaneous projects

Factors enabling the handling of more projects:

- Deep specialization
- Similarity of projects
- Simple & Routine tasks
- High Team effectiveness (clear accountability, decision making, responsiveness)
- Worker personality/preference
- Automation (AI?)

Factors enabling the handling of less projects

- Complex work
- Uniqueness of the project
- Inadequate tools & lack of automation
- Worker personality/preference
- Poor project management

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RESOURCE ALLOCATION BY PROJECT

Project Name	Zach Admin	Zander Sales	Zane Finance	Zaylee Marketing	Zelda Procurement	Zen Engineer	Ziggy Technician	Zion Quality	Zoey Analyst	Zora P Manager	Zuri Production	Total
ZDemo 2nd Marketing Project			26.1%	100.0%	13.0%				65.2%	104.3%		**28.1%**
ZDemo Marketing Project			43.5%	43.5%	100.0%					43.5%		**20.9%**
Zdemo Server Upgrade	43.5%					56.5%	26.1%			73.9%		**18.2%**
ZDemo Digital Transformation	19.6%					120.7%				26.1%		**15.1%**
Total	**63.0%**		**69.6%**	**143.5%**	**113.0%**	**177.2%**	**26.1%**		**65.2%**	**247.8%**		**82.3%**

What's good about it – Quick way to tally up the number of projects and time commitment per project over a set period of time (e.g. current month)

What's challenging – Assessing how many projects is too much – and making necessary changes.

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"The number of projects that key resources can handle should determine the number of active projects in the organization – not the other way around."

- Steyn & Schnetler

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Customized Page: Project Report Dashboard
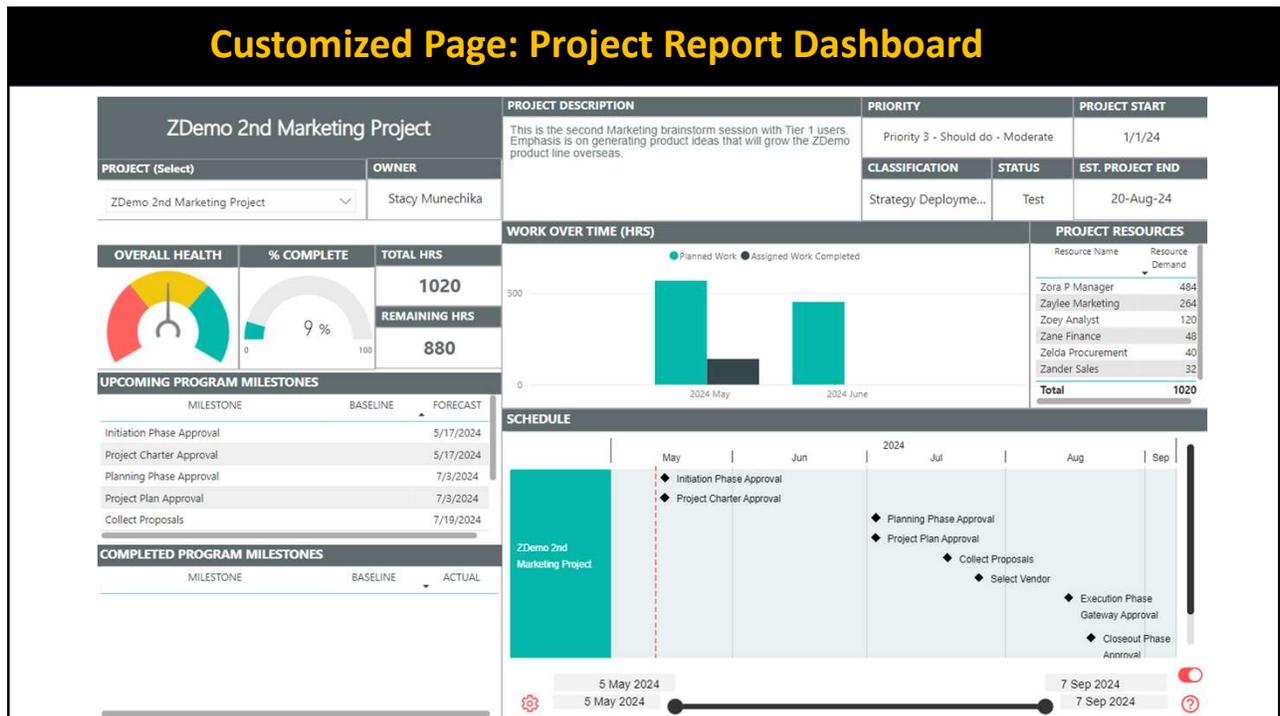
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Standard Page: Project Risks & Issues

