

# Create a Balanced Scorecard

SharePoint Business Intelligence Content Team

## Quick Step-by-Step

**Microsoft**

# Create a Balanced Scorecard

SharePoint Business Intelligence Content Team

**Summary:** Learn how to create scorecards and strategy maps across various measurements and display them in one dashboard by using PerformancePoint Services in Microsoft SharePoint Server 2010.

**Category:** Quick Step-by-Step

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# Contents

Create a Balanced Scorecard by using Dashboard Designer .....	4
How to create a Balanced Scorecard .....	4
How to open Dashboard Designer.....	5
Create a scorecard for a Balanced Scorecard by using Dashboard Designer .....	6
Define KPIs for a Balanced Scorecard.....	7
Create and configure PerformancePoint data connections.....	9
Member Level.....	10
Create and configure KPIs .....	12
Financial KPIs.....	12
Customer KPIs .....	16
Internal KPIs.....	18
Learning and Growth KPIs .....	22
Create and assemble a scorecard .....	24
Create and configure a strategy map as part of a Balanced Scorecard that you create by using Dashboard Designer .....	26
Create and configure a Visio diagram to use in a Balanced Scorecard .....	26
Create and configure a strategy map report by using Dashboard Designer .....	28
Assemble and publish a Balanced Scorecard by using Dashboard Designer.....	30
Assemble and publish a Balanced Scorecard.....	30

# Create a Balanced Scorecard by using Dashboard Designer

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PerformancePoint Services in Microsoft SharePoint Server 2010 enables you to create and use powerful dashboards. This includes a Balanced Scorecard.

A Balanced Scorecard provides a high-level view of organizational performance at a glance. In PerformancePoint Services, a Balanced Scorecard consists of a dashboard page that contains a scorecard and a corresponding strategy map. The scorecard and the strategy map show performance information for key performance indicators (KPIs) across four main areas or perspectives:

- **Financial perspective** KPIs for productivity, revenue, growth, usage, and overall shareholder value.
- **Customer perspective** KPIs for customer acquisition, customer satisfaction rates, market share, and brand strength.
- **Internal perspective** KPIs for resource usage, inventory turnover rates, order fulfillment, and quality control.
- **Learning and growth perspective** KPIs for employee retention, employee satisfaction, and employee training and development.

An example Balanced Scorecard might resemble the following image:



This example was created by using PerformancePoint Services. The articles in this section describe how to create a similar Balanced Scorecard that you can use in your organization.

## How to create a Balanced Scorecard

To create a Balanced Scorecard by using PerformancePoint Services, you typically use the following process:

1. Identify the KPIs that you want to use. Make a list of those KPIs and the data sources that you must have to create them. For the example Balanced Scorecard, we use a SQL Server Analysis Services cube, a table that is stored in SQL Server, and several fixed values that we enter manually to create the KPIs.
2. Create a scorecard that includes KPIs across the financial, customer, internal, and learning and growth perspectives. To create a scorecard that resembles the example, see [Create a scorecard for a Balanced Scorecard by using Dashboard Designer](#).

3. Create a strategy map that uses a Microsoft Visio diagram to represent the four perspectives described earlier in this article. To create a strategy map that resembles the example, see [Create and configure a strategy map as part of a Balanced Scorecard that you create by using Dashboard Designer](#).
4. Add the scorecard and strategy map to a dashboard page, and publish it to SharePoint Server 2010. For more information, see [Assemble and publish a Balanced Scorecard by using Dashboard Designer](#).

Before you begin, make sure that you open PerformancePoint Dashboard Designer.

## How to open Dashboard Designer

You can open Dashboard Designer by using the Business Intelligence Center.

### To install and open Dashboard Designer

1. Open the Business Intelligence Center site in a Web browser.

 **Tip:**

The Web site address (URL) to the Business Intelligence Center typically takes the form `http://<ServerName>/sites/BICenter`. If you do not know the location of the Business Intelligence Center site, contact a SharePoint administrator.

2. In the Business Intelligence Center, click a section — for example, **Monitor Key Performance**, **Build and Share Reports**, or **Create Dashboards**.

More information about each area is displayed in the center pane.

3. In the center of the page, click a **Start using PerformancePoint Services** link.

The PerformancePoint site template opens.

4. Click **Run Dashboard Designer**.

After you have opened Dashboard Designer at least one time, you can open it from the **Start** menu on your computer. To do that, click **Start**, and then click **All Programs**. Locate **SharePoint**, and then click **PerformancePoint Dashboard Designer**. Alternatively, you can continue to open Dashboard Designer from the Business Intelligence Center.

 **Important:**

Before you begin to create items by using Dashboard Designer, make sure that you have at least Design permissions assigned to you in SharePoint Server. Also make sure that you have at least Read permissions to the data sources that you want to use for the Balanced Scorecard. For more information, contact a SharePoint administrator.

### Other Resources

[Plan, design, and implement a PerformancePoint dashboard](#)

[Business Intelligence Scenarios and Solutions](#)

# Create a scorecard for a Balanced Scorecard by using Dashboard Designer

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A Balanced Scorecard includes a scorecard and a corresponding strategy map to display performance across four main organizational perspectives: financial perspective, customer perspective, internal perspective, and learning and growth perspective.

This article describes how to create and configure an example PerformancePoint scorecard to use as part of a Balanced Scorecard. The scorecard described in this article resembles the following image:

Corporate Scorecard

	Actual	Target	
Financial Perspective			
Increase Shareholder Value			
Productivity	43.2%	35.0%	-23%
Growth	-9.88 %	0.00 %	10%
Customer Perspective			
Customer Satisfaction	8.1	7.5	8%
Market Share	5.0%	10.0%	-50%
Internal Perspective			
Inventory Turnover	20	30	-33%
Resource Usage	73.0%	75.0%	-3%
Order Fulfillment	81.0%	85.0%	-5%
Learning and Growth			
Employee Satisfaction	87.0%	95.0%	-8%
Training and Development	75.0%	90.0%	-17%

## Note:

For the example scorecard, we use a combination of fixed values and sample data from the *Microsoft Contoso BI Demo Dataset for Retail Industry*. To download and install this dataset, go to the [Microsoft Download Center](http://go.microsoft.com/fwlink/p/?LinkId=219170) (<http://go.microsoft.com/fwlink/p/?LinkId=219170>).

When you create a scorecard to use as part of a Balanced Scorecard, you typically use the following process:

1. [Define KPIs for a Balanced Scorecard](#)
2. [Create and configure PerformancePoint data connections](#)
3. [Create and configure KPIs](#)
4. [Create and assemble a scorecard](#)

## Tip:

The KPIs that are described in this article are for informational purposes only to show how you can use PerformancePoint Services to create lots of KPIs that use different data sources and calculations. The KPIs that you use for your organization will likely vary from the examples that we describe in this article. For more information about Balanced Scorecards, see [What is the Balanced Scorecard?](http://go.microsoft.com/fwlink/p/?LinkId=237539) (<http://go.microsoft.com/fwlink/p/?LinkId=237539>).

