Agile Investment Management

Applies to: 2.73 release

Agile Investment Management is a tool that bridges the gap between strategic-level investment planning and granular levels of work execution.

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Agile Investment Management Product Guide

Get Started

Agile Investment Management is a tool that bridges the gap between strategic-level investment planning and granular levels of work execution. It allows Portfolio Managers, Product Managers, and Resource Managers to tie the (non-Agile) finance world with Agile development teams and their associated work. It provides both high-level strategic views and granular resource-level views that allow your organization to more accurately align labor effort to goals.
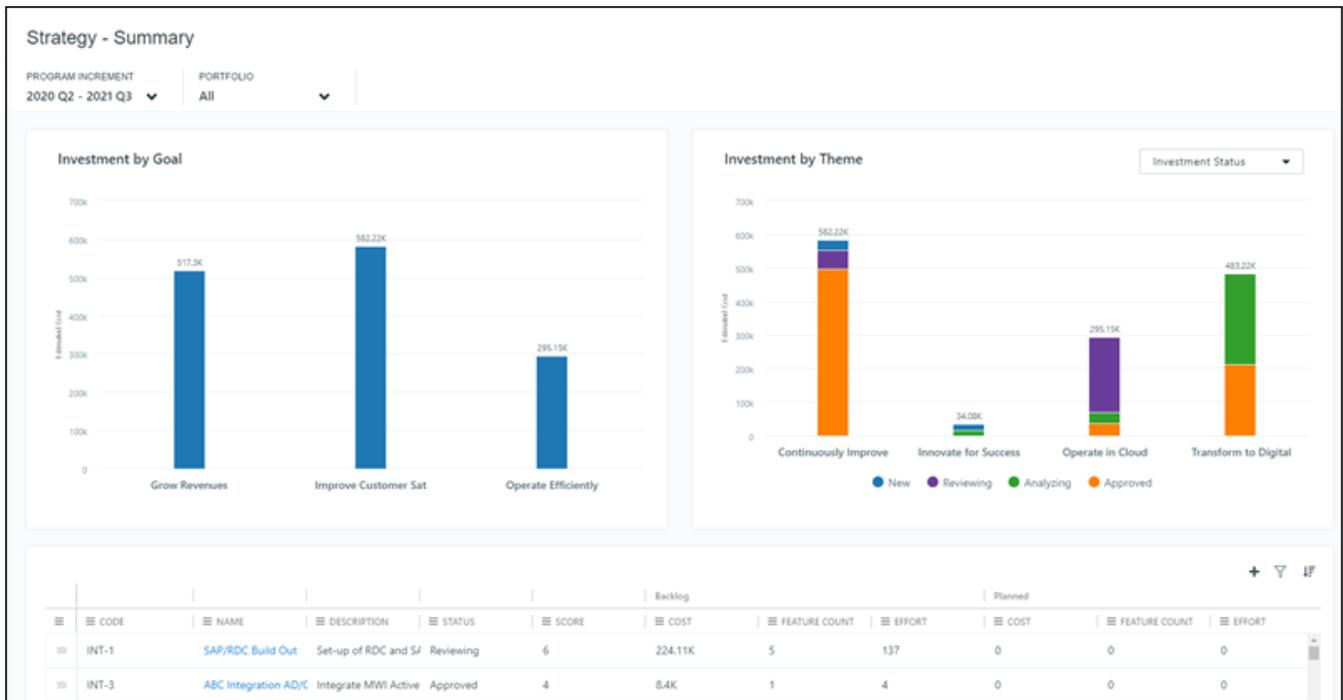
Portfolio Managers can make strategic decisions based on real data

How does Agile Investment Management work?

Agile Investment Management is built to fit within the Scaled Agile Framework (SAFe.) If you're not familiar with SAFe, you can learn more at https://www.scaledagileframework.com/. At a high level, SAFe is a common standard set of terminology and practices organizations use to implement Agile. The data structure in Agile Investment Management is used to scope both cost and work across various levels of your organizational hierarchy, and it fits the top two levels of SAFe out-of-the-box. However, because each organization uses the Agile methodology in their own unique way, Agile Investment Management is built to be malleable. You can customize the app to fit practically any implementation and construct of Agile.

 In Agile Investment Management, cost analysis is organized into Portfolios (high-level), Investments and Products (mid-level), and Features (low-level). Features derive their costs from the hourly rates of the Agile teams (Resources) that work to deliver them. These resources are organized into Teams and allocated to Release Trains. Program increments represent units of time, such as quarters, during which a feature is delivered. The following diagram outlines the relationship between these entities (also called *data dimensions*):
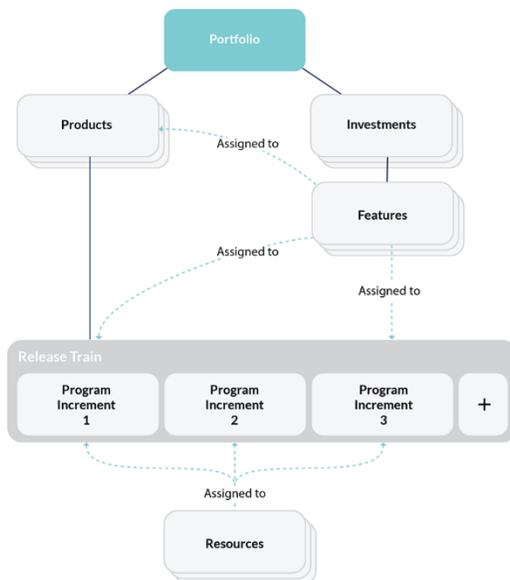
These data dimensions should mirror the structure of your organization in a way that incorporates (and tracks the cost of) Agile teams, all the way up to the Portfolio level. All cost is derived from Resource pay-rate and the effort required to deliver a Feature.

Uniquely, this data structure contains two parallel, interrelated hierarchies of cost roll-up: the Product hierarchy and the Investment hierarchy. The Product hierarchy supports work breakdown, while the Investment hierarchy supports Resource-based capacity planning.

Next step: [Create a Portfolio hierarchy](#).

Create a Portfolio hierarchy

Role: Portfolio Manager

Portfolios are the top-level folders that group Investments and Products together. Agile Investment Management supports iterative planning cycles. Portfolio Managers can create and edit the Portfolio structure, align Investments to these Portfolios, and prioritize the Investments within a Portfolio via a backlog.

After an admin has completed the initial setup of the application, the first step to using Agile Investment Management is to create a Portfolio hierarchy (think folder structure) that mimics the structure of your organization at a high level.

Create your Portfolio Hierarchy

To create a Portfolio, navigate to the **Portfolio - Portfolio** page in the side menu. This page features a listing table of all Portfolios in the system. The filters at the top of the page control which Portfolios are shown. Click the **plus** ➕ icon to create a new Portfolio.

TIP: You can also right-click a Portfolio in the table to edit it, delete it, or create a new Portfolio as its child.

Give your Portfolio a name and a parent Portfolio, then click **Add**. The **Portfolio Details** panel automatically opens. Here, you can edit the Portfolio to assign it a specific place in the hierarchy.

NOTE: You can view a details panel for any line-item in the application (for example, every Portfolio, Investment, and Resource). Use these panels to view and change information for that line-item. To open a details panel, simply click the name of the item wherever it is linked (indicated by blue text).

Continue adding Portfolios until you're ready to move one level of granularity deeper to Investments.

TIPS:
- See also: [Portfolios](#)
- In the any "add new item" dialog, you can click **Add Another** to quickly finish the current item and create an additional new item, and so on. Note that for some types of data, you'll still have to go into the details panel for each new item to edit certain fields (such as **labor rate** for Portfolio).
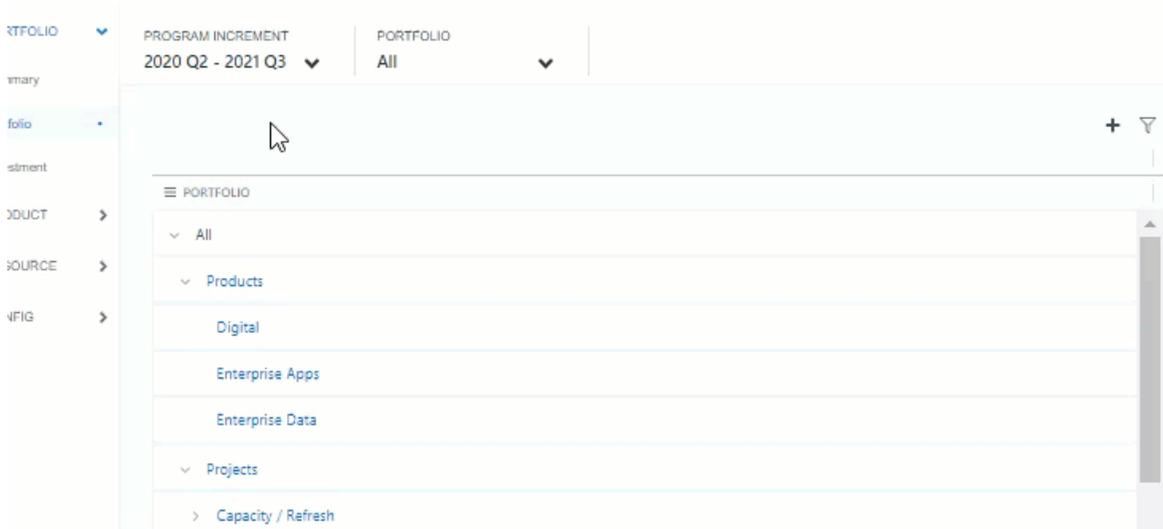
Next step: **[Capture and prioritize demand with Investments and Features](#).**

Capture and prioritize demand with Investments and Features

Role: Portfolio Manager

Agile Investment Management helps you capture, prioritize, and plan investment demand from the business.

After you enter any initial Investments, users can enter new Investment requests, fill out supporting business case details, and capture Investment attributes needed to support an ROI and value-analysis process. Agile Investment Management supports any frequency in which organizations plan and fund Investments. As demand from the business is formed and captured, users can define critical attributes that provide Portfolio Managers the means necessary to analyze investments relative to strategic goals and themes.

TIP: Remember that cost rolls up from Feature to Investment to Portfolio.

Create Investments

To create an Investment, navigate to the **Portfolio - Investment** page in the side menu, then click the **plus** ✚ icon. Like Portfolios, you can also right-click in the table to add or delete items.
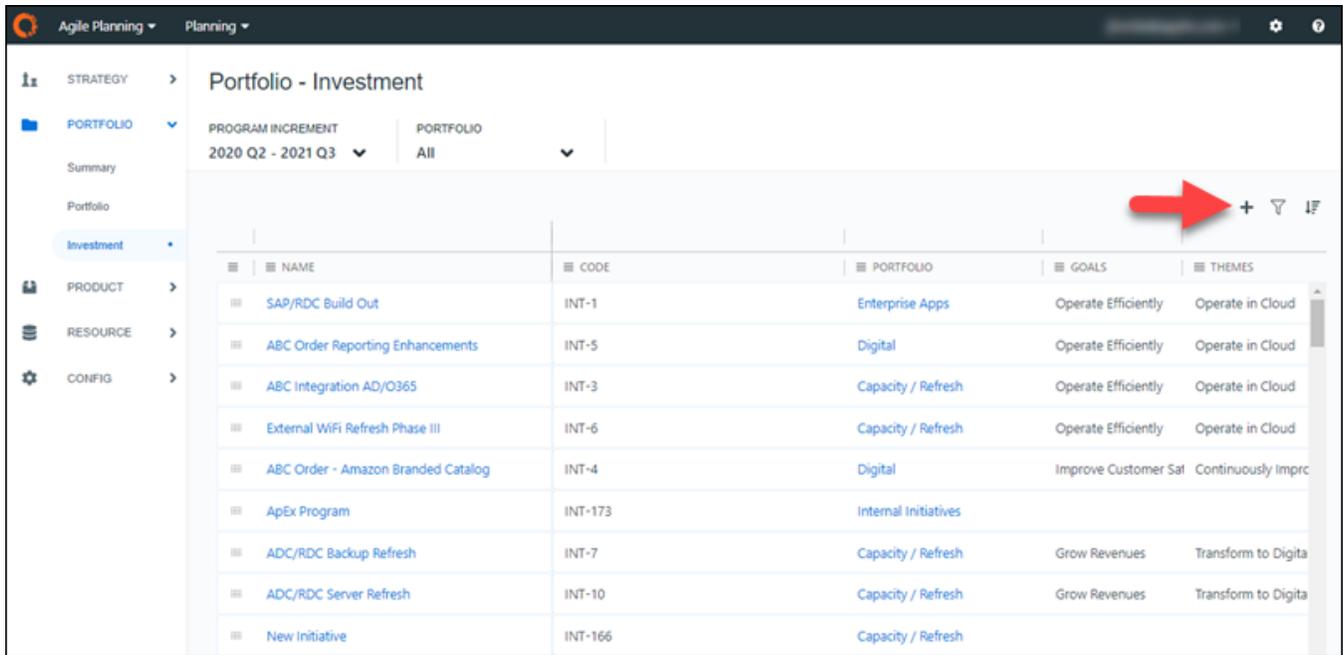
Give your Investment a name and a parent Portfolio, then click **Add**. The **Investment Details** panel automatically opens.

NOTE: Unlike Portfolios, Investments cannot be children of other Investments. Only Portfolios and Teams can have a child item of the same type.

The **Investment Details** panel has some additional functionality out-of-the-box as compared to the **Portfolio Details** panel. In addition to having more fields, it contains two tabs: **Feature** and **Cost**.
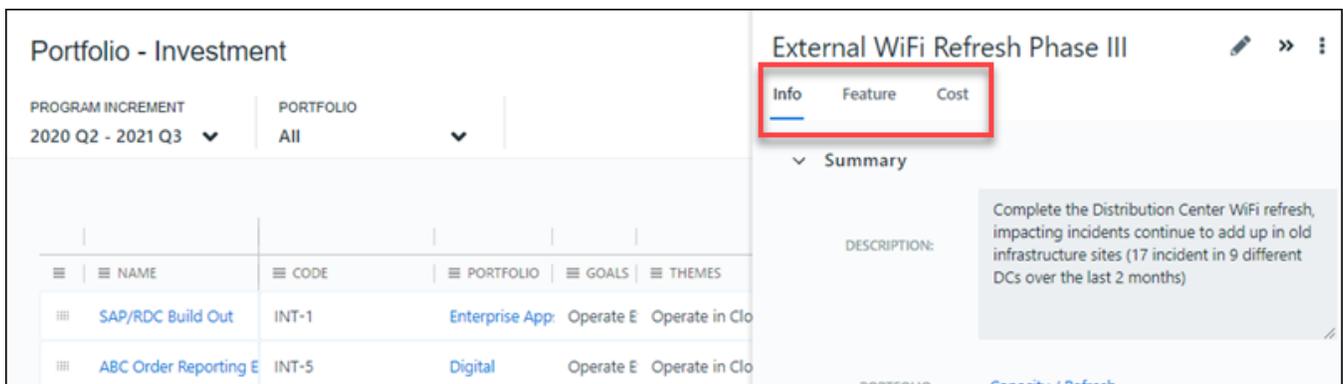
If you click **Cost**, you'll see that it's empty because your Investment does not contain any Features yet. You could repeat the same process you used to create this Investment on the **Product - Feature** page, but there's a quicker way to do it.