This data is entered through a Sharepoint List in the Project Sharepoint site (Project Online). It is not linked to the Project .mpp file
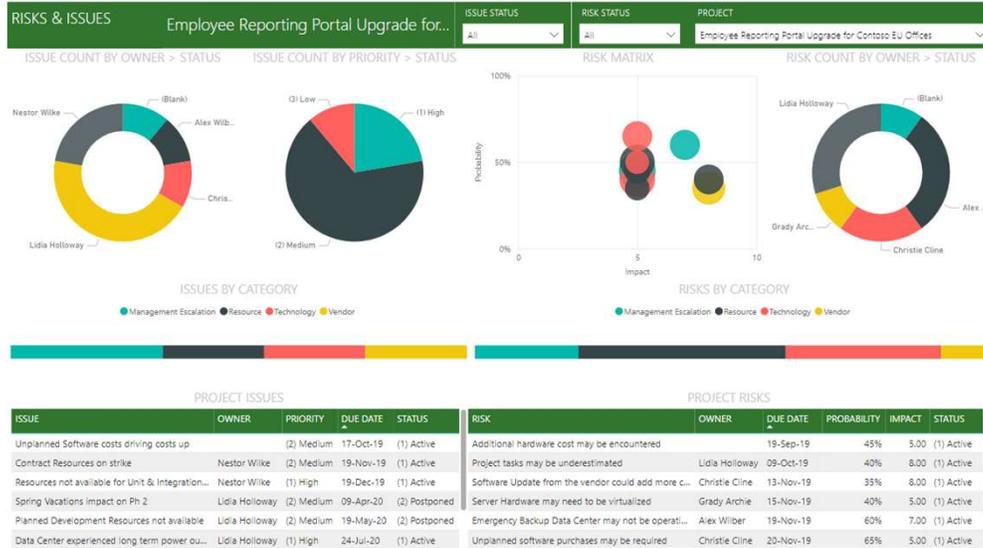
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Standard Page: Portfolio Dashboard
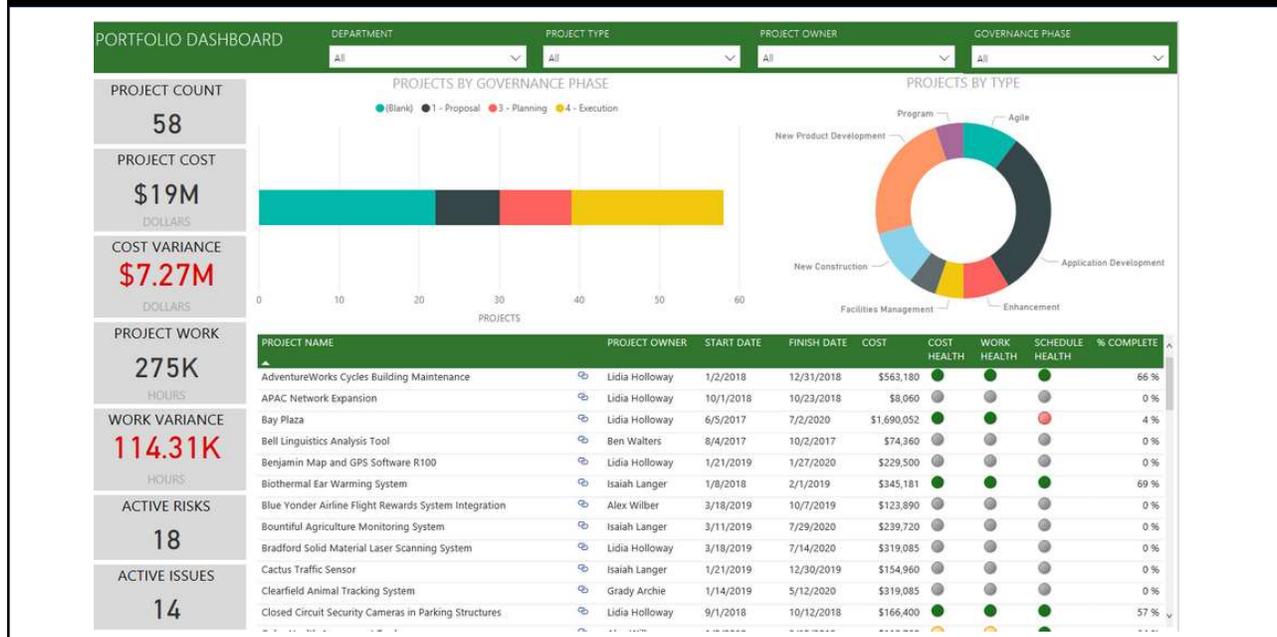
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Customized Page: Project Portfolio Summary