# Define KPIs for a Balanced Scorecard

You can organize the KPIs in a Balanced Scorecard into four perspectives: financial, customer, internal, and learning and growth.

The following table describes the KPIs that we use in the example scorecard.

KPI	Description	Data source
Financial perspective	<p>Financial Perspective KPIs show performance for metrics such as revenue, growth, productivity, and other metrics related to increasing shareholder value.</p> <p>In the example scorecard, the Financial Perspective KPI shows overall performance for the Increase Shareholder Value, Productivity, and Growth KPIs.</p>	<p>None</p> <p>This KPI is an objective KPI that shows information based on the KPIs that are nested underneath it.</p>
Increase Shareholder Value	<p>The Increase Shareholder Value KPI shows overall performance for the Productivity and Growth KPIs.</p>	<p>None</p> <p>This KPI is an objective KPI that shows information based on the KPIs that are nested underneath it.</p>
Productivity	<p>The Productivity KPI shows performance as measured by calculating the cost of sales as a percentage of total sales.</p>	<p>Sales data</p> <p>This KPI uses data in the Sales cube of the ContosoRetailDW database.</p>
Growth	<p>The Growth KPI shows performance as measured by growth in sales for the current year compared to growth in sales for the previous year.</p>	<p>Sales data</p> <p>This KPI uses data in the Sales cube of the ContosoRetailDW database. This KPI can also use Time Intelligence functionality to show information for a particular period of time.</p>
Customer perspective	<p>Customer perspective KPIs show performance for metrics such as customer satisfaction, customer retention, brand strength, and market share.</p> <p>In the example scorecard, the customer perspective KPI shows overall performance for the Customer Satisfaction and Market Share KPIs.</p>	<p>None</p> <p>This KPI is an objective KPI that shows information based on the KPIs that are nested underneath it.</p>
Customer Satisfaction	<p>The Customer Satisfaction KPI shows performance as</p>	<p>External data that is manually</p>

KPI	Description	Data source
	measured by overall customer satisfaction.	entered This KPI uses fixed values that we specify.
Market Share	The Market Share KPI shows performance as measured by current market share.	External data that is manually entered This KPI uses fixed values that we specify.
Internal perspective	Internal KPIs show performance for metrics such as operations management, order fulfillment, and quality control.  In the example scorecard, the Internal perspective KPI shows overall performance for the Inventory Turnover and Resource Usage KPIs.	None This KPI is an objective KPI that shows information based on the KPIs that are nested underneath it.
Inventory Turnover	The Inventory Turnover KPI shows performance as measured by calculating the number of inventory cycles that occurred during the past year.	Sales and Inventory data This KPI uses data in the Sales cube and in the Inventory fact table in the ContosoRetailDW database. This KPI also uses Calculated Metrics and Time Intelligence functionality
Resource Usage	The Resource Usage KPI shows performance as measured by the percentage of time sales representatives are engaged in selling activities.	External data that is manually entered This KPI uses fixed values that we specify.
Order Fulfillment	The Order Fulfillment KPI shows performance as measured by dividing current inventory by units sold and comparing that value to a target value.	External data that is manually entered This KPI uses fixed values that we specify.
Learning and growth perspective	Learning and growth perspective KPIs show performance for metrics such as employee satisfaction, employee retention, and employee training and development.  In the example scorecard, the Learning and growth perspective KPI shows overall performance for the Employee Satisfaction and Training and Development	None This KPI is an objective KPI that shows information based on the KPIs that are nested underneath it.

KPI	Description	Data source
	KPIs.	
Employee Satisfaction	The Employee Satisfaction KPI shows performance as measured by overall employee satisfaction.	External data that is manually entered This KPI uses fixed values that we specify.
Training and Development	The Training and Development KPI shows performance as measured by the percentage of employees who have completed mandatory and recommended training programs.	External data that is manually entered This KPI uses fixed values that we specify.

After defining the KPIs to use for the scorecard, the next step is to create the PerformancePoint data connections that are needed for some of those KPIs.

 **Important:**

Before you begin to perform the tasks that are described in this article, verify that the following prerequisites are met:

- You have at least Design permissions assigned to you in SharePoint Server.
- You have at least Read permissions assigned in the SQL Server databases that are used for the scorecard.
- Dashboard users have at least Read permissions assigned in SharePoint Server and in the SQL Server databases that are used.

For more information, see [Authorization and permissions in PerformancePoint Services \(SharePoint Server 2010\)](#).

## Create and configure PerformancePoint data connections

This section describes how to create PerformancePoint data connections to data sources that are used for some of the example KPIs. Often, organizations will use different data sources, such as tables that are stored in Excel Services and SQL Server, cubes that are stored in SQL Server Analysis Services, and fixed values that dashboard authors enter manually.

 **Important:**

The procedures in this section assume that PerformancePoint Services is configured by using the Unattended Service Account. If your organization is using another security model, the steps that you follow to create a connection to a data source might vary. For more information, see [Create data connections \(PerformancePoint Services\)](#) and [Configure PerformancePoint Services](#).

First, create a connection to an Analysis Services data cube. The following procedure describes how to create a connection to the Sales cube in the ContosoRetailDW database.

## To create a data connection to the Sales cube in the ContosoRetailDW database in Analysis Services

1. In the **Workspace Browser**, click **Data Connections**.
2. On the **Create** tab, click **Data Source**.  
The Select a Data Source Template dialog box appears.
3. In the **Category** pane, select **All**, in the **Template** pane, click Analysis Services, and then click **OK**.  
A new data source opens for editing in the center pane.
4. In the center pane, on the **Editor** tab, do the following:
  - a) In the **Connection Settings** section, specify the name of the server where the Analysis Services data is stored.  
The **Database** list is populated.
  - b) In the **Database** list, select **ContosoRetailDW**.  
The **Cube** list is populated.
  - c) In the **Cube** list, select **ContosoRetailDW**.
  - d) Click **Test Data Source**.  
A **Test Connection** dialog box appears to confirm that you have successfully created the data connection.
  - e) After you have tested the connection, close the **Test Connection** dialog box.
5. In the center pane, click the **Time** tab, and then perform the steps in the following list to configure the data connection to work with Time Intelligence. Doing this configuration enables you to add a Time Intelligence filter to at least one KPI as described later in this article. For more information about Time Intelligence, see [PerformancePoint Time Intelligence quick reference](#).
  - a) In the **Reference Data Mapping** section, in the **Time Dimension** list, select **Date.Calendar YQMD**.  
This is a calendar-year time dimension that contains year, quarter, month, and day hierarchies.
  - b) In the **Reference Member** section, in the **Choose a date to begin the year for the selected time dimension** box, type **2007-01-01**.  
This value corresponds to the first day of the first year of data in the cube.
  - c) In the **Hierarchy** level list, select **Day**.  
This enables you to use Time Intelligence formulas to display information at the day level.
  - d) In the **Reference Date** section, type **1/1/2007**.
  - e) In the **Time Member Associations** section, use the lists in the **Time Aggregation** column to specify the settings that are listed in the following table:

<b>Member Level</b>	<b>Time Aggregation</b>
Calendar Year	Year
Calendar Quarter	Quarter
Calendar Month	Month

<b>Member Level</b>	<b>Time Aggregation</b>
Date	Day

This helps align the dimension members with the correct hierarchies in the time dimension.

6. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type a name such as **Contoso Retail Sales** for the data connection.
  - Optionally, in the **Description** box, type a description for the data source.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the data source.
7. In the **Workspace Browser**, right-click the data source, and then click **Save**.

The next step is to create a data connection to a table that is stored in SQL Server. This is a second data source that you will use for at least one KPI later in this article.

### To create a data connection to the Inventory fact table in SQL Server

1. In the **Workspace Browser**, click **Data Connections**.
2. On the **Create** tab, click **Data Source**.  
The **Select a Data Source Template** dialog box appears.
3. In the **Category** pane, select **All**, in the **Template** pane, click **SQL Server Table**, and then click **OK**.  
A new data source opens for editing in the center pane.
4. In the center pane, on the **Editor** tab, do the following:
  - a) In the **Connection Settings** section, specify the name of the server where the data is stored.  
The **Database** list is populated.
  - b) In the **Database** list, select the **ContosoRetailDW**.  
The **Table** list is populated.
  - c) In the **Table** list, select **dbo.FactInventory**.
  - d) Click **Test Data Source**.  
A **Test Connection** dialog box appears to confirm that you have successfully created the data connection.
  - e) Test the connection, and then close the **Test Connection** dialog box.
5. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type a name such as **Contoso Inventory** for the data connection.
  - Optionally, in the **Description** box, type a description for the data source.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the data source.
6. In the **Workspace Browser**, right-click the data source, and then click **Save**.  
After creating and configuring the data sources, the next step is to create KPIs.

# Create and configure KPIs

This section describes how to create KPIs that resemble those that are used in the example scorecard and that are organized into the following four perspectives:

- [Financial KPIs](#)
- [Customer KPIs](#)
- [Internal KPIs](#)
- [Learning and Growth KPIs](#)

## Note:

In this article, we describe how to create lots of KPIs. Some KPIs use different data sources, Calculated Metrics, and Time Intelligence, whereas other KPIs use fixed values.

PerformancePoint Services enables you to easily create simple or sophisticated KPIs that use the same or different data sources. You can create the KPIs that we describe in this article, or you can create other KPIs to use in a scorecard.

## Financial KPIs

In this section, we describe how to create the following four example KPIs:

- Financial Perspective
- Increase Shareholder Value
- Productivity
- Growth

We begin by creating the Financial Perspective KPI. This KPI is an objective KPI that does not require a data source or specified target and actual values.

### To create the Financial Perspective KPI

1. In Dashboard Designer, in the **Workspace Browser**, click **PerformancePoint Content**.
2. On the **Create** tab, click **KPI**.
3. In the **Select a KPI Template** dialog box, click **Objective**, and then click **OK**.  
The KPI opens for editing with the **Editor** tab open in the center pane.
4. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type **Financial Perspective**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for overall financial performance.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
5. In the **Workspace Browser**, right-click the Financial Perspective KPI, and then click **Save**.

The next step is to create the Increase Shareholder Value KPI. Because this KPI is also an objective KPI, we can create a copy of the Financial Perspective KPI, and then change its name and other details.

### To create the Increase Shareholder Value KPI

1. In the **Workspace Browser**, right-click the Financial Perspective KPI, and then click **Copy**.
2. In the **Workspace Browser**, point to a folder such as **PerformancePoint Content** or point to a display folder in the **PerformancePoint Content** section, right-click to open a shortcut menu, and then click **Paste**.  
A copy of the Financial Perspective KPI opens for editing, with the **Editor** tab open in the center pane.
3. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type **Increase Shareholder Value**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for managing shareholder value.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
4. In the **Workspace Browser**, right-click the Increase Shareholder Value KPI, and then click **Save**.  
After you have created two objective KPIs for the Financial Perspective, the next step is to create the Productivity KPI.

In the following example, we measure productivity by calculating expense (cost of sales) as a percentage of revenue (total sales). We create a KPI that uses Calculated Metrics by using the Sales cube in the ContosoRetailDW sample database.

## To create the Productivity KPI

1. On the **Create** tab, click **KPI**.  
The **Select a KPI Template** dialog box appears.
2. Click **Blank KPI**, and then click **OK**.  
The new KPI opens for editing with the **Editor** tab open in the center pane.
3. Configure the **Actual** value for this KPI by following these steps:
  - a) In the **Actual** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed values)**.  
The **Fixed Values Data Source Mapping** dialog box appears.
  - b) Click the **Change Source** button to open the **Select a Data Source** dialog box.
  - c) Select the **Calculated Metric** tab, in the **Templates** section, click **Blank Calculation**, and then click **OK**.  
The Calculated Metrics Data Source Mapping dialog box appears.
  - d) In the **Name** box, select the text that says **Value1**, and type **SalesCost**.
  - e) In the **Source** column for the **SalesCost** row, click the blue hypertext that says **1 (Fixed Values)**.  
The **Fixed Values Data Source Mapping** dialog box appears.
  - f) Click **Change Source** to open the **Select a Data Source** dialog box.
  - g) Select the Contoso Retail Sales data source, and then click **OK**.  
The **Dimensional Data Source Mapping** dialog box appears.

- h) In the **Select a measure** list, select **Sales Total Cost**, and then click **OK** to close the **Dimensional Data Source Mapping** dialog box and return to the **Calculated Metrics Data Source Mapping** dialog box.
- i) In the **Calculated Metrics Data Source Mapping** dialog box, in the **Name** box, select the text that says **Value2**, and then type **TotalSales**.
- j) In the **Source** column for the **TotalSales** row, click the blue hypertext that says **1 (Fixed Values)**.

The **Fixed Values Data Source Mapping** dialog box appears.

- k) Click **Change Source** to open the **Select a Data Source** dialog box.
- l) Select the Contoso Retail Sales data source, and then click **OK**.

The **Dimensional Data Source Mapping** dialog box appears.

- m) In the **Select a measure** list, select **Sales Amount**, and then click **OK** to close the **Dimensional Data Source Mapping** dialog box and return to the **Calculated Metrics Data Source Mapping** dialog box.
- n) In the **Calculated Metrics Data Source Mapping** dialog box, in the **Formula** box, type the formula **SalesCost/TotalSales**, and then click **OK**.

4. Configure the Target value for this KPI by following these steps:

- a) In the **Target** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed values)**.

