

# Exercise - Explore Microsoft Dataverse

25 minutes

In this exercise, you'll explore Microsoft Dataverse standard tables. Tables in Microsoft Dataverse are similar to tables in a database or worksheets in Microsoft Excel. You can connect tables together with relationships that model real-world interactions between the data. Each table contains multiple rows (records), each having data columns. For example, a Project table might have columns such as Name, Due Date, and Status, and it might be related to a Project Owner table, which might have columns such as Name and Email.

Microsoft Dataverse abstracts much of the typical low-level database management work to help make it easier for you to set up a custom data model that fits your application.

In addition to allowing for the creation of custom tables, Microsoft Dataverse contains a Common Data Model that consists of hundreds of standard table definitions. You can find the current Common Data Model schema at [GitHub Microsoft CDM](#) . You can also browse the Common Data Model by using the CDM Visual Table Navigator by going to [GitHub CDM](#) . For more information, see [Common Data Model Overview](#).

## ⓘ Note

This module is designed for use with the App in a Day instructor-led course. For more information on attending this free, instructor-led course, see [Microsoft Power Platform instructor-led training](#) . On that page, you can [Register for an event](#) .

## ⓘ Note

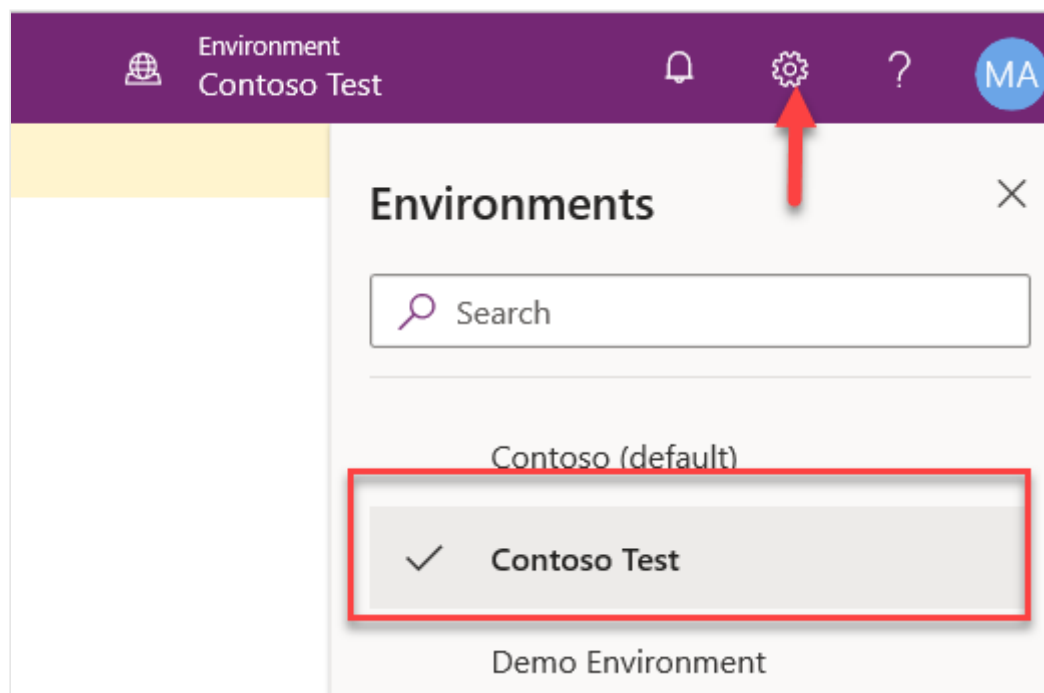
To complete the exercises, you'll need to use a few files. Download the [App in a Day files](#) for use in this module. The file folders that are in this download include:

- **Completed modules with instructions** - Package files to import the completed exercise steps.
- **Machine-Order-Data.xlsx** - File used in the exercises.

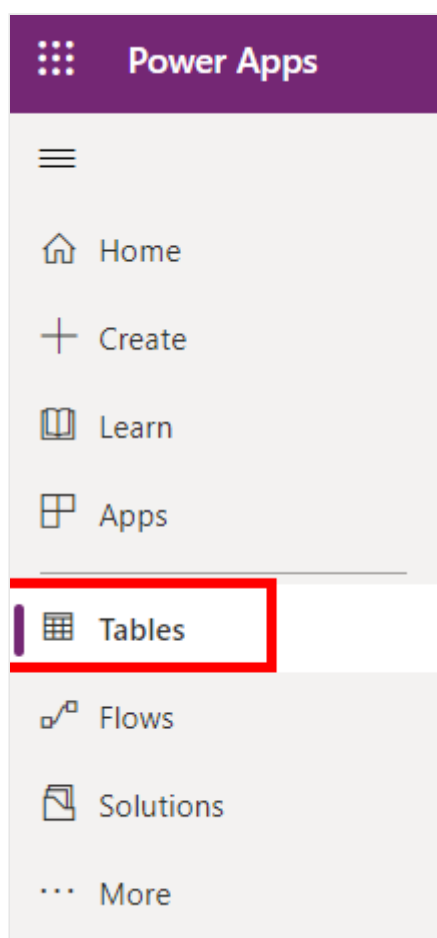
## Task - Explore standard tables

In this task, you'll explore Microsoft Dataverse standard tables.

