Excel 2016 Essentials

Corporate Training Materials

Module One: Getting Started

Welcome to the Excel 2016 Essentials workshop.

Motivation is what gets you started. Habit is what keeps you going.

Jim Rohn

Workshop Objectives

Create worksheets and workbooks

Navigate in worksheets and workbooks

Format worksheets and workbooks

Manage data cells and ranges

Perform operations with formulas and functions

Module Two: Create and Manage Worksheets and Workbooks

Worksheets live in workbooks in Excel and create the building blocks of documenting, analyzing, manipulating, and presenting data. This module will help you get started by creating worksheets and workbooks.

Lesson: Create Worksheets and Workbooks

In this lesson, we'll introduce the following topics:

- Create a Workbook
- Import data from a delimited text file
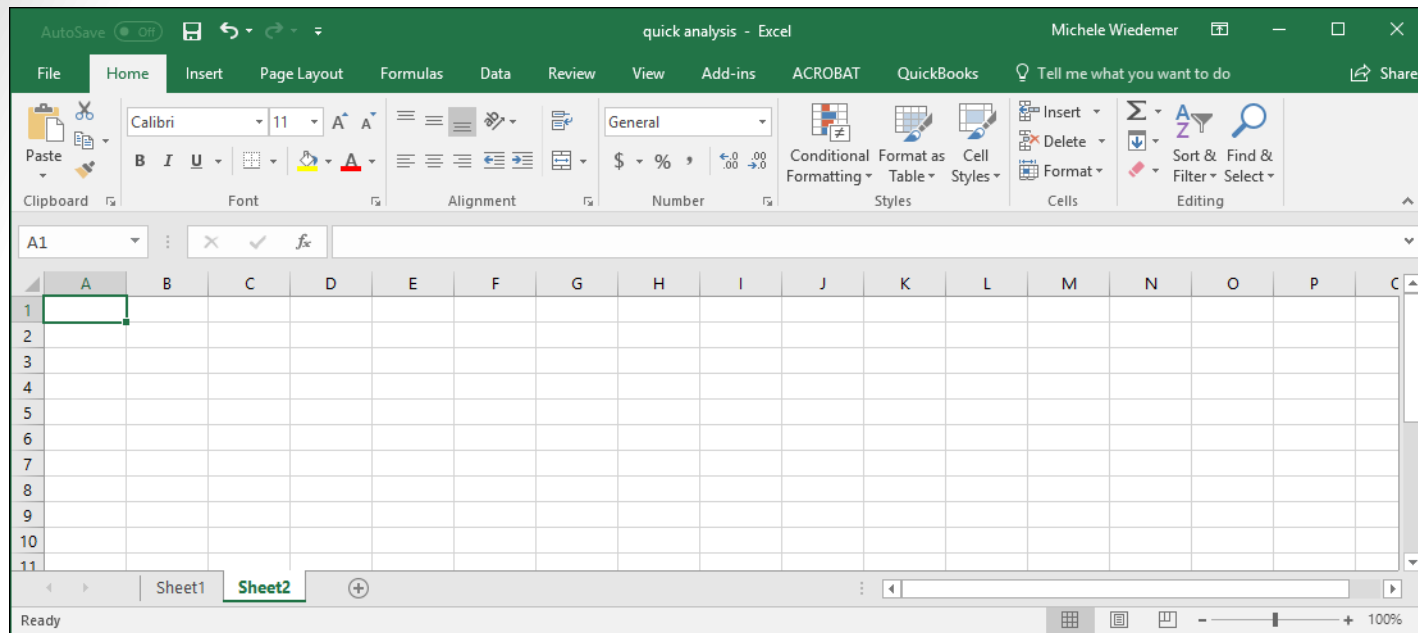- Add a worksheet to an existing workbook
- Copy and move a worksheet

Create a Workbook
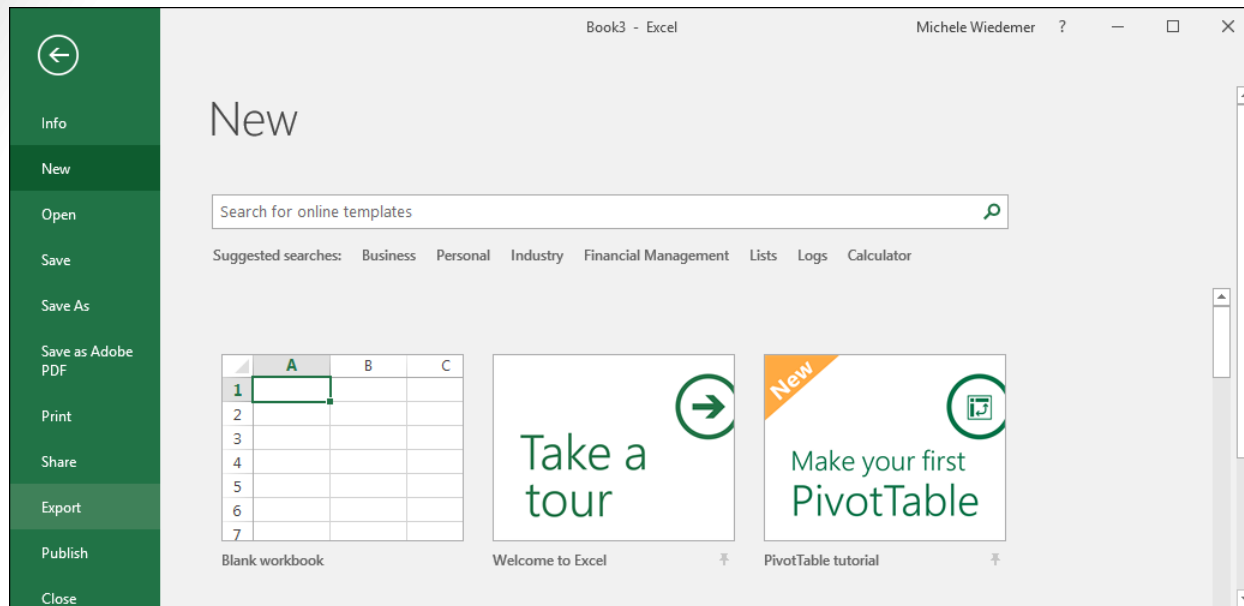
Import Data from a Delimited Text File
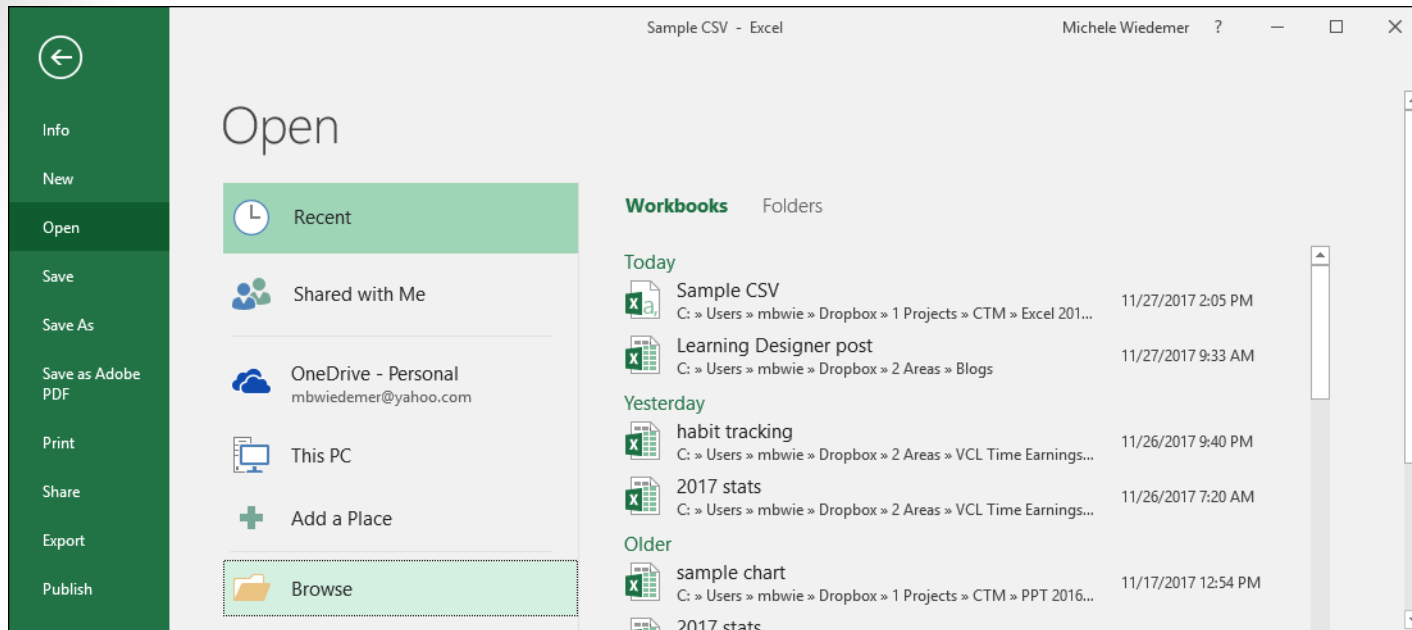
Add a Worksheet