The **Fixed Values Data Source Mapping** dialog box appears.

- b) In the **Value** box, type **.35**.

This is a fixed value that represents 35%, a threshold for cost of sales. In this example, good performance means the cost of sales is less than 35% of the total sales.

- c) Click **OK** to close the **Fixed Values Data Source Mapping** dialog box.

5. In the **Actual** row, in the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.

6. In the **Format** list, select **Percentage**, and then click **OK**.

7. Repeat steps 5 and 6 for the **Target** row.

8. In the **Thresholds** section, click **Set Scoring Pattern and Indicator** to open the **Edit Banding Settings** dialog box.

9. In the **Scoring pattern** list, select **Decreasing is Better**, and then click **Next**.

10. On the **Select an Indicator** page, click **Next**.

11. On the **Specify the worst value** page, type **1**, and then click **Finish**.

This corresponds to 100%, which would mean that in a worst-case scenario, the cost of sales would equal the total sales.

12. In the center pane, click the **Properties** tab, and then specify the following settings:

- In the **Name** box, type **Productivity**.
- Optionally, in the **Description** box, type a description for the KPI.
- Optionally, in the **Person Responsible** box, type the name of the person who is responsible for productivity.

- Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.

13. In the **Workspace Browser**, right-click the Productivity KPI, and then click **Save**.

After creating the Productivity KPI, the next step is to create and configure the Growth KPI. In this example, growth is measured by comparing growth in sales for the current year to growth in sales for the previous year. The Growth KPI uses Time Intelligence functionality.

## To create the Growth KPI

1. On the **Create** tab, click **KPI**.

The Select a KPI Template dialog box appears.

2. Click **Blank KPI**, and then click **OK**.

The new KPI opens for editing with the **Editor** tab open in the center pane.

3. Configure the Actual value for the KPI by following these steps:

- a) In the **Actual** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
- b) In the **Fixed Values Data Source Mapping** dialog box, click **Change Source**.
- c) Select the Contoso Retail Sales data source, and then click **OK**.  
The **Dimensional Data Source Mapping** dialog box appears.
- d) In the **Select a measure** list, select **Sales Amount Growth (Calendar Year)**.
- e) In the **Select a dimension** section, click **New Time Intelligence Filter**.
- f) In the **Time Formula Editor** dialog box, in the **Time Formula** pane, type **Year-3**, and then click **OK**.

### **Note:**

Use **Year-3** here because the Contoso Retail Sales database contains data for the calendar years 2007, 2008, and 2009 only. This **Year-3** value causes the scorecard to display information as of 2009 when the actual calendar year is 2012.

4. Configure the Target value for the KPI by following these steps:

- a) In the **Target** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
- b) In the **Fixed Values Data Source Mapping** dialog box, click **Change Source**.
- c) Select the Contoso Retail Sales data source, and then click **OK**.  
The **Dimensional Data Source Mapping** dialog box appears.
- d) In the **Select a measure** list, select **Sales Amount Growth (Calendar Year)**.
- e) In the **Select a dimension** section, click **New Time Intelligence Filter**.
- f) In the **Time Formula Editor** dialog box, in the **Time Formula** pane, type **Year-4**, and then click **OK**.

### **Note:**

Use **Year-4** here because the Contoso Retail Sales database contains data for the calendar years 2007, 2008, and 2009 only. The **Year-4** value causes the scorecard to display information as of 2008 when the actual calendar year is 2012.

- g) Click **OK** to close the **Dimensional Data Source Mapping** dialog box.

5. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type **Growth**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for sales growth.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
6. In the **Workspace Browser**, right-click the Growth KPI, and then click **Save**.

After creating the KPIs for the Financial Perspective, the next step is to create KPIs for the Customer Perspective.

## Customer KPIs

This section describes how to create the following three KPIs:

- Customer Perspective
- Customer Satisfaction
- Market Share

Begin by creating the Customer Perspective KPI. Because this is an objective KPI that resembles the Financial Perspective KPI, you can create a copy of the Financial Perspective KPI, and then change its name and other details.

### To create the Customer Perspective KPI

1. In the **Workspace Browser**, right-click the Financial Perspective KPI, and then click **Copy**.
2. In the **Workspace Browser**, point to a folder such as **PerformancePoint Content** (or to a display folder in the **PerformancePoint Content** section), right-click to open a shortcut menu, and then click **Paste**.

A copy of the Financial Perspective KPI opens for editing, with the **Editor** tab open in the center pane.

3. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type **Customer Perspective**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for maintaining a healthy customer perspective.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
4. In the **Workspace Browser**, right-click the Customer Perspective KPI, and then click **Save**.

The next step is to create the Customer Satisfaction KPI. Different organizations measure customer satisfaction in different ways, often using complex formulas that are outside the scope of the Balanced Scorecard. For this KPI, assume that customer satisfaction data comes from a third-party application, and use fixed values to configure the Customer Satisfaction KPI.

### To create the Customer Satisfaction KPI

1. On the **Create** tab, click **KPI**.

The **Select a KPI Template** dialog box appears.

2. Click **Blank KPI**, and then click **OK**.

The new KPI opens for editing with the **Editor** tab open in the center pane.

3. Configure the Actual value for the KPI by following these steps:
  - a) In the **Actual** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
  - b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **8.1**, and then click **OK**.
4. Configure the Target value for the KPI by following these steps:
  - a) In the **Target** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
  - b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **7.5**, and then click **OK**.
5. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type **Customer Satisfaction**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for guaranteeing customer satisfaction.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
6. In the **Workspace Browser**, right-click the Customer Satisfaction KPI, and then click **Save**.

After creating a Customer Satisfaction KPI, the next step is to create the Market Share KPI. Similar to the Customer Satisfaction KPI, assume that the data for this KPI comes from a third-party application, and use fixed values to configure the Market Share KPI.

## To create the Market Share KPI

1. On the **Create** tab, click **KPI**.

The **Select a KPI Template** dialog box appears.

2. Click **Blank KPI**, and then click **OK**.

The new KPI opens for editing with the **Editor** tab open in the center pane.

3. Configure the Actual value for the KPI by following these steps:
  - a) In the **Actual** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
  - b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **.05**, and then click **OK**.
  - c) In the **Actual** row, in the **Number Format** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - d) In the **Format** list, select **Percentage**, and then click **OK**.
4. Configure the Target value for the KPI by following these steps:
  - a) In the **Target** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.

- b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **.10**, and then click **OK**.
  - c) In the **Target** row, in the **Number Format** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - d) In the **Format** list, select **Percentage**, and then click **OK**.
5. In the center pane, click the **Properties** tab, and then specify the following settings:
- In the **Name** box, type **Market Share**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for increasing market share.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
6. In the **Workspace Browser**, right-click the Market Share KPI, and then click **Save**.  
After creating KPIs for the Customer perspective, the next step is to create KPIs for the Internal perspective.