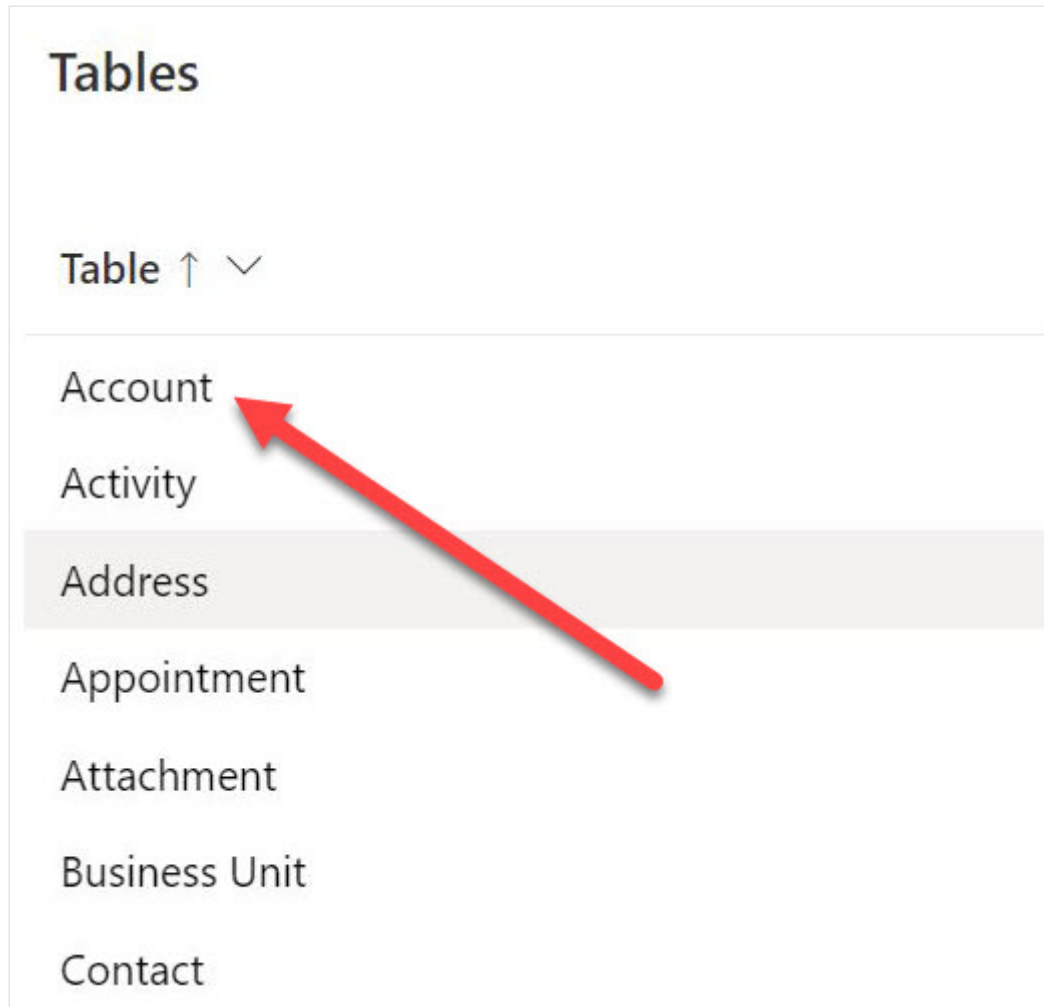
Before beginning the exercises, go to [Make Microsoft Power Apps](#) and confirm that you're in your training environment for the labs.



1. In the left pane, select **Tables**.



2. A list of tables in this environment will display. Select a few of the standard tables (such as **Account**) to get familiar with some features of a table.



## Table properties

In the **Table properties** section, you'll find the table name, table type, the table's primary column, and table description. You can also copy the table's set name, schema name, or logical name from the **Tools** dropdown menu.

Tables > Account

**Table properties**

Name	Primary column	Description
Account	Account Name	Business that represents a cus
Type	Last modified	
Standard	-	The company that is billed in I

**Tools**

- Copy set name
- Copy schema name
- Copy logical name
- API link to table definition
- API link to table data

**Schema**

- Columns
- Relationships
- Keys

**Data experiences**

- Forms
- Views
- Charts
- Dashboards

**Customizations**

- Business rules
- Commands

Account columns and data

Address 1: City	Primary Contact	Main Phone	Account Name
Redmond	Rene Valdes (sample)	555-0158	A. Datum Corporation (sample)
Santa Cruz	Nancy Anderson (sample)	555-0152	Adventure Works (sample)
Missoula	Paul Cannon (sample)	555-0157	Alpine Ski House (sample)

+133 more

## Table schema

In the **Schema** section, you can navigate to the table columns, relationships, and keys. For this exercise, select **Columns**.

