Microsoft 365

Power Platform Well-Architected Framework

Defining a Monitoring Strategy

Ali Youssefi
Q3 2023

Overview and Intended Audience

This session is to discover and assist with defining a monitoring strategy for the Power Platform. This is not a technical discussion and is designed to be strategic in nature.

The intended audience includes:

- Business Stakeholders
- Key Decision Makers
- Directors
- Architects
- Anybody interested!

What is Monitoring and Why do I need a strategy?

At a high level, monitoring is the ability to extract information about how your applications and platform are being used, how they are performing and the evolution of your business data.

Insights collected from monitoring quite frankly will shape how your business plans and operates.

Having a proper monitoring strategy in place as you are planning your solution is ideal. That said, there is no time that implementing this strategy is a bad choice.

Defining a Monitoring Strategy

Building a Monitoring Strategy

1. Identify what questions and requests from your business you need to address and what tools are the right choice.
    1. For instance, operational data for troubleshooting, user movement and active usage and adoption within Dynamics 365 applications, etc.
    2. Does the organization require first party tools only? What about third party and licensing? Open source?
    3. Will the tool scale as your organization continues to grow?
2. Identify the organizations used in your production swim lane.
    1. Monitoring how tests are running, how changes impact experience and performance across environments is key to acting quickly to mitigate disruption.
3. Identify security requirements and how you plan to ensure compliance.
    1. Monitoring how users are connecting with the platform (devices, locations, multiple failed log-ins)
    2. Monitoring what actions users are taking with data (exporting mass amounts of data, bulk deletes, etc)
4. Identify who needs access to monitor based on roles and responsibilities.
    1. Ops Management, Business Stakeholders, InfoSec, Development teams, etc.
    2. How do you plan to service the application with ITSM solutions?
5. Identify what is your responsibility monitor and what is Microsoft’s responsibility.

Building a Monitoring Strategy – Build Towards a Future State

Microsoft Power Platform is a robust platform with many connectivity points. As your business furthers adoption of the platform, more services will become relevant to meet business needs.

Consider the following from the Cloud Adoption Framework when you define your monitoring architecture:

- Consolidate your monitoring investment when resources are limited.
- Decide how monitoring will help enable the future services your business needs.
- Align with future services and resources that you'll monitor in the cloud.
- Identify monitoring gaps across the three dimensions (depth, breadth, and across) of the health model.
- Model the financial aspects, costs, and support factors that support a cost-benefit analysis.
- Guide the hybrid decisions that you need to make.

Building a Monitoring Strategy – Build Towards a Future State

Consolidate your monitoring investment when resources are limited.

Multiple tools are available to monitor Microsoft Power Platform. Some require more involvement and maintenance than others.

Consider which tools add or reduce effort when resources are limited.

Tools that could reduce effort include robust monitoring and harness the power of machine learning. The trade off is the amount of data needed to train models, the complexity of setup and costs.

Consider what data points are relevant when resources are limited.

Do you need to track each transaction? What is the minimal amount of data needed to ensure you're healthy, you're secure and your business has what it needs to make informed decisions.

Building a Monitoring Strategy – Build Towards a Future State

Decide how monitoring will help enable the future services your business needs.

How does your monitoring strategy increase visibility into business needs and ensure efficient and optimal workloads?

Consider how you plan to address capacity constraints, service protection limits and operational health.

Platforms and tools that provide robust alerting and automation to ensure business continuity are a must.

Consider how you share telemetry and secure access. Visibility into metrics is key to understanding business needs.

Are your logs behind licensed software? Do your Business Intelligence tools align with your organizational model?

Building a Monitoring Strategy – Build Towards a Future State

Align with future services and resources that you'll monitor in the cloud.

Microsoft Power Platform is a constantly evolving platform. Data and business extensivity solutions are widely available and growing in number.

Consider as you advance your usage of the Power Platform what services you may require and how the telemetry from Dataverse and Apps and Flows will assist with the choice you make.

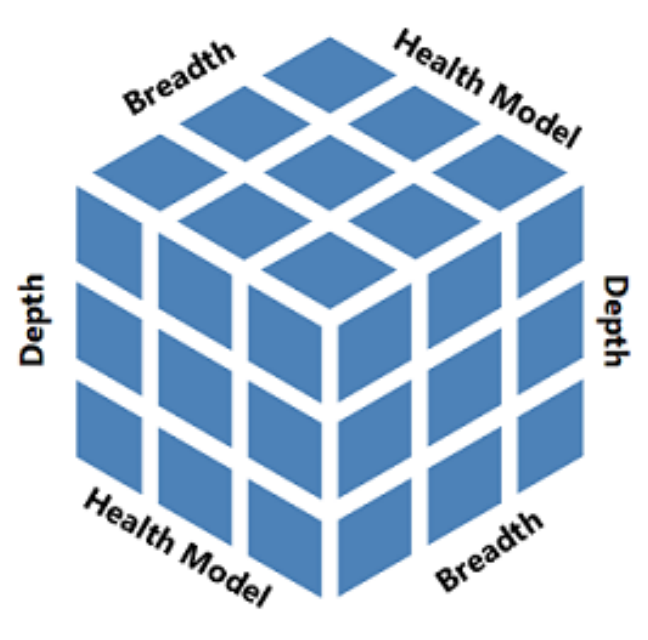
Are you monitoring transactions made with the Dataverse API and other connectors? How does your business solution scale under increased pressure?