Create Features

Click the **Feature** tab on the **Investment Details** panel, then click then click the **plus** ✚ icon. You can add a child Feature to this Investment directly from the Investment's details panel.

Features are more granular than Investments. Features are the core work planning elements in Agile Investment Management, and are typically analogous to an Agile epic.

Now that you've assigned a Feature to your Investment, go back to the Investment details panel by clicking the **back arrow**. Click the **Cost** tab again. Your Feature's cost data (which is still blank) now appears here. Once you've costed out several Features and assigned them to an Investment, you can use the **Cost** tab on the **Investment Details** panel for a quick visual breakdown of that Investment's cost.

Assign Feature Effort

Agile Investment Management automatically determines the cost of Features on your Roadmap using two factors. The first determinant factor is the Feature's *Effort* value, which is explained below. The other, more complex factor is the total cost of the Resources (ie, their combined salaries) over the time period it takes to deliver the Feature, with additional calculations to account for non-Roadmap work. You can add that information into the system during the next task.

Navigate to the **Product - Feature** page to view a list of your Features. Click into each Feature to assign its effort value.

NOTE: Cost calculation for backlog Features (ie, Features assigned to a Product, but not a Release Train - Program Increment) are costed based from the Product level, since no Resources are associated with those Features yet.

TIPS:
- See also: Investments and Features.
- You can right-click Investments and Features in tables to clone them.
- You can drag and drop Investments and Features to reorder them as you see fit. Drag the leftmost part of a row in the table to reorder it.

Next step: Set up Teams and allocate Resources

Set up Teams and allocate Resources

Role: Resource Manager

Resources are the people that work to deliver Features for your organization. Resources are organized into Teams. Cost in Agile Investment Management is calculated across all levels of the data hierarchy, in some way or another, from the payrates of your Resources. (The one exception to this is the cost calculation of backlog Features).

As a Resource Manager, you can use Agile Investment Management to accomplish the following goals:
- Manage the allocation of Resources across RTs
- Work with Product Managers to align capacity to planned Feature effort
- Understand the total cost of Resources and how they roll up into Products

Create Teams and Resources

Navigate to the **Resource - Team** page. This page is functionally identical to the previous listing table pages for Portfolios, Investments, and Features.Click the **plus** ✚ icon to add Teams.
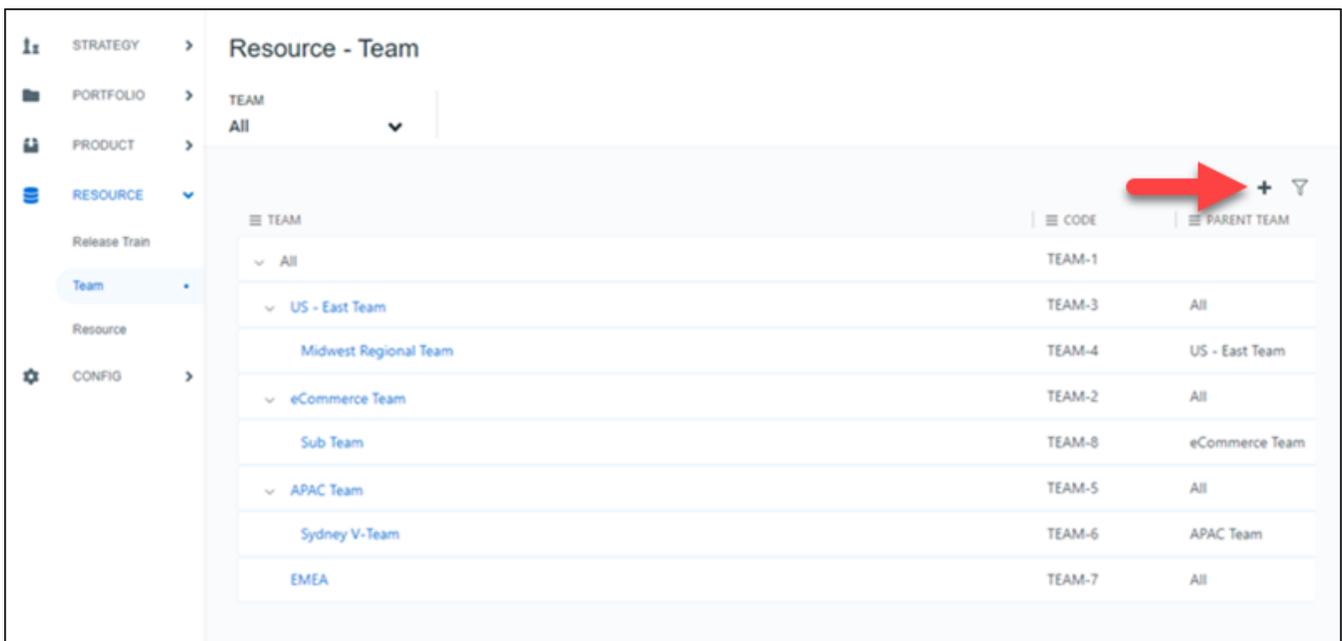
Next, navigate to the **Resource - Resource** page and start adding Resources. When you first create a Resource, the following dialog appears:
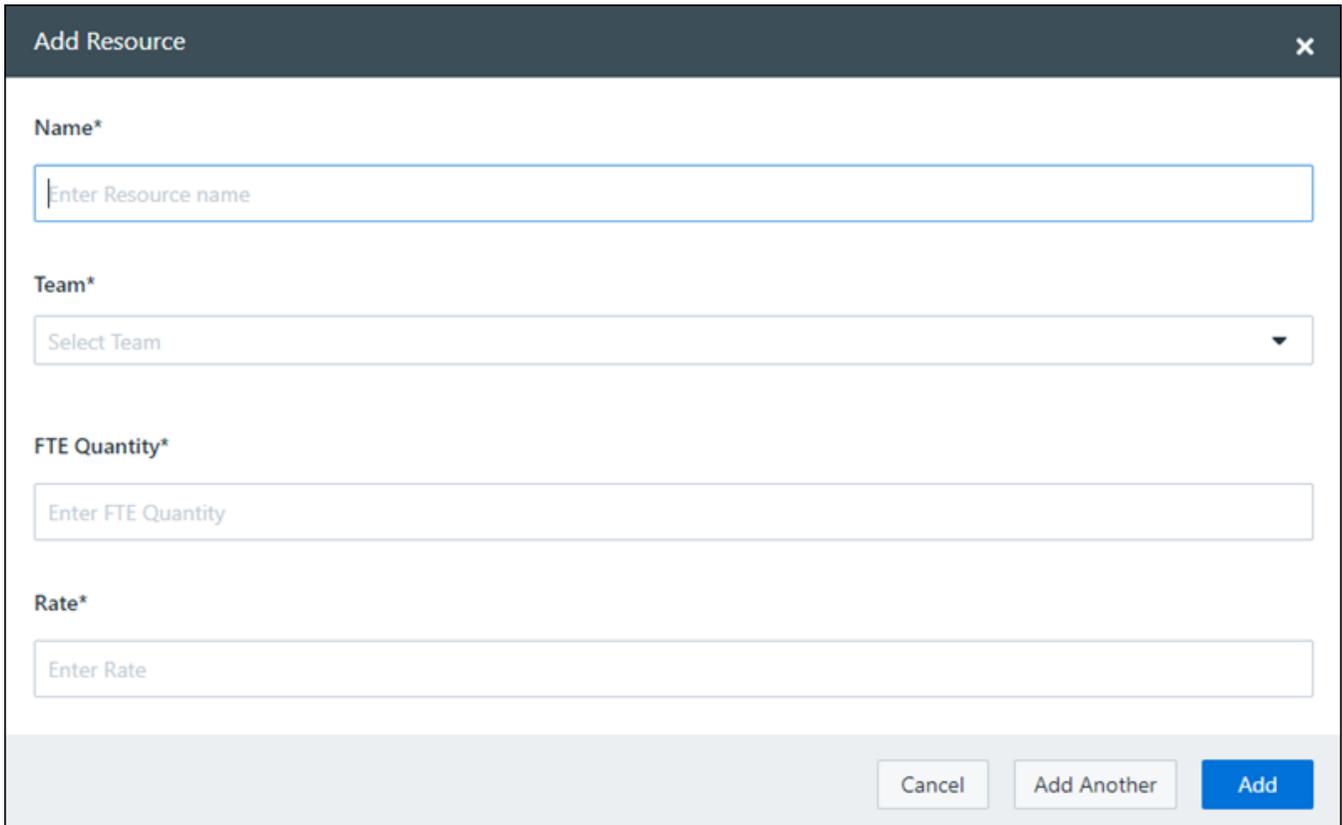
FTE Quantity, or full-time equivalent, is a unit of headcount measure. An FTE of 1.0 indicates one full-time worker.

Hourly Rate is simply the hourly pay rate of the worker.

The Resource Details Panel opens when you add a new Resource, or when you click the name of a Resource. You can use this details panel to enter other key information about the Resource, such as **Role** and **Location**.

Allocate Resources

Next, you will allocate your Resources to Release Trains. This allows Agile Investment Management to scope the costs of the Features that are planned on your Roadmap.

NOTE: This guide assumes that your administrator has already set up your Program Increments, Release Trains, and Investment Activities. If you're an administrator and you haven't done this yet, see Configure Agile Investment Management to get started.

You should be familiar with the following terms before continuing:
- **Release Train** - A collection of Agile Resources that work together to deliver Features. Unlike a Team, the Resources that make up a Release Train might not all report to the same manager.
- **Program Increment** - The core unit of time in Agile Investment Management. It's typically around two or three months in duration, but can be any length defined by your organization. It's important to note that Features cannot be spread across multiple Program Increments.
- **RTPI** - An abbreviation for Release Train - Program Increment. This term simply refers to a Release Train during a given Program Increment. It's useful to keep this concept in mind because you can allocate on a per-RTPI basis.
- **Dev days**: The default measure for capacity across Program Increments.

Allocate a Resource to an RTPI
1. Open the Resource Details Panel.
2. Click the **Program Increment** tab.
3. Click any Program Increment.
   The Resource - Program Increment Details Panel opens.
4. Click **Edit** 🖊 .
5. Click Plus ➕, then select a Release Train from the dropdown menu.
6. Assume for now that this Resource will spend 100% of their time working on this Release Train. Enter 100 in the Allocation (Percentage) column, and note that the information on the details panel updates to reflect this.
7. Click **Finish**.

Adjust allocations on Product Roadmap

At this point, you know how to add Resources into the application and allocate them to Release Trains. But how can you make informed decisions about allocation without a top-down view? You'll find such a view (and more) on the **Product - Roadmap** page.

Navigate to the **Product - Roadmap** page. It looks quite different from the listing table pages you've seen so far:

For now, ignore the **Backlog** column. Note that you're on the **Feature** tab, indicated in the top right corner of the screen. You can also ignore the **Resource** tab.

The page is composed of a vertical list of Release Trains along a horizontal timeline of Program Increments. Each large rectangle represents an RTPI, which contains a group of cards. Each card represents a Feature that is planned to be delivered by that Release Train during that Program Increment. You'll also notice several numbers:
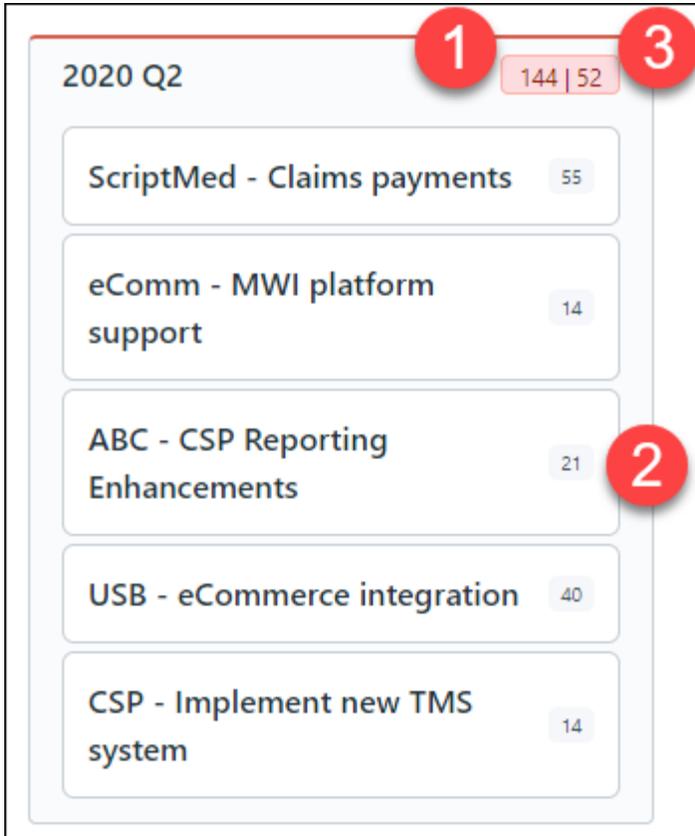
1. The left number in the top-right box is the total Effort of all Features in the RTPI.
2. The number on the right side of each Feature card is that Feature's Effort value. All of the Effort values add up to the left number in the top-right box.
3. The right number in the top-right box is **Resource capacity**. This is the number of dev days that will go toward delivering the Features in this RTPI.