Use of custom fields to classify and filter projects for prioritization.
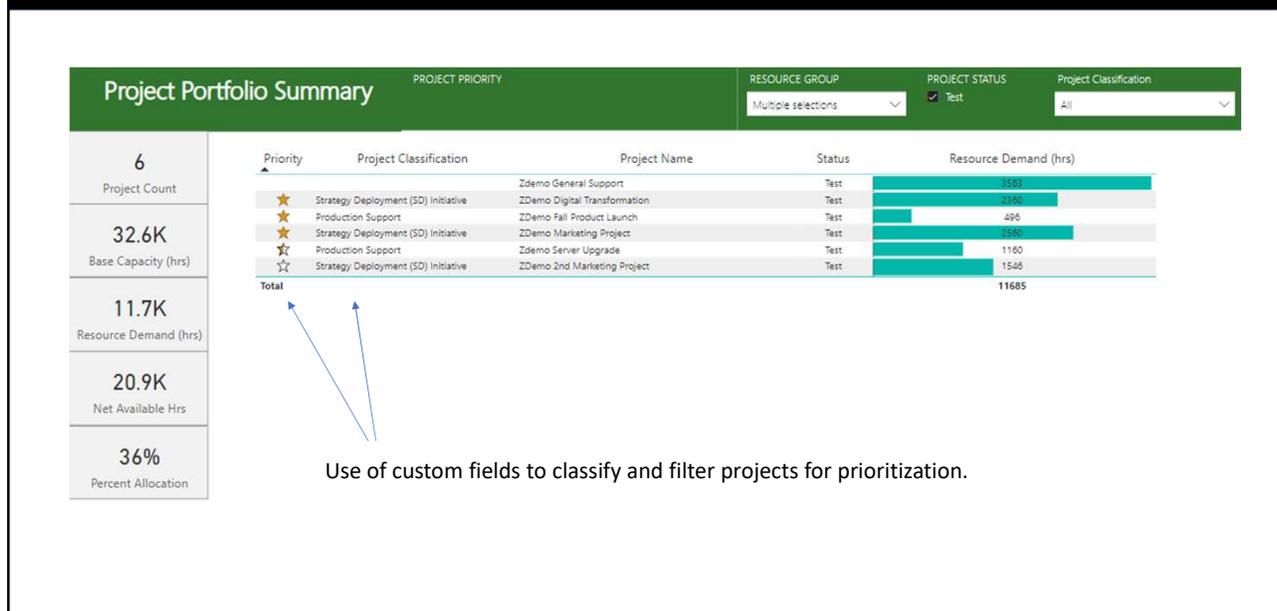
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Standard Page: Portfolio Costs

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Being able to aggregate project data coupled with powerful visualization capabilities is a game changer.

Provides data transparency with the ability to drill down to relevant details.