Ensure the monitoring tools you choose for the Power Platform will provide an opportunity for end to end monitoring across services that you onboard.

Telemetry correlation and extraction play a major role here. The tools chosen must follow industry standards and be open to including new services you bring into your Power Platform solution.

Building a Monitoring Strategy – Build Towards a Future State

Identify monitoring gaps across the three dimensions (depth, breadth, and across) of the health model.
Service visibility is the goal here. The strategy should account for the following three dimensions and explicitly state known gaps and plans to address.



Depth: *Are you collecting signals that are meaningful or are they simply noisy?*

Breadth: *Are you monitoring each layer your customizations and solutions are interacting?*

Health Model: *Are you monitoring availability, performance, security and continuity?*

Building a Monitoring Strategy – Build Towards a Future State

Model the financial aspects, costs, and support factors that support a cost-benefit analysis.
Organizations most of the time have existing commitments on other platforms outside of Microsoft Power Platform.

Consider the existing commitments, knowledge and expertise needed as you identify tools to monitor Dataverse.
Do you have SCOM in place? Does the IT and Ops team already understand the platform or tool chosen to monitor Dataverse?

Consider tools that provide cost flexibility without reducing business value.
Can you reduce noisy telemetry while reducing cost? How will the reduction impact existing processes? (BI tools, visualizations, workbooks, etc.)

Building a Monitoring Strategy – Build Towards a Future State

Guide the hybrid decisions that you need to make.

Organizations may need to utilize a hybrid model of both cloud and on-premise resources to meet business requirements.

Consider the platforms needed when connecting to on-premise resources. These include robotic processes, IoT, legacy APIs, gateways, etc.
Ensure that these tools provide telemetry that can correlate with your Power Platform monitoring tooling.

Logging of requests as well as other identifiers along with delivery and consolidation of logs into a centralized area is key.

Building a Monitoring Strategy – Define Impact and How to Address

Identify your existing incident management priority model to standardize across your organization workloads. Review the example below:

Priority		Impact			
		Extensive	Significant	Moderate	Minor
Urgency	Sev 0 - Critical	**Critical**	**Critical**	**Error**	**Error**
	Sev 1 = Error	**Critical**	**Error**	**Error**	Warning
	Sev 2= Warning	**Error**	**Error**	Warning	Warning
	Sev 3 = Informational	Low	Low	Low	Low

Consider how you plan to alert your operations team and what tools you will use. Which tools and what actions you need to take based on priority?

Building a Monitoring Strategy – Privacy and Security

Microsoft Power Platform telemetry does not include PII out of the box. That said, developers could potentially add PII through instrumentation. Data analysts could combine both Dataverse telemetry with Azure AD or Microsoft Purview activity logs that could contain sensitive data.

Consider how you plan to separate and isolate data points collected that could contain PII. Regional privacy laws can be quite complex.

Access to the tools and platforms where your monitoring logs will reside is another consideration.

Based on role and responsibility, resources may require additional or temporary access. Does your tooling provide ease of access?

A proper log store platform should also provide governance. The organization should be able to accurately and quickly determine who is accessing and if needed, revoke access.

An example

Contoso Coffee

Contoso Coffee is a global organization with Dataverse users worldwide leveraging multiple solution areas.

Sellers use Dynamics 365 Sales to find new revenue streams and strengthen relationships. They have third party ISVs used to assist sellers manage opportunities.

Operations uses both Dynamics 365 Customer Service and ServiceNow for managing tickets. Customer Service is used for customer facing tickets. ServiceNow for internal tickets, platform health, etc.

Contoso Coffee also has internal APIs that reside on-premise. They connect to these via Azure and write data to Dataverse.

They use Power Apps and Power Automate Flows developed by both citizen and pro developers. They need a consistent monitoring platform across all pillars of the Power Platform.

Contoso Coffee runs a tight ship and resources are stretched thin. They have a need to leverage machine learning and other tools that can help free up resources from having to spend a lot of time digging through a mountain of telemetry.

Deep Dive into Building a Monitoring Strategy

- Consolidate your monitoring investment when resources are limited.
- Decide how monitoring will help enable the future services your business needs.
- Align with future services and resources that you'll monitor in the cloud.
- Identify monitoring gaps across the three dimensions (depth, breadth, and across) of the health model.
- Model the financial aspects, costs, and support factors that support a cost-benefit analysis.
- Guide the hybrid decisions that you need to make.

Next Steps

Follow the Power Platform Well-Architected Framework series for up-to-date information on strategy, tooling and other useful insights.

Fill out the monitoring strategy document and begin a planning session on how you plan to address.

If you have Microsoft Unified, please reach out to your Microsoft representative for hands on help.

If not, please reach out in the comments and let me know what works, what questions you have or any feedback in general!

Thank you!