Click the top-right box to open the RTPI Details Panel. Note the discrepancy between Allocated capacity and Roadmap capacity. Allocated capacity represents the total number of dev days allocated to this RTPI. Roadmap capacity is the subset of those Dev days that will go toward new feature work. This is defined by the Investment Mix listed in this details panel.
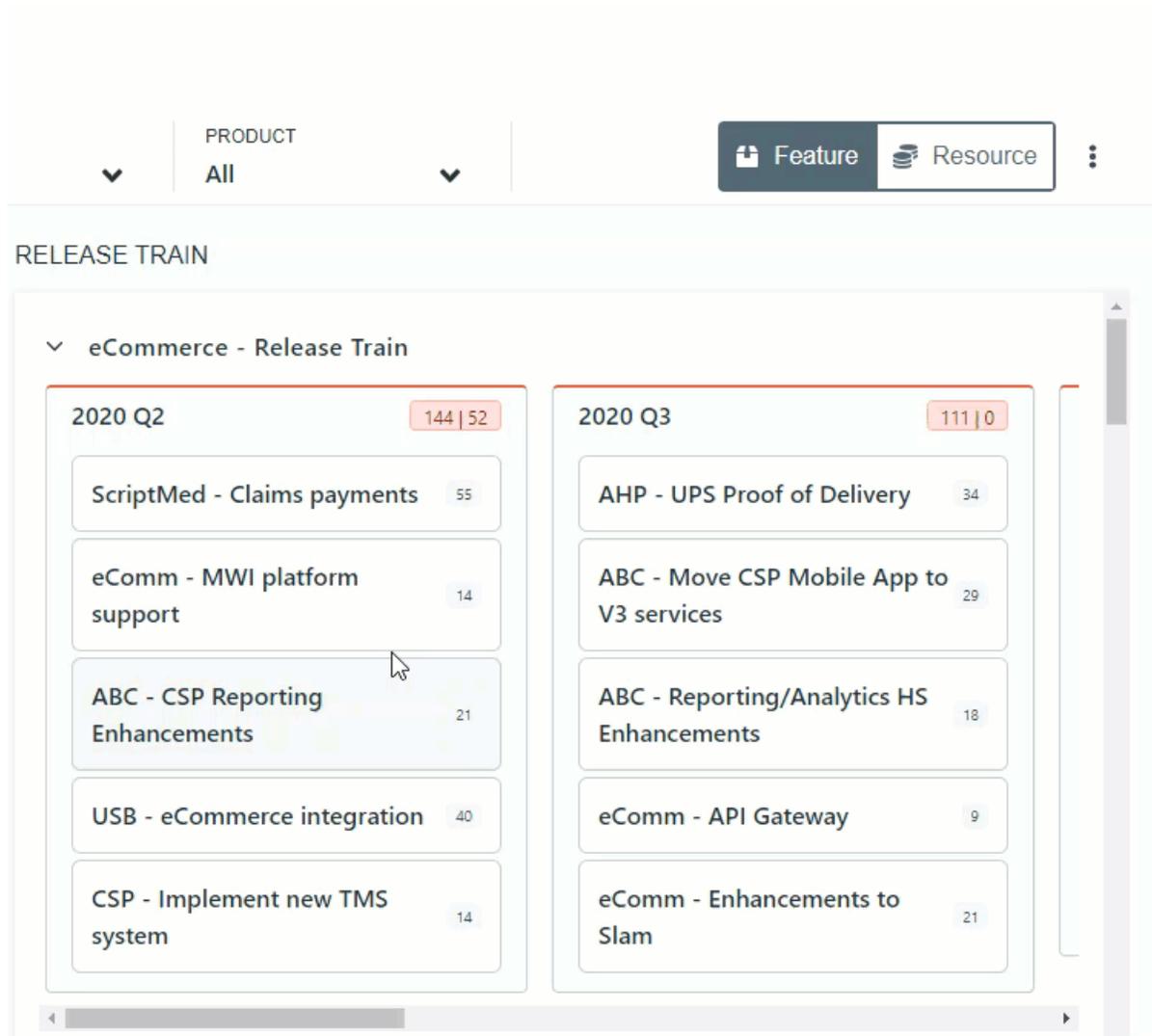
Use the **Product - Roadmap** page to make smart allocation decisions that align with the goals of your organization while ensuring that each Feature is getting the attention it needs.

TIPS:
- You can add and allocate Resources directly on the **Resource** tab as well.
- You can right-click to edit or delete Resources and Features on these tabs. Note that deleting a Resource removes it from a specific Release Train and Program Increment (RTPI), while deleting a Feature removes it from the system entirely.

Next step: Build out Product Roadmaps

Build out Product Roadmaps

Role: Product Manager

In addition to Investments, Features are also grouped into Products. The Product hierarchy enables smarter Roadmap planning and Resource allocation, as contrasted with the Investment hierarchy, which provides a more detailed breakdown of work. Additionally, Features that are assigned to a Product but not a Release Train are considered *backlog Features*. Since these Features are not associated with any Resources, they derive their cost from a rate set at the Product level.

Navigate to the **Product - Product** page and create a new Product. You can click the **plus** icon or right-click in the table. You'll be prompted to enter a parent Portfolio.

Manage Product backlog

NOTE: In this example, the Product backlog is already built-out.

Navigate to the **Product - Roadmap** page. In the previous topic, we learned that the cards on this page represent Features, and the number on the right side of each card is the Feature's effort value. This high-level view of Features enables informed Roadmap planning.

When your organization is ready to work on a Feature that's been sitting in the backlog in an upcoming Program Increment, you can assign that Feature to an RTPI (Release Train - Program Increment). To do this, simply drag the Feature from the backlog into the RTPI. Note that the left number in the top-right corner of the RTPI increments to include the effort value of the Feature you just added.

TIPS:

- See also: [Products](#).
- Use the **Group By** filter to group Features on this page by their assigned Products or Investments. If an administrator has configured your environment for custom Feature properties, you can group by those as well.
- You can use the **Backlog** section of the Product - Roadmap page to search for Features and add new Features. The number in the top-right corner of the backlog is the combined effort of all backlog Features.
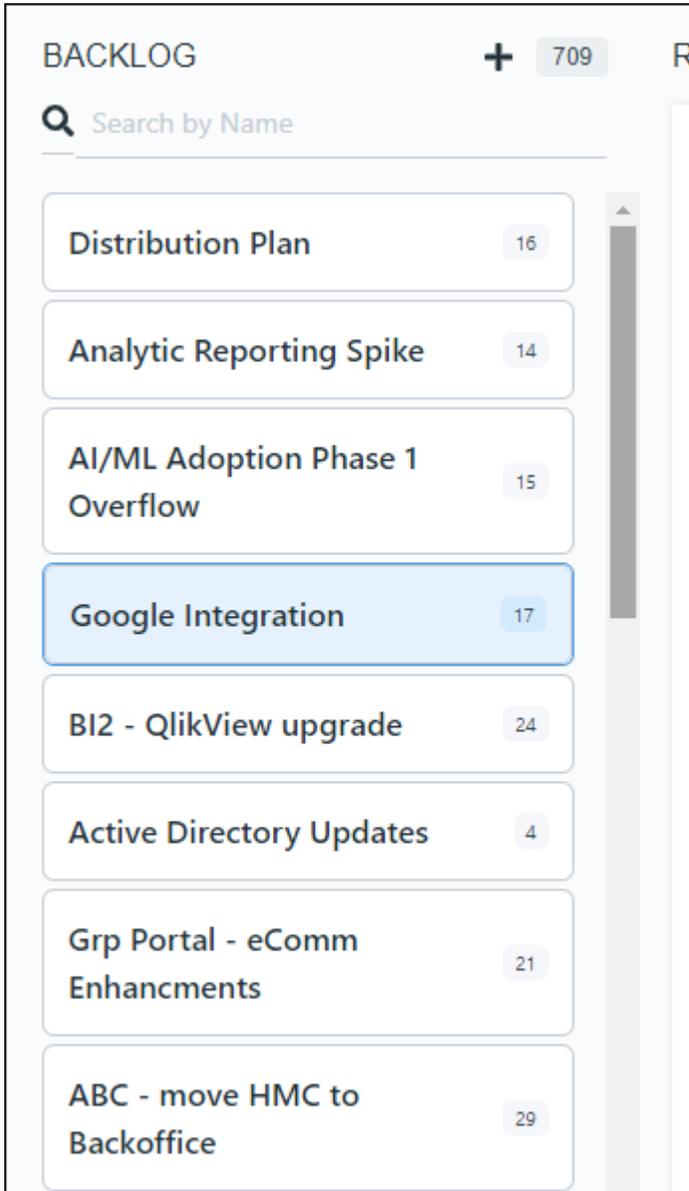
Next step: [Analyze data and report to stakeholders](#)

Analyze data and report to stakeholders

All of the data you've been entering in the system is visualized on the application's three "summary" pages: **Strategy - Summary**, **Portfolio - Summary**, and **Product - Summary**.

For this example, navigate to the **Portfolio - Summary** page.

Use the various features on this page to tailor the report to your needs.

1) Filters - These filters control which data is displayed on the page. This includes both graphs and the Investment listing table (6). Note that you can use the Program Increment filter to select multiple sequential Program Increments.

[gif of PI selector]

2) Backlog toggle - This toggle controls whether or not backlog Feature costs are included on the page.

3) Investment Portfolio treemap graph - This graph displays the costs of your selected Portfolio and its children. Bigger rectangles correspond to higher cost. Mouse over rectangles to see their associated name and cost figure.

4) Cost by Program Increment bar graph - Use this bar graph to compare costs over time (remember that Program Increments are the core unit of time in the application.) Mouse over the colored sections of a bar to see that section's cost.

5) Bar-breakdown method - Use this dropdown menu to select how each bar in the graph is broken down.

6) Investment listing table - This table lists the Investments in the application. Note that the filters above affect this table as well.

Data dimensions in Agile Investment Management

Program Increments

Program Increment (PI) – A Program Increment is the core unit of time in Agile Investment Management. A Program Increment represents a fixed number of sprints, and is typically 2-3 months in duration. Each Program Increment is user-defined and can be a different duration. Program Increments provide a more meaningful planning frame to financial and business stakeholders than the typical Agile sprint.

Unlike most other data dimensions in Agile Investment Management, you cannot create custom properties for Program Increments. Program Increments contain only the following properties: *Name*, *Start Date*, and *End Date*.

Create a Program Increment

1. In the left panel, click **Config -> Program Increment**.
2. Click the Plus ✚ icon in the top-right corner.
3. Enter the required information, then click **Add**.

NOTE: Default values are not used when manually adding dimensions as described here.

Import or Export Program Increment data

NOTE: Only Admins can access the Reference Data pages.

Use this method to import data for several Program Increments at once.
1. Navigate to the **Reference Data - Summary** page.
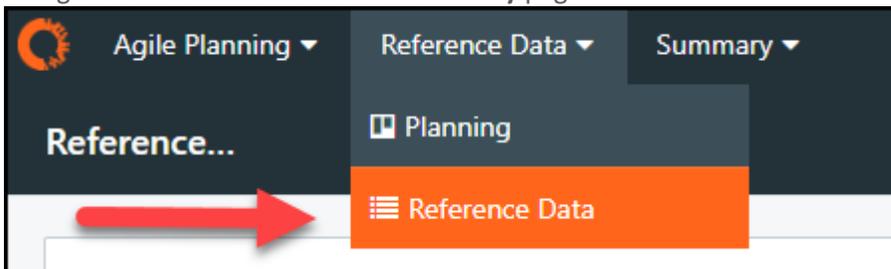
2. Click the **Export Template** button in the Program Increment row.
   The **Export Template** dialog opens.

3. Note the data formats in the drop-downs and modify them if necessary.
   When you're finished, click **OK** to download a template .csv file.
4. Enter your Program Increment data in the .csv file.
5. On the **Reference Data** page, in the Program Increment row, click **Import new…**. Select the file and click **Import**.

To export data, click any dimension on the **Reference Data - Summary** page (such as Investment), then click the **Export** button to export that dimension's data.

Investment Activities

Investment Activity – An Investment Activity is a label which is used to categorize work effort. It allows you to better plan by capacity, and subsequently track delivery against plan. Investment Activity is applied at the RTPI level to determine cost.

Investment Activity functions differently from the other dimensions in Agile Investment Management. Each row in the Investment Activity table on the **Reference Data - Investment Activity** page represents a category of work (for example, New Features, Tech Debt, and Bug Fixes.) Agile Investment Management factors in these categories when determining a Release Train's capacity in a given Program Increment.

You cannot add custom properties to Investment Activity. Investment Activity contains only the following properties:

- *DefaultPercentage* - This number determines how much of a Release Train's effort will go towards its Investment Activity in a given Program Increment. This is the default value for a new Release Train - Program Increment (RTPI). This value can be adjusted manually when planning.
- *DefaultAvailableForRoadmapPlanning* – If this is set to true, then its Investment Activity can be factored into capacity calculations. If this is set to false, it cannot be factored into those calculations. This value cannot be adjusted manually and must be adjusted via import.

NOTES:

- The sum of the DefaultPercentage values for all Investment Activities on the **Reference Data – Investment Activity** page must always be 100. These values can be adjusted individually for each Release Train – Program Increment (RTPI) on the **Product – Roadmap** page, but their sum must still be 100.

Import or export Investment Activity data

NOTE: Only Admins can access the Reference Data pages.
1. Navigate to the **Reference Data - Summary** page.
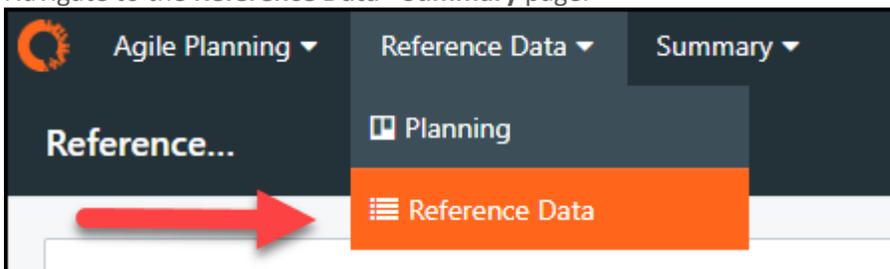
2. Click the **Export Template** button in the Investment Activity row.
   The **Export Template** dialog opens.
3. Note the data formats in the drop-downs and modify them if necessary. When you're finished, click **OK** to download a template .csv file.

4. Enter your Investment Activity data in the .csv file.
5. On the **Reference Data - Summary** page, in the Investment Activity row, click **Import new…**. Select the file and click **Import**.

To export data, click any dimension on the **Reference Data - Summary** page (such as Investment), then click the **Export** button to export that dimension's data.

Examples

You want to plan how much work Team Blue (the Release Train) can deliver next quarter (the Program Increment). Team Blue contains 10 members, each with 20 capacity points for a total of 200. If you set the DefaultPercentage value for New Features (the Investment Activity) to 25, then Team Blue's capacity for next quarter can only contain 50 points worth of New Features work.

Portfolios

Portfolio – A Portfolio is essentially a folder used to categorize Investment and Product hierarchies. A Portfolio contains a prioritized list (or backlog) of Investments. Portfolios can be nested inside other Portfolios to organize Investments and Products into smaller, more manageable groups.

To configure Portfolio properties, see [Configure data dimensions](#).

Create a Portfolio

1. In the left panel, click **Portfolio – Portfolio**.
2. Click the plus ✚ icon in the top-right corner.
   The **Add Portfolio** dialog appears.
3. Enter the name of your Portfolio, and select a parent Portfolio.
   If you do not select a parent Portfolio, the new Portfolio will be added to the top level of your hierarchy.
4. Click **Add**.
   The **Portfolio Details** panel appears. Use this details pane to add any additional info to your new Portfolio.