Tables > Account

Table properties

Name	Primary column	Description
Account	Account Name	Business that represents a customer
Type	Last modified	The company that is billed in the account
Standard	-	

Properties Tools

- Copy set name
- Copy schema name
- Copy logical name
- API link to table definition
- API link to table data

Schema

- Columns**
- Relationships
- Keys

Data experiences

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Account columns and data

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## Columns

A table has a list of columns. In the following example, the Account table has columns such as **Account Name** and **Account Number**. Each column has a data type, such as **Text** and **Number**. The system chooses the data type when you create a column, and this value isn't changeable. The data type also defines many characteristics and behaviors of the column when your application runs. For example, a **Choice** column allows you to have a predefined list of values for use in your application. When this column is used on a form in a model-driven application, the visual presentation is a dropdown control. The column helps to ensure data consistency and allows for built-in support for multi-language applications.

Tables > Account > Columns

Display name ↑	Name	Data type	Managed	Customizable
(Deprecated) Process Stage	Stageld	Unique identifier	Yes	No
(Deprecated) Traversed Path	TraversedPath	Single line of text	Yes	Yes
Account	AccountId	Unique identifier	Yes	Yes
Account Name <small>Primary name column</small>	Name	Single line of text	Yes	Yes
Account Number	AccountNumber	Single line of text	Yes	Yes
Account Rating	AccountRatingCode	Choice	Yes	Yes
Address 1	Address1_Composite	Multiple lines of text	Yes	Yes
Address 1: Address Type	Address1_AddressTypeCode	Choice	Yes	Yes
Address 1: City	Address1_City	Single line of text	Yes	Yes
Address 1: Country/Region	Address1_Country	Single line of text	Yes	Yes

For more information, see [Microsoft Dataverse Supported Data Types](#).

Return to the table by selecting the browser's back button.

Select **Relationships**.

Tables > Account

Table properties

Name	Primary column	Description
Account	Account Name	Business that represents a customer. The company that is billed in the invoice.
Type	Last modified	
Standard	-	

Properties Tools

- Copy set name
- Copy schema name
- Copy logical name
- API link to table definition
- API link to table data

Schema

- Columns
- Relationships**
- Keys

Data experience

- Forms
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Account columns and data

	Address 1: City	Primary Contact	Main Phone	Account Name	
	Redmond	Rene Valdes (sample)	555-0158	A. Datum Corporation (sample)	
	Santa Cruz	Nancy Anderson (sample)	555-0152	Adventure Works (sample)	
	Missoula	Paul Cannon (sample)	555-0157	Alpine Ski House (sample)	

## Relationships

Relationships allow you to manage relationships between tables. Supported relationships include one to many (1:N), many to one (N:1), and many to many (N:N). Relationships also define the behavior that happens when actions occur on the primary row in a 1:N relationship. For example, if the parent row has been deleted, you can set up the relationship behavior so that all child rows are also deleted, or you can remove the reference.

Tables > Account > Relationships

Display name	Name	Related table	Relationship type	Managed	Customizable
(Deprecated) Process Stage	processstage_account	Process Stage	Many-to-one	Yes	No
Base Record ID	Account_DuplicateBaseRecord	Duplicate Record	One-to-many	Yes	No
Company Name	contact_customer_accounts	Contact	One-to-many	Yes	Yes
Connected From	account_connections1	Connection	One-to-many	Yes	Yes
Connected To	account_connections2	Connection	One-to-many	Yes	Yes
Created By	lk_accountbase_createdby	User	Many-to-one	Yes	Yes
Created By (Delegate)	lk_accountbase_createdonbehalfby	User	Many-to-one	Yes	
Created By (External Party)	lk_externalparty_account_createdby	External Party	Many-to-one	Yes	

Return to the table by selecting the browser's back button.

Select **Keys**.

Tables > Account

Table properties

Name	Primary column	Description
Account	Account Name	Business that represents a customer. The company that is billed in the invoice.
Type	Last modified	
Standard	-	

Properties Tools

- Copy set name
- Copy schema name
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- API link to table definition
- API link to table data