Lesson: Navigate in Worksheets and Workbooks

In this lesson, we'll introduce the following topics:

- Search for data within a workbook
- Navigate to a named cell, range, or workbook element
- Insert and remove hyperlinks
- Hide or unhide columns and rows
- Hide or unhide sheets

Search for Data Within a Workbook

Navigate to a Named Cell or Range

Insert and Remove Hyperlinks

Hide or Unhide Columns and Rows

Hide or Unhide Sheets

Lesson: Modify Worksheets

In this lesson, we'll introduce the following topics:

- Insert and delete columns and rows
- Adjust row height and column width
- Insert headers and footers
- Change worksheet tab color
- Rename worksheet

Insert and Delete Table Rows and Columns

Adjust Row Height and Column Width

Insert Headers and Footers

Change Worksheet Tab Color

Rename a Worksheet

Lesson: Format Workbooks

In this lesson, we'll introduce the following topics:

- Copy and move worksheets

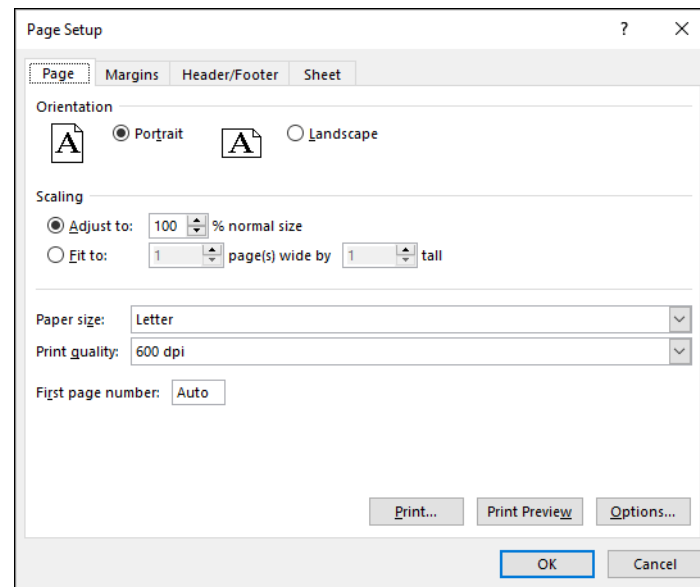- Modify page setup

- Change workbook themes

Copy and Move Worksheets

Modify Page Setup

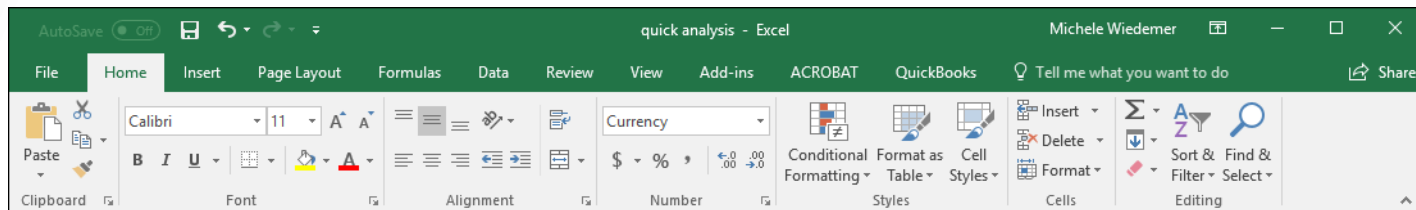# Change Workbook Themes

Lesson: Customize Options and Views

In this lesson, we'll introduce the following topics:

- Customize the Quick Access Toolbar

- Change magnification using zoom tools

- Change workbook views

- Change window views

- Modify document properties

- Display formulas
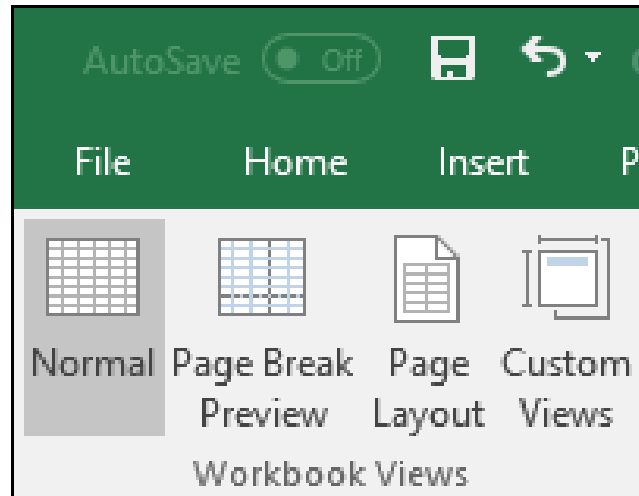
Customize the Quick Access Toolbar

Use Zoom Tools

Change Workbook Views

Change Window Views

Modify Document Properties

Display Formulas

Lesson: Configure Worksheets and Workbooks for Distribution

In this lesson, we'll introduce the following topics:

- Print all or part of a workbook

- Set a print area

- Save workbooks in alternative file formats

- Repeat columns or rows across multiple pages

- Inspect a workbook for personal information and hidden properties

- Inspect a workbook for accessibility issues

- Inspect a workbook for compatibility issues

Print Workbooks

Set a Print Area

Save Workbooks in Alternative File Formats

Repeat Columns or Rows Across Multiple Pages

Inspect a Workbook for Hidden Properties

Inspect a Workbook for Accessibility Issues

Inspect a Workbook for Compatibility Issues

Module Three: Manage Data Cells and Ranges

Now let's get more detailed by working with the data on your worksheets. This module introduces you to the tools you need to insert, format, summarize and organize your data.

Lesson: Insert Data in Cells and Ranges

In this lesson, we'll introduce the following topics:

- Replace data

- Cut, copy, and paste data

- Paste data using special paste options

- Fill cells using Autofill

- Insert and delete cells

Replace Data

Cut, Copy and Paste Data

Paste Data Using Special Paste Options

Fill Cells Using Autofill

Insert and Delete Cells

Lesson: Format Cells and Ranges

In this lesson, we'll introduce the following topics:

- Merge Cells
- Align and Indent Cell Contents
- Wrap text within cells
- Apply number formats
- Apply cell formats
- Apply cell styles
- Format cells using the Format Painter

Merge Cells

Modify Cell Alignment and Indentation

Wrap Text Within Cells

Apply Number Formats

Apply Cell Formats

Apply Cell Styles

Apply Conditional Formatting

Format Cells Using the Format Painter

Lesson: Summarize and Organize Data

In this lesson, we'll introduce the following topics:

- Insert sparklines

- Group data

- Insert subtotals

- Outline data

- View grouped and outlined data

Insert Sparklines

Group Data

Insert Subtotals

Outline Data

Viewing Grouped and Outlined Data

Module Four: Create Tables

In this module, you'll learn to create and manage tables, apply styles and configure table style options, and work with filtering and sorting strategies.

Lesson: Create and Manage Tables

In this lesson, we'll introduce the following topics:

- Create an Excel table from a cell range
- Add or remove table rows and columns
- Convert a table to a cell range

Create an Excel Table from a Cell Range

Add or Remove Table Rows and Columns

Convert a Table to a Cell Range

Lesson: Manage Table Styles and Options

In this lesson, we'll introduce the following topics:

- Apply styles to tables

- Configure table style options

- Insert total rows

Apply Styles to Tables

Configure Table Style Options

Insert Total Rows

Lesson: Filter and Sort Tables

In this lesson, we'll introduce the following topics:

- Filter records

- Use a Number Filter

- Sort data by multiple columns

- Clear Filters

- Change sort order

- Remove duplicate records

Filter Records
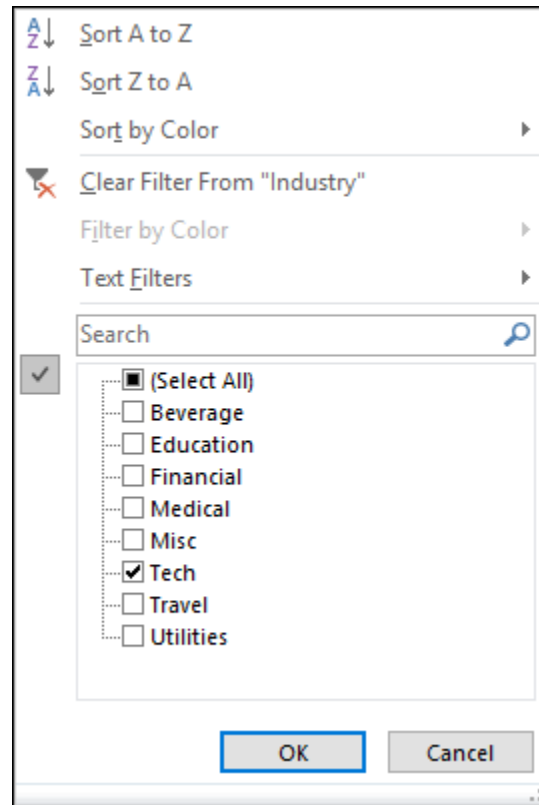
	A	B	C	D
1	Company	Industry	Q1 Sales	Q2 Sales
2	A. Datum Corporation	Tech	$195,449	$746,907
9	Consolidated Messenger	Tech	$579,825	$448,399
14	Litware, Inc.	Tech	$902,264	$206,331
17	Total			$1,401,637