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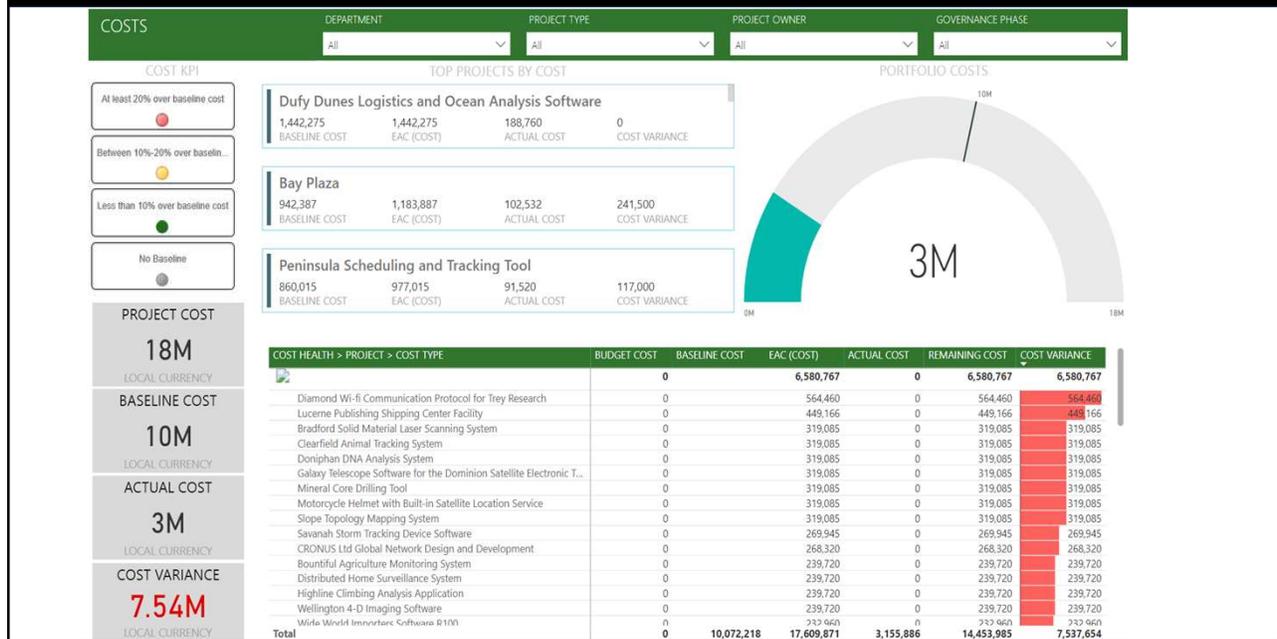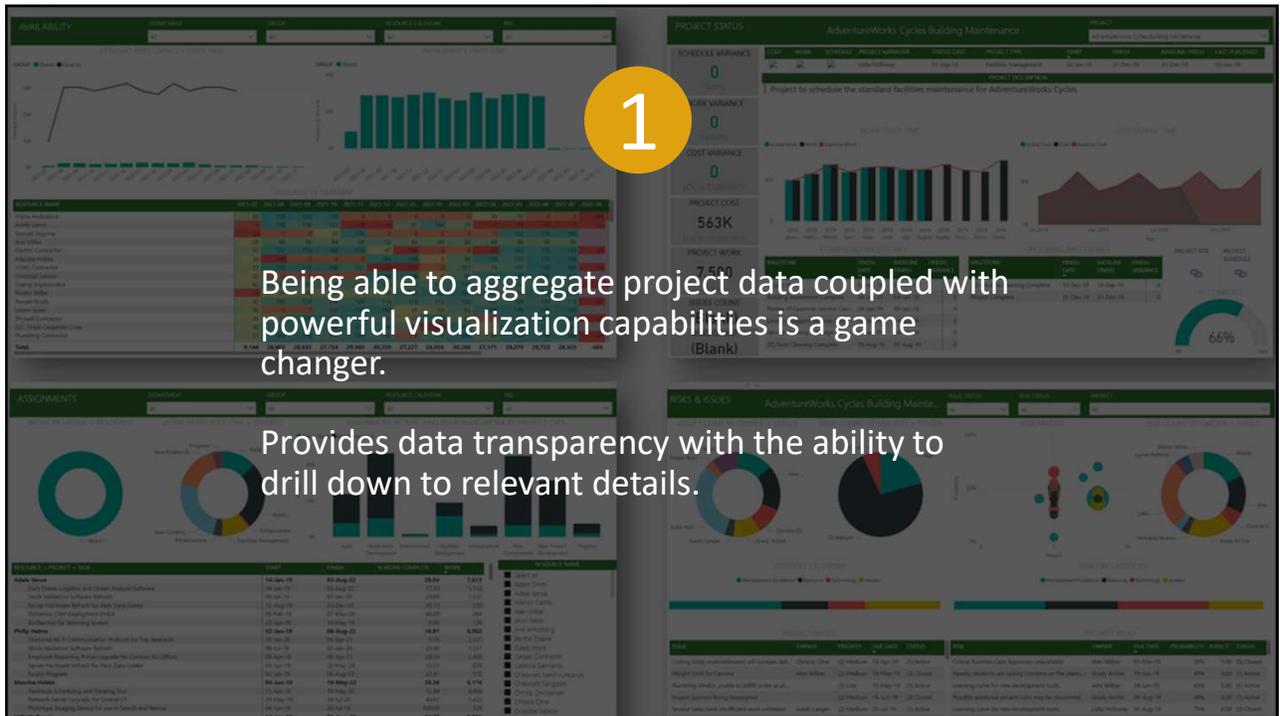