Schema

- Columns
- Relationships
- Keys**

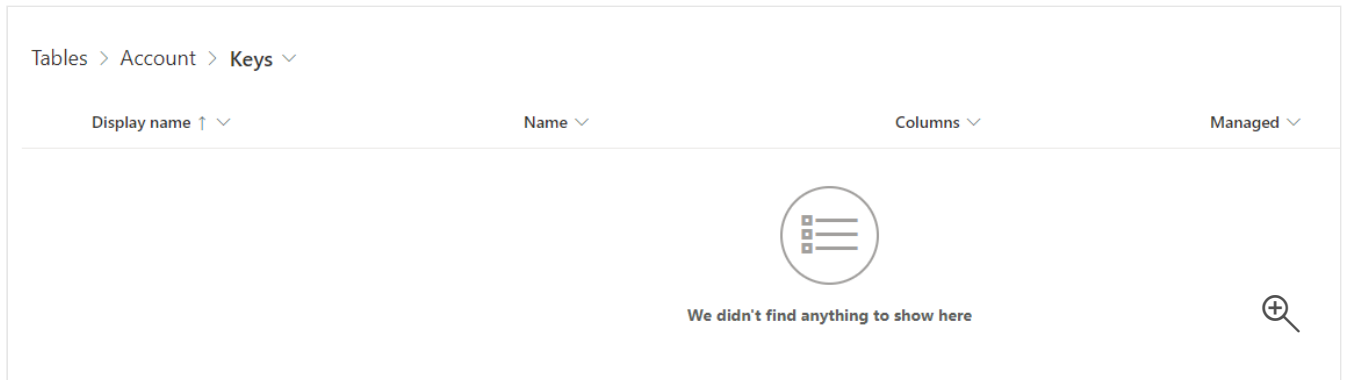
Data experience

- Forms
- Views
- Charts
- Dashboards

Account columns and data

# Keys

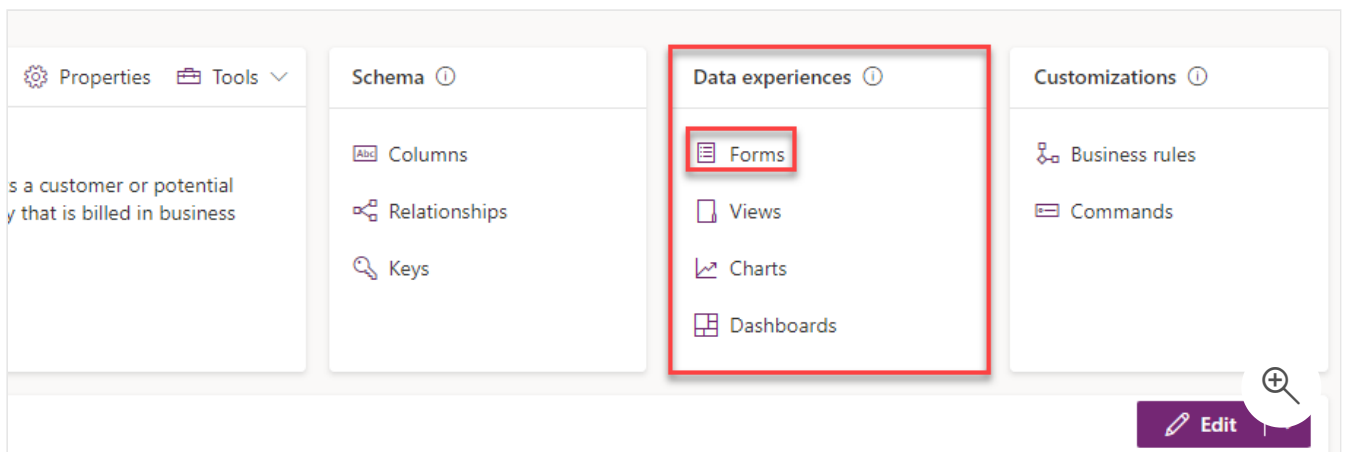
By selecting the **Keys** menu, you can view the lookup keys for the table. Keys can contain multiple columns to define a composite key. Keys enforce uniqueness, so you shouldn't use them when you need to store duplicate values of used columns.



Return to the table by selecting the browser's back button.

## Data experiences

With the **Data experiences** menu, you can navigate to the table forms, views, charts, and dashboards. Select **Forms**.



## Forms

You can use forms to interact with the data that you need to do your work. Make sure that the forms that you use are designed to help you efficiently find or enter the information that you need. From the **Form type** dropdown menu, you can create different types of forms, such as **Quick Create**, **Quick View**, **Card**, and a **Main** form. Some forms have more than one version to accommodate different user roles within your organization.

Tables > Account > Forms ▾

Name ↑ ▾	Form type ▾	Status ▾	Managed ▾	Customizable ▾
Account	⋮ Main	On	Yes	Yes
account card	⋮ Quick View	On	Yes	Yes
Account Card form	⋮ Card	On	Yes	Yes
Account for Interactive experience	⋮ Main	On	Yes	Yes
Account Hierarchy Tile Form	⋮ Quick View	On	Yes	Yes
Account Quick Create	⋮ Quick Create	On	Yes	Yes
Account Reference Panel	⋮ Quick View	On	Yes	Yes
Information	⋮ Main	On	Yes	Yes
Social Profiles	⋮ Quick View	On	Yes	Yes

Return to the table by selecting the browser's back button.

Select **Views**.

Properties
 Tools ▾

Schema ⓘ
 

Columns
 Relationships
 Keys

Data experiences ⓘ
 

Forms
 Views
 Charts
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Customizations ⓘ
 

Business rules
 Commands

Edit

## Views

Views will let you define how a list of rows are shown in the app. You can create multiple custom views, each having its own filtering and sorting criteria. For example, you could create a view so that only the rows that were created in the last week are visible, and you could create another view for rows that haven't been updated in a year. Create views to make the application users more productive in filtering their data.

Tables > Account > Views ▾

Name ↑ ▾		View type ▾	Status ▾
Account Advanced Find View	⋮	Advanced Find View default	On
Account Associated View	⋮	Associated View default	On
Account BulkOperation View	⋮	Associated View	On
Account List Member View	⋮	Associated View	On
Account Lookup View	⋮	Lookup View default	On
Accounts: Influenced Deals That We Won	⋮	Public View	On

Return to the table by selecting the browser's back button.

Select **Charts**.

Properties
Tools ▾

Schema ⓘ

Columns
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Data experiences ⓘ

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Views
Charts
Dashboards

Customizations ⓘ

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Commands

Edit

## Charts

Use charts to display a high-level view of your data in insightful and graphical ways.

