



The Ultimate Guide to Rapid App Development

How to create business apps with no
code and minimal resource investment



Digital transformation is disrupting classic workplaces and business processes

Creative destruction, digital disruption: The modern workplace has clearly changed. We're no longer anchored to our desks, only able to complete work in the office with local servers and systems. With the rise of cloud adoption and bring-your-own-device (BYOD) policies, mobile usage is increasing, while traditional market barriers are being erased.

72% rise in enterprise-managed devices since 2013¹

You need technology to help your business get ahead and stay there—even as other demands for secure clouds and mobile solutions squeeze IT budgets. Thankfully, you don't have to choose between getting ahead and saving money. Business apps are rapidly evolving to support the collaboration we've come to expect from modern technology.

That technology is here now. Together, Microsoft SharePoint, PowerApps, and Flow give you the means to quickly and easily create your own innovative apps and automated workflows for the precise solutions you need.

In this eBook, you'll learn how to use PowerApps and Flow to enhance your SharePoint experience to create shared business apps, automate your processes, and unlock your data.

1. "Mobile Analytics Report," 2015, Citrix

Reinventing apps in a mobile-first world

Mobile apps have moved beyond the consumer space to power business productivity



65%

of total digital time is spent on mobile, notes ComScore's Cross-Platform Future in Focus 2016 report.²



72%

of smartphone owners check their phones at least once an hour, according to a poll by Gallup.³



51%

of worldwide internet usage is on mobile devices, having outperformed desktop for the first time in November 2016, based on data from StatCounter.⁴

2. "2016 U.S. Cross Platform Future in Focus," 2016, ComScore

3. "Most U.S. Smartphone Owners Check Phones at Least Hourly," 2015, Gallup

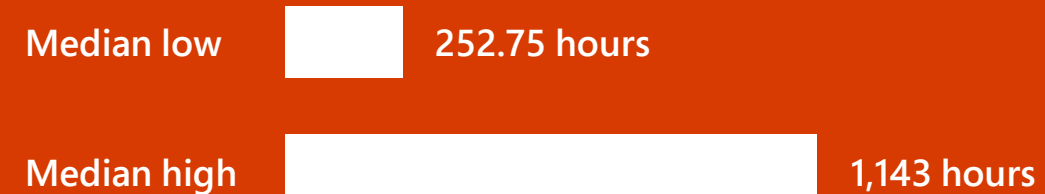
4. "Mobile and Tablet Internet Usage Exceeds Desktop for First Time Worldwide," 2016, StatCounter

Apps are everywhere in our mobile-first world, especially for personal use. Yet the complexity and cost to build them have kept organizations from developing apps, leaving business workers with slow and outdated processes.

Classic mobile and web apps typically required separate coding for each platform, which can be costly and time-consuming to do—especially since programmers are currently in high demand. Instead, PowerApps simplifies the process so anyone can do it. Its easy-to-use, browser-based visual designer helps you rapidly build custom business apps without having to write any code.

By connecting PowerApps to your existing systems and data, you can quickly build reports, forms, and workflows, then publish your app instantly to all users in your organization. It's one app, seamlessly deployed to Windows, iOS, Android, and the web—all without using the app store.

Developing a basic app using a developer can take:⁵



Traditional app development requires months of time and \$37,913–\$171,450 to create, assuming an hourly rate of \$150.⁵

Since PowerApps won't require thousands of dollars and months of time to create, you can build them for short-term, team-centric projects just as easily as for more permanent enterprise-wide processes. Whether for a specific office department or upcoming event, you can create apps anytime you want.