To add Investments to a Portfolio, see [Manage Investments](#).

Investments

Investment - An Investment is a planned high-level business initiative. An Investment contains a prioritized list (or backlog) of [Features](#). Investments are grouped into Portfolios. [Investments](#) represent a desired business outcome, and they carry the associated effort and costs to deliver that outcome. They typically span multiple quarters (or [Program Increments](#)) to accomplish. Investment data such as cost, effort, and number of features rolls up from the Feature level. The business case for an Investment can be defined using custom fields.

To configure Investment properties, see [Configure data dimensions](#).

Create an Investment

Use this method when adding a small number of Investments.
1. In the left panel, click **Portfolio -> Investment**.
2. Click the plus ➕ icon in the top-right corner.
   The **Add Investment** dialog opens.
3. Enter the name of your Investment and select a parent Portfolio.
4. Click **Add**. The **Investment Details** panel appears. Use this details panel to add any additional info to your new Investment.

NOTE: Default values are not used when manually adding dimensions as described here.

Assign an Investment to a different Portfolio

1. In the left panel, click **Portfolio -> Investment**.
2. Click on an Investment name. The **Investment Details** panel opens.
3. Mouse over the Portfolio field and click the pencil ✏️ icon that appears.
4. Select the Portfolio to which the Investment will be assigned, then click the check ✔️ icon to save your changes.

Import or export Investment data

NOTE: Only Admins can access the Reference Data pages.

Use this method to import data for several Investments at once.
1. Navigate to the **Reference Data - Summary** page.
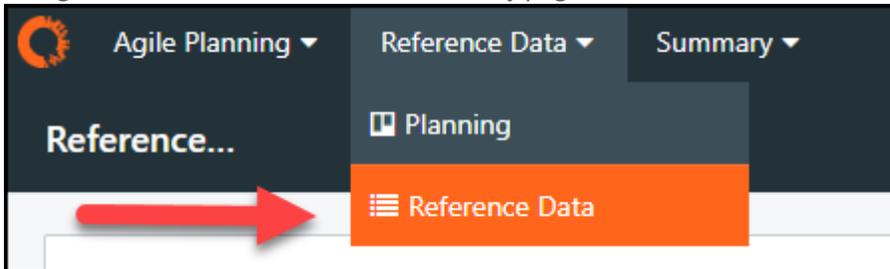
2. Click the **Export Template** button in the Investment row.
   The **Export Template** dialog opens.
3. Note the data formats in the drop-downs and modify them if necessary. When you're finished, click **OK** to download a template .csv file.
4. Enter your Investment data in the .csv file.
   NOTE: To assign an Investment to a Portfolio in the .csv file, enter the Portfolio's **code** value. You can view and export these values on the **Reference Data – Portfolio** page.
5. On the **Reference Data** page, in the Investment row, click **Import new…**. Select the file and click **Import**.

To export data, click any dimension on the **Reference Data - Summary** page (such as Investment), then click the **Export** button to export that dimension's data.

Products

Product - A Product is a value stream that's being invested in. The capacity, cost, and timeframe required to deliver Features rolls up to the Product level. Like Investments, Products each contain a prioritized list (or backlog) of Features, and are grouped into Portfolios. Unlike Investments, Release Trains are allocated to Products.

Product contains a property called *Unit Labor Rate* which takes an integer. A Product's Unit Labor Rate is used with a backlog Feature's *Effort* value to calculate the cost of that Feature. Unit Labor Rate does not affect planned Features. For detailed information on Product and Feature cost, see Cost flow in Agile Investment Management.

To configure Product properties, see Configure data dimensions.

Create a Product

Use this method when adding a small number of Products.
1. In the left panel, click **Product > Product**.
2. Click the plus ➕ icon in the top-right corner.
   The **Add Product** dialog opens.
3. Enter the name of the Product and select its parent Portfolio.
4. Click **Add**.
   The **Product Details** panel appears. Use this details panel to add any additional info to your new Product.

NOTE: Default values are not used when manually adding dimensions as described here.

Assign a Product to a different Portfolio

1. In the left panel, click **Product -> Product**.
2. Click on a Product name. The **Product Details** panel opens.
3. Mouse over the **Product** field and click the pencil ✏️ icon that appears.
4. Select the Portfolio to which your Product will be assigned, then click the check ✔️ icon to save your changes.

Import or export Product data

NOTE: Only Admins can access the Reference Data pages.

Use this method to import data for several Products at once.
1. Navigate to the **Reference Data - Summary** page.
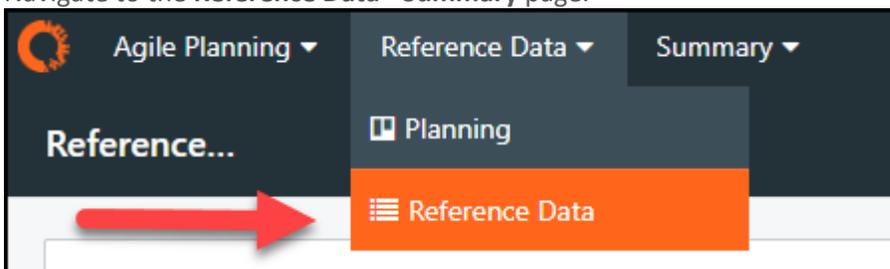
2. Click the **Export Template** button in the Product row.
   The **Export Template** dialog opens.

3. Note the data formats in the drop-downs and modify them if necessary. When you're finished, click **OK** to download a template .csv file.
4. Enter your Product data in the .csv file.
   NOTE: To assign a Product to a Portfolio in the .csv file, enter the Portfolio's **code** value. You can view and export these values on the **Reference Data – Portfolio** page.
5. On the **Reference Data** page, in the Product row, click **Import new…**. Select the file and click **Import**.

To export data, click any dimension on the **Reference Data - Summary** page (such as Investment), then click the **Export** button to export that dimension's data.

Release Trains

Release Train - A Release Train is an Agile delivery team that develops Features. Release Trains are allocated to Products. A Release Train's Investment Activity and Capacity can vary by Program Increment.

To configure Release Train properties, see Configure data dimensions.

Release Train capacity

Release Train has a property called *Capacity*. Capacity is used to scope the delivery capability of a Release Train in a given Program Increment (or RTPI). Capacity is a numeric value that can be defined in whatever way makes most sense for your organization. For instance, it can represent Agile story points.

Create a Release Train

Use this method when adding a small number of Release Trains.
1. In the left panel, click **Resources -> Release Train**.
2. Click the plus ✚ icon in the top-right corner.
   The **Add Release Train** dialog opens.
3. Fill in the required fields.
4. Click **Add**.
   The **Release Train Details** panel appears. Use this details panel to add any additional info to your new Release Train.

NOTE: Default values are not used when manually adding dimensions as described here.

Add a Release Train to a Product

1. In the left panel, click **Resources -> Release Train**.
2. Click on a Feature name.
   The **Release Train Details** panel opens.
3. Mouse over the **Release Train** field and click the pencil 🖉 icon that appears.
4. Select the Release Train to which the Feature will be assigned, then click the check ✔ icon to save your changes.

Import or export Release Train data

NOTE: Only Admins can access the Reference Data pages.

Use this method to import data for several Release Trains at once.
1. Navigate to the **Reference Data - Summary** page.
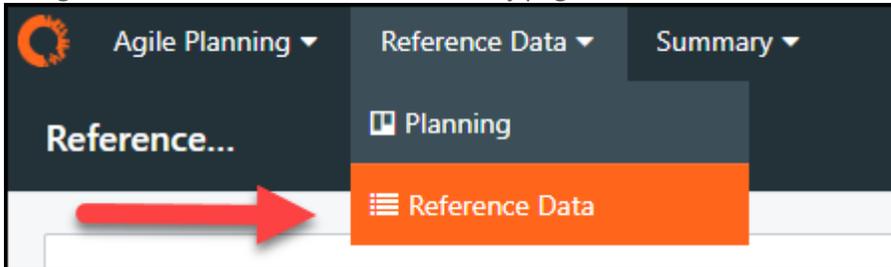
2. Click the **Export Template** button in the Release Train row.
   The **Export Template** dialog opens.
3. Note the data formats in the drop-downs and modify them if necessary. When you're finished, click **OK** to download a template .csv file.
4. Enter your Release Train data in the .csv file.
5. On the **Reference Data** page, in the Release Train row, click **Import new…**. Select the file and click **Import**.

To assign an Investment to a Product in the .csv file, enter the Product's **code** value. You can view and export these values on the **Reference Data – Product** page.

To export data, click any dimension on the **Reference Data - Summary** page (such as Investment), then click the **Export** button to export that dimension's data.

Features

Feature - A Feature is a granular business initiative. Features are the core work planning elements of Agile Investment Management, and can be associated with both Investments and Products. A Feature is typically analogous to an Agile epic. Feature data, such as estimated cost and effort, rolls up to the Investment, Product, and Portfolio levels to support reporting.

Features contain a property called *Effort* which takes a monetary value. Effort is used to calculate the cost of both planned and backlog Features.

To understand Feature cost calculation, see Cost flow in Agile Investment Management.

To configure Feature properties, see Configure data dimensions.

Create a Feature

Use this method when adding a small number of Features.
1. In the left panel, click **Product -> Feature**.
2. Click the plus ✚ icon in the top-right corner.
   The **Add Feature** dialog opens.
3. Enter the name of the Feature and its parent Investment.
4. Click **Add**. The **Feature Details** panel appears.
   Use this details panel to add any additional info to your new Feature.

NOTE: Default values are not used when manually adding dimensions as described here.

Assign a Feature to an Investment, Product, or RTPI

Features are always associated with an Investment. However, in order for a Feature's cost to be calculated, it must also be associated with additional data dimensions: Product (for backlog Features) and Release Train – Program Increment for (planned Features). A Feature is assigned to an RTPI once is has been assigned to both a Release Train and Program Increment. For more information on planned and backlog Features, see [Cost flow in Agile Investment Management](#).

Assign a Feature to an Investment, Product, or Release Train
1. In the left panel, click **Product > Feature**.
2. Click on a Feature name. The **Feature Details** panel opens.
3. Mouse over the relevant field (Investment, Product, or Release Train) and click the pencil ✏ icon that appears.
4. Once you've made your selection, click the check ✔ icon to save your changes.

Assign a Feature to a Program Increment
1. In the left panel, click **Product > Roadmap**.
   Every card on this page represents a Feature.
2. Drag and drop Features to assign them to RTPI's.
   You cannot assign a Feature to a Program Increment without also assigning it to a Release Train.

Import or export Feature data

NOTE: Only Admins can access the Reference Data pages.

Use this method to import data for several Features at once.
1. Navigate to the **Reference Data - Summary** page.
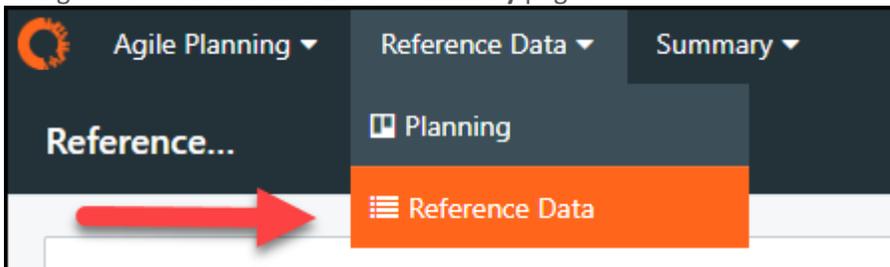
2. Click the **Export Template** button in the Feature row.
   The **Export Template** dialog opens.
3. Note the data formats in the drop-downs and modify them if necessary. When you're finished, click **OK** to download a template .csv file.
4. Enter your Feature data in the .csv file.
   NOTE: To assign a Feature to an Investment, Product, or Release Train in the .csv file, enter the corresponding **code** value. You can view and export these values on the respective **Reference Data – Investment, Product, Release Train** pages.
5. On the **Reference Data** page, in the Feature row, click **Import new…**. Select the file and click **Import**.

You can also export filtered Feature data on the **Product – Feature** page.
1. Use the left panel to navigate to the **Product – Feature** page.
2. Use the filters at the top of the page to control which data will be exported.
3. Click the **More** ⋮ icon in the top-right corner, then click **Export Feature**.

To export unfiltered Feature data, click **Feature** on the **Reference Data - Summary** page, then click the **Export** button to export Feature data.

Goals and Themes

Goal - A Goal is a tag which represents a high-level strategic objective. Goals are composed of Themes, and are associated with your Portfolios via Themes. Goals are used for reporting purposes (including cross-portfolio reporting).

Theme – A Theme is a tag that helps you to organize Investments into higher-level business objectives. Themes are used for reporting purposes.

Your Investments represent high-level business initiatives, and Portfolios group related Investments together. Additionally, Investments are grouped by Products, which represent value streams. Goals and Themes provide a third way to categorize Investments that doesn't necessarily correspond with your Portfolio or Product hierarchies.

Agile Investment Management uses Goals and Themes for reporting. For example, the first chart on the **Strategy - Summary** page displays the total amount being invested in each Goal, with the option to filter by Program Increment or Portfolio.

Goals are only directly associated with Themes; Goals cannot be assigned to any other data dimension. Themes are associated with Investments. Therefore, for an Investment to be associated with a Goal, it must be associated with that Goal's Theme. The chain of data is as follows:

Goal -> Theme -> Investment -> Portfolio

Multiple Themes can be associated with one Goal. Multiple Investments can be associated with multiple Themes. A single Portfolio can be associated with multiple Investments. These data relationships can be summarized thusly:

Goal (one to many) -> Themes (many to many) -> Investments (many to one) -> Portfolio

Create a Goal

Use this method when adding a small number of Goals.
1. Navigate to the **Strategy - Goal** page.
2. Click the plus ➕ icon in the top-right corner.
   The **Add Goal** dialog opens.
3. Fill in the required fields, then click **Add**.

Create a Theme

Use this method when adding a small number of Themes.
1. Navigate to the **Strategy - Theme** page.
2. Click the plus ✚ icon in the top-right corner.
   The **Add Theme** dialog opens.
3. Fill in the required fields, then click **Add**.

Assign a Theme to an Investment

1. Navigate to the **Portfolio - Investment** page.
2. Click on an Investment name.
   The **Investment Detail** pane opens.
3. Click anywhere in the **Theme** field to open a drop-down.
4. Select any number of Themes to associate with your Investment, then click the check ✓ icon to save your changes.

Import Goal or Theme data

NOTE: Only Admins can access the Reference Data pages.