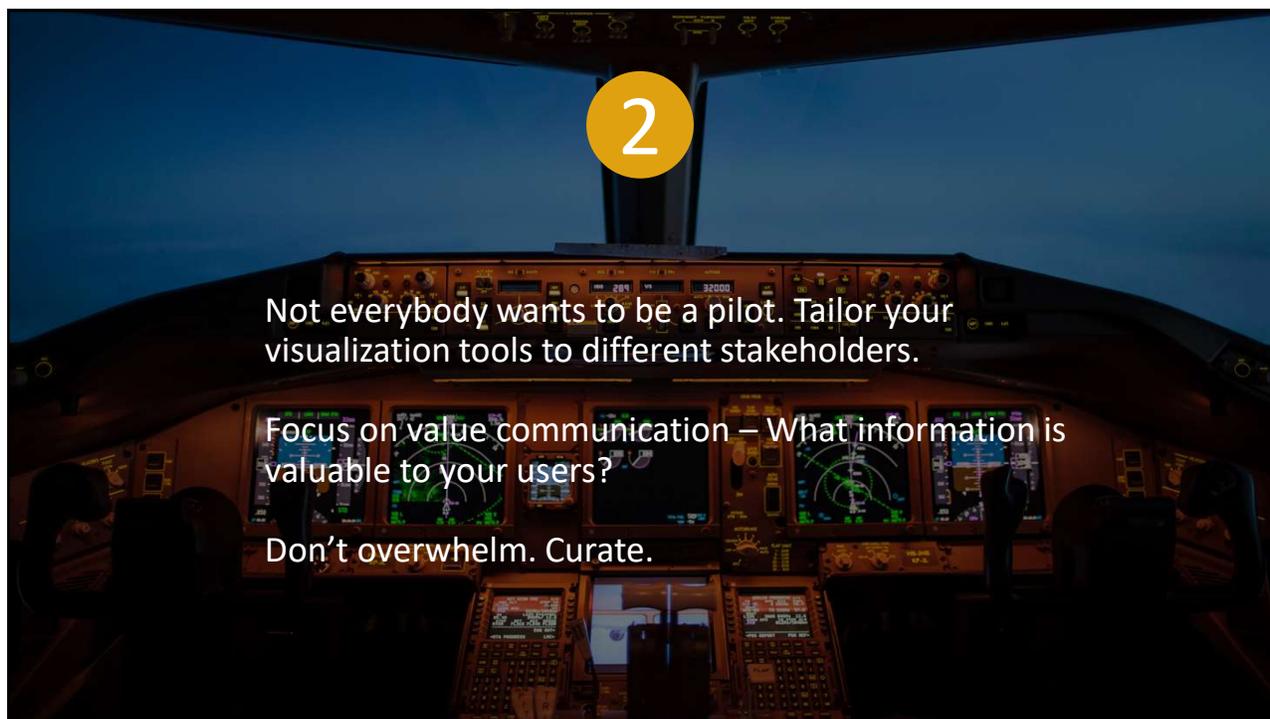
Not everybody wants to be a pilot. Tailor your visualization tools to different stakeholders.

