1st Reading

**Analyze the current business process**

Completed100 XP

* 6 minutes

If you're making your first app with Power Apps, consider your business and the work that you and your team do daily. Then, identify a business problem that you're currently using a manual process to solve.

Potential use cases for automation are gaps, complaints, or inefficiencies that exist in your current work environment. Processes that still require paper or email, and processes that require you to manually move data from one place to another (from an email to a database or from one spreadsheet to another), are likely candidates for solving with an app.

Knowing how the app that you have in mind will benefit your colleagues and managers is important, especially when you're asking for cooperation when making or using the apps. The following list describes the types of issues that the platform can solve:

* **Availability** - Accessing apps anytime, anywhere.
* **Mobility** - Allowing people to work with an app while on the move.
* **Consolidation** - Gathering data in a more automated way to minimize manual consolidation.
* **Training** - Getting people up to date and tracking their training results and certifications.
* **Democratization** - Enhancing the ability to self-solve problems within the department or section.
* **Inclusion** - Reducing friction for employees who have different work environments from other employees (such as remote workers or people with disabilities).
* **Efficiency** - Reducing time that's required for getting the desired outcome, reducing unnecessary steps.
* **Productivity** - Increasing the throughput of a process.
* **Timeliness** - Increasing the speed of end-to-end collaboration among different stakeholders.
* **Scalability** - Allowing more throughput.
* **Analysis** - Gathering required extra information and storing it in a way that allows for easier analysis.
* **Reporting** - Enabling faster or more complete reporting to management.
* **Security** - Storing and working with data in a more secure way.
* **Compliance** - Solving issues around handling personal information, meeting legal or accounting requirements.
* **Sustainability** - Reducing waste (such as paper and electricity) and pollution.

**Identify key contributors**

Evaluate everyone who contributes to this process, including people in your department and other departments who work together on this problem. Familiarize yourself with what they do in context of the business problem that's being solved.

When you start documenting the business process, you'll want to rely on these people to help you understand each step. You'll most likely learn along the way, and you might need to add new people to your project team to provide their perspectives.

In this module's example scenario, key contributors have already been identified, as shown in the following screenshot.

**Example: The cost of the current gear service process**

In the scenario with the scuba shop's service department, you've already analyzed the cost of the current gear service process. As a result, you've discovered that:

* It takes the sales staff roughly 15 minutes to check in a service customer. Each sales representative captures an average of six customers each day for gear service. The average cost of each salesperson is roughly USD 26.00 each hour.

(4 sales members x 6 requests) 24 service requests each day equals 156dailytocreatetheseservicerequestsmanually,or156dailytocreatetheseservicerequestsmanually,or1,092 each week.

52 weeks x 1,092=1,092=56,784 a year

* Tom and Steve in the service department spend, on average, one hour servicing each piece of gear. Due to the manual nature of service order intake, they can only complete six service orders each per day, even though they work nine hours a day.
* Because the service team is only able to complete 12 service orders a day, but get an average of 24, they're backlogged in orders. As a result, customers have taken their business elsewhere or the team has had to outsource some of the service orders to competing dive shops in the area.
* The average revenue for each service transaction is 125,sothediveshop′sservicedailyrevenueis125,sothediveshop′sservicedailyrevenueis3,000.
* Tom and Steve's average cost is 40eachhour,whichequalsto40eachhour,whichequalsto540 a day.
* The dive shop spends an average of $74 in parts daily to service the gear.
* The total cost of service to the shop is $770 per day.

If the shop only completes 12 service orders each day, then the revenue for the day is 1,500or1,500or546,000 a year minus 280,280forthecostofpartsandlabor.Thiscalculationequalsa280,280forthecostofpartsandlabor.Thiscalculationequalsa265,720 profit for the shop.

Now imagine deploying an app from Power Apps that would minimize the cost of entering orders into the system while giving the service team members more time to fulfill more orders. If you cut the costs on intake by half (taking 7.5 minutes to capture what's needed and collect pictures and a customer signature, all from one device), then the same solution will bring a centralized and streamlined system that Tom and Steve can follow to increase the number of orders that they can fulfill daily to eight each.

Those numbers would resemble the following example estimation:

**New cost**: (78fordataentry,78fordataentry,770 for the service team, 98forserviceparts)98forserviceparts)344,344 annually, but the revenue goes to 728,000foraprofitof728,000foraprofitof383,656.

383,656−383,656−265,720 = **$117,936 per year is the potential cost of doing nothing**

**Recommended content**

For more information, see the following resources:

[Defining the business value of solving the problem](https://learn.microsoft.com/en-us/power-apps/guidance/planning/defining-business-value/)

[Measuring success against the business value](https://learn.microsoft.com/en-us/power-apps/guidance/planning/measuring-success/)

**Next unit: Optimize the business process with your solution**

2nd Reading

**Example - Identify automation opportunities**

Completed100 XP

* 1 minute

In the scuba shop scenario, you've reviewed the current service process and have found some obvious improvements to make:

* Go paperless for the entire process. (You've noted the savings and environmental impact as a project benefit.)
* Look up the gear automatically that's being serviced based on the customer's purchase history.
* Do initial assessment checks and gather pictures, if needed, through the app. This approach will greatly reduce the time that it takes to gather that information from four potential sales team members and end-to-end process time.
* Create weekly service reports automatically by using the data.
* Send service reminders to customers every year.
* Provide the customer with status updates automatically as their gear is serviced.
* Identify the customers who are affected by a manufacturer's recall.