Use this method to import data for several Goals or Themes at once.
1. Navigate to the **Reference Data - Summary** page.
2. Click the **Export Template** button in the Goal or Theme row.
   The **Export Template** dialog opens.
3. Note the data formats in the drop-downs and modify them if necessary. When you're finished, click **OK** to download a template .csv file.
4. Enter your Goal or Theme data in the .csv file.
5. On the **Reference Data** page, in the Goal or Theme row, click **Import new…**. Select the file and click **Import**.

Example

Your organization plans to launch two new e-commerce websites: 'ChairsForSale' and 'DesksForSale'. The websites are represented in Agile Investment Management as Portfolios. Each website needs a user profile page and a product catalog, which will be represented as Investments. Additionally, ChairsForSale will have a blog called 'The Chair Lair' and DesksForSale will have a twitter account called '@DesksAreTheBest' which will also be represented as Investments.

Your organization is also interested in expanding its social media efforts. You can use Goals and Themes to support this effort.
1. Create a Goal called **Expand Social Media**.
2. Create the Themes **Blogs** and **Twitter** and assign them to **Expand Social Media**.
3. Tag **The Chair Lair** with **Blogs** and **@DesksAreTheBest** with **Twitter**. Remember that both of these entities are Investments in this example.
4. Use the **Strategy – Summary** page to report on your organization's social media spend. You can view spend at both the Goal and Theme levels. You can also filter by Portfolio and Program Increment.

Cost flow in Agile Investment Management

Costs in Agile Investment Management flow through various data dimensions to support reporting. The following diagram outlines the overall data hierarchy of Agile Investment Management:
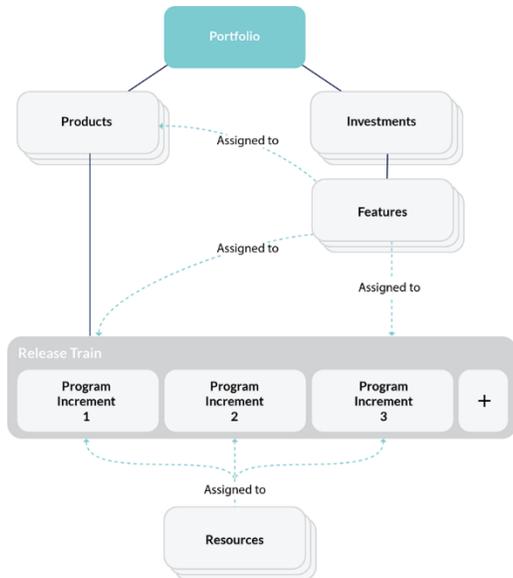
For definitions of each data dimension, see Agile Investment Management glossary.

Costs in Agile Investment Management are calculated at the Feature level. This means that any time you see a monetary value in Agile Investment Management, it is in some way derived from the costs of your Features. However, the cost of each Feature is calculated, not entered individually.

Features are divided into two categories: *planned* and *backlog*. Planned Features and backlog Features calculate their costs differently.

Backlog Feature cost

A *backlog* Feature is any Feature that is not assigned to an RTPI. A backlog Feature's cost is the product of its *Effort* value and its Product's *Unit Labor Rate* value.

> Backlog Feature Cost = Feature's Effort x Product's Unit Labor Rate

Planned Feature cost

Any Feature that's assigned to an RTPI is considered a *planned* Feature. The cost calculation for a planned Feature is more complex than that of a backlog Feature. All cost for planned Features rolls up from the Resource level. Additionally, Feature cost rolls up differently to Products than it does to Investments.

Both planned Features and Resources are assigned to RTPIs*. The effort value of a Feature equates to working days ("dev days"). Agile Investment Management averages* the hourly rates of Resources in an RTPI, then multiplies that number by the number of hours required to complete a Feature (which is determined by the Feature's Effort). This cost rolls up to the Product level. For Investments, there is an additional layer of calculation.

Investments also take Investment Mix into account , which is composed of Investment Activities. Investment Mix is a property of an RTPI, and it can vary by RTPI. Essentially, only cost that is dedicated to new Feature work will roll up to Investments, while the cost of other work effort is not counted. Each Investment Activity has two key properties: a percent value, and a binary 'Include on Roadmap' property. Investment Mix answers the questions, "What percentage of the Release Train's time and effort will go towards each category of work, and which of those categories directly apply to Roadmap Features?" If 80% of your Investment Mix is dedicated to Roadmap Features, then only 80% of the total cost of your RTPI rolls up to the Investment level. In contrast, 100% of that cost rolls up to the Product level.

Example: The RTPI 'E-Commerce - Q1 2021' has an Investment Mix that contains two Investment Activities: 'New Features' and 'Site Maintenance'. New Features has a percent value of 90% and is included on the Roadmap, while Site Maintenance has a percentage value of 10% and is not included on the Roadmap. The total cost of each Feature in 'E-Commerce - Q1 2020', based on the hourly rates of Resources assigned to that RTPI and the Effort values of those Features, would be multiplied by 0.9 before rolling up to the Investment level.

***NOTE**: A Resource can be allocated to multiple concurrent RTPIs. Agile Investment Management weights the cost of a "split" Resource based on the percentage of that Resource's time dedicated to each RTPI. For example, If Margaret Smith, a full-time employee, is allocated 75% to "E-Commerce - Q1 2021" and 25% to "Enterprise Analytics - Q1 2021", then her hourly rate will influence the cost of an E-Commerce Feature more than the cost of an Enterprise Analytics Feature, in proportion with both percentages. Her influence on both costs will be less than that of a full-time employee allocated to a single RTPI.

A more detailed breakdown of planned Feature cost calculation is coming soon.

Product, Investment, and Portfolio cost

Cost roll up from the Features to Products, Investments, and Portfolios is simple:
- A Product's cost is the sum of its Features' costs. The table on the **Product - Product** page displays both planned and backlog costs.
- An Investment's cost is the sum of its Features' costs. The table on the **Portfolio - Investment** page displays both planned and backlog costs.
- A Portfolio's cost is the sum of its Investments' costs.

Agile Investment Management glossary

Agile Investment Management is built on several *dimensions* which all categorize data to track spend on some level. These dimensions relate to and rely on each other to support Agile Investment Management's reporting capability. A definition for each dimension is provided below. Click a dimension name to learn more about its distinct properties and how to utilize it.

To track cost through the these dimensions in Agile Investment Management, see [Cost flow in Agile Investment Management](#).

NOTE: Agile Investment Management is highly customizable in nature. Most of the dimensions below can be customized to varying degrees to support the unique use case of your business. See [Configure data dimensions](#) for more information. These definitions convey a suggested use case, but they are not always prescriptive. For example, the feature dimension is typically analogous to an Agile *epic*, but you could build out your organization's environment such that investment is closer to an Agile epic instead.

Foundational dimensions

The first four dimensions are foundational 'buckets' of cost in Agile Investment Management:

Portfolio - A Portfolio is essentially a folder used to categorize Investment and Product hierarchies. A Portfolio contains a prioritized list (or backlog) of Investments. Portfolios can be nested inside other Portfolios to organize Investments and Products into smaller, more manageable groups.

Example: A parent Portfolio called Enterprise could contain Portfolios called Enterprise Apps and Enterprise Data.

Investment - An Investment is a planned high-level business initiative. An Investment contains a prioritized list (or backlog) of features. Investments are grouped into Portfolios. Investments represent a desired business outcome, and they carry the associated effort and costs to deliver that outcome. They typically span multiple quarters (or Program Increments) to accomplish. Investment data such as cost, effort, and number of features rolls up from the Feature level. The business case for an Investment can be defined using custom fields.

Example: A portfolio called Website could contain Investments called Update UI and Migrate Servers.

Feature - A Feature is a granular business initiative. Features are the core work-planning elements of Agile Investment Management, and can be associated with both Investments and Products. A Feature is typically analogous to an Agile epic. Feature data, such as estimated cost and effort, rolls up to the Investment, Product, and Portfolio levels to support reporting.

Example: An Investment called Account Management could contain features called Single-Sign On, Password Recovery, and New Profile Options.

Product - A Product is a value stream that's being Invested in. The capacity, cost, and timeframe required to deliver Features rolls up to the Product level. Like Investments, Products each contain a prioritized list (or backlog) of Features, and are grouped into Portfolios. Unlike Investments, Resources and Release Trains are allocated to Products.

Example: A Portfolio called E-Commerce could contain products called fashion, gadgets, and consumables.

Roadmap planning dimensions

These dimensions support roadmap planning for Agile release trains. Together, they allow you to plan on an Agile basis, rather than a waterfall basis.

Release Train - A Release train is an Agile cross-team collection of Resources that work together to deliver Features. Release Trains are allocated to Products. A Release Train's Investment Mix and Capacity can vary by Program Increment. A Release Train's allocated resources, their associated delivery capacity (velocity), and labor cost (blended labor rate of team members) can vary by program increment.

Team - A Team is a set of Resources that generally reports to the same manager, in contrast to a Release Train.

Resources- Resources are the people that work to deliver Features. Resources are grouped by Team and assigned to RTPIs (Release Train - Program Increments).

Program Increment (PI) - A Program Increment is the core unit of time in Agile Investment Management. A Program Increment represents a fixed number of sprints, and is typically 2-3 months in duration. Each Program Increment is user-defined and can be a different duration. Program Increments provide a more meaningful planning frame to financial and business stakeholders than the typical Agile sprint.

Release Train - Program Increment (RTPI) - RTPI refers to a release train in a given program increment. While RTPI is not a standalone dimension, each RTPI has an associated capacity value and Investment Mix percentages, and can be thought of as a core planning unit.

Investment Activity - An Investment Activity is a label used to categorize work effort. It allows you to better plan by capacity, and subsequently track delivery against plan. Investment Activity is applied at the RTPI level to determine cost. Investment activities can be either included or excluded from Roadmap planning. Work that goes toward deliverable should be included on the Roadmap, while maintenance work (such as bug-fixing) should not. This distinction allows you to see how much effort is directly going toward Roadmap objectives.

Example: You have a Release Train called 'Flying Scotsman' and a Program Increment called 'March-May 2020'. The RTPI 'Flying Scotsman - March-May 2020' has a set of two Investment Activities called 'New Feature Work' and 'Maintenance Work', each with a DefaultPercentage value of 50. This indicates that during this time period, the Flying Scotsman will focus its efforts on these two areas evenly. A Release Train can have a different Investment Mix in each Program Increment.

Roadmap - A Roadmap is a set of planned Features by Release Train and Program Increment. It represents your organization's plan to deliver Features over time. Product Managers can utilize the Roadmap to plan the delivery of Features, while Resource Managers can use the Roadmap to adjust allocation and capacity at a more granular level. Investment Mix and capacity data rolls up into Roadmaps.

Strategic reporting dimensions

Goals and Themes provide an additional way to categorize and report on your Investments.

Goal - A Goal is a tag which represents a high-level strategic objective. Goals are composed of Themes, and are associated with your Portfolios via Themes. Goals are used for reporting purposes (including cross-Portfolio reporting).

Theme - A Theme is a tag that helps you to organize Investments into higher-level business objectives. Themes are used for reporting purposes.

Agile Investment Management Admin Guide

Add users to a project

This task can only be performed by an Admin in Frontdoor. For additional information on roles, see [Frontdoor permissions and roles](#).

1. In the Settings ⚙ menu at the top of the page, click **Access Administration**.
    The Frontdoor Access Administration console opens.
2. On the Access Administration page, click **Roles**.
3. Locate the **BasicAgileUser** role and click **Grant** in the **Actions** column.
4. To grant access to users within your authentication domain, click **Authentication domains I manage**, then click **Next**. Select the users, then click **Next**.
5. To grant access to users outside of your authentication domain, click **Another authentication domain**, then click **Next**. In the Username field, type a user name, then click **Add**. Continue adding users as needed, then click **Next**.
6. Review the role settings, then click **Grant Role**.

NOTE: In Agile Investment Management, only Admins can access the **Config** menu and the **Reference Data** page.

Import reference data

NOTE: This topic is intended for Admins.

In Agile Investment Management, you can information into the application in two ways: manually or via import. Importing is helpful when setting up the application or when adding a large amount of data. For example, if your organization decides to deliver a new feature in Q2, you can quickly add that feature and its relevant information without having to import anything. Alternatively, your organization may want to represent hundreds of unique features when you first set up the application. Importing data saves you a lot of time in these situations.

The import process is identical for each data dimension. However, each dimension has unique properties and unique relationships to other data dimensions. This topic provides general instructions on importing, but you will need to become familiar with each dimension's functionality in the application to import meaningful data. For more information, see Get started in Agile Investment Management.

1. Navigate to the **Reference Data - Summary** page.
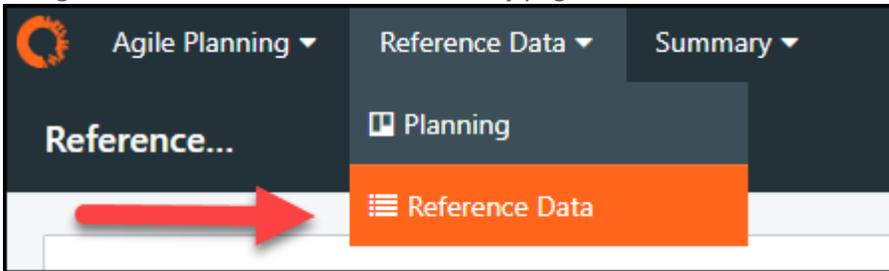
2. Click the **Export Template** button for the data you want to import.
    The **Export Template** dialog opens.
3. Note the data formats in the drop-downs and modify them if necessary. When you're finished, click **OK** to download a template .csv file.
    NOTE: The template that you download will have the correct column headers, but it will not necessarily be populated with valid data. You can specify the type of data that is included by modifying the drop-downs before you download.
4. Enter your data in the .csv file.
5. On the **Reference Data - Summary** page, click **Import new…** for the type of data you want to import. Select the file and click **Import**.

The code property

A dimension's code property functions as a unique identifier. Use the code values of your dimension line items to associate them with one another. Codes are automatically generated upon importing a new line item.

Example: You want to create a new Investment called Investment A, and you want it to live under an existing Portfolio called Portfolio B in your hierarchy. To do this, enter Portfolio B's code on Investment A's line as you import your Investment data. Investment A now lives under Portfolio B in your project. Additionally, a new code is generated for Investment A so you can associate it with additional dimensions, such as Features.

Admin quick-start steps

Follow the steps in this topic to populate Agile Investment Management with your organization's data. This will enable the application's reporting and planning capabilities.

Before you start

Each of the subsequent tasks require you to import data for a different data dimension. The import process is identical for all data dimensions. However, each dimension has different properties that you must understand in order to enter the correct data. If you are a new to the application, you should become familiar with each dimension before importing data.