5. "Cost to Build a Mobile App: A Survey," 2015, Clutch

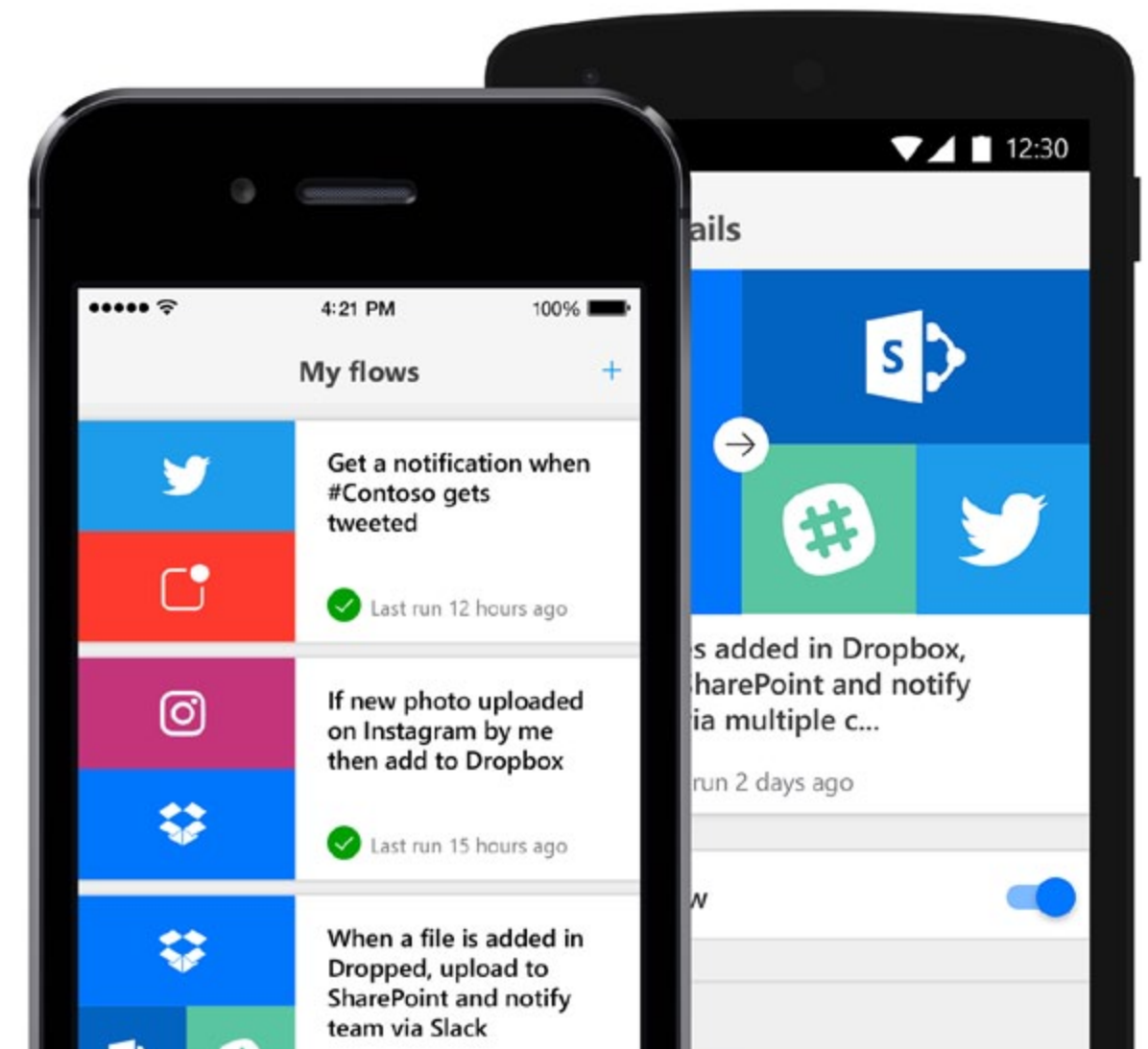
To eliminate tedious manual tasks with multi-step workflows, SharePoint and PowerApps can be combined with another powerful tool: Microsoft Flow.

Flow can automate almost any process or task. Alerts, approvals, reviews, and file movement? Flow uses the cloud to automate them all across SharePoint and dozens of other services, freeing up valuable IT time for more important tasks. You can also create and launch workflows directly from a SharePoint list or document library, integrating all your data in a team site.

Flow can also connect to other third-party applications and services you might already be using, such

as storage apps like Dropbox and Google Drive, marketing and customer relationship management (CRM) systems like MailChimp and Salesforce, communication tools like Slack and email, and even social media platforms like Twitter and Facebook.