Focus on value communication – What information is valuable to your users?

Don't overwhelm. Curate.

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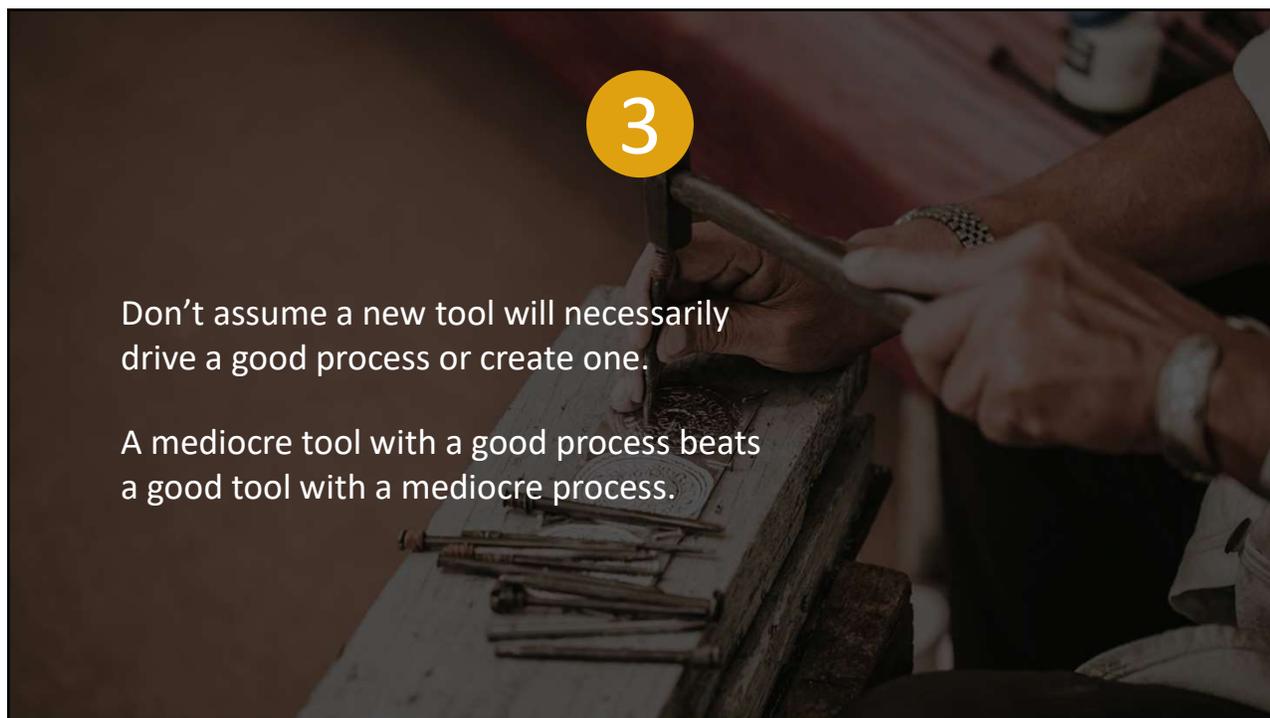
Don't assume a new tool will necessarily drive a good process or create one.

A mediocre tool with a good process beats a good tool with a mediocre process.