## Internal KPIs

This section describes how to create the following four KPIs:

- Internal Perspective
- Inventory Turnover
- Resource Usage
- Order Fulfillment

Begin by creating the Internal Perspective objective KPI. This KPI does not require a data source or specific actual and target values.

### To create the Internal Perspective KPI

1. In Dashboard Designer, in the **Workspace Browser**, click **PerformancePoint Content**.
2. On the **Create** tab, click **KPI**.
3. In the **Select a KPI Template** dialog box, click **Objective**, and then click **OK**.  
The KPI opens for editing with the **Editor** tab open in the center pane.
4. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type **Internal Perspective**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for overall financial performance.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
5. In the **Workspace Browser**, right-click the Internal Perspective KPI, and then click **Save**.  
After creating the Internal Perspective KPI, the next step is to create the Inventory Turnover KPI. Inventory turnover is typically calculated by dividing the total cost of goods sold by the average dollar value of inventory available. To create the Inventory Turnover KPI, this example uses Calculated

Metrics by using two data sources and Time Intelligence for the Actual value, and a fixed value for the Target value.

## To create the Inventory Turnover KPI

1. On the **Create** tab, click **KPI**.
2. In the **Select a KPI Template** dialog box, click **Blank KPI**, and then click **OK**.  
The KPI opens for editing with the **Editor** tab open in the center pane.
3. Configure the **Actual** value for this KPI by following these steps:
  - a) In the **Actual** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed values)**.  
The **Fixed Values Data Source Mapping** dialog box appears.
  - b) Click the **Change Source** button to open the **Select a Data Source** dialog box.
  - c) Select the **Calculated Metric** tab, in the **Templates** section, click **Blank Calculation**, and then click **OK**.  
The **Calculated Metrics Data Source Mapping** dialog box appears.
  - d) In the **Name** box, select the text that says **Value1**, and then type **CostOfSales**.
  - e) In the **Source** column for the **CostOfSales** row, click the blue hypertext that says **1 (Fixed Values)**.  
The **Fixed Values Data Source Mapping** dialog box appears.
  - f) Click **Change Source** to open the **Select a Data Source** dialog box.
  - g) Select the Contoso Retail Sales data source, and then click **OK**.  
The **Dimensional Data Source Mapping** dialog box appears.
  - h) In the **Select a measure** list, select **Sales Unit Cost**.
  - i) In the **Select a dimension** section, click **New Time Intelligence Filter**.  
The **Time Formula Editor** dialog box appears.
  - j) In the **Time formula** pane, type **Year-3:Year-4**.

### **Note:**

Use **Year-3:Year-4** here because the Contoso Retail Sales database contains data for the calendar years 2007, 2008, and 2009 only. This formula causes the scorecard to display information for the range of time from 2008 to 2009 when the actual calendar year is 2012.

- k) Click **OK** to close the **Time Formula Editor** dialog box, and then click **OK** to close the **Dimensional Data Source Mapping** dialog box and return to the **Calculated Metrics Data Source Mapping** dialog box.
- l) In the **Calculated Metrics Data Source Mapping** dialog box, in the **Name** box, select the text that says **Value2**, and type **Inventory**.
- m) In the **Source** column for the **Inventory** row, click the blue hypertext that says **1 (Fixed Values)**.  
The **Fixed Values Data Source Mapping** dialog box appears.
- n) Click **Change Source** to open the **Select a Data Source** dialog box.
- o) Select the Contoso Inventory data source that was created earlier, and then click **OK**.  
The **Dimensional Data Source Mapping** dialog box appears.

- p) In the **Select a measure** list, select **OnHandQuantity**, and then click **OK** to close the **Dimensional Data Source Mapping** dialog box and return to the **Calculated Metrics Data Source Mapping** dialog box.
  - q) In the **Calculated Metrics Data Source Mapping** dialog box, in the **Formula** box, type the formula **CostOfSales/Inventory**, and then click **OK**.
  - r) In the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - s) In the **Format** list, select **Number**, and then click **OK**.
4. Configure the Target value for this KPI by following these steps:
- a) In the **Target** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed values)**.  
The **Fixed Values Data Source Mapping** dialog box appears.
  - b) In the **Value** box, type **30**.  
This is a fixed value that will represent 30 inventory cycles, a threshold for inventory turnover. In this example, good performance means the company has had an inventory turnover of at least 30 inventory cycles over a one-year period.
  - c) Click **OK** to close the **Fixed Values Data Source Mapping** dialog box.
  - d) In the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - e) In the **Format** list, select **Number**, and then click **OK**.
5. In the center pane, click the **Properties** tab, and then specify the following settings:
- In the **Name** box, type **Inventory Turnover**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for managing inventory turnover.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
6. In the **Workspace Browser**, right-click the Inventory Turnover KPI, and then click **Save**.  
After creating the Inventory Turnover KPI, the next step is to create the Resource Usage KPI. Resource usage is typically calculated as a percentage of the time resources are used. In the example scorecard, resource usage is calculated as a percentage of sales representatives' time that is spent generating sales. For this example, assume that the data for this KPI comes from a third-party application and use fixed values to configure this KPI.

## To create the Resource Usage KPI

1. On the **Create** tab, click **KPI**.
2. In the **Select a KPI Template** dialog box, click **Blank KPI**, and then click **OK**.  
The KPI opens for editing with the **Editor** tab open in the center pane.
3. Configure the Actual value for the KPI by following these steps:
  - a) In the **Actual** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.

- b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **.73**, and then click **OK**.
  - c) In the **Actual** row, in the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - d) In the **Format** list, select **Percentage**, and then click **OK**.
4. Configure the Target value for the KPI by following these steps:
- a) In the **Target** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
  - b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **.75**, and then click **OK**.
  - c) In the **Target** row, in the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - d) In the **Format** list, select **Percentage**, and then click **OK**.
5. In the center pane, click the **Properties** tab, and then specify the following settings:
- In the **Name** box, type **Resource Usage**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for maintaining sufficient resource usage.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
6. In the **Workspace Browser**, right-click the Resource Usage KPI, and then click **Save**.

After creating the Resource Usage KPI, the next step is to create the Order Fulfillment KPI. Order fulfillment is typically calculated as a percentage of what merchandise is available at the time orders are made. In our example scorecard, order fulfillment is calculated by dividing units in inventory by units sold. For this example, assume that the data for this KPI comes from a third-party application and use fixed values to configure this KPI.

## To create the Order Fulfillment KPI

1. On the **Create** tab, click **KPI**.
2. In the **Select a KPI Template** dialog box, click **Blank KPI**, and then click **OK**.  
The KPI opens for editing with the **Editor** tab open in the center pane.
3. Configure the Actual value for the KPI by following these steps:
  - a) In the **Actual** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
  - b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **.81**, and then click **OK**.
  - c) In the **Actual** row, in the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - d) In the **Format** list, select **Percentage**, and then click **OK**.
4. Configure the Target value for the KPI by following these steps:
  - a) In the **Target** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.

