

Power Platform Insights
October 2023

Hitachi Solutions Brings Vegas Insights Home

Microsoft Power Platform Conference Key Takeaways
for Business Leaders



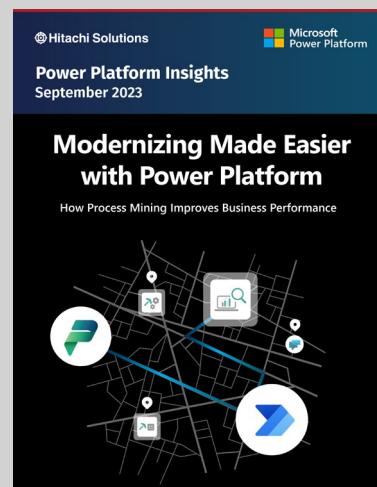


Pictured L to R: Tom Bowman, Vivek Bavishi, Em D'Arcy, Joel Lindstrom, Azure McFarlane, Matthew Devaney, and Troy Taylor.

The **Hitachi Solutions Rapid Solution Development (RSD) team** was in Las Vegas for the 2023 Microsoft Power Platform Conference earlier this month. With a packed turnout, they spent three days delivering sessions, interacting with the Microsoft team, and talking with customers who are using Power Platform to transform their businesses.

Didn't make the conference? No problem. We're highlighting some of the content presented by our team in this edition of INSIGHTS.

Did you see
September INSIGHTS
on **Process Mining?**



Process and task mining are powerful tools you can use today to jumpstart your digital transformation, automation, and AI initiatives. Read our blog, [Boost Your Business with Process and Task Mining](#), or [check out the September issue of Power Platform Insights](#).



Top 5 Best Practices for Your RPA Projects

Hitting the stage with an **RPA best practices** presentation was **Vivek Bavishi**. He shared recommendations, based on his extensive experience, on successfully implementing robotic process automation (RPA) with Power Automate Desktop. Check it out:



Planning

- Use process mining to analyze processes and identify automation opportunities, bottlenecks, optimizations, and automatable tasks. Process mining looks at system logs to visualize processes and provide optimization insights.



Error Handling

- Handle errors with an OnError section for each action. This helps define behavior if an action fails.
- Categorize errors as system vs business exceptions for better troubleshooting. System errors indicate platform issues and business errors are process issues.



Logging & Troubleshooting

- Log flow runs, errors, and start/end times to a central location for visibility. Standardize logging formats across projects for consistency.
- Utilize flow session data for debugging by extracting metadata for each action. This should include inputs, outputs, and errors.

NEWS RELEASE

Hitachi Solutions is thrilled to announce a strategic partnership with **Leapwork**. This exciting collaboration marries our extensive quality assurance expertise with Leapwork's groundbreaking visual, AI-powered, codeless test automation platform. Together, we make it quick and easy for non-technical Microsoft Power Platform and Dynamics 365 users to build and maintain test automation at scale — reducing manual errors, mitigating disruptions, and enhancing quality. Read the [press release](#) to learn more.



Design Flows

- Use UI elements instead of recorder for resilience. UI elements directly reference IDs and are more stable than recorder if UI changes.
- Establish naming conventions for consistency across flows and projects. This improves maintenance and troubleshooting.
- Use regions, subflows, and comments to organize flows into logical sections. Regions group related actions and subflows encapsulate reusable logic.



Deployment & Management

- Use machine groups for load distribution across multiple machines. This prevents overload if flows overlap.
- Schedule flows to prevent overlap and queuing of multiple flows. This distributes loads efficiently.
- Follow ALM practices with dev/test/prod environments for desktop flows to simplify deployment. This eliminates rework with tying flows to environments.
- Monitor, measure, and optimize flows regularly to identify issues over time. This helps continuously improve performance.
- Be cautious with Power Automate Desktop version updates — test thoroughly in lower environments before deploying to production to avoid breaking existing flows.