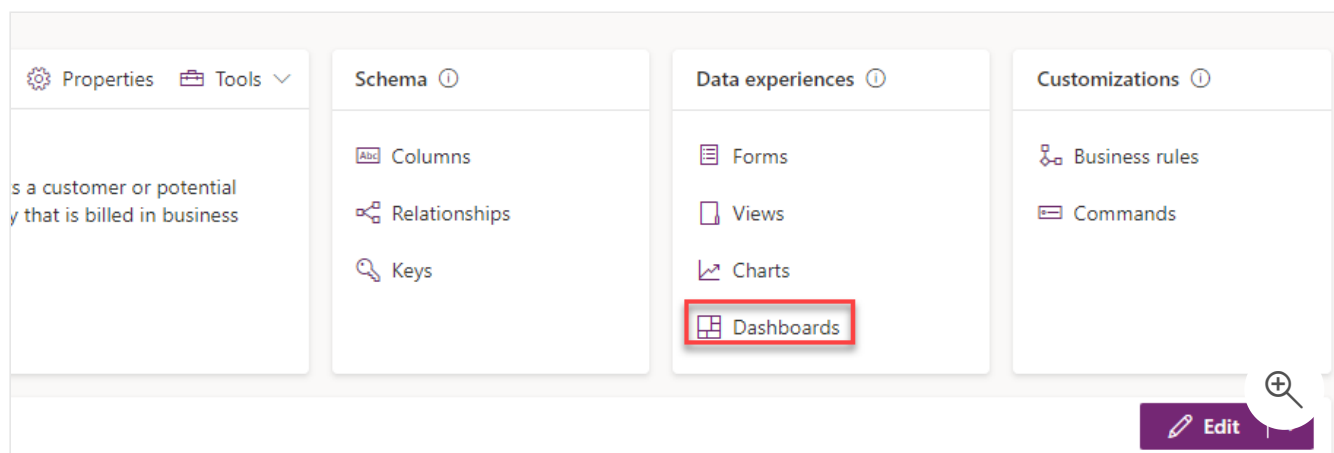
Tables > Account > Charts ▾

Name ↑ ▾		Managed ▾	Customizable ▾
Accounts by Industry	⋮	Yes	Yes
Accounts by Owner	⋮	Yes	Yes
Accounts by Owner - Tag Chart	⋮	Yes	Yes
New Accounts By Month	⋮	Yes	Yes



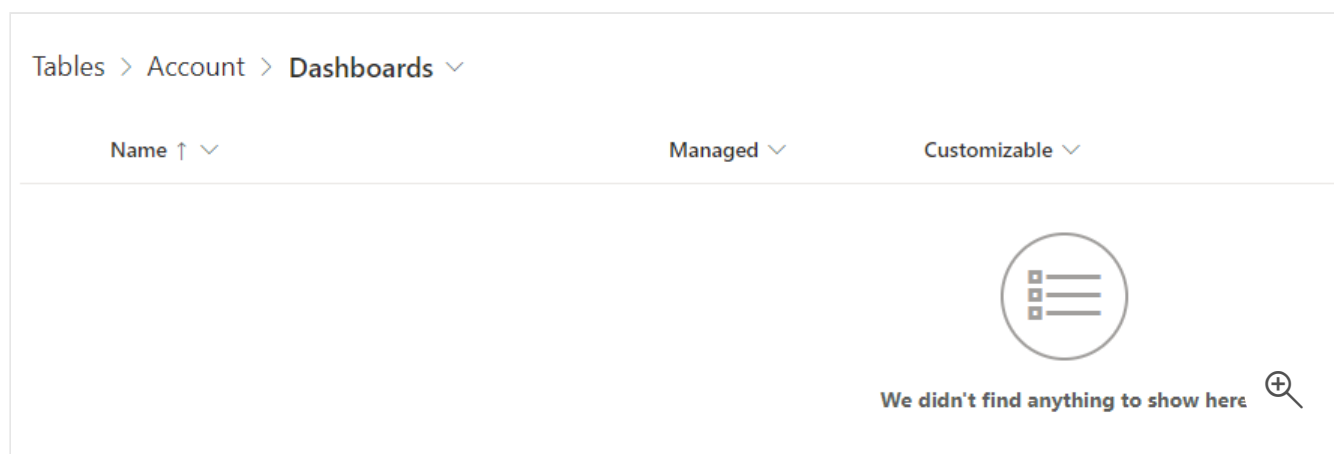
Return to the table by selecting the browser's back button.

Select **Dashboards**.