TIPS:
- See Agile Investment Management definitions for a general definition of each data dimension.
- See Cost flow in Agile Investment Management to better understand how the data dimensions relate to one another.
- See How to: Upload reference data for general instructions on uploading data.
- Each step below includes a link to a "Work with..." topic for a dimension. Follow each link to learn about that dimension.

1. Establish Program Increments

Role: Admin

Program Increments (or PIs) are the core unit of time in Agile Investment Management. Each Program Increment can be a different length of time to fit your organization's internal calendar or deadlines. Program Increments will be used to plan and analyze both your allocation of Resources and the cost required to deliver Features.

In the left menu, navigate to **Config - Program Increments**. You can enter data manually or import your Program Increment data. For more information, see Work with Program Increments.

Program Increment properties:
- **Name** - A unique identifier and a name.
- **Start Date** - Start of the Program Increment.
- **End Date** - End of the Program Increment.

2. Customize Agile Investment Management for your organization

Role: Admin

Use the **Config** section in the left menu to add information about your organization's setup, including locations and roles. Add information about your organization's calendar, including working days and non-working days (such as weekends and holidays). Working time will be factored into capacity and cost calculation throughout the application.

Agile Investment Management is highly customizable by design. You can tailor Agile Investment Management to fit the specific processes and business cases of your organization. Though it's not mandatory, you can add custom properties to capture relevant details across each layer of your data hierarchy.

Before continuing, you should define any custom properties in the **Config** section. For more information, see [Configure data dimensions](#).

3. Set up Investment Activity mix

Role: Admin

Investment Activity is essentially a way to categorize the types of work that will be done in a given Program Increment. You can specify what percentage of a Release Train's time will be spent on each Investment Activity.

Importantly, you can also choose whether or not to track the cost of work based on its Investment Activity. For example, a Release Train can split its work evenly between two Investment Activities: "New feature work" and "Fix bugs." While time and money spent on bug fixing is import and should be tracked in Agile Investment Management, you may not want to reflect this work as being part of any specific Feature. To do this, you would set the Include property of **New feature work** to **true** and **Fix bugs** to **false**.

[Import](#) your Investment Activity data. For more information, see [Work with Investment Activities](#).

Investment Activity properties

- **Name** - A unique identifier and a name.
- **DefaultAvailableForRoadmapPlanning** - Boolean. Enter true for Feature-related work or False for non-Feature-related work.
- **DefaultPercentage** - Integer. When you create a new Program Increment, this value will be applied. **NOTE**: The DefaultPercentage values of all Investment Activities must add up to 100.

Configure data dimensions

NOTE: This topic is intended for Admins.

Agile Investment Management contains several dimensions, all of which are customizable to some degree. Dimensions are the building blocks of Agile Investment Management. Dimensions are listed in the **Configuration** table on the **Reference Data - Summary** page. Click a dimension name to view all data for that dimension type, including custom properties.
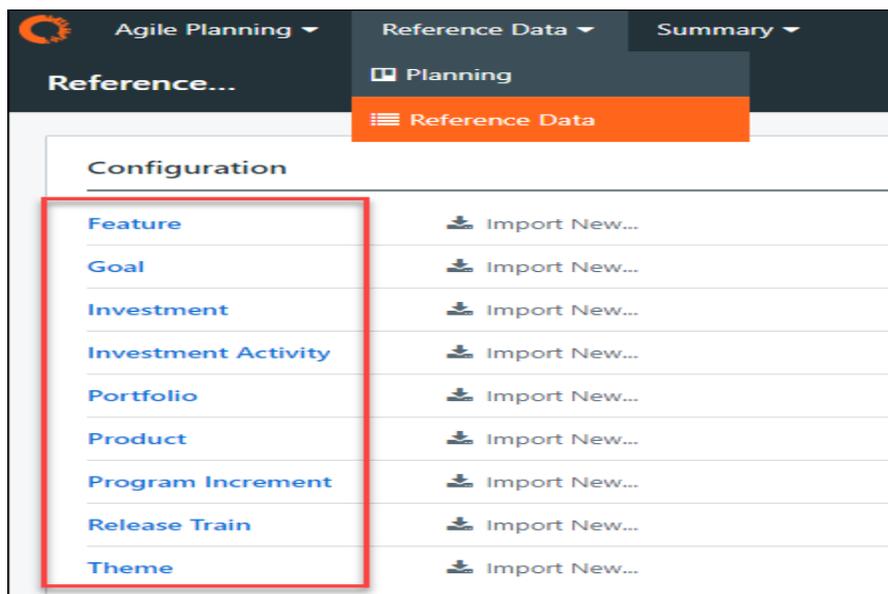
For information about what each dimension represents and its relationship with other dimensions, see Agile Investment Management definitions.

Customize dimensions

Each dimension contains several built-in properties. Each property is a field which can contain a specific type of data. For example, the Investment dimension has a Name property that takes String data.

There are several ways to customize a dimension to your organization's use case:
- You can add custom properties to (or remove custom properties from) a dimension. Note that adding a custom property with the data type custom list requires an extra step to define the list's values.
- You can define which properties are displayed and the order in which they are displayed on a dimension's details panel.

Add or remove a custom property

1. Navigate to the **Reference Data – Summary** page.
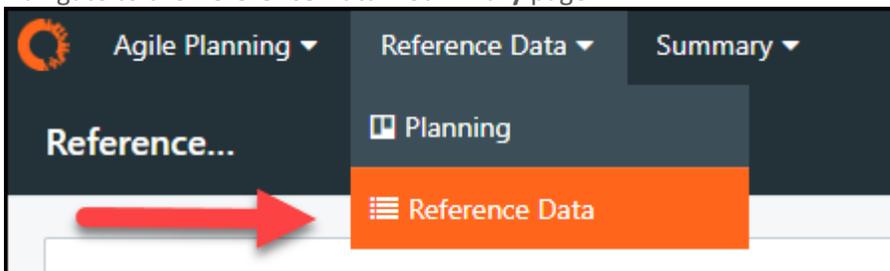
2. Click the dimension you want to customize (such as Investment).
3. Click the **Edit Columns** button.
   The columns are now displayed as rows. Cells in white are editable. Cells in gray are read-only.
   The bottom row of the table can be used to add a custom property.
4. In each cell of the row, enter the data your custom property requires. When you are done, click **Save**.

To delete a custom property, right-click its row and click **Delete**, then click the **Save** button.

Add a custom property with type 'custom list'

If you want a dimension to contain a property with custom choices, use a custom list. For example, you could add a custom property named Urgency to Investment with the possible values 1-3 months, 3-6 months, and 6-12 months to indicate to users or stakeholders the timeframe in which the investment must be delivered upon.

1. On the **Reference Data - Summary** page, click the **Add Custom List** button at the bottom.
   The custom list dialog opens.
2. Enter the name of the list.
   Note that this name is distinct from the display name of the property itself.
3. Use the buttons to add items to your custom list. When you are done, click **Save**.
   From here, the remaining steps are the same as adding any custom property.
4. Navigate to the **Reference Data - Summary** page, then click the dimension you want to customize.
5. Click the **Edit Columns** button.
   The columns are now displayed as rows. Cells in white are editable. Cells in gray are read-only. The bottom row of the table can be used to add a custom property.
6. In each cell of the row, enter the data your custom property will require. When you are done, click **Save**.

Custom lists are displayed on the **Reference Data - Summary** page. Click a custom list to edit its list items.

Configure property layout

Users can view a *details panel* for any dimension line item which displays data from both built-in and custom properties. This panel can be customized. In the following image, a user is viewing the details panel for the Enterprise Data Portfolio on the **Portfolio - Portfolio** page:
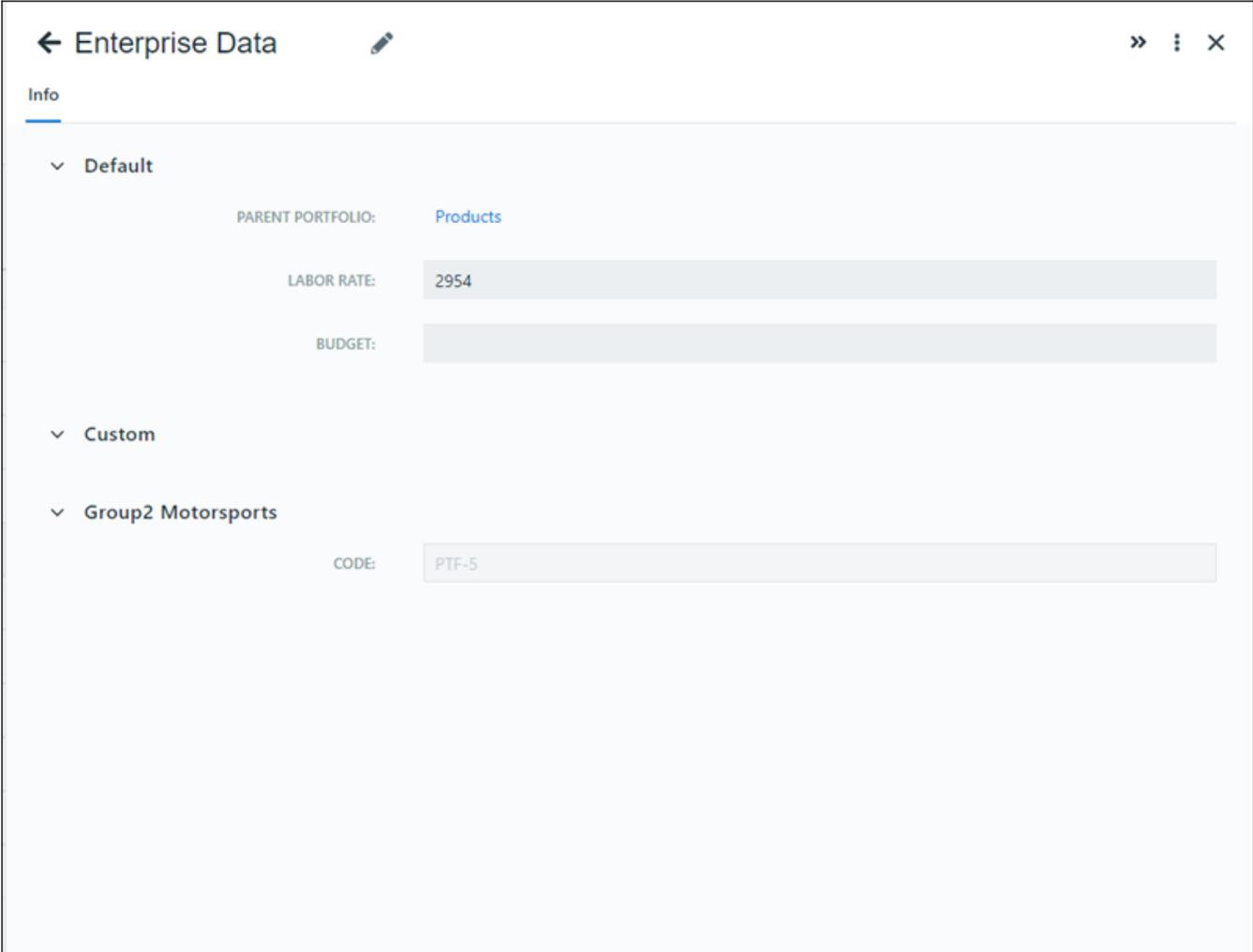
The following steps allow you to customize details panels like the one in the preceding image.
1. In the left panel, click **Config > Properties Layout**.
2. Select the dimension you want to customize, such as Investment.
3. Drag and drop the properties to create the layout you want.
   The box on the right represents the details panel. The box on the left contains properties which will be hidden from view.
4. If necessary, click **Add Group** to add a new properties group.
   These groups are visual only and are not used for reporting.

To edit the name of any custom properties group, simply click its name.

You can edit groups which are included out-of-the-box.

To delete a custom properties group, hover over it and click the X in the top-right corner.

About Agile Insights

Agile Insights is an Apptio SaaS solution that helps technology leaders quantify their Agile development business value. Through a unique combination of financial and execution analytics, Agile Insights informs decisions that drive labor capitalization, optimize labor investments, and improve team productivity.

Use Agile Insights to quantify the business value of your Agile development:
- Optimize labor investments by measuring product delivery and program incentives.
- Improve team productivity so you can track your investments into innovating, evolving, and maintaining your Agile products.
- Inform labor capitalization decisions, providing a comprehensive view into Agile labor spend, utilization, and composition.

Agile Insights integrates your financial information with work execution information from your Agile Application Lifecycle Management (Agile ALM) systems (such as JIRA, Microsoft TFS, VersionOne, and CA Rally) to create a business performance view of Agile productivity, quality, and labor.

Agile Insights can be installed independently or as sub-feature of Cost Transparency.

Use Agile Insights to create:
- **Product delivery analytics** that help you optimize resource investments, justify the funding of current products, and inform decisions that improve velocity.
- **Development and quality analytics** that drive accountability for spend and quality, reduce unproductive work, and inform decisions that improve quality.
- **Labor analytics** that inform your labor capitalization decisions, improve team resourcing decisions, and track Agile transformation progress.

Agile Insights components and reports

Because the data and the allocation of Agile development investments can vary between organizations, Agile Insights is composed of five components that can accommodate a variety of implementations. This section provides an overview of the Agile Insights components and their related reports. For configuration instructions, see the Configure Agile Insights. Install the following Agile Insights components to view the associated reports.

Agile Teams component

This component consists of the raw team data. This component must be installed before all other Agile components.

Associated data:
- Team name
- Average monthly salary of team members
- Internal and external headcount
- Onshore and offshore headcount
- Team location
- Management chain
- Employee name (optional)

Associated reports:
- **Agile Insights main report** - A high-level view into your Agile project management investments and processes. For more information, see Agile Insights main report.
- **Agile Teams by Resource Type** - View the roles and resources used by your Agile development teams so you can analyze whether the teams meet business goals and expectations. For more information, see Agile Teams by Resource Type.
- **Agile Labor Plan Variance** - Understand the variance between actual versus planned labor investment, internal versus external investment, and actual versus planned capacity. For more information, see Agile Labor Plan Variance.

Agile Activity component

This component includes all modeled Agile team bugs and stories. The **Agile Teams** component must be installed prior to installing this component.

Associated data:
- ID
- Ticket name
- Ticket type
- Summary
- Open date
- Resolved date
- Closed date
- Opener
- Resolver
- Closer
- Team
- Sprint ID
- Points
- Release version
- Epic name

Associated reports:
- **Agile Development Analytics** - Provides an overview of your Agile backlog, effort, value created, and the priority of epics to empower your decision-making and allow you to create value faster. For more information, see Agile Development Analytics.
- **Labor Resource Distribution** - Provides insight into team focus so you can understand the quality of your Agile teams and whether you're getting the value you need out of their efforts. For more information, see Labor Resource Distribution.
- **Cost of Quality** - Provides a financial perspective into the funding of your Agile teams so you can see the financial impact of defects. For more information, see Cost of Quality.
- **Development Analytics by Sprint** - Provides an overview of your Agile backlog, effort, and quality to empower your decision-making and allow you to understand whether your spending is generating value for the organization. For more information, see Development Analytics by Sprint.
- **Ticket Hygiene** - Provides visibility into issues that, if fixed, improve the productivity of your Agile teams. For more information, see Ticket Hygiene.