Summary

Vivek's biggest takeaways were that when implementing RPA: 1) Always start small and focus on the highest impact best practices first. 2) Continuously monitor, measure, and optimize flows over time as automation scales across the organization. 3) Always follow structured ALM practices to significantly simplify deployment and maintenance.

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Oh No!!! Error-handling Strategies for Apps & Flows

In his session, **Matthew Devaney** discussed must-have strategies for handling errors in Power Apps and Flow. He discussed how to gracefully deal with errors to improve app resilience and user experiences. Here are some highlights:



Recommendations for Power Apps

- Validate user input before submitting forms to catch errors early. Add validation rules and required fields to check for issues like invalid email addresses or dates in the past.
- Use the OnError property in Power Apps to handle unexpected errors. You can put custom code here to log errors and troubleshoot bugs.
- Don't show users cryptic technical errors. Create clear, user-friendly error messages that explain the problem and how to fix it.
- Use loading indicators, that prevent users from submitting a form multiple times, to help you avoid errors when users double-click submit buttons.



Recommendations for Power Automate

- Leverage try/catch blocks to gracefully handle errors across a group of actions in a flow. The catch block can return a clear error message.
- Log all errors to a database or SharePoint list. This creates an audit trail you can reference when troubleshooting or identifying patterns.
- When errors occur in a flow, return clear messages to users or processes. Don't show technical failures unrelated to their actions.
- Use the Azure Application Insights tool to monitor flow executions and identify failures. It provides a dashboard to pinpoint errors.

Summary

Matthew's two biggest takeaways include implementing comprehensive error handling strategies result in more resilient apps and gracefully handling errors creates much better experiences for users and developers.

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SharePoint vs Dataverse — The Ultimate Comparison

In this session, **Vivek Bavishi** explored the differences between using SharePoint versus Dataverse for managing data and building solutions with the Power Platform. The informative discussion covered the pros and cons of each platform and recommendations for when each one is the best fit.

Vivek talked about a hypothetical user named Mike, whose experience was shared to illustrate how needs often outgrow SharePoint's capabilities over time. Mike started using SharePoint lists at his first job out of college to build some simple solutions for his team. After a few years, he realized he wanted to build more robust and complex solutions, so he learned Power Apps and Dataverse.

Mike was able to connect data from multiple sources and implement more advanced business logic and security in Dataverse. After becoming proficient with Power Apps, Mike went to work for a Microsoft partner. There he delivered projects for clients who needed enterprise-level solutions beyond SharePoint's capabilities. Mike's journey showed how professionals often start with SharePoint for basic needs, but eventually turn to Dataverse as their skills and solution requirements progress.

The surprise twist? Mike's career story was, in reality, Vivek's career story. Here are some presentation highlights:

When SharePoint is a Good Fit

- SharePoint is free to use (with M365 licenses) and provides easy access to data, making it a good choice for simple departmental use cases. It can work well when you just need a small solution within one team.
- SharePoint allows users to easily connect to SharePoint lists as a data source. This enables basic solutions to be built on top of lists.
- With SharePoint there are no additional licensing costs to get started.

Limitations of SharePoint

- There are restrictions on the types of data and number of rows SharePoint can handle efficiently. Complex data and large data sets become problematic.
- The security roles and controls in SharePoint are more limited compared to Dataverse. Things like row-level security are not supported.
- SharePoint is not the best choice for complex enterprise-wide solutions that connect multiple systems and data sources.

When Dataverse/ Power Apps is a Better Fit

- Dataverse can support more complex data types and higher volume of rows without performance issues.
- The security model in Dataverse allows for fine-grained control over access and roles. Row-level and field-level security are supported.
- Dataverse provides easy connections to data living in other sources like Dynamics 365, Salesforce, SQL Server, etc. This enables true enterprise-wide solutions.
- For regulated industries or complex business processes, Dataverse allows for more robust auditing, compliance rules, and application lifecycle management.

Downsides of Dataverse/ Power Apps

- There are licensing fees associated with Dataverse and Power Apps for production environments and user access.
- With greater capabilities comes more complexity in setting up and managing environments.