- b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **.85**, and then click **OK**.
  - c) In the **Target** row, in the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - d) In the **Format** list, select **Percentage**, and then click **OK**.
5. In the center pane, click the **Properties** tab, and then specify the following settings:
- In the **Name** box, type **Order Fulfillment**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for maintaining order fulfillment.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
6. In the **Workspace Browser**, right-click the Order Fulfillment KPI, and then click **Save**.  
After creating the KPIs we need for the Internal perspective, the next step is to create KPIs for the Learning and Growth perspective.

## Learning and Growth KPIs

This section describes how to create the following three KPIs:

- Learning and Growth Perspective
- Employee Satisfaction
- Training and Development

Begin by creating the Learning and Growth Perspective KPI, an objective KPI that does not require a data source or specific target and actual values.

### To create the Learning and Growth Perspective KPI

1. In Dashboard Designer, in the **Workspace Browser**, click **PerformancePoint Content**.
2. On the **Create** tab, click **KPI**.
3. In the **Select a KPI Template** dialog box, click **Objective**, and then click **OK**.  
The KPI opens for editing with the **Editor** tab open in the center pane.
4. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type **Learning and Growth Perspective**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for overall financial performance.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
5. In the **Workspace Browser**, right-click the Learning and Growth Perspective KPI, and then click **Save**.

After creating the Learning and Growth Perspective KPI, the next step is to create the Employee Satisfaction KPI. Similar to customer satisfaction rates, different companies measure employee satisfaction in different ways. For this example scorecard, assume that the data for this KPI comes from a third-party application and use fixed values to configure this KPI.

## To create the Employee Satisfaction KPI

1. On the **Create** tab, click **KPI**.  
The **Select a KPI Template** dialog box appears.
2. Click **Blank KPI**, and then click **OK**.  
The new KPI opens for editing with the **Editor** tab open in the center pane.
3. Configure the Actual value for the KPI by following these steps:
  - a) In the **Actual** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
  - b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **.87**, and then click **OK**.
  - c) In the **Actual** row, in the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - d) In the **Format** list, select **Percentage**, and then click **OK**.
4. Configure the Target value for the KPI by following these steps:
  - a) In the **Target** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
  - b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **.95**, and then click **OK**.
  - c) In the **Target** row, in the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - d) In the **Format** list, select **Percentage**, and then click **OK**.
5. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type **Employee Satisfaction**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for maintaining employee satisfaction.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the KPI.
6. In the **Workspace Browser**, right-click the Employee Satisfaction KPI, and then click **Save**.  
After creating the Employee Satisfaction KPI, the next step is to create the Training and Development KPI. Different companies measure training and development in different ways. For this example scorecard, measure performance for this KPI as measured by the percentage of employees who have completed mandatory and recommended training programs. Assume that the data for this KPI comes from a third-party application and use fixed values to configure this KPI.

## To create the Training and Development KPI

1. On the **Create** tab, click **KPI**.  
The **Select a KPI Template** dialog box appears.
2. Click **Blank KPI**, and then click **OK**.  
The new KPI opens for editing with the **Editor** tab open in the center pane.
3. Configure the Actual value for the KPI by following these steps:

- a) In the **Actual** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
  - b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **.75**, and then click **OK**.
  - c) In the **Actual** row, in the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - d) In the **Format** list, select **Percentage**, and then click **OK**.
4. Configure the Target value for the KPI by following these steps:
- a) In the **Target** row, in the **Data Mappings** column, click the blue hypertext that says **1 (Fixed Values)**.
  - b) In the **Fixed Values Data Source Mapping** dialog box, in the **Value** box, type **.90**, and then click **OK**.
  - c) In the **Target** row, in the **Number** column, click the blue hypertext that says **(Default)** to open the **Format Numbers** dialog box.
  - d) In the **Format** list, select **Percentage**, and then click **OK**.
5. In the center pane, click the **Properties** tab, and then specify the following settings:
- In the **Name** box, type **Training and Development**.
  - Optionally, in the **Description** box, type a description for the KPI.
  - Optionally, in the **Person Responsible** box, type the name of the person who is responsible for training and development.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and specify or create a display folder for the KPI.
6. In the **Workspace Browser**, right-click the Training and Development KPI, and then click **Save**. After creating all the KPIs for the example scorecard, the next step is to create a blank scorecard and add the KPIs to it.

## Create and assemble a scorecard

Earlier in this article, you created lots of KPIs. Some of those KPIs are objective KPIs, which means those KPIs display performance for KPIs that are nested underneath the objective KPIs. To create the scorecard, begin with a blank scorecard, add all the KPIs to the scorecard, and then configure a hierarchy for the KPIs.

### To create and assemble a scorecard for a Balanced Scorecard

1. In Dashboard Designer, in the **Workspace Browser**, click **PerformancePoint Content**.
2. In the ribbon, on the **Create** tab, in the **Dashboard Items** group, click **Scorecard**.  
The Select a Scorecard template opens.
3. In the **Category** pane, select **Standard**, in the **Template** pane, select **Blank Scorecard**, and then click **OK**. A blank scorecard opens for editing with the **Editor** tab open.
4. In the **Details** pane, expand **KPIs**, and then expand **PerformancePoint Content**.  
Locate the KPIs that you want to use for the scorecard.

5. From the **Details** pane, drag one KPI at a time to the **Drop items here** section that is located on the left side of the center pane. Make sure to add the KPIs in the order that is shown in the following list so that each KPI is added below the previous KPI:
  - Financial Perspective
  - Increase Shareholder Value
  - Productivity
  - Growth
  - Customer Perspective
  - Customer Satisfaction
  - Market Share
  - Internal Perspective
  - Inventory Turnover
  - Resource Usage
  - Order Fulfillment
  - Learning and Growth Perspective
  - Employee Satisfaction
  - Training and Development
6. Click the **Increase Shareholder Value** KPI to select it, and then, in the ribbon, on the **Edit** tab, in the **Header** group, click the **Increase Indent** toolbar command.  
The Increase Shareholder Value KPI is now nested underneath the Financial Perspective KPI.
7. Click the **Productivity** KPI, and then, on the **Edit** tab, click the **Increase Indent** toolbar command two times to nest **Productivity** underneath **Increase Shareholder Value**.
8. Click the **Growth** KPI, and then, on the **Edit** tab, click the **Increase Indent** toolbar command two times to nest **Growth** underneath **Shareholder Value**. (This puts the Growth KPI at the same level as the Productivity KPI.)
9. Click the **Customer Satisfaction** KPI, and then, on the **Edit** tab, click the **Increase Indent** toolbar command to nest **Customer Satisfaction** underneath **Customer Perspective**.
10. Click the **Market Share** KPI, and then, on the **Edit** tab, click the **Increase Indent** toolbar command to nest **Market Share** underneath **Customer Perspective**.
11. Click the **Inventory Turnover** KPI, and then, on the **Edit** tab, click the **Increase Indent** toolbar command to nest **Inventory Turnover** underneath **Internal Perspective**.
12. Click the **Resource Usage** KPI, and then, on the **Edit** tab, click the **Increase Indent** toolbar command to nest **Resource Usage** underneath **Internal Perspective**.
13. Click the **Order Fulfillment** KPI, and then, on the **Edit** tab, click the **Increase Indent** toolbar command to nest **Order Fulfillment** underneath **Internal Perspective**.
14. Click the **Employee Satisfaction** KPI, and then, on the **Edit** tab, click the **Increase Indent** toolbar command to nest **Employee Satisfaction** underneath **Learning and Growth Perspective**.
15. Click the **Training and Development** KPI, and then, on the **Edit** tab, click the **Increase Indent** toolbar command to nest **Training and Development** underneath **Learning and Growth Perspective**.
16. On the **Edit** tab, in the **View** group, click **Update**.