Agile Epics and Initiatives component

This component includes past, current, and planned program increments, including sprint detail. The **Agile Teams** and **Agile Activities** components must be installed prior to installing this component.

Associated data:
- Program initiative (PI) name
- PI ID
- PI start/end date
- Sprint name
- Product manager
- Associated product
- Start date
- End date

Associated reports:

There are currently no reports associated with this component. While some reports have Epic data in them, they pull that data from the **Activity** object rather than **Agile Epics and Initiatives**.

Agile Products component

This component includes epics and initiatives tied to the work planned or in progress associated with the products. The **Agile Teams**, **Agile Activities**, and **Epics and Initiatives** components must be installed prior to installing this component.

Associated data:
- Epic name
- Epic ID
- Product manager
- Associated product

Associated reports:
- **Executive Dashboard** - A high-level view into your Agile development spend versus plan, labor per organization and cost pool, and released feature and bugs per product. For more information, see [Executive Dashboard](#).
- Agile Delivery:
    - **Product Investments** - Gain visibility into the milestones of your Agile teams, such as the products they deliver, the timing of delivery, and the business value of their efforts. For more information, see [Product Investments](#).
    - **Product Development Analytics** - Understand investments at the team level and how many teams support a product. Also provides a breakdown of what teams are working on (quality versus innovation), trending over time. For more information, see [Product Development Analytics](#).
    - **Product Value by Epic** - Helps you understand the number, value, and priority of Agile development work at the epic level. For more information, see [Product Value by Epic](#).

Agile Labor Capitalization component

This component includes products supported by the modeled Agile teams. This is an optional component, but at a minimum, the **Agile teams** and **Agile Activity** components must be installed prior to installing this component.

Associated data:
- Product name
- Product owner
- Product profile
- Capitalizable activity

Associated reports:
- **Capitalizable Labor** - View the impact of capitalized development labor by cost, by team, by time, or by internal versus external labor. For more information, see [Capitalizable Labor](#).

Agile Insights concepts

Digital business is an incredibly powerful force that is empowered by the following:
- Cloud resources, which provide scale, agility, and advanced capabilities that empower developers.
- Agile development strategies, which help developers move faster while maintaining quality and customer satisfaction.
- Strategic suppliers, who provide resources and specialization.

While these elements provide strategic benefits, they also add complexity to the CIO's ability to run IT like a business, to scale modern delivery methods, and to get return on investment (ROI). In response, Apptio's Agile Insights provides a product-centric business management model that helps you govern investments and align your development teams and backlogs with your products. This drives profit and loss ownership lower into the organization in a way that makes your data accessible to those who are managing your company's decision-making relationships and investment decisions around your application development growth.

Agile Insights provides visibility into the IT initiatives that support products, provides insight into what to capitalize, measures the financial impact of Agile development, and provides visibility into funded initiatives.

To learn more about Agile terminology and concepts, see [Agile terminology](#).

For a list of the metrics gathered by Agile Insights, organized by area, see [Key Agile Insights Metrics](#).

Out-of-the-box data sets

- Agile Teams Master Data informs the Agile Teams object in all models.
- Agile Development Activity Master Data informs the Agile Activity object in all models.
- Issue Type Weighting serves as a reference table or tablematch for weighing ticket severity (for example, S1, S3).
- Priority Weighting serves as a reference table or tablematch for weighing the ticket priority (for example, P1, P3).
- Epics and Business Initiatives Master Data informs the Agile Epics and Business Initiatives object in all models.
- Products Master Data informs this backs the Agile Products object in all models.
- Program Increments Master Data
- For the Utilized Labor model, the driver is based on the `Agile Teams Master Data.Utilized Labor Headcount`.

Agile Insights models

Agile Dev Cost model measures the labor investments associated with building and maintaining product portfolios.

- Driver: Average salary
- Objects:
  - Agile Teams
  - Agile Development Activity
  - Agile Epics and Business Initiatives
  - Agile Products

Agile Dev Budget model measures the labor budget associated with building and maintaining product portfolios.

- Driver: `=IF(Agile Teams Master Data.Average Salary*Agile Teams Master Data.Planned Headcount)`
- Objects:
  - Agile Teams
  - Agile Products

Agile Activity model measures the ticket counts associated with building and maintaining product portfolios.

- Drivers:
  - Bug Count: `=IF(Agile Development Activity Master Data.QA Activity="Yes",1,0)`
  - Story Count: `=IF(Agile Development Activity Master Data.Development Activity = "Yes", Agile Development Activity Master Data.Count,0)`
- Objects:
  - Agile Teams
  - Agile Development Activity
  - Agile Epics and Business Initiatives
  - Agile Products

Planned Labor model measures the planned and budgeted headcount associated with building and maintaining product portfolios.

- Driver: `Agile Teams Master Data.Planned Headcount`
- Objects:
    - Agile Teams
    - Agile Products

Utilized Labor model measures the utilized and actual headcount associated to building and maintaining product portfolios.

- Driver: `Agile Teams Master Data.Labor Headcount`
- Objects:
    - Agile Teams
    - Agile Development Activity
    - Agile Epics and Business Initiatives
    - Agile Products

Development Costs model measures the development investments associated with stories and feature work.

- Driver: `=IF(Agile Development Activity Master Data.Development Activity="Yes", Agile Dev Cost,0)`
- Objects:
    - Agile Development Activity
    - Agile Epics and Business Initiatives
    - Agile Products

Development Tickets model measures the ticket count associated with stories and feature work.

- Driver: `=IF(Agile Development Activity Master Data.Development Activity="Yes", Agile Dev Cost,0)`
- Objects:
    - Agile Development Activity
    - Agile Epics and Business Initiatives
    - Agile Products

Quality Costs model measures the quality investments associated with bug and defect work.

- Driver: `=IF(Agile Development Activity Master Data.QA Activity="Yes", Agile Dev Cost,0)`
- Objects:
    - Agile Development Activity
    - Agile Epics and Business Initiatives
    - Agile Products

QA Tickets model measures the quality count associated with bug and defect work.

- Driver: `=IF(Agile Development Activity Master Data.QA Activity="Yes", Agile Dev Cost,0)`
- Objects:
    - Agile Development Activity
    - Agile Epics and Business Initiatives
    - Agile Products

Agile Insights menu

Use the Apptio menu to navigate and control the information displayed in the application.
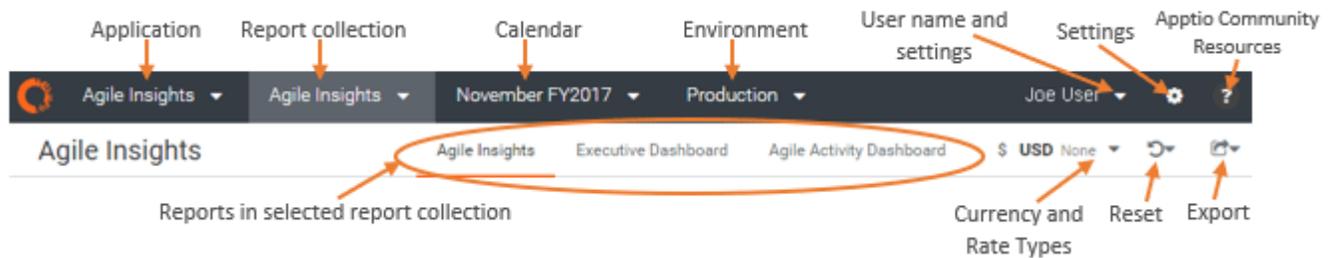
Application menu - Apptio planning applications support common login and user administration via Frontdoor. Use the Application menu to switch between Apptio applications available in the environment of your organization.

Report collection menu - Select a report collection, then use the menu provided to select a report in a report collection, reset slicers (⟳▾), and export or email your data (⬀▾). In the previous image, the report collection is Agile Insights.

Calendar menu - Select a time period.

Environment menu - Select your environment.

User name and Settings menu - View your user account settings or log out.

Settings menu - The Admin uses the Settings menu to manage users and projects.

Help - Displays What's New details for recent releases, and links to resources in the Apptio Community.

Currency and Rate Types menu - Select your currency and rate type.

Capitalize labor in Agile Insights

Capitalizable labor is the direct cost of labor associated with the development stage of software, distributed over time via a depreciation or amortization schedule. Capitalizable labor does not include the cost to design, research, or deliver software, but it does include the cost of active coding and testing of the software. Most organizations that capitalize labor set a threshold for capitalizing labor only if the dollar amount exceeds that threshold. Organizations can also develop their own unique rules.

Before adopting Agile, many organizations require employees to manage their time in traditional time-tracking solutions using project codes to manage and track activities. While time-tracking can be a very accurate method to understand the work of each team member as capitalized versus expensed, the process is very tedious, which increases overhead in a way that is counterproductive to Agile best practices.

In contrast, Agile Insights leverages your organization's Agile activity (epics, story types, story categories, etc.) and identifies capitalizable work (new feature work or value-add work for existing features) that can then be allocated to your Agile team financial data in a way that provides detailed tracking of that data to support any audit or Controller concerns.

As organizations transform to Agile methodologies, they often use Agile ALM solutions (such as JIRA, Rally, VersionOne, TFS, etc.) to define the activities in their organizations that are deemed capitalizable. Also, organizations tend to associate epics, story types, and story categories to define activities as new feature work versus work that adds value add to existing features. By leveraging this information, Apptio's Agile Insights allows customers to map capitalizable activity against their activity data. Further, by allocating Agile financial data to Agile activity, Agile Insights provides a view into capitalizable labor and provides detailed data that allows Finance to support auditing concerns.

Use this topic to understand the accounting rules used to calculate labor capitalization in Agile Insights and the theory behind labor capitalization generally used by organizations. This topic will help you move your organization from time tracking to an Agile methodology.

For a list of reports, see Agile Insights reports.

For configuration instructions, see Configure Agile Insights.

Accounting rules

The accounting rules used in Agile software development for labor capitalization are not always straightforward. For example, the rules for developing internal-only software differ from the rules for developing software for sale. It is helpful to understand the following basic principles and common terms:

- **SOP 98** provides accounting guidance related to the cost of software that is developed or obtained for internal use. The following must be true for software to be considered "internal use" per the Financial Accounting Standards Board:
  - The software must be acquired, internally developed, or modified solely to meet the entity's internal needs.
  - During software development or modification, no substantive plan exists, or is being developed, to market the software externally.
- **Definition of the stages of software development**

Preliminary project	Application development	Post-implementation
Conceptual formulation of alternatives	Design of chosen path, including software configuration and software interfaces	Training
Evaluation of alternatives	Coding	Application maintenance
Determination of needed technology	Installation to hardware	
Final selection of alternatives	Testing, including parallel processing phase	

Useful resources:
  - SOP 98 - Financial Accounting Standards Board
  - SAFe - Scaled Agile Framework guidance for Labor Capitalization
  - Withum Accounting Guidance - Insights from a CPA
  - Accounting Tools - Capitalization of software development costs

Time tracking overhead

Many organizations use traditional time tracking methodologies because of the lack of a Finance-approved alternative. Even as customers move into Agile practices, organizations still struggle to manage employee work with traditional time tracking solutions, which usually require project codes and the management of activities to track against. While time tracking can accurately record work the work that needs to be capitalized versus expensed, the process is time consuming and tedious, and it creates additional overhead for workers that is counter-intuitive to Agile methodologies. Agile Insights is now the result of research by KPMG and Apptio that determined that the increased overhead of using time tracking for Agile teams is counterproductive to Agile best practices, as shown in the following image.
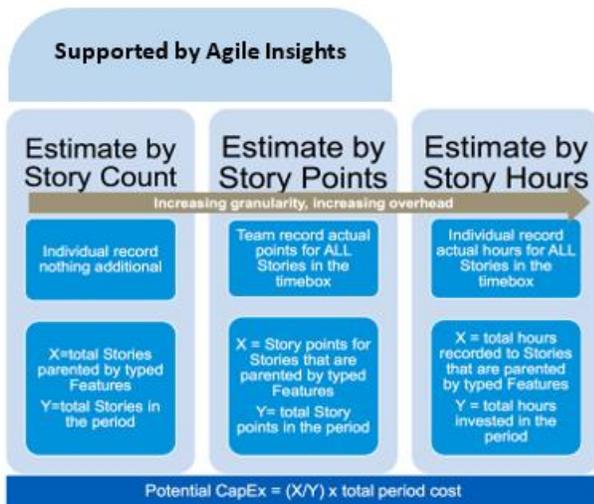
Key Agile Insights metrics

The following metrics are used in Agile Insights.