Summary

When evaluating SharePoint vs. Dataverse, consider factors like data complexity, security needs, integration requirements, costs, and internal skill sets. SharePoint can serve basic departmental needs well, while Dataverse is better suited for complex enterprise solutions needing tight security controls and connections to multiple data sources. As needs advance over time, many users evolve from SharePoint-based tools to robust Power Platform solutions.

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Have It Your Way with RPA — At Home!

RPA allows automating repetitive computer tasks to free up time for more important work. It can help individuals and families automate mundane tasks like paying bills, tracking expenses, and ordering household supplies. Power Automate Desktop is a free RPA tool anyone can use at home with Windows 10 or 11. **Azure McFarlane** gave some great examples and showed how she uses Power Automate RPA flows in her day-to-day life:



Automating Personal Tasks

Examples of automating personal tasks with RPA:

- Logging into accounts and websites to check status or collect data
- Filling out forms with your information
- Copying data from one software system or website to another
- Checking your bank transactions and updating a budget spreadsheet
- Placing recurring orders for household supplies



Getting Started with Power Automate Desktop

Power Automate Desktop is a free RPA tool from Microsoft. The paid version has more features for enterprise use. With the free version, you can:

- Automate tasks on your Windows desktop
- Log into websites and applications
- Extract and copy data
- Update files and spreadsheets
- Send automated emails



Example: Ordering Toilet Paper

Azure demonstrated an example RPA workflow for ordering toilet paper. The automated steps included:

- Opening a web browser to a shopping site
- Logging into the site
- Searching for toilet paper
- Adding it to the cart
- Going through checkout and payment

The RPA bot can log into sites, enter information, click buttons, and more — just like a person. This saves time and effort from manually placing these recurring orders.

Summary

RPA tools like Power Automate Desktop bring enterprise-level automation capabilities to anyone with Windows. Automating personal tasks with RPA can free up more time for family and hobbies. Start by identifying repetitive tasks and try automating small workflows. RPA skills are valuable in business and IT as more organizations adopt automation.

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Customizing Peak Performance with Adaptive Cards

Adaptive cards provide a powerful way to create simple interactive interfaces to engage with users and collect information without building a full custom app. Here presenters **Matthew Devaney** and **Azure McFarlane** explored how organizations can leverage adaptive cards to improve processes and employee workflows.

Adaptive cards are interactive cards that can be sent to users through Microsoft Teams, Outlook, chatbots, and other services. They allow you to collect input from users by adding text fields, dropdowns, submit buttons and more — all without coding a

custom app. Adaptive cards are defined in a JSON format and rendered automatically based on the environment they are displayed in. The cards adapt their styling and layout to Teams, Outlook, etc.

Matthew and Azure provided a real-world example of using automated adaptive cards at MIT to streamline the approval process for coaches' workout plans. This replaced a tedious manual email process. They highlighted key benefits like meeting users in tools they already use regularly, increasing response rates, and rapidly deploying lightweight solutions.



Benefits of Adaptive Cards

- Lightweight and easy to build compared to a full app
- Can deploy anywhere since they are just JSON code
- Increased response rate since users receive the cards in tools they already use



Key Recommendations for Using Adaptive Cards

- Meet users where they are already working — in Teams, Outlook, etc.
- Reuse card templates across the organization

Summary

Adaptive cards are a valuable option for creating simple, interactive experiences without coding custom apps. Organizations should consider identifying workflows that could be improved through adaptive cards to increase employee productivity. Useful next steps include reviewing processes that involve collecting data or input from users and prototyping adaptive cards to streamline these interactions. With their flexibility and ease of use, adaptive cards enable impactful improvements to workflows across an organization.

About Hitachi Solutions RSD Team

Partnering with our customers to deliver innovative digital solutions and services — we work together to meet challenges effectively with Microsoft Power Platform to analyze data, build solutions, automate processes, and create virtual agents. Hitachi Solutions turns great ideas into impactful solutions.



Contact Hitachi Solutions today to get started!

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