50
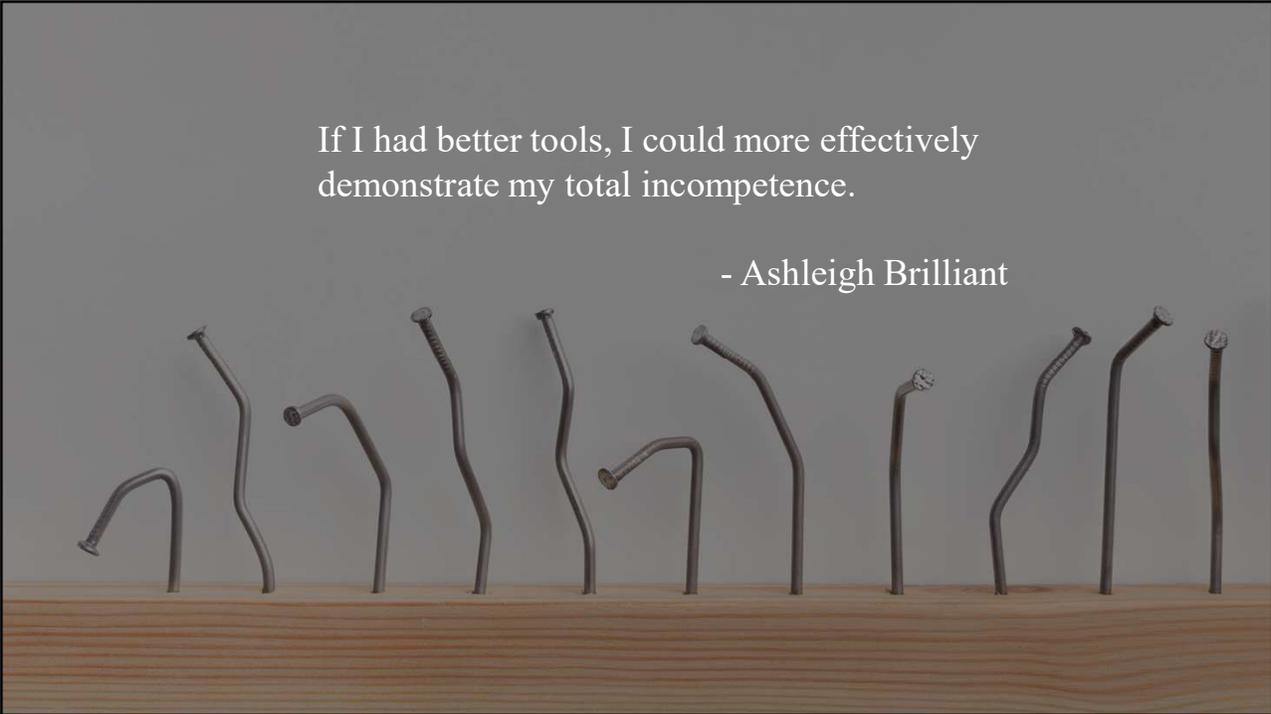
If I had better tools, I could more effectively demonstrate my total incompetence.

- Ashleigh Brilliant

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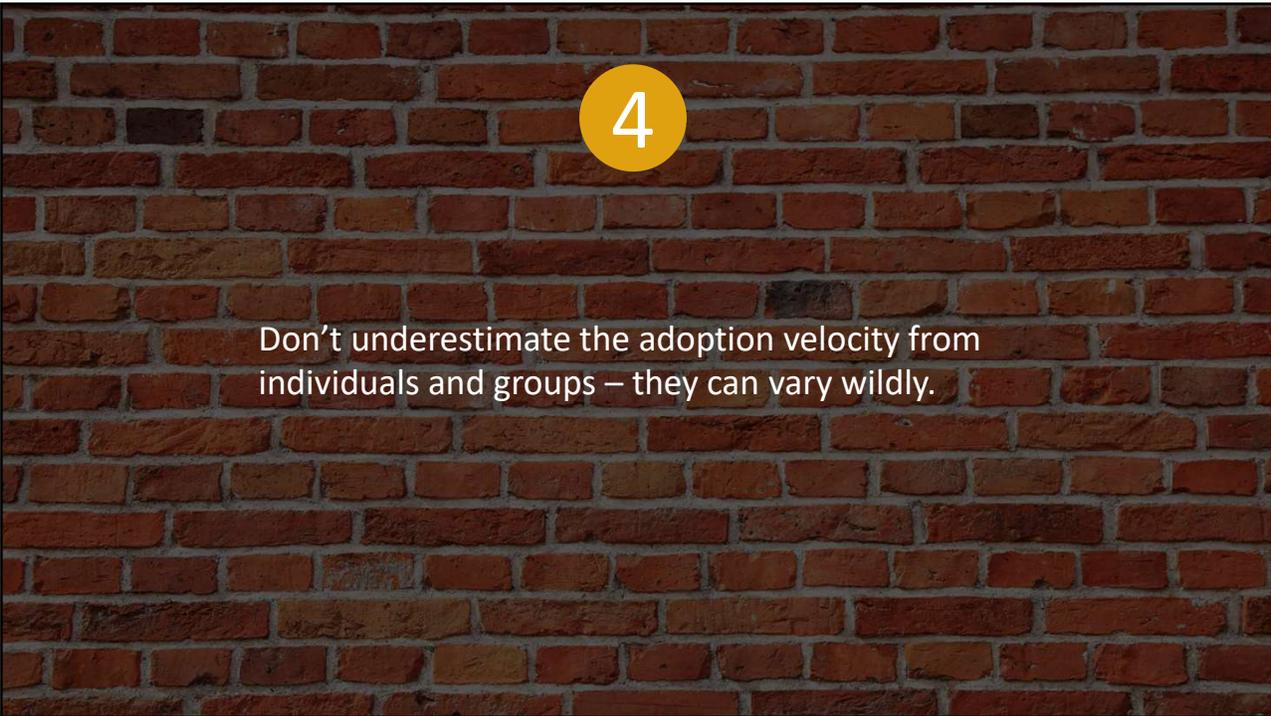
4