The scorecard updates to show performance for all the KPIs.

17. In the center pane, click the **Properties** tab, and then specify the following settings:

- In the **Name** box, type a name, such as **Corporate Scorecard**.
- Optionally, in the **Description** box, type a description for the scorecard.
- Optionally, in the **Person Responsible** box, type the name of the person who is responsible for organizational performance.
- Optionally, next to the **Display Folder** box, click the **Browse** button, and then specify or create a display folder for the scorecard.

18. In the **Workspace Browser**, right-click the Corporate Scorecard, and then click **Save**.

After you have created a scorecard to use as part of a Balanced Scorecard, the next step is to create a strategy map by using Dashboard Designer. For more information, see [Create and configure a strategy map as part of a Balanced Scorecard that you create by using Dashboard Designer](#).

## Concepts

[Create a Balanced Scorecard by using Dashboard Designer](#)

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# Create and configure a strategy map as part of a Balanced Scorecard that you create by using Dashboard Designer

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A Balanced Scorecard includes a scorecard and corresponding strategy map to display performance across four main organizational areas or perspectives: financial perspective, customer perspective, internal perspective, and learning and growth perspective.

This article describes how to create and configure an example PerformancePoint strategy map to use as part of a Balanced Scorecard.

### Tip:

To download a sample Visio diagram that you can use for a Balanced Scorecard, see [Example Visio Diagram for a Balanced Scorecard](http://go.microsoft.com/fwlink/p/?LinkId=237627) (<http://go.microsoft.com/fwlink/p/?LinkId=237627>).

In this article

- [Create and configure a Visio diagram to use in a Balanced Scorecard](#)
- [Create and configure a strategy map report by using Dashboard Designer](#)

## Create and configure a Visio diagram to use in a Balanced Scorecard

In PerformancePoint Services, a strategy map report uses a Microsoft Visio diagram for its visual structure and a scorecard for its data source. To create a strategy map, begin by creating and configuring a Visio diagram. You can create and configure a Visio diagram in the following ways:

- Open an existing Visio diagram and configure it
- Create and configure a new Visio diagram

 **Tip:**

Make sure that the Visio diagram contains enough sections and shapes to connect to the key performance indicators (KPIs) that are used in the scorecard. The shapes in the Visio diagram can be squares, rectangles, ovals, and so on. Do not use stencils or complex shapes in Visio diagrams that you create for a Balanced Scorecard because the strategy map might not be displayed correctly.

To download a sample diagram, see [Example Visio Diagram for a Balanced Scorecard](http://go.microsoft.com/fwlink/p/?LinkId=237627) (<http://go.microsoft.com/fwlink/p/?LinkId=237627>).

## To create and configure a Visio diagram

1. Click **Start**, click **All Programs**, click **Microsoft Office**, and then click **Microsoft Visio 2010**. Microsoft Visio opens and displays a list of templates.
2. On the **File** tab, in the **Template Categories** group, click **General**, click **Basic Diagram**, and then click **Create**.  
A new drawing opens.
3. In the **Shapes** pane, select **Basic Shapes** to display a list of available shapes.
4. From the **Shapes** pane, drag a shape to the drawing. Repeat for each shape that you want to add.
5. To edit a shape, do any of the following:
  - a) To change the size of a shape, point to a side selection handle. Then press and hold the mouse button and drag the handle to resize the shape.
  - b) To move a shape, click to select it, and then use the directional arrow keys on the keyboard to move the shape to a different location.
  - c) To optionally add text to a shape, double-click the shape, and then type the text that you want to use.
  - d) To optionally edit font settings for text in a shape, double-click a shape that contains text to select the text. Then, on the **Home** tab, in the **Font** group, use the available toolbar commands to edit the font that is used in the shape.
6. On the **File** tab, click **Save As**, and save the file to your computer.

After you create the Visio diagram, proceed to [Create and configure a strategy map report by using Dashboard Designer](#).

## To configure an existing Visio diagram

1. Open an existing Visio diagram for editing.

 **Tip:**

To download a sample Visio diagram that you can use for a Balanced Scorecard, see [Example Visio Diagram for a Balanced Scorecard](http://go.microsoft.com/fwlink/p/?LinkId=237627) (<http://go.microsoft.com/fwlink/p/?LinkId=237627>).

2. In the **Shapes** pane, select **Basic Shapes** to display a list of available shapes.
3. To add a shape from the **Shapes** pane, drag a shape to the drawing.
4. To remove a shape, click the shape to select it, and then press the Delete key on the keyboard.

5. To edit a shape, do any of the following steps:
  - a) To change the size of a shape, point to a side selection handle. Then press and hold the mouse button, and drag the handle to resize the shape.
  - b) To move a shape, click to select it, and then use the directional arrow keys on the keyboard to move the shape to a different location.
  - c) To optionally add text to a shape, double-click the shape, and then type the text that you want to use.
  - d) To optionally edit font settings for text in a shape, double-click a shape that contains text to select the text. Then, on the **Home** tab, in the **Font** group, use the available toolbar commands to edit the font that is used in the shape.
6. On the **File** tab, click **Save** to save your changes.

After you configure a Visio diagram, the next step is to create a strategy map report by using Dashboard Designer.

## Create and configure a strategy map report by using Dashboard Designer

### Important:

Before you begin to perform the following procedures, verify that the following prerequisites are in place:

- You have at least Design permissions assigned to you in SharePoint Server.
- You have at least Read permissions assigned to you in the SQL Server databases that are used.
- Dashboard users have at least Read permissions assigned in SharePoint Server and in SQL Server.

