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Accelerate Your Career In Microsoft 365

My recommended strategy to *correctly* create lists and libraries on SharePoint

Introduction

Welcome to my recommended process for creating a list or library in SharePoint Online, and everything you should think about before creating it. This may be updated periodically, and if so, you'll get notified via email (as long as you're still on my email list).

List/Library Checklist

①	What columns are needed?
②	Content Type
③	What views will you need?
④	Indexes

Design The List BEFORE You Create It

What columns are needed for this list or library? I know this may seem obvious, but most users simply start creating columns in their list without properly planning. I recommend using one of these two paths:

1. Create a test list or library, and add in all your columns. Start tweaking them, and once finalized, create the “real” list or library. Don’t forget to clean up that test one, though 😊
2. Use something as simple as notepad to type out all your columns. See how many you have and think about how users will interact with them. You may find that you need more columns. Maybe less?

Planning your structure ahead of creating the list or library helps you to find issues **before** they arise. Decide which columns need to be required vs optional.

What data will be presented in a dropdown list that could be useful outside of this list. Many times, I see a Department column set up as a Choice field, with all the values hardcoded. Those users end up having to maintain that list any time the official list of departments changes, either from a new department being formed or from a name change. Organizational data like that belongs in the Term Store, not in a choice column. That way you as well as others can use this data in any list or library by adding a managed metadata column. You can also use automation like PowerShell or Power Automate to sync that term store to an HR system or other source-of-truth system.

To Content Type Or Not To Content Type

Think about where this data may be needed. Think about what data your list columns describe. Creating a custom content type for this list is very important if one of the following conditions is true:

- This type of data is used in other places in the tenant.
- It needs to be found and displayed easily on other sites.
- This data’s structure should be the standard way all other site owners should create a list or library to house this data.

Those are great indicators that you need a content type, either created in this site, or better yet created in the Content Type Hub in the SharePoint Admin Center. If you create it in the Admin Center, you can publish it for all other users to use on their sites.

What Views Are Needed

Now that you’ve designed the list, how are users going to view this data? What columns will they need to see on the view, and which can be left out, to be later viewed in the details pane? Once you’ve got the list or library created, add the necessary fields to a view and make sure it looks correct, in the right order, etc. You may find that you have too many fields to fit on the screen and need to make some choices. Are your users okay with scrolling to see the other fields? Should you break that view into two (or more) other views?

Maybe you realize that people shouldn't be expected to navigate to the list or library directly. If this is data people will search for, you may want to create a search interface to find this instead! PnP Modern Search web parts can surface data easily, making for a much better experience for users.

This is especially true if you're expecting a large amount of data. Once you hit 5,000 items or files in a library, SharePoint will not allow a view to retrieve and display any additional. In fact, users will get error messages instead of seeing their data. If you can't narrow down that View's filters to make sure you always stay under the limit, exposing that data via SharePoint Search could be a better option, since SharePoint Search doesn't have that limitation.

Whether you use SharePoint Search to surface this data or not, you still have the option to incorporate JSON formatting into the columns and views to improve the display of your data. If you aren't very experienced with JSON formatting, start small and learn a little more each time you create a new list or library.

Indexes

As you identify the fields you need to filter on in your views, all of those fields will need to be added as indexes in the List/Library Settings page. Once a list or library has surpassed the 5,000-item limit, filtering on a non-indexed column will cause that familiar List View Threshold error on the page. Add that particular field in the Settings page, and that error will go away (assuming your filter produces less than 5,001 items). Making sure that you've added all the indexes necessary for your views will ensure users don't panic because "their list broke". It also is how you can have up to 30 MILLION items in a list. Yes, SharePoint Online *does* support that on a single list. With the right architecture designed from the beginning of that list/library's lifecycle, you'll have no issues maintaining your data in there.

Take Aways

Practice makes perfect. Use the tips on this checklist to improve your solutions. Put them to use, and before you know it, they'll be second nature. Yes, it is likely more work than you're used to. Yes, it takes longer, but think of the quality you'll be delivering. Think of the troubleshooting you *won't* be doing later. Taking the extra time to set things up properly now sure beats the stress of dealing with issues because you didn't take that time to plan your architecture.