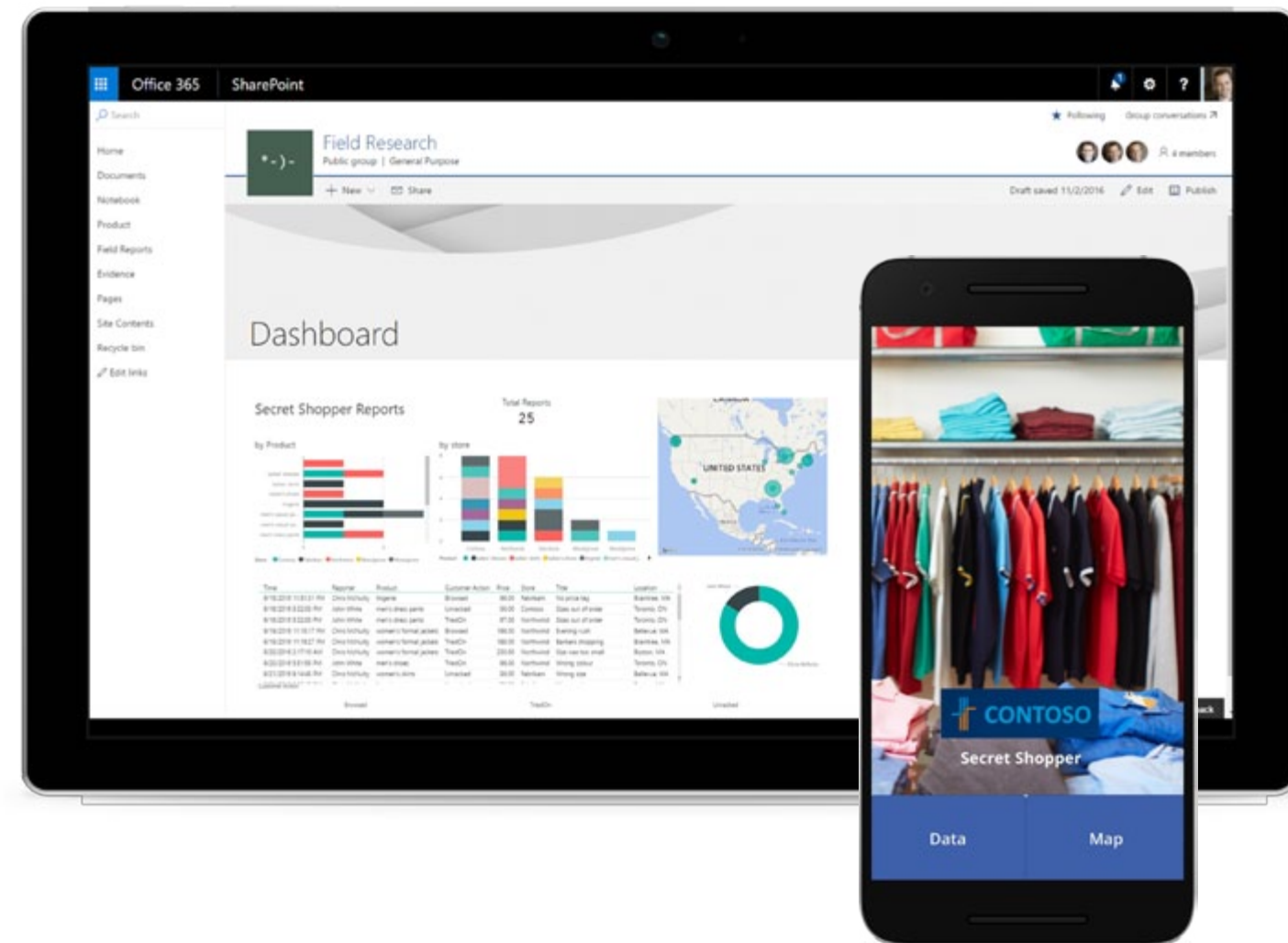
To make your mobile apps even more dynamic, integrate Flow with PowerApps. Use it to bring real-time data to your business frontline, with inputs from business apps that you already use like OneDrive, SendGrid, or SQL data warehouses.



Modernize field research

We use millions of metrics to track and analyze customer purchases, both in-store and online. But there have been few integrated ways to track customer behavior in the field—until now.

With PowerApps, for example, secret shoppers can use a custom app to easily record customer behavior, as Flow automatically populates a SharePoint list with the information in real time. Secret shoppers can photograph store conditions, note where customers shop in the store, or which items they try on without buying, and record it all instantly on a mobile device.



App-building and computerized processes: No code required

Mobile app creation has always faced significant barriers to entry. Even the simplest business application requires advanced UI design, coding knowledge, and significant time investment. But PowerApps and Flow eliminate these barriers—giving you the capability to create, run, and share apps without any coding work necessary.