These automation opportunities don't address some obvious benefits in other departments, such as sales. Being able to keep track of the life of gear allows the sales department to reach out to customers with opportunities to buy new gear and new training.

3rd Reading

# Create a project plan

Completed100 XP

* 5 minutes

Having a project plan ensures that you have the correct resources (time, people, and funds) and that you follow a consistent approach to ensure an excellent level of quality for the apps that you make.

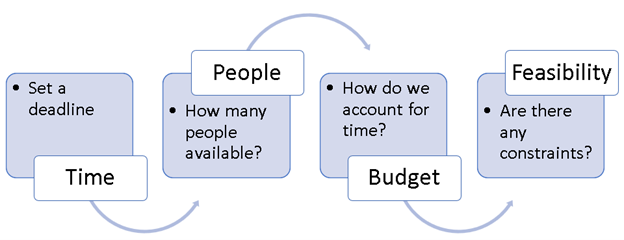
Having a clear objective for what you and your project team are trying to achieve is important so that your project team members share the same goals. Writing down your goals is a good way to clarify what you want the app to achieve. It also ensures that you don't lose focus on what you need to create and what features to prioritize. For more information, see [Prioritizing features and requests](https://learn.microsoft.com/en-us/power-apps/guidance/planning/prioritizing-features/).

If you have ambitious goals, you might want to consider how to break down the project into incremental releases. A later section in this module discusses the incremental release methodology.

## Define the project scope

Make sure that you scope the project so that you know how much you'll try to achieve from the project. Keep a clear roadmap for what you define as complete and what's outside the scope of the project (and, possibly, what you want to have done in the next version). Your scope directly affects and determines which features to include and not to include when making the app.

To define the project scope, you should consider the following constraints.



* **Time** - Set a deadline for when you want to accomplish the project objectives. With smaller projects, this deadline might be a few weeks, whereas larger projects might take several months.
* **People** - Determine the number of people who are available for the project.
* **Budget** - If you need to account for time that's spent by you and your coworkers, or if you need to hire experts, you'll need to establish a budget.
* **Feasibility** - You might find that you're constrained by available expertise by lack of access to the data that you need or by the amount of change that your organization has a propensity for.

You should also consider what functional pieces you can deliver in usable chunks. It won't be helpful to anyone if your app only delivers halfway on several features; plan to deliver each component in a working form, end to end. Even if your app doesn't have every feature that you want yet, deliver something that people can use. Your project plan should specify what you'll deliver in each phase.

## Recommended content

For more information, see the following articles:

* [Prioritizing feature requests](https://learn.microsoft.com/en-us/power-apps/guidance/planning/prioritizing-features/)
* [Identifying project team members](https://learn.microsoft.com/en-us/power-apps/guidance/planning/identifying-project-members/)
* [Listing the project tasks and owners](https://learn.microsoft.com/en-us/power-apps/guidance/planning/project-tasks-owners/)
* [Defining the project schedule](https://learn.microsoft.com/en-us/power-apps/guidance/planning/defining-project-schedule/)
* [Identifying the risks](https://learn.microsoft.com/en-us/power-apps/guidance/planning/identifying-risks/)
* [Gaining support and sponsorship from management](https://learn.microsoft.com/en-us/power-apps/guidance/planning/gaining-support/)

## Example: Dive shop service department solution

In the following example, you'll help the dive shop service department develop a solution by going through the project plan, completing two releases, establishing more goals for release 1 of the solution, defining project scope, and then identifying the risks.

### Project plan

When you looked at the overall business goals for your solution, you decided to divide them into releases so that you could deliver value incrementally.

### Release 1

**Release 1** of your solution has the following goals:

* Immediately on solution availability, 100 percent of service requests will be created by using the digital system.
* Within two weeks of solution availability, the service team should be completing an average of 16 service orders each day.

### Release 2

**Release 2** of your solution has the following goals:

* Every customer should be able to register their products within your system.
* By the end of the year, department managers can access a weekly service report that's up to date for all service orders in the system.
* Customers will receive reminders to service their gear. These reminders are sent annually, 30 days before the anniversary of the prior service order completion on the gear.

### More goals for release 1 of the solution

Other goals that you have for **Release 1** of the solution include:

* User training should be minimal, and ease of use is paramount.
* The shop's general manager should be able to use service data to create marketing campaigns and sales promotions that target service customers.

## Project scope

While looking at your business process, you notice that it's divided into four main tasks:

1. Create a service order.
2. Approve the service order (to be completed in house or outsourced to a vendor).
3. Complete the service order.
4. Communicate with customers and schedule pickup.

## Identify the risks

You've created the following table for your expense report project.

| **Risk** | **Risk level** | **Plan to reduce risk** |
| --- | --- | --- |
| You can't confidently move old service order data into the system because the paper trail is incomplete. | Significant | Review invoice data to confirm service order completions. |
| External user access to entering data could lead to incorrect gear being associated with a customer and missed service and sales opportunities | Significant | Engage the sales team to help customers enter the correct information into the system at the time of purchase or service check-in. |