Clear Filters

Use a Number Filter

Change Sort Order

Sort Data by Multiple Columns

Remove Duplicate Records
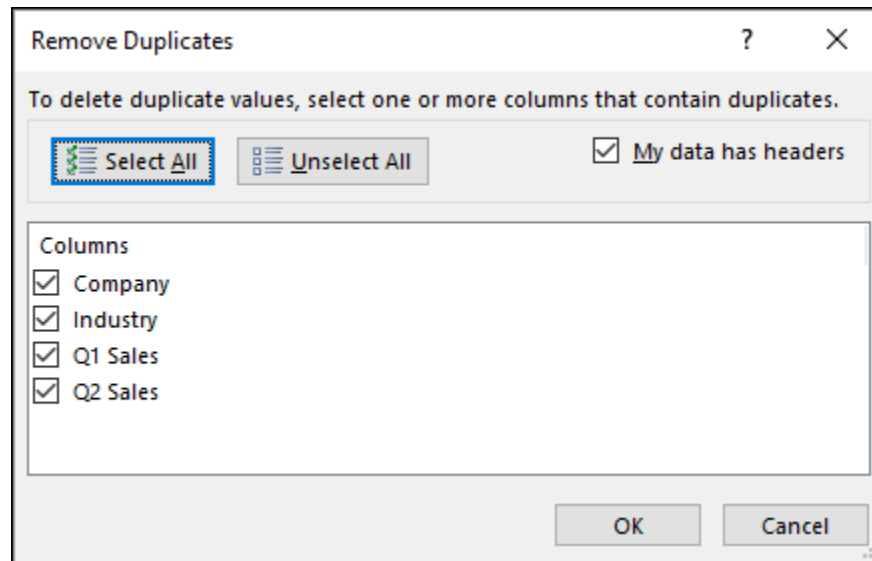
Module Five: Perform Operations with Formulas and Functions

Excel's power lies in its ability to make calculations that help you analyze data. This module explains how to build the formulas and use the functions that can help you make your calculations.

All which is beautiful and noble is the result of reason and calculation.

Charles Baudelaire

Lesson: Summarize Data Using Functions

In this lesson, we'll introduce the following topics:

- Math basics

- Build a formula

- Edit a formula

- Copy a formula

- Relative vs. absolute references

Math Basics of Excel

Arithmetic operators: $+ - * / \% \wedge$

Comparison operators: $= > < \leq \geq \neq$

Text concatenation: **&**

Reference operators: Colon Comma Space

Build a Formula

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1				Inventory										
2														
3	Part No.	# In Stock	Unit Price	Total Value	Reorder level	# left to reorder								
4	QS12578	26	$248.89	$ 6,471.14	20									
5	DSP4543	14	$124.50		10									
6	DS45848	2	$588.00		1									
7	SS12566	18	$224.67		10									
8	SSP2777	12	$118.00		5									
9	QS12585	5	$555.22		5									
10	DS12566	2	$470.99		1									
11	DS12556	8	$430.37		5									
12	KSP4333	4	$585.00		2									
13	QP133	12	$255.23		10									
14	KS36678	3	$685.75		1									
15														
16	Tax rate	10%												
17														

Sheet1 | Sheet2 | Sheet3

Edit a Formula

Copy a Formula

Relative vs Absolute References

Lesson: Perform Basic Functions

In this lesson, we will introduce the following topics:

- Understand Formulas vs. Functions

- Calculate using the status bar

- Perform basic functions

- AutoComplete a function

- Create functions using the Formulas tab

Understanding Formulas vs. Functions

Calculate Using the Status Bar

Perform Basic Functions

▲	A	B	C	D	E	F	G	H	I	J	K	I
1	Household Budget											
2	2013											
3												
4		January	February	March	April	May	June	Total - first six months				
5	Mortgage	890	890	890	890	890	890					
6	Heat	250	250	175	125	80	0					
7	Power	225	225	175	175	150	150	=AVERAGE(B7:G7)				
8								AVERAGE(**number1**, [number2], ...)				
9	Phone	65	75	65	65	75	75					
10	Car Payment	275	275	275	275	275	275					
11	Gas	240	240	360	240	240	240					
12	Insurance	180	180	180	180	180	180					
13	Food	600	600	600	600	600	600					
14												
15												
16												

Sheet1 | Sheet2 | Sheet3 | ⊕

Autocomplete a Function

Create Functions Using the Formulas Tab

Lesson: Perform Conditional Operations Using Functions

In this lesson, we'll introduce the following topics:

- Perform logical operations by using the IF function

- Perform logical operations by using the SUMIF function

- Perform logical operations by using the AVERAGEIF function

- Perform statistical operations by using the COUNTIF function

Perform Logical Operations Using the IF Function
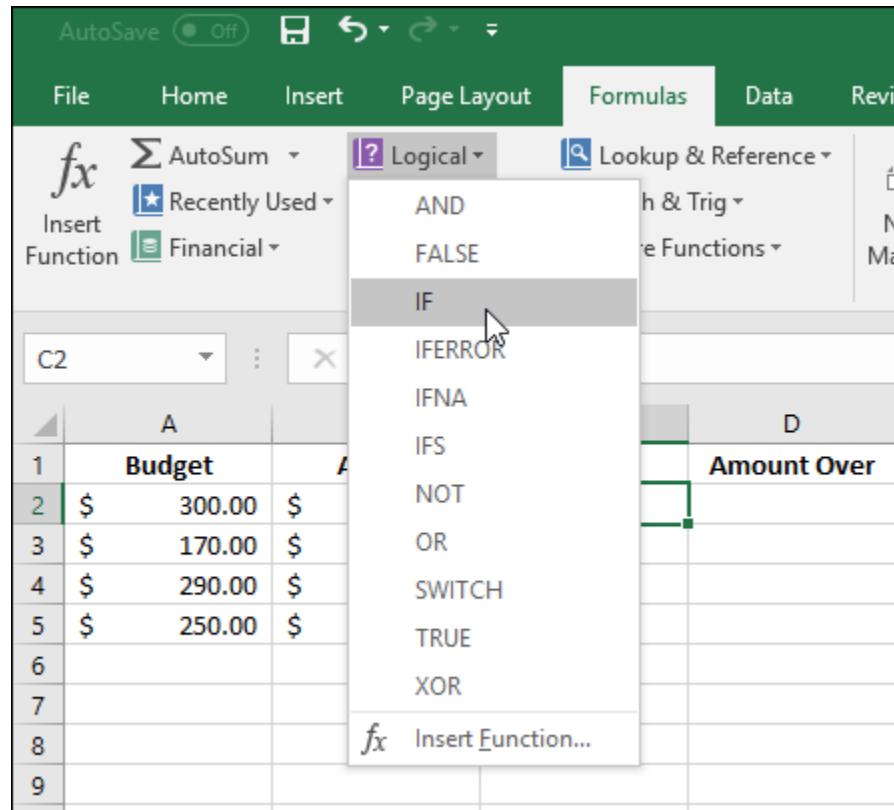
Perform Logical Operations Using the SUMIF Function

Perform Logical Operations Using the AVERAGEIF Function

Perform Logical Operations Using the COUNTIF Function

Lesson: Format Text Using Functions

In this lesson, we'll introduce the following topics:

- Format text by using UPPER, LOWER, and PROPER functions

- Format text by using the CONCATENATE function

- Format text by using RIGHT, LEFT, and MID functions

Format Text Using UPPER, LOWER, and PROPER Functions
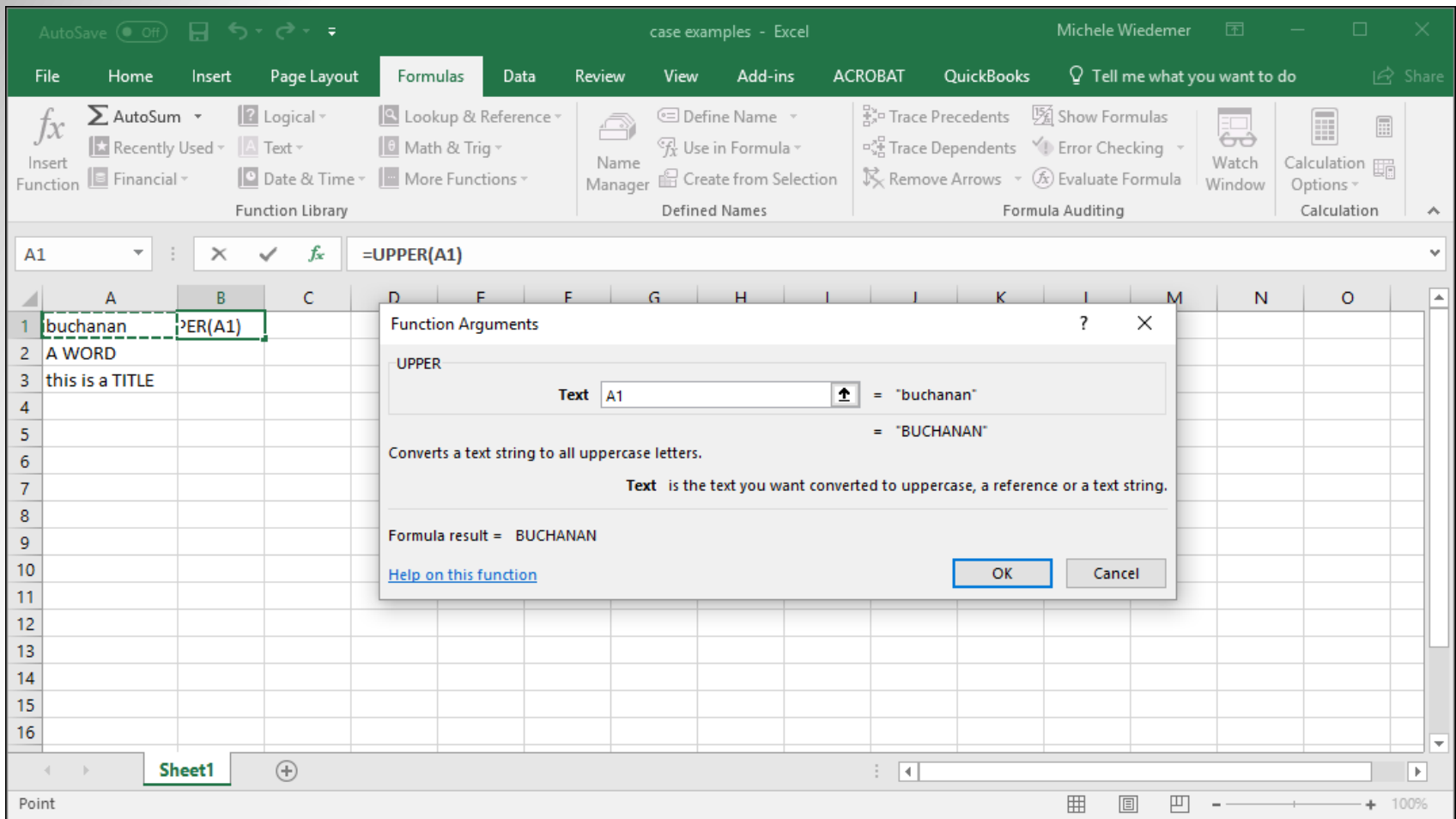
Format Text Using the CONCATENATE Function

Format Text Using RIGHT, LEFT, and MID Functions

Module Six: Create Charts and Objects

Quick Analysis includes a number of formatting, charts, and totals shortcuts to help you visualize your data. Recommended Charts are another way of quickly visualizing your information. This module looks at these shortcuts, as well as creating and formatting your own charts and using and formatting other types of objects.
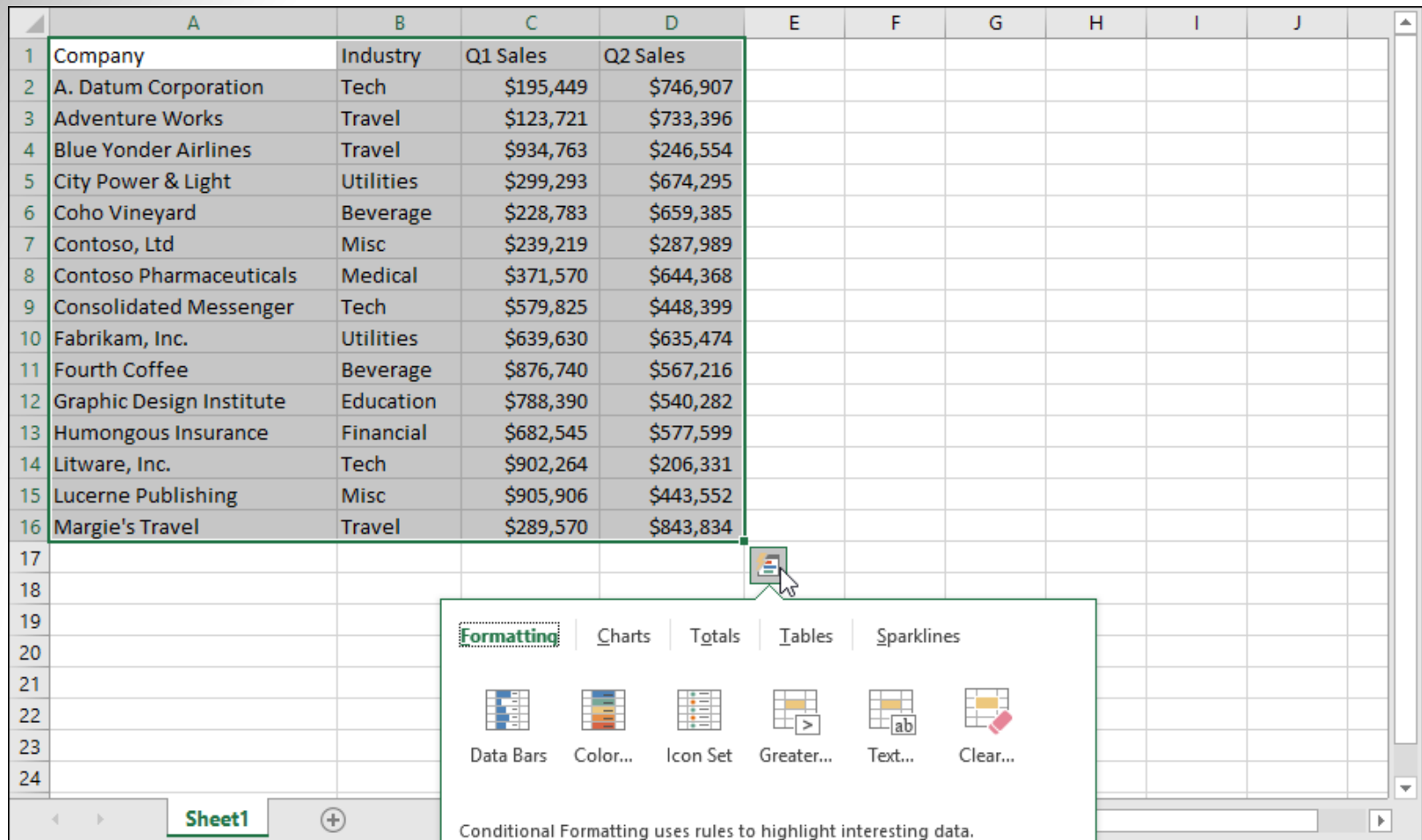
Lesson: Analyze Data using Quick Analysis

In this lesson, we'll introduce the following topics:

- Format with Quick Analysis

- Create charts with Quick Analysis

- Calculate totals with Quick Analysis

Format With Quick Analysis

Create Charts with Quick Analysis

Calculate Totals with Quick Analysis

Lesson: Create Charts

In this lesson, we'll introduce the following topics:

- Use recommended charts

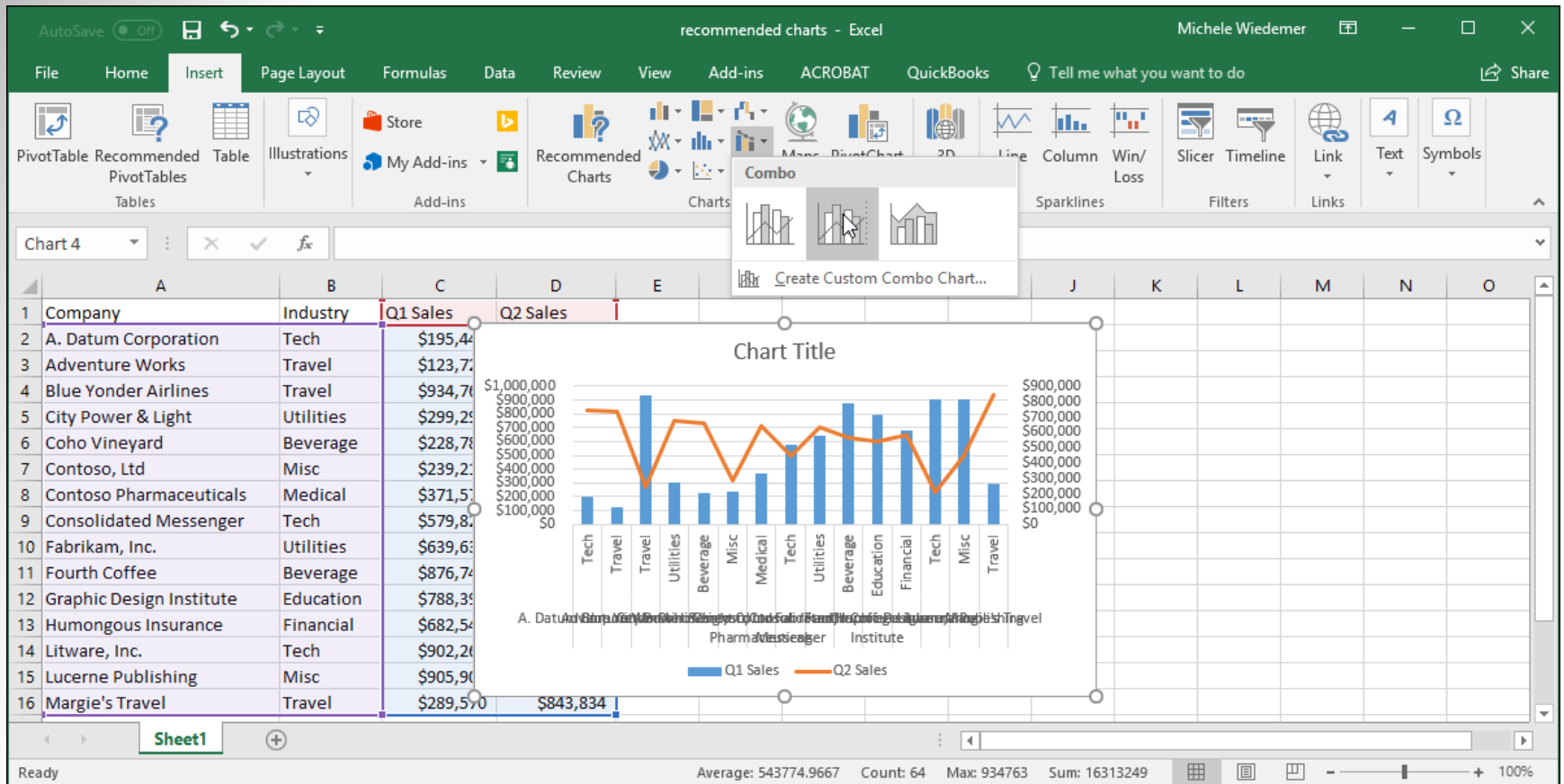- Create a new chart

- Add additional data series
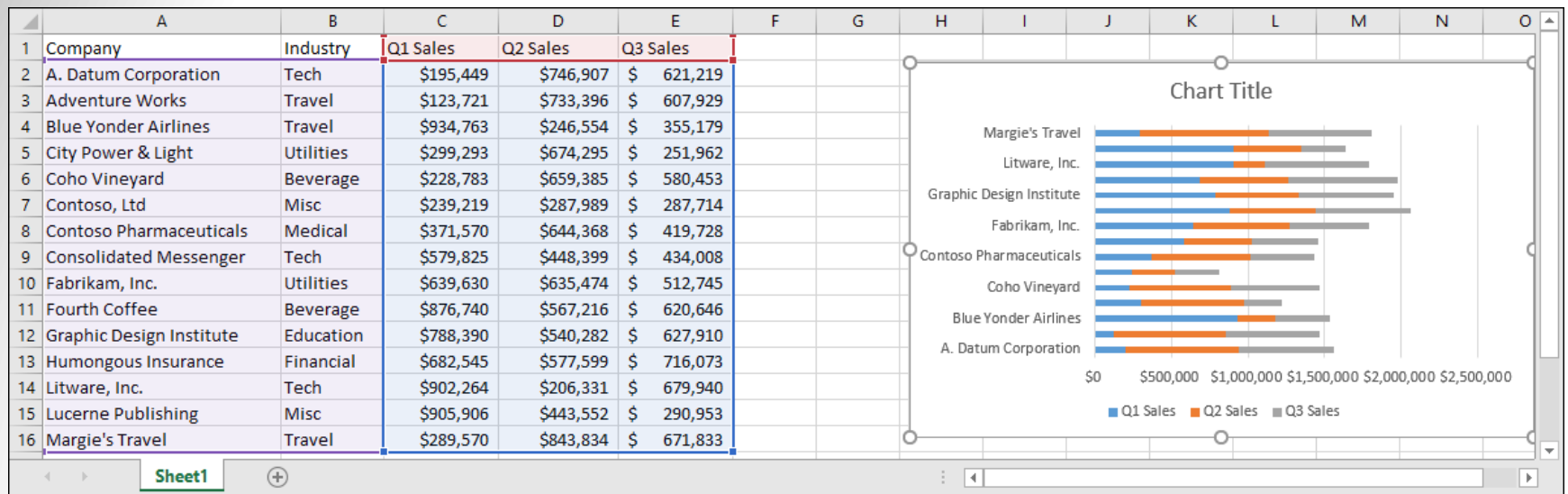
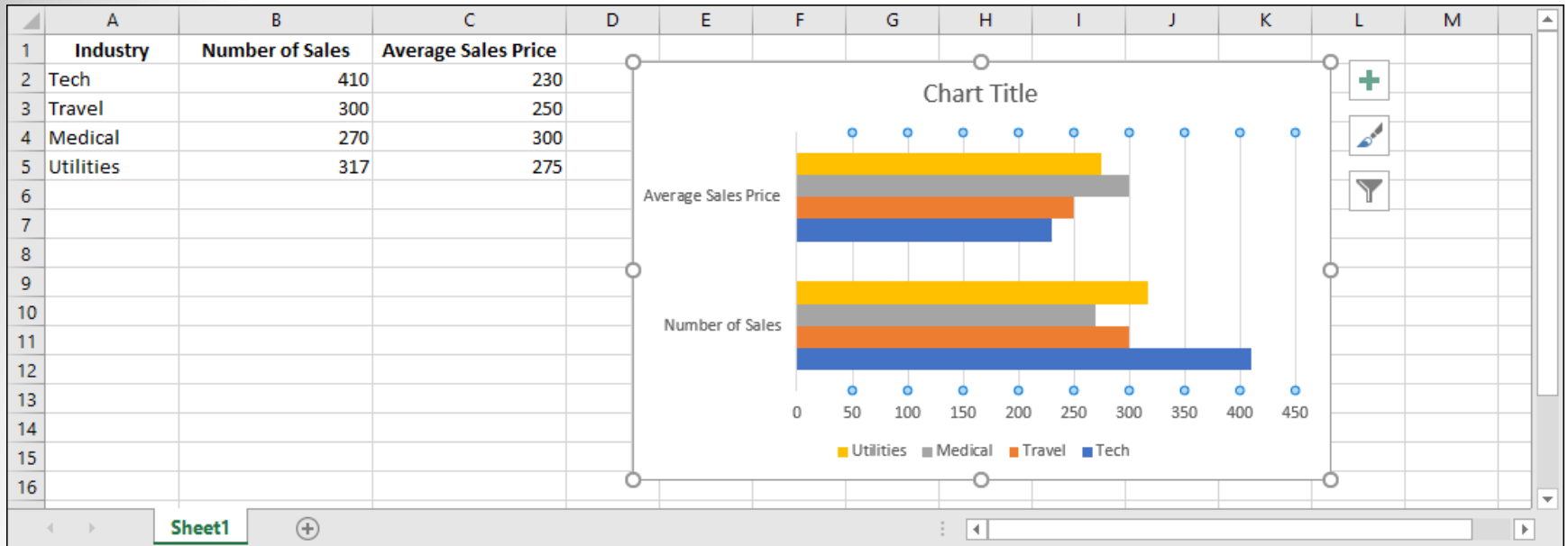- Switch between rows and columns in source data