Don't underestimate the adoption velocity from individuals and groups – they can vary wildly.

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Follow the Bacon Principles

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The Bacon Principles

Bacon and Egg Analogy: The pig is committed, but the chicken is not.

Be committed to your change initiative over the long run.

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The Bacon Principles

Bacon is not a meal by itself...

Technology implementation is only part of the solution – need change management for adoption.

...but, Bacon can make other things much better!

Focus on creating tools that enhance processes & decision making.

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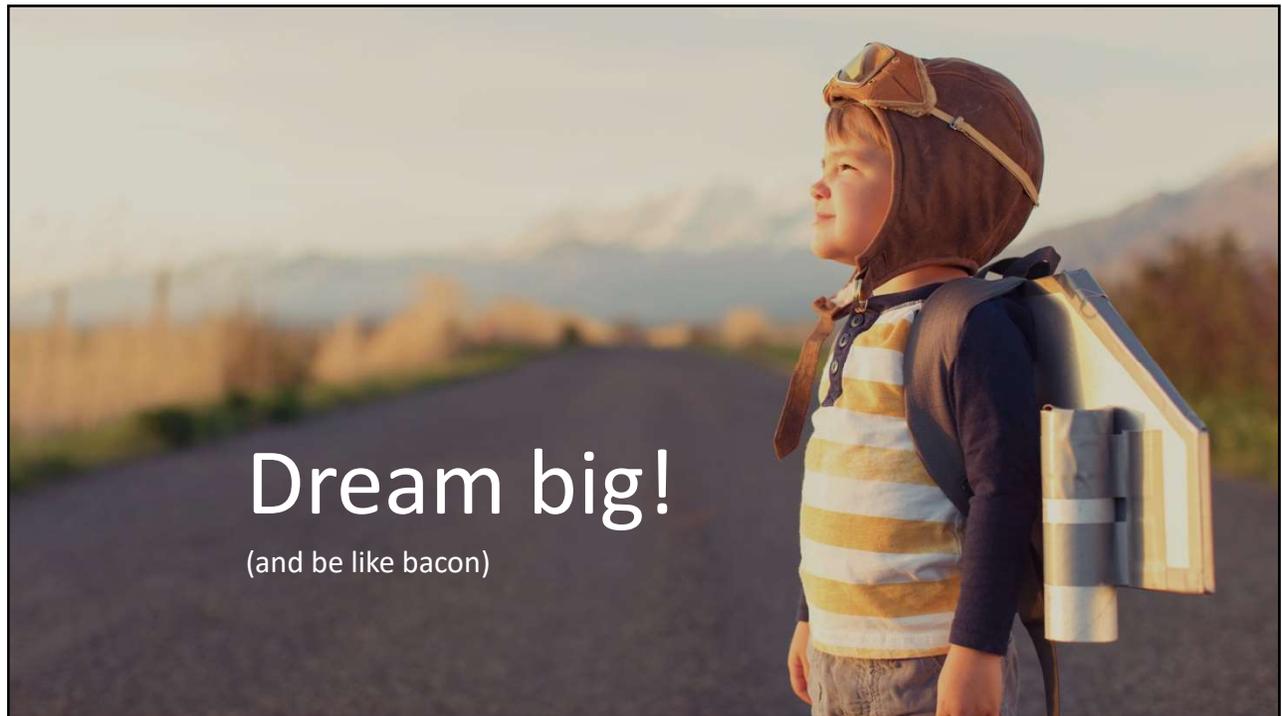
Dream big!
(and be like bacon)

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