## Dashboards

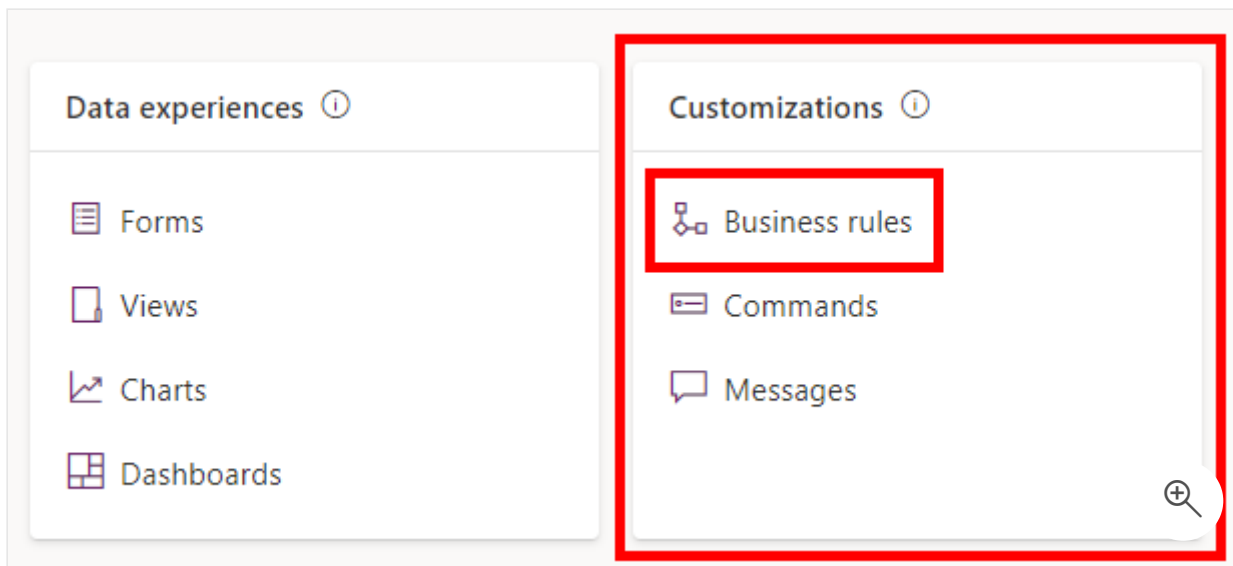
Dashboards help you bring your views, charts, and web resources together in one place.



Return to the table by selecting the browser's back button.

## Customizations

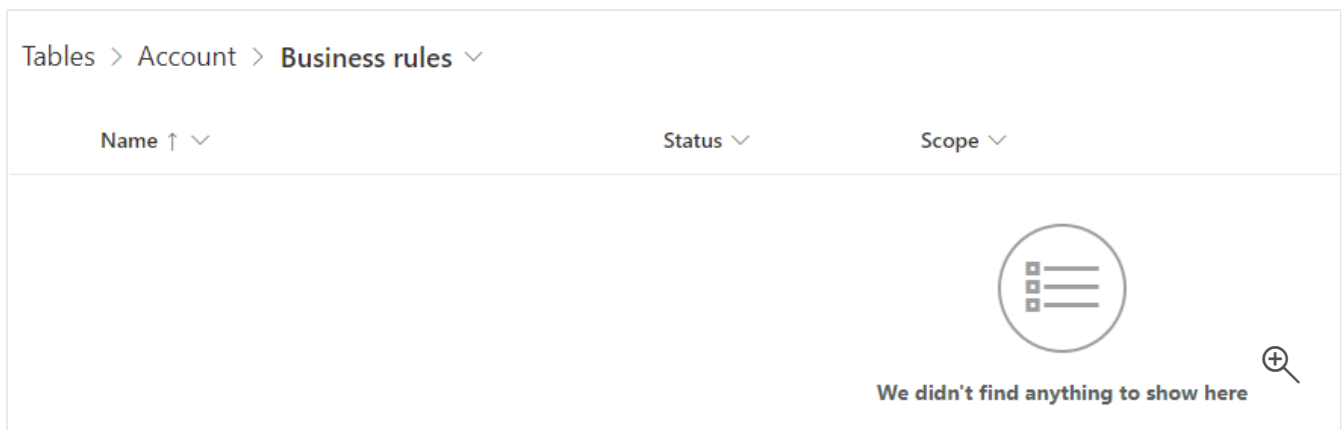
In the **Customizations** section, you can navigate to the table business rules and commands. Select **Business rules**.