Use Recommended Charts
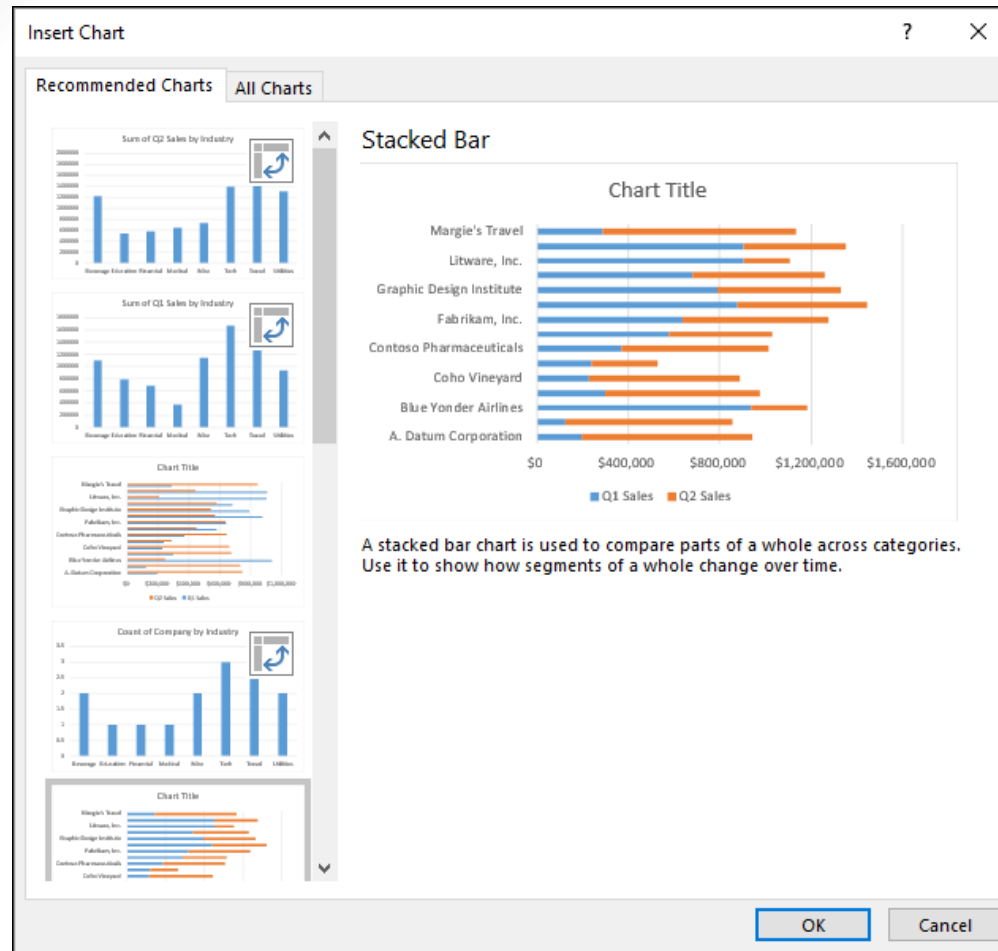
Create a New Chart

Add Additional Data Series

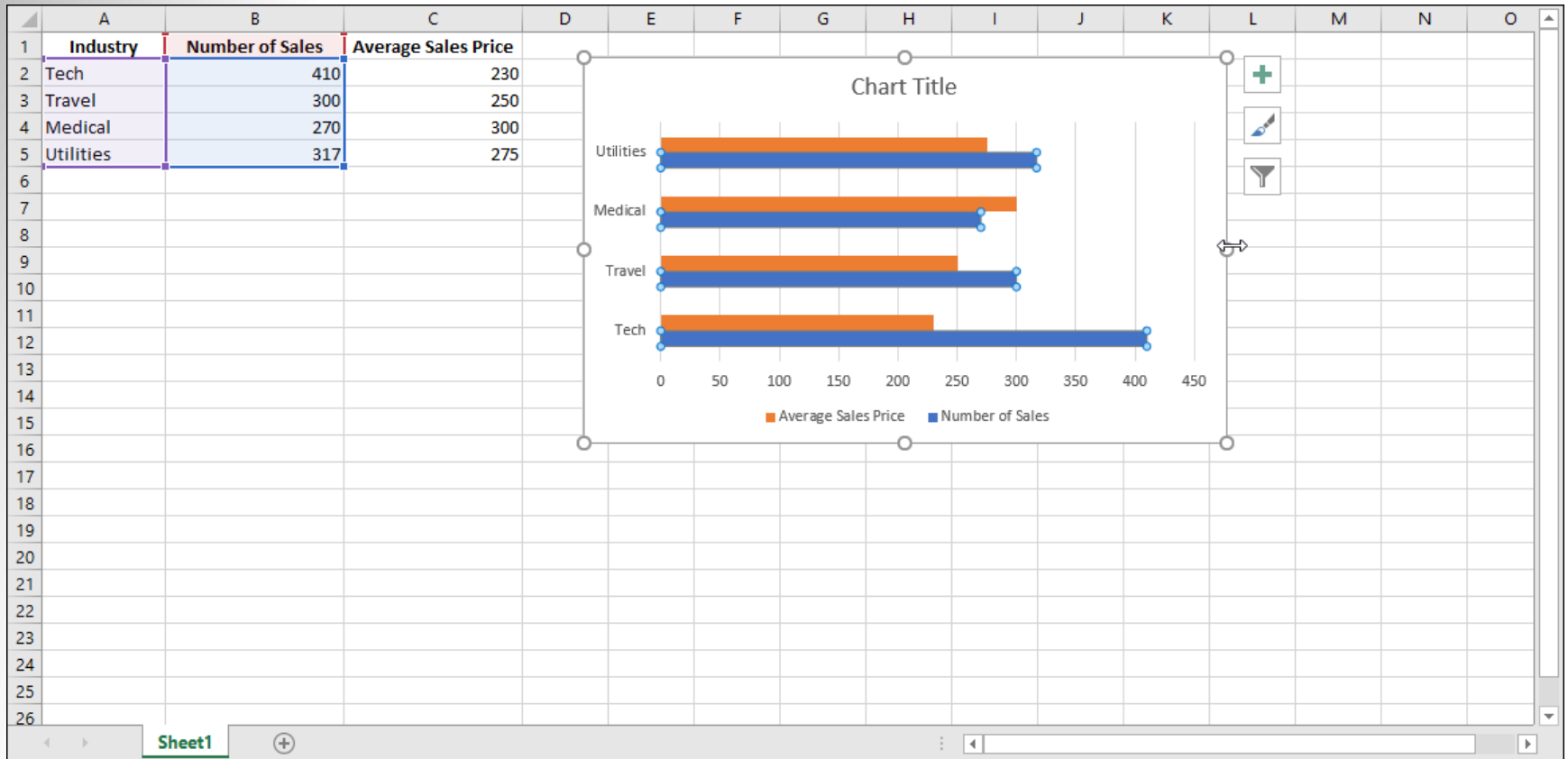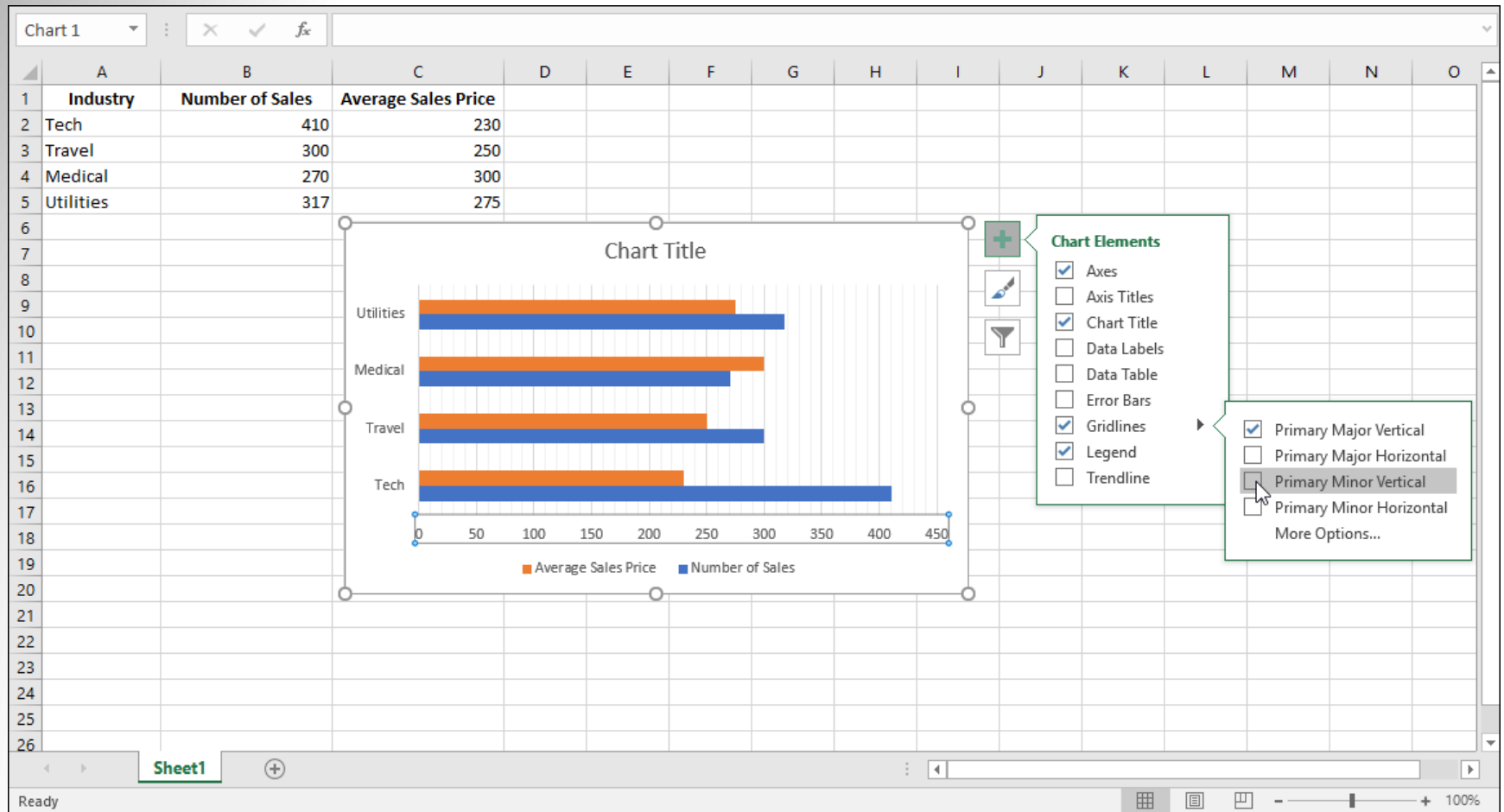# Switch Between Rows and Columns in Source Data