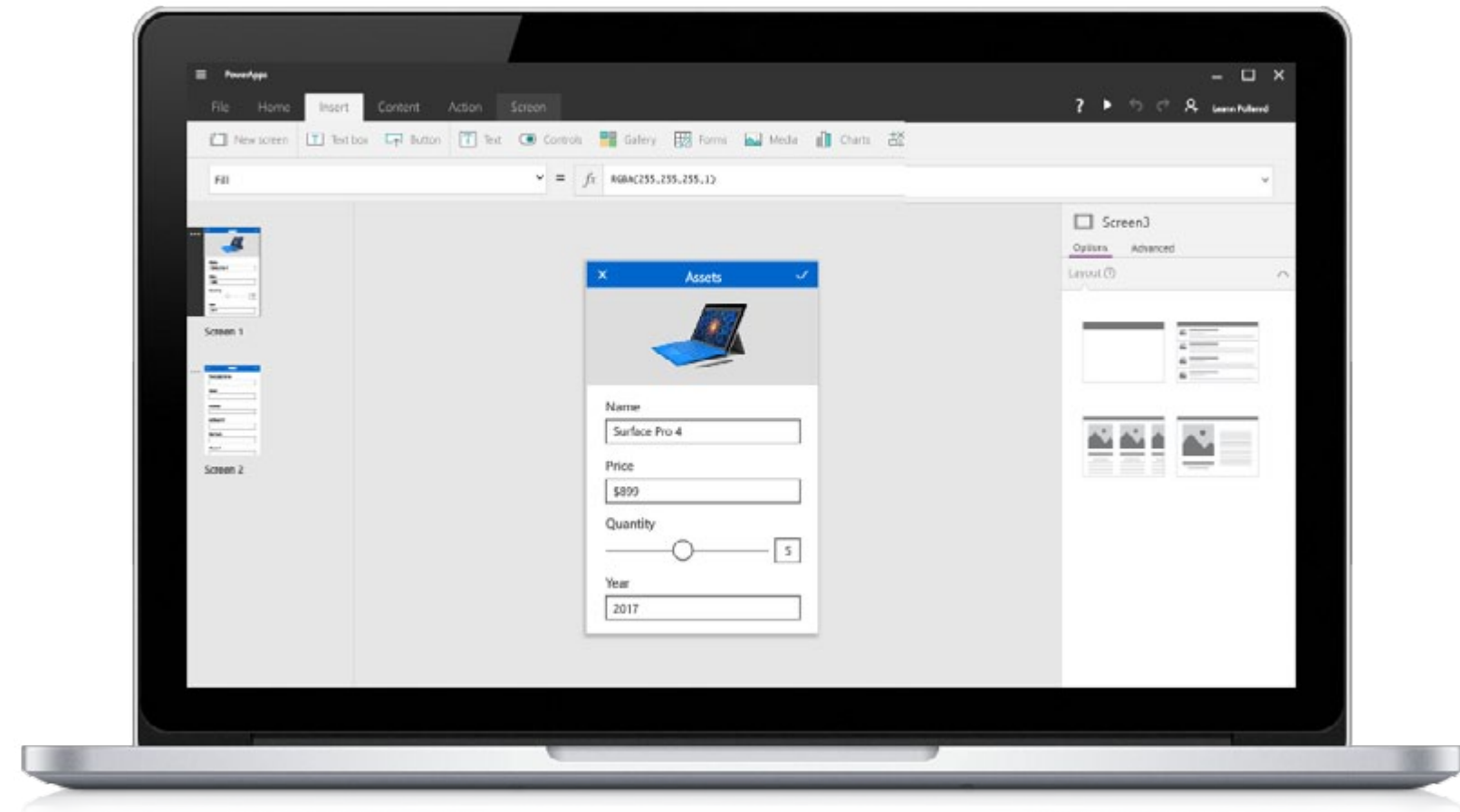


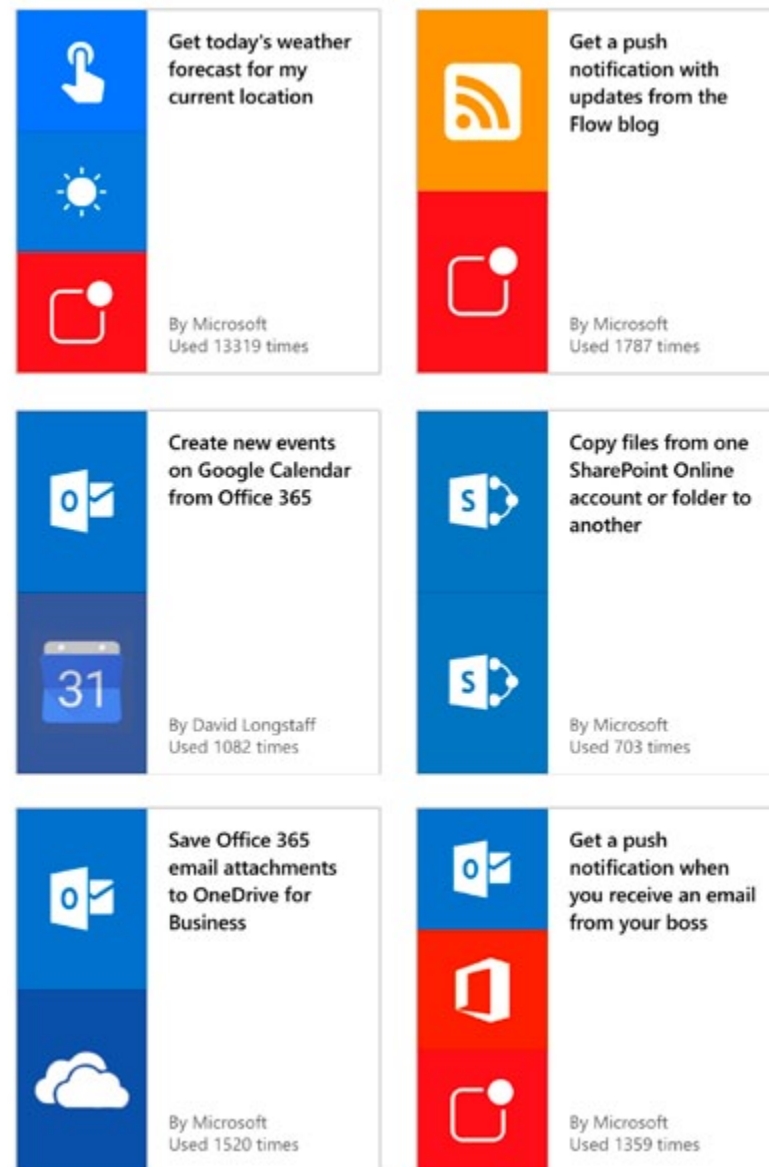
Both PowerApps and Flow feature intuitive visual designers, so anyone can craft forms and screens in an easy-to-use interface.

When developing your app, PowerApps gives you the option to use automatically generated pre-made templates or customize the tool to fit your more specific needs.

Since mobile devices offer hardware sensors not available in traditional browsers and desktops, PowerApps takes advantage of device features like cameras, GPS systems, and digital ink for a more robust final product.

Then, once your app is complete, you can instantly publish it to Windows, the web, iOS, and Android.





Create flows through an easy-to-use visual designer that will guide you through each step and help authenticate your accounts.

Select from dozens of pre-made templates also available in Flow to start automating your app's usage. Here are just a few applications of these templates:

- Create a new record in Dynamics CRM when a new list item is added to a SharePoint list.
- Copy new members from MailChimp lists to SharePoint lists.
- Move files to different folders after they're approved in SharePoint.
- Create a new item in SharePoint when a new order is added in Salesforce.
- Route finished documents to a team for approval.

Whether you start with a template or begin from scratch, using Flow to create automation features is intuitive and easy to understand.

Cross-tool functionality seamlessly moves your data from one operation to another. Since SharePoint is a core piece of the Office 365 suite, your data easily integrates with tools like Excel or Power BI reporting. And since it uses an Excel-inspired expression language, these tools talk with each other, using formula language you already recognize and understand to integrate your data from one function to the next.