## Business rules

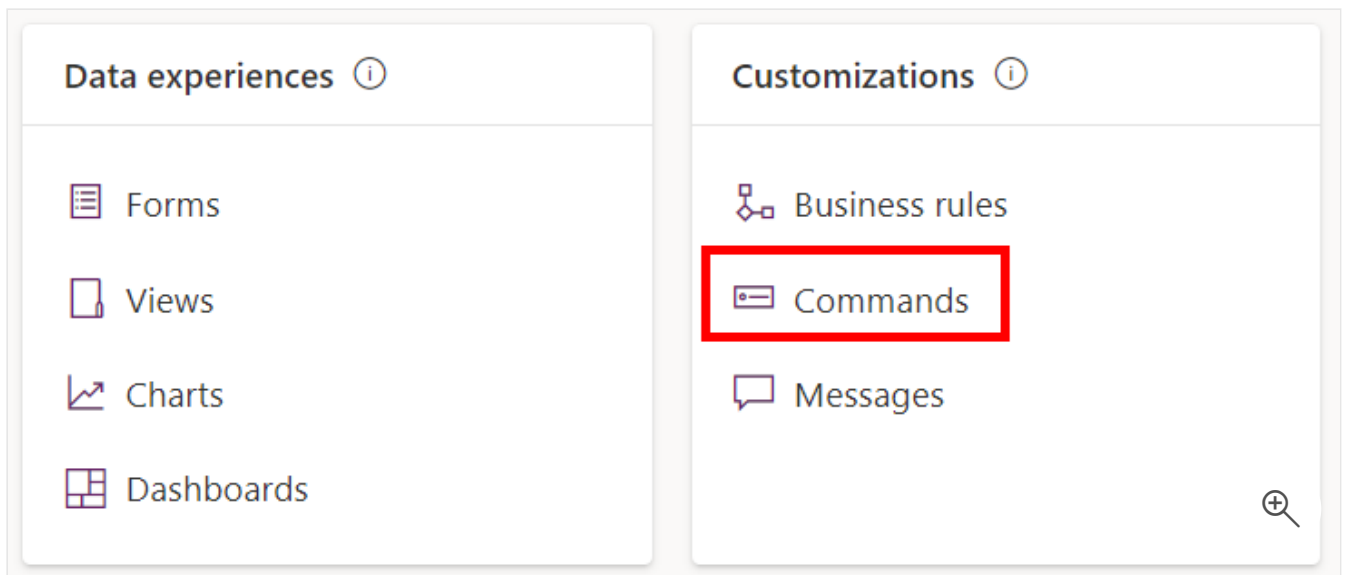
Building a business rule is similar to building a flowchart where you can define conditions and actions.

For more information, see [Business Rules Recommendations](#).



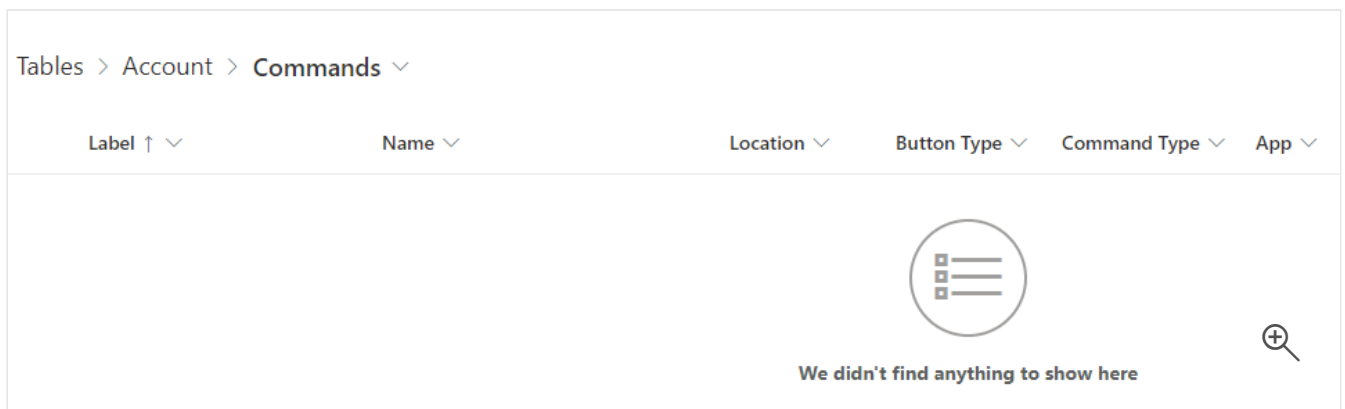
Return to the table by selecting the browser's back button.

Select **Commands**.



## Commands

Microsoft Dataverse allows you to create your own command bar buttons. The commands that you add to the table will be listed in the **Commands** section.



Return to the table by selecting the browser's back button.

## Columns and data

The **columns and data** section shows the first 10 rows of the table data. You can also view more columns by selecting the **Show existing columns** button, add a new column by selecting the **+ new column** button, edit table data with the **Edit** button, and order columns to your liking by dragging and dropping columns.

Account columns and data

Address 1: City Primary Contact Main Phone Account Name \* ↑

+133 more

Redmond Rene Valdes (sample) 555-0158 A. Datum Corporation

Santa Cruz Nancy Anderson (sample) 555-0152 Adventure Works

Missoula Paul Cannon (sample) 555-0157 Alpine Ski House (sample)

Los Angeles Sidney Higa (sample) 555-0154 Blue Yonder Airlines (sample)

Redmond Scott Konersmann (sample) 555-0155 City Power & Light (sample)

Phoenix Jim Glynn (sample) 555-0159 Coho Winery (sample)

Redmond Robert Lyon (sample) 555-0156 Contoso Pharmaceuticals (sample)

+

+

+

Select the **Edit** button.

## Edit

By selecting the **Edit** button, you can create a new row, create a new column, refresh the data to view the latest rows, create an app from the data, and edit the table properties.

← Back + New row + New column Refresh Create an app Edit table properties

Accounts

Address 1: City Primary Contact Main Phone Account Name \* ↑

+133 more

Redmond Rene Valdes (sample) 555-0158 A. Datum Corporation (sample)

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Redmond Scott Konersmann (sample) 555-0155 City Power & Light (sample)

Phoenix Jim Glynn (sample) 555-0159 Coho Winery (sample)

+

+

+

You can delete one or more rows by selecting the rows that you want to delete. For this exercise, **don't delete rows**.

