Power Platform Data Layer Decision Guide

Start*

*For Power Pages, you can only use Dataverse

Do you want to create relationships between multiple tables/lists?

— No → SharePoint List(s) **might** be an option (Microsoft List(s))

— Yes → What kind of relationship do you need?

Only 1 one-to-many → Do you want to create a relationship to a table/list that contains more than 5000 items?
- No → SharePoint List(s) **might** be an option (Microsoft List(s))
- Yes → Can you re-think your architecture so that you don't need to do a lookup to a table/list with > 5000 items?
  - Yes → SharePoint List(s) **might** be an option
  - No → Will you reach more than 1.000.000 or > 2GB records in the lifetime of your solution?

Multiple one-to-many or many to many relationships → Will you reach more than 1.000.000 or > 2GB records in the lifetime of your solution?

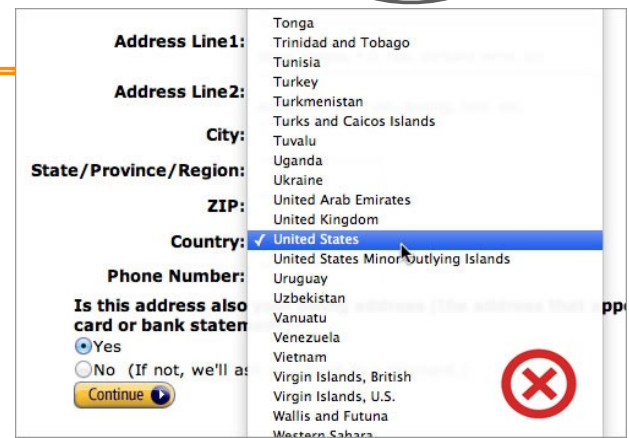Will you reach more than 1.000.000 or > 2GB records in the lifetime of your solution?
- No → Do you want ALM or AI Builder?
  - No → Dataverse for Teams **might** be an option
  - Yes → Dataverse **might** be an option
- Yes, complex, a lot of data → Dataverse **might** be an option

Even if the SharePoint lookup column limit is 5.000 items, it's not a good idea to have large dropdowns (UX). **SharePoint is not a relational database!**

An example of a relationship is a Support Ticket list that is linked with a Employee list

SharePoint Lists (Microsoft Lists)
- Easy to use
- Included in M365 license
- No complex relations (many-to-many)
- Limits to lookup (one-to-many relations), max 5000 item lookups
- Complex ALM: Not part of the solution package

Dataverse
- Simple, for non-developers
- Design tables without software
- **Complex relationships**
- Management of permissions through web-interface
- Access to pre-built entities
- Simplicity of database attached to environment
- No need to configure Azure firewall
- **ALM: Entities part of the solution package**
- **Azure DevOps (Pipelines)**
- **AI Builder**
- No advanced backups
- **Price**

Azure SQL
- More ways to access data, not limited to Power Automate, Power BI or Power Apps
- Complex relationships
- Use built-in tools for backups and restoring data
- Bulk import with SSIS
- Optimize data retrieval and join SQL tables
- Stored procedures for complex data
- Complex ALM: Not part of the solution package
- Need to be managed and maintained
- Price

Dataverse for Teams
- Included in most M365 licenses
- Light version of CDS
- Complex relationships
- No ALM (yet)
- Limited to 2GB data storage
- Limited to 1.000.000 records
- No AI Builder

Dataverse for Teams environments can be upgraded to Dataverse

This chart is built to help you choosing your data layer from a Power Platform point of view. However, every situation is different and all requirements need to be investigated carefully before deciding.