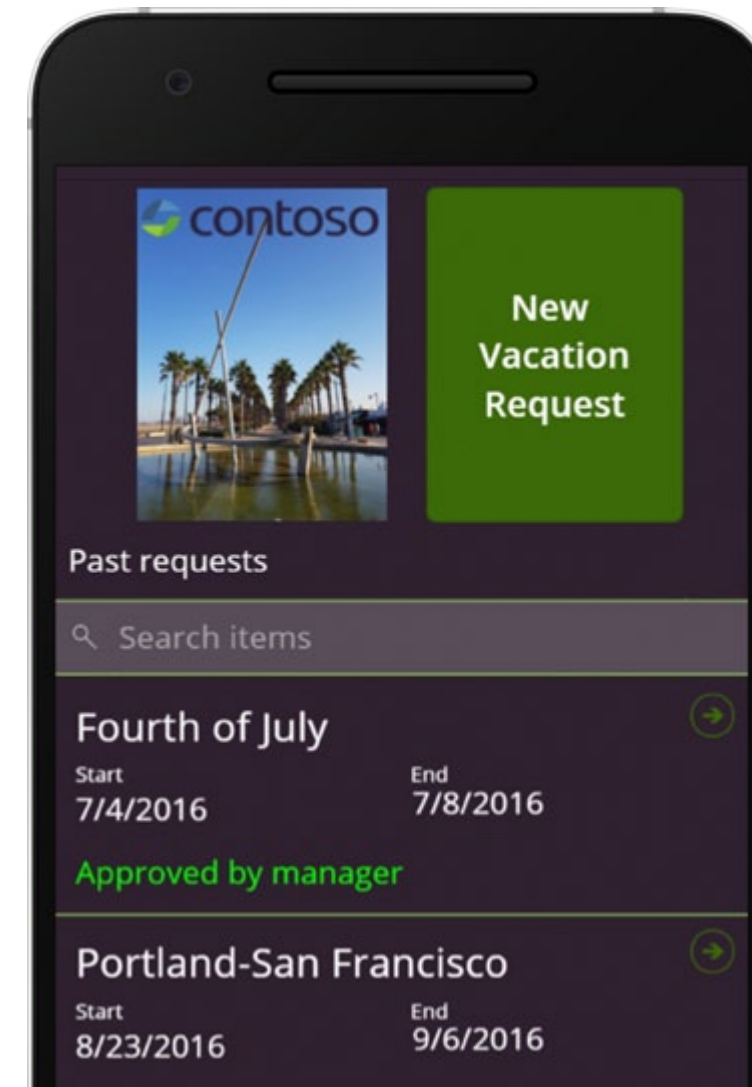
Streamline employee vacation requests

With PowerApps and Flow, employees and management can easily handle time-off requests.

Vacation requests don't need to be a hassle for employees or management. Getting employees to remember to share their vacation plans and requests becomes much easier when you make the process easy to follow. Simply put: It's easier to take time off when the process to make and approve requests is easier on everyone involved.

Using PowerApps and Flow, the vacation approval process becomes faster and simpler for all.

- Employees request time off using any device, through an app built in PowerApps.
- Management receives an email notification directing them to the request, tracked by a SharePoint list and using a flow.
- When management approves or rejects the request, the app instantly updates in real time, adding approved results to the department's team calendar in SharePoint.



Build an app for any occasion

Building a traditional app could take months, even if you only use it for a week—which makes any planning, developer staffing, and budgeting for such a heavy workload incredibly difficult and unlikely to happen. But by using PowerApps, a non-developer could build an app in an afternoon.

Such easy app creation means you can actually build lightweight apps custom-tailored for one-time events as the opportunities arise. So you can afford to get exactly what you need, when you need it.