### To create a strategy map for use in a Balanced Scorecard

1. Click **Start**, click **All Programs**, click **SharePoint**, and then click **PerformancePoint Dashboard Designer**.
2. In the **Workspace Browser**, click **PerformancePoint Content**.
3. On the **Create** tab, in the **Reports** group, click **Strategy Map**.  
The Create a Strategy Map Report wizard opens.
4. On the **Select a Scorecard** page, select the scorecard that you created for the Balanced Scorecard, and then click **Finish**.  
The strategy map opens for editing with the **Editor** tab open in the center pane.
5. In the ribbon, on the **Edit** tab, click **Edit Strategy Map**.  
The **Strategy Map Editor** dialog box appears.
6. In the **Strategy Map Editor** dialog box, click **Import Visio File**, browse to where the Visio diagram is saved, and then click **Open**.
7. In the **Strategy Map Editor** dialog box, click a shape to select it, and then click **Connect Shape**.  
The **Connect Shape** dialog box appears and displays the scorecard that was selected for the strategy map.

8. In the **Connect Shape** dialog box, take the following steps:
    - a) Click a cell in the **Target** column that corresponds to the KPI that you want to connect to the shape. (The **Target** column contains graphical indicators.)
    - b) To optionally replace the text inside the shape with the text that is used for the scorecard KPI, select the check box next to **Show KPI name in shape text**.
    - c) Click **Close**.

The shape changes color to according to the KPI that is connected to it.
  9. Repeat steps 7 and 8 for each shape in the diagram.
  10. After connecting shapes to KPIs, click **Apply** to close the **Strategy Map Editor** dialog box.

The strategy map appears on the **Editor** tab in the center pane of the workspace.
  11. In the center pane, click the **Properties** tab, and then specify the following settings:
    - In the **Name** box, type a name such as **Strategy Map** for the strategy map report.
    - To optionally provide a description for the report, type a description in the **Description** box.
    - To optionally specify a display folder for the report, next to the **Display Folder** box, click the **Browse** button, and then select or create a folder.
  12. In the **Workspace Browser**, right-click the report, and then click **Save**.
- The next step is to create a dashboard page and assemble the Balanced Scorecard. Proceed to [Assemble and publish a Balanced Scorecard by using Dashboard Designer](#).

## Concepts

[Create a Balanced Scorecard by using Dashboard Designer](#)

# Assemble and publish a Balanced Scorecard by using Dashboard Designer

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A Balanced Scorecard provides a high-level view of organizational performance at a glance. In PerformancePoint Services, a Balanced Scorecard consists of a dashboard page that contains a scorecard and corresponding strategy map. The scorecard and strategy map show performance information for key performance indicators (KPIs) across four main perspectives: the financial perspective, the customer perspective, the internal perspective, and the learning and growth perspective. This article describes how to assemble and publish a Balanced Scorecard by using PerformancePoint Dashboard Designer.

## Tip:

The procedures in this article assume that you have already created and configured a scorecard and its corresponding strategy map report by using Dashboard Designer. For more information, see the following resources:

- [Create a Balanced Scorecard by using Dashboard Designer](#)
- [Create a scorecard for a Balanced Scorecard by using Dashboard Designer](#)
- [Create and configure a strategy map as part of a Balanced Scorecard that you create by using Dashboard Designer](#)

## Assemble and publish a Balanced Scorecard

After you have created a scorecard and strategy map, use the following process to assemble and publish a Balanced Scorecard:

1. Create a dashboard page by using Dashboard Designer
2. Add the scorecard and strategy map to the dashboard page
3. Publish the dashboard

## Important:

Before you begin to perform the tasks that are described in this article, verify that the following prerequisites are met:

- A scorecard and strategy map are already created.
- Microsoft Visio Viewer is installed on every computer where the dashboard will be viewed. To download Visio Viewer, see [Visio 2010: Visio Viewer](http://go.microsoft.com/fwlink/p/?LinkId=237626) (<http://go.microsoft.com/fwlink/p/?LinkId=237626>).
- You have at least Design permissions assigned to you in SharePoint Server.
- You have at least Read permissions assigned in the SQL Server databases that are used for the scorecard.
- Dashboard users have at least Read permissions assigned in SharePoint Server and in the SQL Server databases that are used.

For more information, see [Authorization and permissions in PerformancePoint Services \(SharePoint Server 2010\)](#).

Begin by creating a dashboard page.

## To create a dashboard page for a Balanced Scorecard

1. In Dashboard Designer, in the **Workspace Browser**, click **PerformancePoint Content**.
2. On the **Create** tab, in the **Dashboard Items** group, click **Dashboard**.  
The **Select a Page Layout Template** dialog box appears.
3. For best results, select the **2 Columns** template, and then click **OK**.  
A dashboard page opens for editing with the **Editor** tab open in the center pane.
4. On the **Editor** tab, in the **Pages** section, select the default text that says **Page 1** and type a name such as **Summary** for the page.
5. In the center pane, click the **Properties** tab, and then specify the following settings:
  - In the **Name** box, type **Balanced Scorecard**.
  - Optionally, in the **Description** box, type a description for the dashboard.
  - Optionally, in the **Person Responsible** box, type the name of the person responsible for overall organizational performance.
  - Optionally, next to the **Display Folder** box, click the **Browse** button, and then select or create a display folder for the dashboard.
6. In the **Workspace Browser**, right-click the Balanced Scorecard dashboard, and then click **Save**.  
Do not close Dashboard Designer. Keep it open for the following procedure.

The next step is to add the scorecard and the strategy map to the dashboard.

## To add the scorecard and the strategy map to the dashboard page

1. Begin with the Balanced Scorecard dashboard page open for editing. In the center pane, click the **Editor** tab.
2. In the **Details** pane, expand **Scorecards**, and then expand **PerformancePoint Content** to locate the scorecard that was created for the Balanced Scorecard.
3. From the **Details** pane, drag the scorecard to the **Left Column** zone in the center pane.
4. In the **Details** pane, expand **Reports**, and then expand **PerformancePoint Content** to locate the strategy map report that was created for the Balanced Scorecard.
5. From the **Details** pane, drag the strategy map to the **Right Column** zone in the center pane.
6. In the **Workspace Browser**, right-click the Balanced Scorecard dashboard, and then click **Save**.  
Do not close Dashboard Designer. Keep it open for the following procedure.

The final step is to publish the dashboard to SharePoint Server.

## To publish the Balanced Scorecard dashboard

1. Begin with the Balanced Scorecard dashboard page open for editing. In the center pane, click the **Properties** tab.
2. In the **Deployment Properties** section, take the following steps:
  - a) Next to the **Document Library** box, click **Browse** to open the **Document Library** dialog box. Select **Dashboards**, and then click **OK**.

- b) In the **Master Page** list, select a template, such as **v4**.
  - c) Select the **Include page list for navigation** check box.
3. In the **Workspace Browser**, right-click the Balanced Scorecard dashboard, and then click **Save** to save the publishing settings.
  4. In the **Workspace Browser**, right-click the Balanced Scorecard dashboard, and then click **Deploy to SharePoint**.  
The dashboard is published to SharePoint Server and opens in a browser window.

## **Concepts**

[Create a Balanced Scorecard by using Dashboard Designer](#)