← Back Delete 2 record(s)

Accounts

Address 1: City Primary Contact Main Phone Account Name \* ↑

+133 more

Redmond Rene Valdes (sample) 555-0158 A. Datum Corporation (sample)

✓ Santa Cruz Nancy Anderson (sample) 555-0152 Adventure Works (sample)

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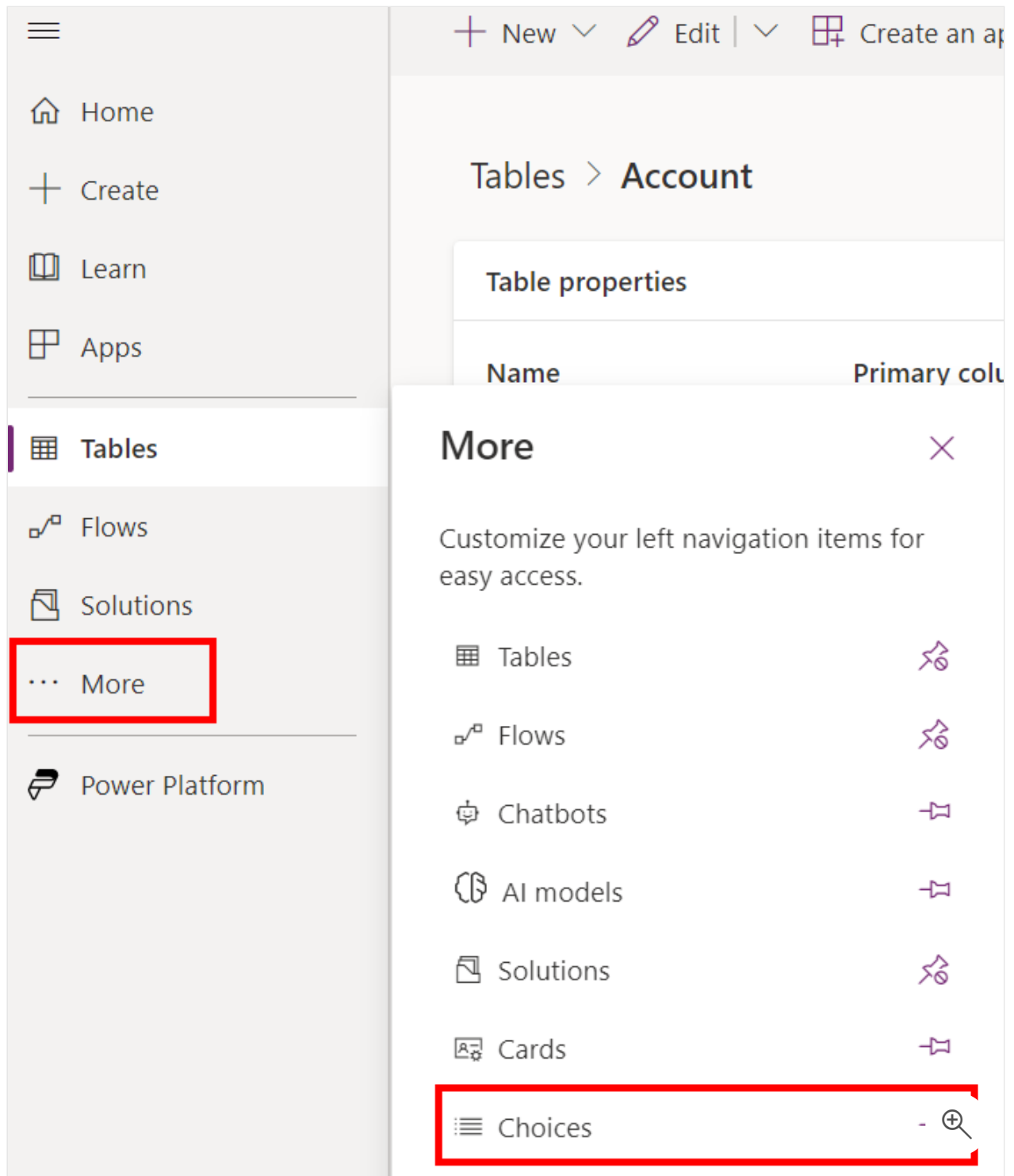
+

Select the **Back** button.

## Task - Explore standard choices






Similar to standard tables, Microsoft Dataverse includes a set of standard choices. You can also create custom choices. Later in this lab, you'll create a custom choice called **ApprovalStatus** to set the approval status of a machine order.

1. Select **Choices** from the left-hand navigation pane, you may need to select **More** to see **Choices** if it hasn't been pinned to your navigation pane.



2. Examine the standard choices.

## Choices

Display name  		Name 	Type 	
Activity Type	...	activitypointer_activitytypecode	Standard	
Approve Article	...	knowledgearticle_isapproverel...	Standard	
Assign type	...	assigntype	Standard	
Associated EntityType Code	...	documenttemplate_associated...	Managed	
Authentication Protocol	...	emailserverprofile_authenticati...	Standard	
A Yes or No boolean	...	field_security_permission_type	Standard	

## Next unit: Exercise - Create custom tables and columns

[Continue >](#)