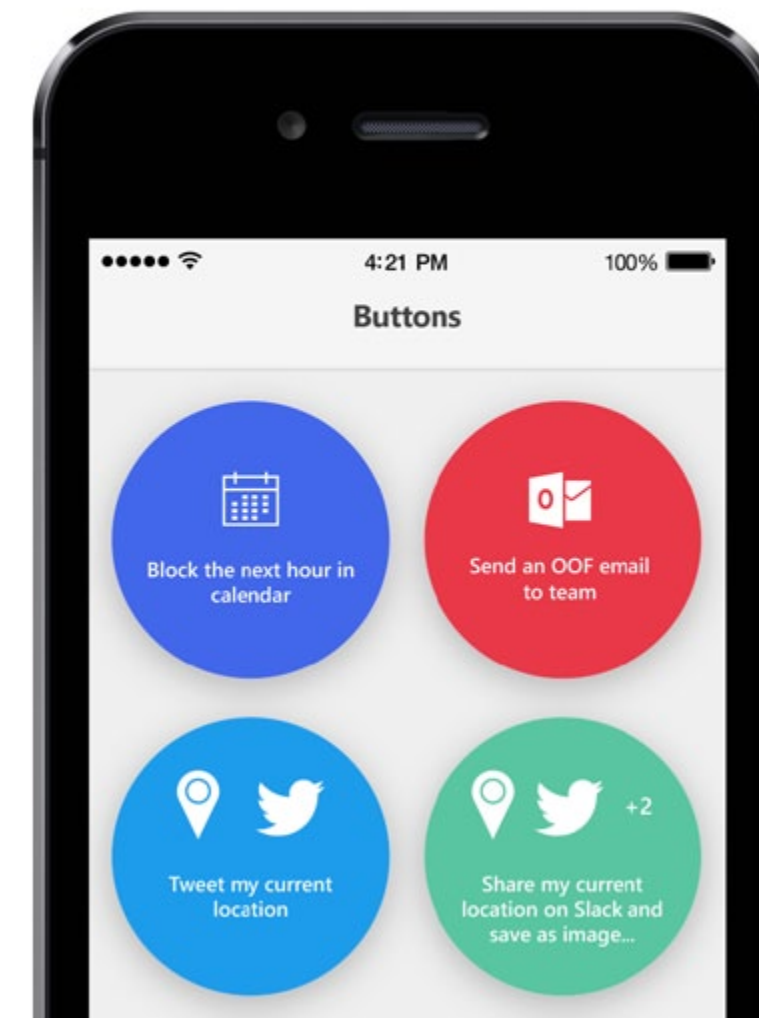
With PowerApps, you can create apps for projects that would otherwise live for too short a period of time to warrant traditional custom development.

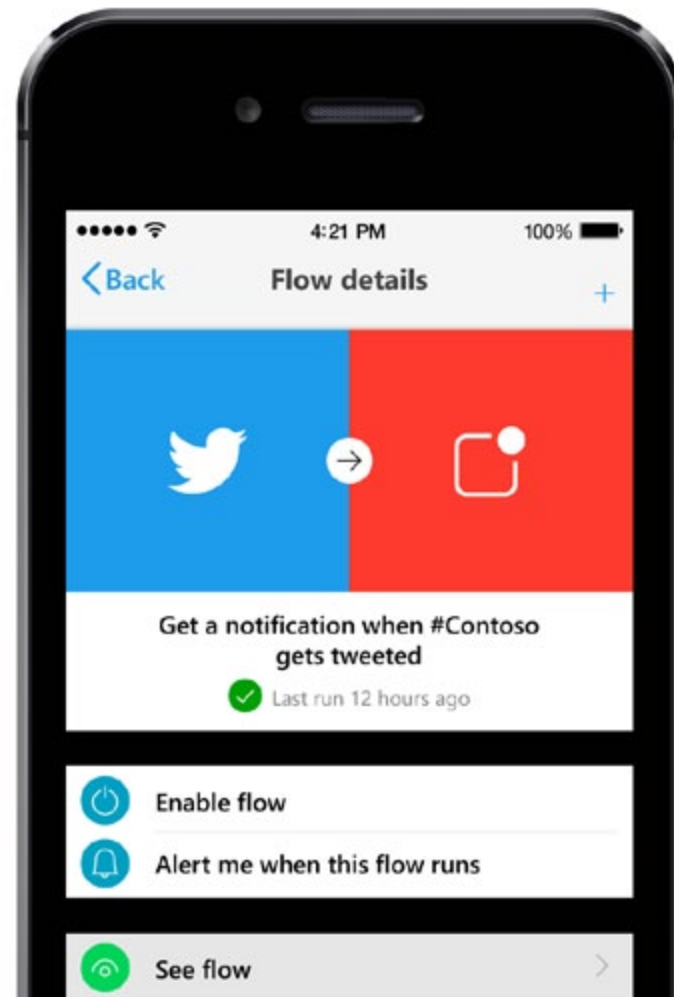
Build an app to fit your project needs—whatever its shelf life. Since such a quick turnaround is now possible, you can create short-term projects to engage employees through instant employee surveys, event-specific signups, or lists of campus resources.

Using rapidly deployed app logic and integrations, PowerApps can easily update efforts that last for longer amounts of time. Generating tools that support industry-specific logic and move from evolution to revolution, you can run your business virtually everywhere. And

depending on the application, you can also build out features to track issues across systems, announce breaking customer news, or provide assisted sales experiences.

Or you can use apps to update long-term systems, which are typically used to rely on for years, like tracking time cards and expenses or maintaining ERP and CRM systems. Make these systems available on the go by building apps for workers to access them on their mobile devices.