Lesson: Format Charts

In this lesson, we'll introduce the following topics:

- Resize charts
- Add and modify chart elements
- Apply chart layouts and styles
- Move charts to a chart sheet
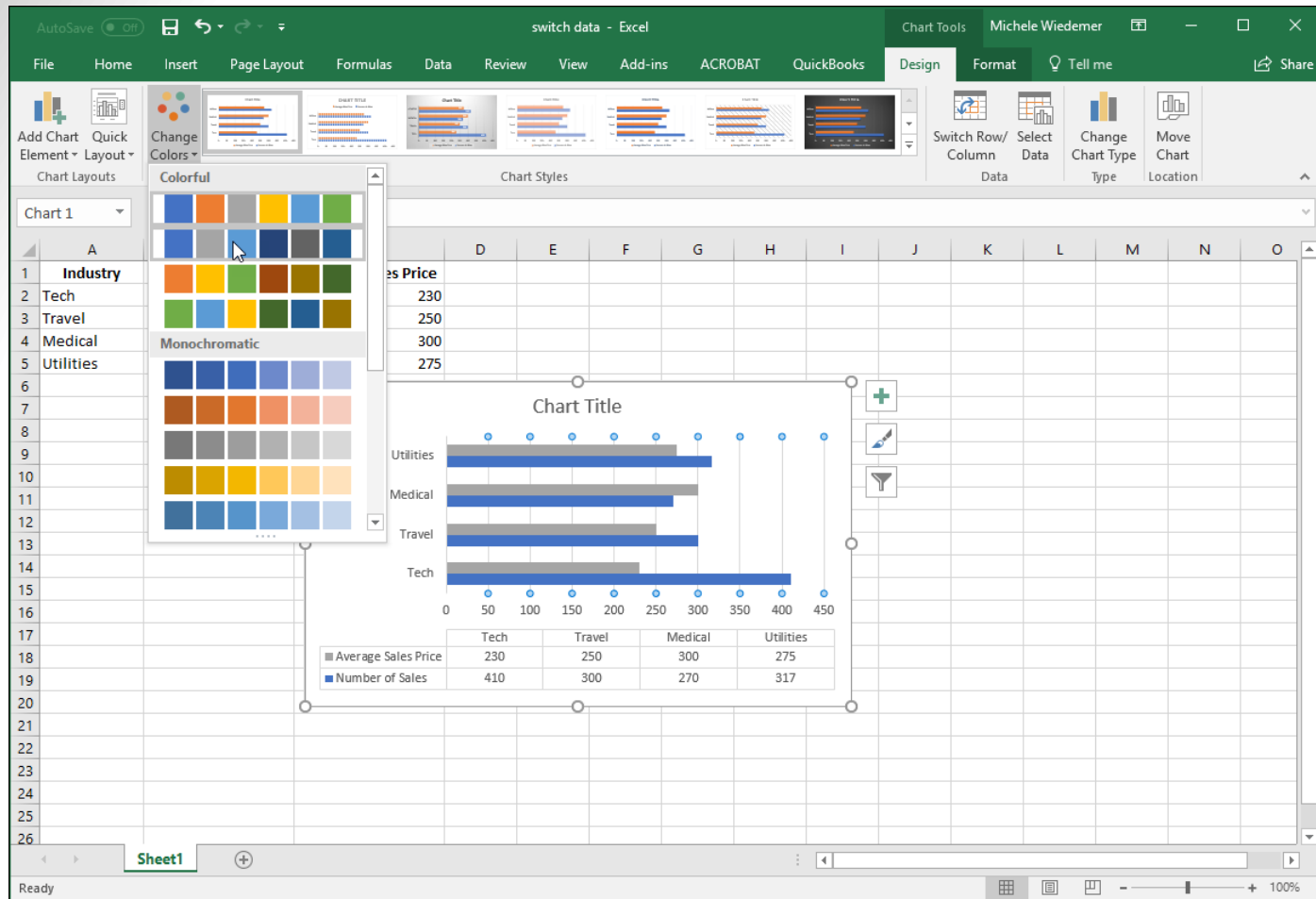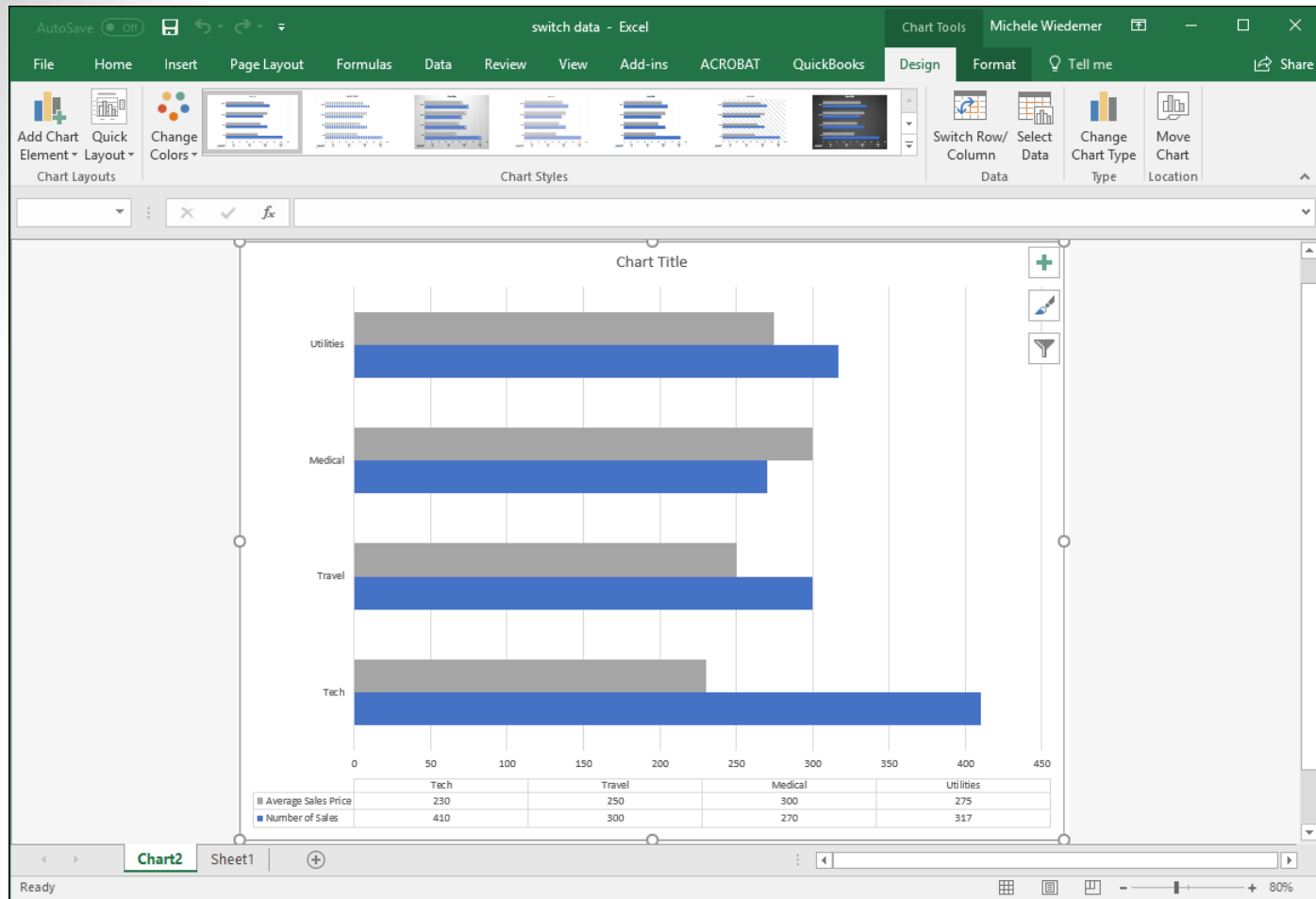- Add data to a chart on a chart sheet

Resize Charts

Add and Modify Chart Elements

Apply Chart Layouts and Styles

Move Charts to a Chart Sheet

Add Data to a Chart on a Chart Sheet

Lesson: Insert and Format Objects

In this lesson, we'll introduce the following topics:

- Insert shapes

- Insert text boxes

- Insert pictures
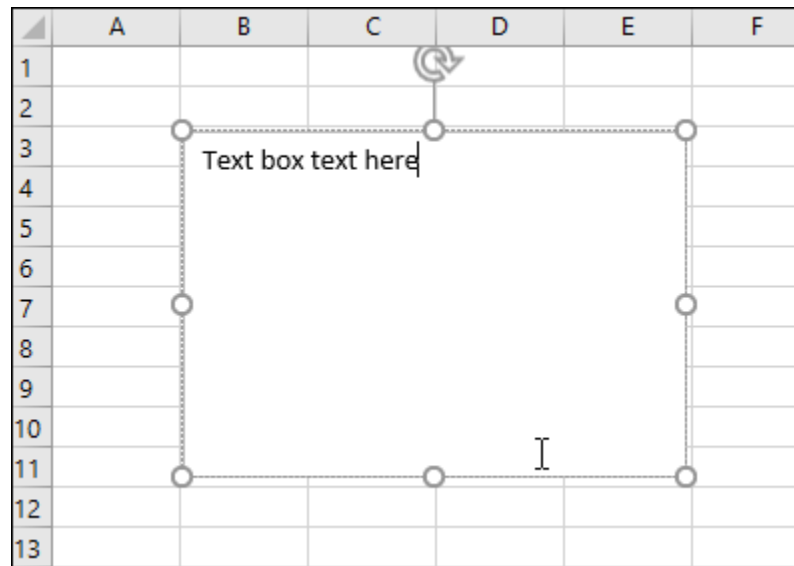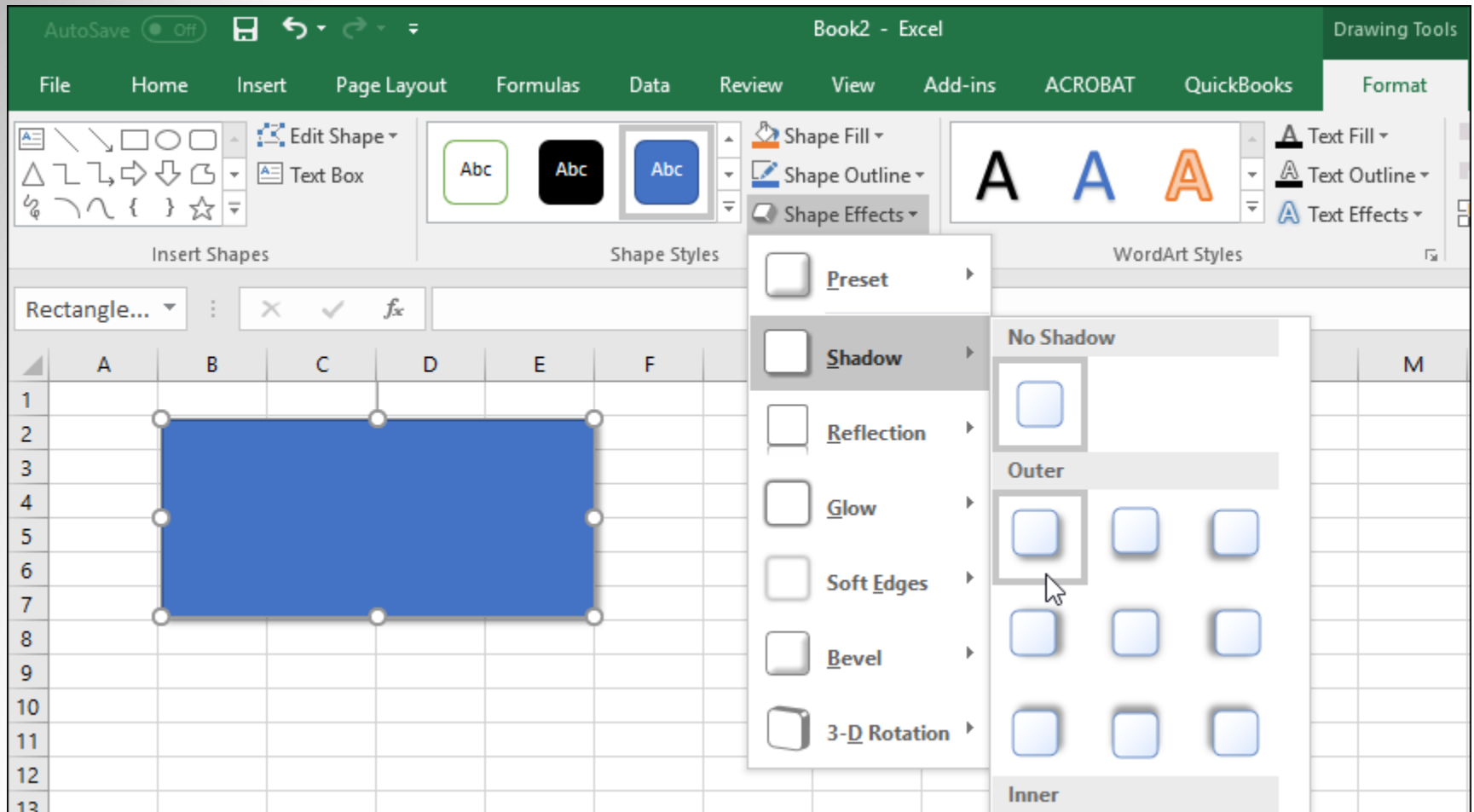
- Format shapes and text boxes
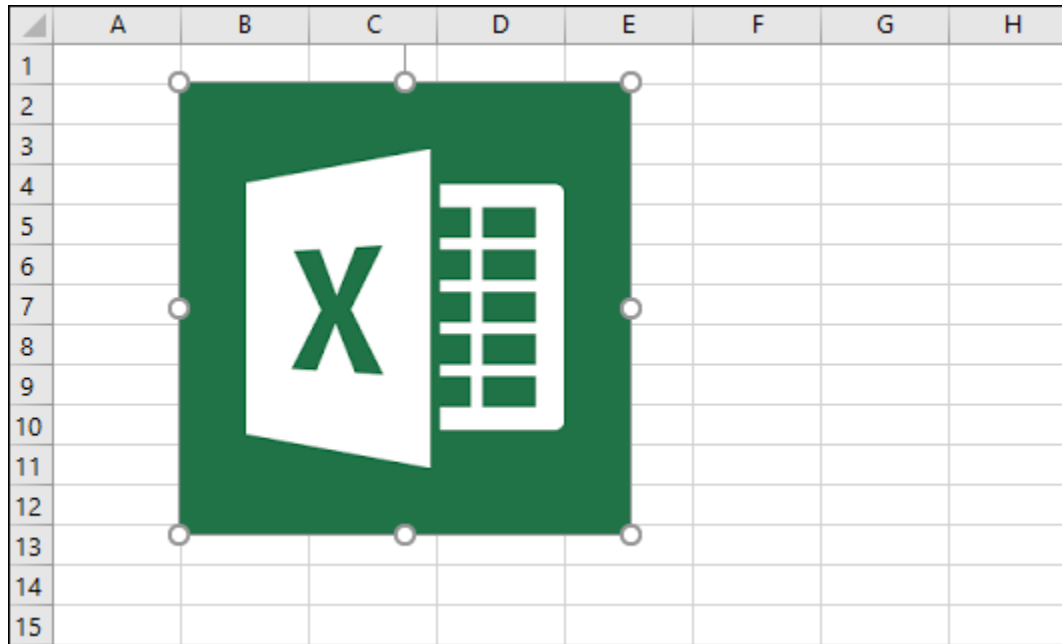
- Add alternative text

Insert Shapes
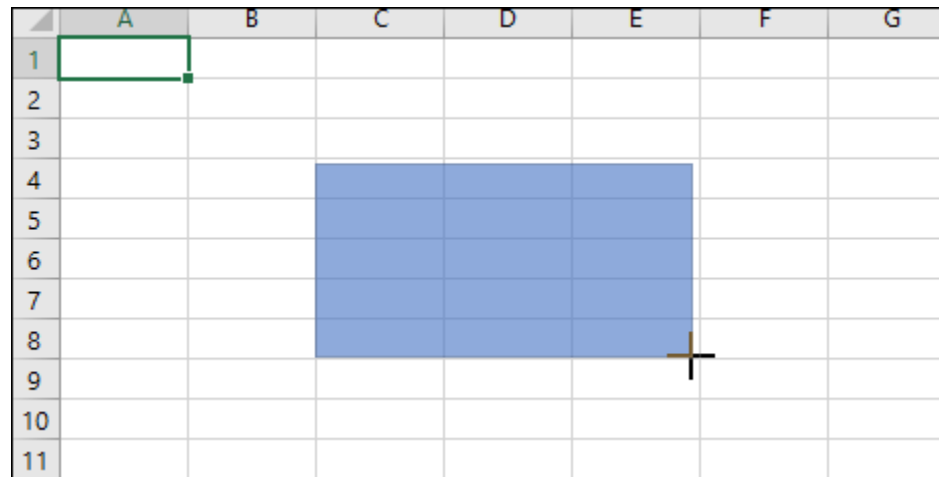
Insert Text Boxes

Format Shapes and Text Boxes

Insert Images

Add Alternative Text to Objects for Accessibility