With Flow, automation is so easy that creating quick, short-term apps is more efficient than ever.

The ways you can use Flow to improve your workflow are virtually endless. For instance, you can set up notifications or alerts when a certain file or folder is updated within OneDrive. Files can sync automatically by connecting folders, keeping your data always up-to-date. Or you can collect business data through forms or CRM systems and automatically organize the information into spreadsheets.

Expensive mobile apps are hand-coded, requiring planning and approvals that add to the already high price tag and time to make. But quick, single-use apps that are focused on specific events or campaigns can hone in on the problems at hand.

NASCAR case study

NASCAR Productions manages the process that turns empty racetracks into buzzing compounds ready to broadcast Super Bowl-sized events across 38 weekends a year.

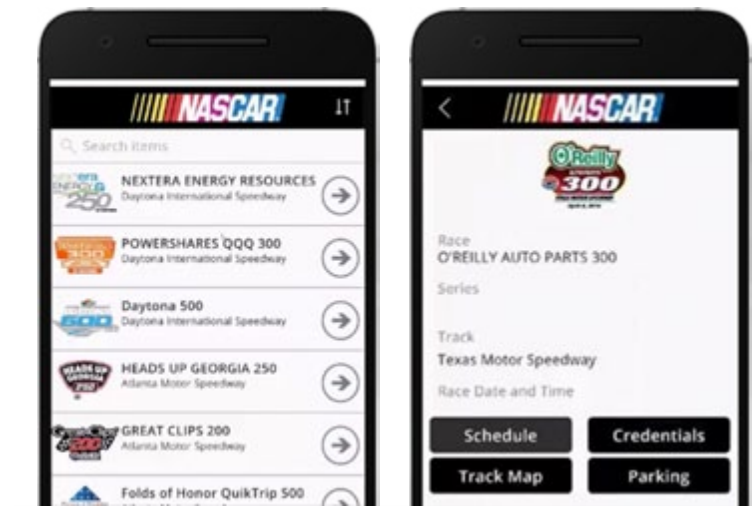
Providing easy, up-to-date information for employees, vendors, and partners is critical to having efficient operations. To handle the workload, NASCAR developed their “Inside Track” company intranet on SharePoint Online. Then, using PowerApps, they built a custom app fueled by SharePoint data to provide parking maps, schedules, or track credentials to NASCAR event staff on the track, in the office, and everywhere in between.

“By adopting Microsoft PowerApps, we got a fast, easy way to build and maintain a mobile app that uses our SharePoint data and that field workers love to have at their fingertips.”

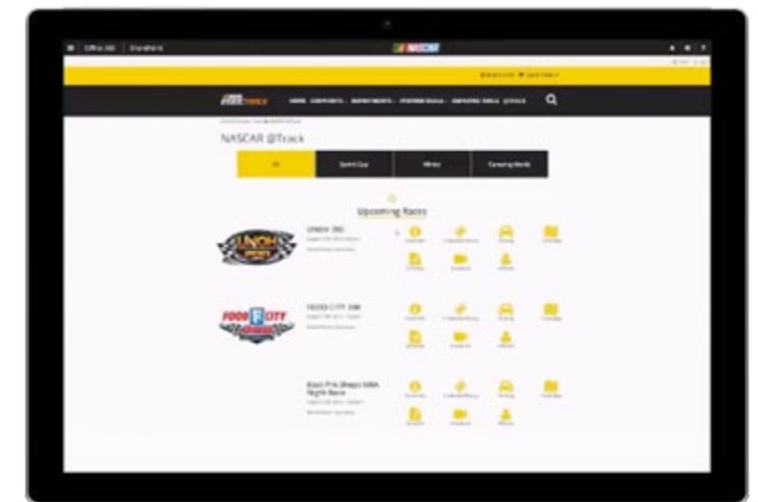
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Robert Burg

Senior Manager, Technology Integration and Development, NASCAR



Users can scroll through the list of events or use the search tool.



Clicking on the event page brings up available information, including links to the schedule, track map, or parking information—all managed from a SharePoint list and updated automatically through Microsoft Flow.

You already have everything you need. PowerApps and Flow are available to most **Microsoft Office 365** business plans and currently run on SharePoint Online. That means you don't need to buy a third-party tool to quickly build apps and automate business processes.



Learn more

Transform business process with [Microsoft PowerApps](#) and [Flow](#).



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