Agile Activity metrics

Count of:
- Escaped Defects Products with Capitalizable Labor
- Reopened Tickets
- Reopened Tickets in Active Sprint
- Stories with No Development Estimate
- Tickets
- Tickets Not Assigned to an Agile Team
- Tickets Not Started
- Tickets Released on Time
- Tickets with Late Release
- Capitalizable Stories
- Closed Tickets
- Capitalizable Features QTD
- Development Tickets
- Features

Cost of:
- Cost of Bugs
- Cost of Closed Tickets
- Cost of Escaped Defects
- Cost of Finished but Unreleased Work
- Cost of Released Features
- Cost of Reopened Tickets
- Cost of Reopened Tickets in Active Sprint
- Cost of Tickets in Active Sprint
- Cost of Unresolved Tickets in Active Sprint
- Cost of Work Not Started
- Cost per Closed Ticket
- Abandoned Activity

- Features in Active Sprint
- Open Bug Count
- Open Feature Count
- QA Ticket Count
- QA Tickets in Active Sprint
- QTD Agile Activity
- Story Count
- Unresolved Tickets in Active Sprint
- YTD Escaped Defects
- YTD Bug Count
- YTD Count of Escaped Defects
- YTD QA Ticket Count

- Development
- Features
- Monthly Capitalizable Labor
- Monthly Development Cost
- Monthly Feature Costs
- Monthly Quality Costs
- QA Activity Costs
- Qtrly Capitalizable External Labor Cost
- Qtrly Capitalizable Internal Labor Cost
- Cost of Quality
- Quarterly Capitalizable Labor
- YTD Bug Cost
- YTD Cost of Escaped Defects
- YTD Cost of Released Features
- YTD Development Costs
- YTD QA Activity Costs

Cost Per:
- Closed Dev Ticket
- QA Activity
- Ticket
- Agile Team

Percent of:
- QA Tickets
- Abandoned Activity
- Effort

Agile Team metrics

Count of:
- Agile Teams
- Headcount Assigned to an Agile Team
- Headcount Not Assigned to an Agile Team
- Labor Headcount
- Planned Headcount Planned Labor Capacity
- Utilized Headcount

Percent of:
- Workforce on Agile Team
- Workforce on Agile Teams

Cost of:
- Capitalizable External Labor
- Capitalizable Internal Labor
- Monthly External Development Costs
- Monthly Internal Labor Development Costs
- YTD Development Budget
- YTD Development Costs
- YTD External Labor Costs
- YTD Internal Labor Costs

Average Team Size

Existing Labor Capacity

Epics & Initiatives metrics

Count of:
- Active Epics
- Total Epics
- Stories without Epic Link

Average Count of Epics per Investment Category

Average Count of Epics per Product

Average Investment per Epic

Products metrics

Count of:
- Product Owners
- Total Products

Annual Budget by Product

Average Investment per Product

FY Budget

Monthly Budget

Model metrics

Unit Models:
- Agile Activity
- Development Tickets
- QA Tickets
- Planned Labor
- Utilized Labor

Currency Models:
- Agile Dev Budget
- Agile Dev Cost
- Development Costs
- Quality Costs

Configure Agile Insights

Use these instructions to configure Agile Insights. Allocation guidance for each of the following modeled objects is included:
- Master data set (MDS) appends
- Modeled object drivers
- Allocation methodologies

Conceptual data model

The following image outlines the conceptual flow of the Agile development modes and the allocation of labor costs to Agile work.
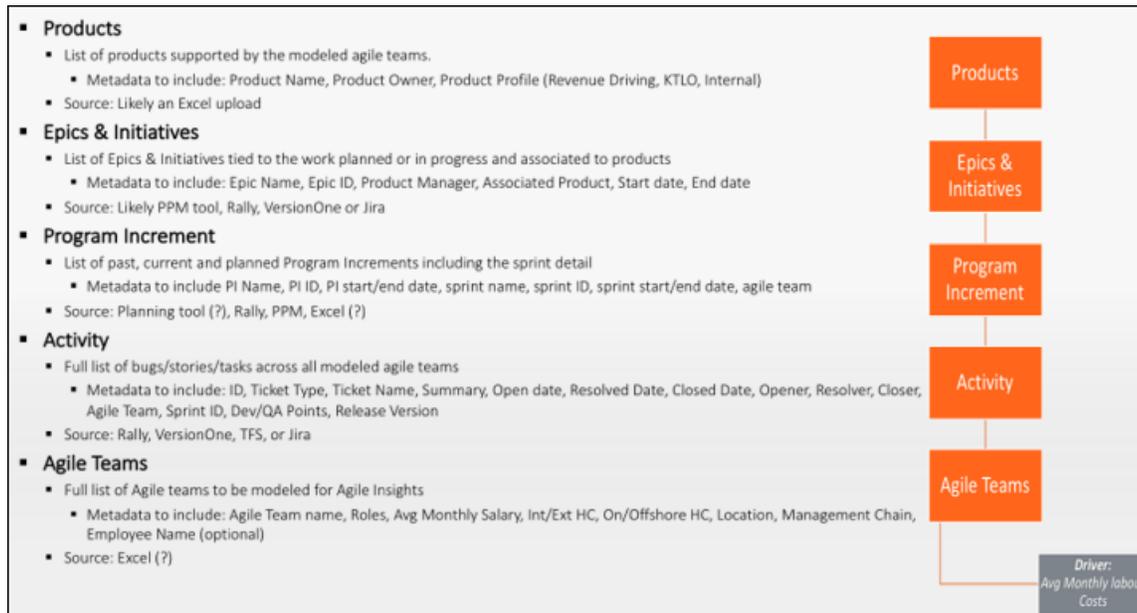
Install the Agile Insights components

1. Open the project.
2. Click the **Project** tab.
3. Click **Components**.
4. Click **Install**. Install the Agile Insights components in the following order:
   NOTE: You can configure one component at a time, provided they are installed in this order.
   - Agile Insights – Teams
   - Agile Insights – Activity
   - Agile Insights – Epics and Initiatives
   - Agile Insights – Products
   - Agile Insights – Capitalizable Labor (Optional)

Because data varies between organizations, different approaches to allocating Agile costs are needed. Discussion of these methods, with pros and cons of each, follows.

Configure Agile Teams Master Data

The Agile Teams Master Data serves as the entry point of data and costs for Agile Insights. This master data set supports both IT Agile teams and software development teams. For additional guidance about required columns and mappings, see the Apptio Value Explorer (from your **Home** page, click the **Settings** button (⚙), click **Data Advisor**, then click **Apptio Value Explorer**).

1. Upload raw Agile team data from one of the following primary sources:
    - For existing Cost Transparency customers, it's assumed that employees are already associated with Agile teams and tracked in the Labor Master Data. Export the data to Excel and identify the Agile team associated to each employee. Ensure the data set also includes the following fields:
        - o Salary (average by role, benchmark or actual)
        - o Manager
        - o Organization
        - o Role or position
    - For non-Cost Transparency customers, acquire or create an organization chart for the groups that manage Agile processes. Enhance that raw data to include the Agile team, salary (average by role, benchmark, or actual), manager, organization, and role or position for each employee.
2. Upload the raw Planned Agile Team Data, which should include the expected headcount per Agile team, role, cost pool, and location.
3. Append the raw Agile Team Data into the Agile Teams Master Data. See the Apptio Value Explorer for guidance about required columns and mapping.
4. Append the Planned Agile Team Data into the Agile Teams Master Data. See the Apptio Value Explorer for guidance about required columns and mapping.
5. Validate the drivers configured on the Agile Teams mode. Expected driver configurations per model follow:

- Agile Dev Cost model

- Agile Dev Budget model

- Utilized Labor model

- Planned Labor model

Configure the Agile Development Activity Master Data

The Agile Development Activity Master Data is sourced from your Agile ALM solutions, such as JIRA, VersionOne, Rally, or MS Team Foundation Server (TFS). Agile Insights is able to integrate with multiple systems in a single Apptio project. Investments in Agile Teams will allocate into Agile Development Activity based on the following potential allocation strategies.

1. Upload raw Activity Data from JIRA, VersionOne, Rally, or MS Team Foundation Server (TFS). See the Apptio Value Explorer for guidance about required columns and mapping.
   NOTE: While terminology from system to system varies, many concepts are similar. Some KPIs display released vs. non-released activity or active sprint vs. not an active sprint. Apptio recommends that you query your solution to extract data monthly, rather than per release, per closed sprint, or any other metric. Be sure to associate tickets and status to all labor costs associated with an activity.
   For example, for tickets that are extracted from a system, but considered part of the backlog, do not associate these costs.
2. Append the raw Activity Data into the Agile Development Activity Master Data. See the Apptio Value Explorer for required columns and mapping. The following fields require consideration beyond simple column-to-column mapping:
   - **Capitalizable Activity** - Your organization might use a custom field to indicates whether the work being done is considered capitalizable. In this case, the field can be used to create a function that results in Yes or No. Alternately, your organization may define capitalizable work by type (for example, Issue Type="Story" or "Feature"). This field requires discovery, but directionally correct is an acceptable place to begin.
   - **Development Activity** - Your organization might use terminology to define your work. For example, instead of Development Activity, you might use Story, Feature, or Enhancement. Based on your internal terminology, create a function that results in Yes or No.
   - **QA Activity** - Determine the term your organization uses for QA Activity. For example, you might use Bug, QA Task, Quality Task. Create a function that results in Yes or No.
   - **Fix/Version** - While this field may be more Jira centric, the intent is to map a field from the source system that indicates the planned release or release number/name.
   - **Found In** - Many solutions have a Found In field, but the intent of the column is to map a field that indicates, for all bugs, where and when a bug was found. Examples include Post Release, Integration, or Pre-Release.

- **Post-Delivery Defect** - Based on the Found In column, create a function that results in Yes or No based on whether an issue is found after a release of a feature or product version.
- **Released** - Create a function that indicates the release of a ticket, with results of Yes or No.

3. Allocate Agile team labor and activity count across the following models:
   - **Agile Dev Cost model** - The Agile Team object can allocate directly into the Agile Activity object but allocations will vary between customers. As organizations transform from Projects to Products, teams often continue to track their time. In this case, you can optionally request to use time tracking data to allocate from Labor to Activity. This allocation can be supported but simpler options exist. It's possible to generate more precise results with allocations at a more granular level with time tracking, but it increases overhead that undermines Agile methodologies. Apptio's three prescriptive approaches to Labor to Activity allocation are shown in the following image. Note that increasing granularity increases overhead.
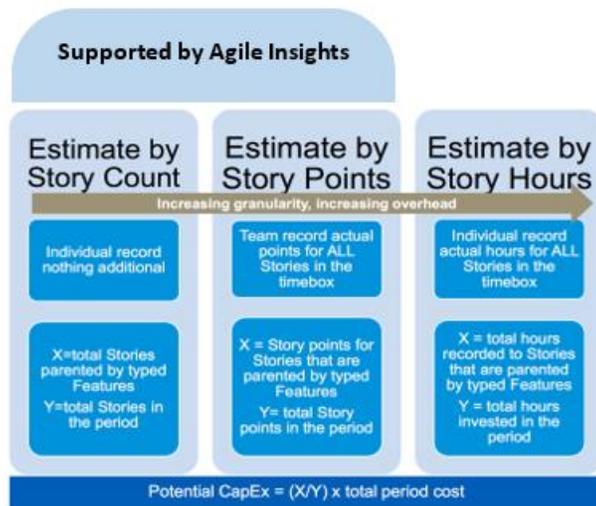
- Option 1 - The least granular allocation is an assumptive burdening of your costs. Agile Insights allows you to provide weightings for different key attributes of the work your teams do. For example, if you are able to say that one of your teams spends 40% of their time on new feature work, 40% of that team's cost should be allocated to stories.

- Option 2 - The next step up is to weight by story points or estimates. This will capture a forward-looking estimate of how long a story will take to do. If your Agile teams are already tracking story points in your Agile ALM, then Apptio recommends weighting by this field for the most accurate results.

- Option 3 - The most granular allocation would be to bring in actual recorded time to weight by. This method will give you the most accurate results, but also generates a lot of overhead. Choosing this method will greatly reduce the agility of your teams but will provide a defensible allocation strategy. It's recommended that you try to move away from this method to improve time to delivery.

Custom Allocation Keys & Columns

- Agile Teams MDS:
  - **Key to Time Tracking:** Agile Team OR Employee Name
- Time Tracking MDS:
  - **Key to Agile Teams MDS:** Employee Name OR Agile Team (new custom column)
  - **Key to Agile Development MDS:** Project ID OR Product (new custom column) OR Issue Type
- Agile Development MDS:
  - **Key to Time Tracking:** Product OR Project ID (new custom column) OR Issue Type
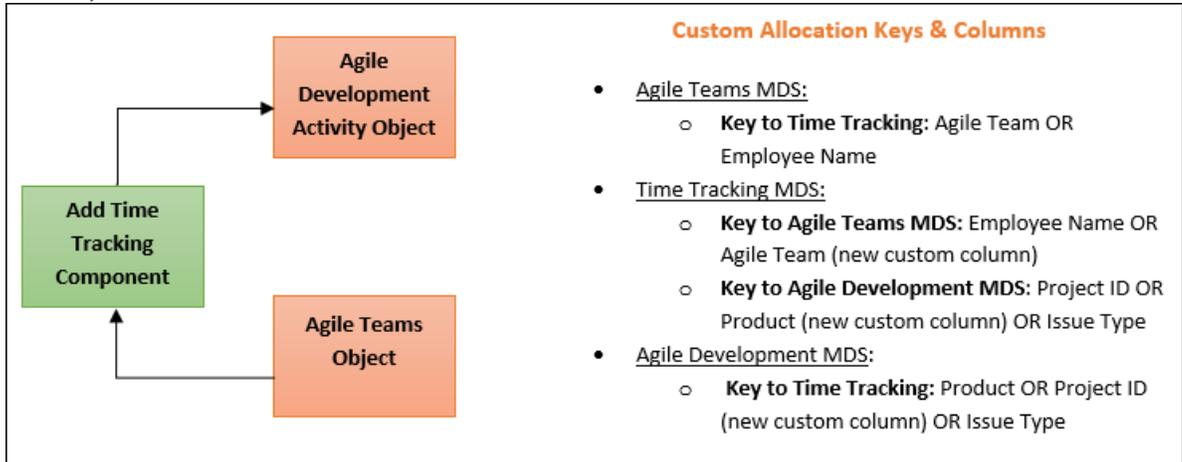
- **Utilized Labor Model** - The Agile Team object will allocate directly into the Agile Activity based on the Agile Team name. It's not necessary to weight the allocation if you are expecting to see how many team members are active in a given time period. However, if you want to weight the utilization of labor to various Issue Types (features, bugs, etc.), use a weighting strategy that aligns with internal business rules. For example, if Agile roles are expected to contribute a percentage of their time to certain activity types, as follows, distribution by percent can be leveraged by creating a custom object in the model to allocate based on this weighting.
  - Role = **Product Owner**. Time spent on new feature work = **10%**.
  - Role = **Iteration Manager**. Time spent on new feature work = **60%**.
  - Role = **Business Analyst**. Time spent on new feature work = **50%**.
  - Role = **Quality Analyst**. Time spent on new feature work = **90%**.
  - Role = **Developer**. Time spent on new feature work = **90%**.

Configure Epic and Business Initiatives Master Data

Epics and Business Initiatives Master Data is commonly sourced from the same Agile ALM solution from which your Activity data is sourced. Features and bugs in the Activity Master Data are likely to be associated with epics, which establishes a data-based relationship between Activities and Epics. If you choose to use a field other than Epic, it's best to select a field in the Agile ALM solution that elevates the visibility of Agile work to a level that can be communicated in business-facing language, as long as a viable data relationship can be established.

To configure the Epics and Business Initiatives Master Data:
1. Upload raw Epic Data from JIRA, VersionOne, Rally, or MS Team Foundation Server (TFS). (See the Apptio Value Explorer for required columns and mapping.)
   NOTE: While terminology from system to system varies, many concepts are similar. Some KPIs display "released" vs "non-released" activity or "active sprint" versus "not an active sprint." Apptio recommends that you query your solution to extract data monthly, rather than per release, per closed sprint, or any other metric. Be sure to associate tickets and status to all labor costs associated with an activity. For example, for tickets that are extracted from a system, but considered part of the backlog, do not associate these costs.

2. Append the raw Epic Data into the Epics and Business Initiatives Master Data. See the Apptio Value Explorer for required columns and mapping.
3. Allocate Agile Activity Data to the Epics and Initiatives Master Data across the Agile Dev Cost, Agile Activity, and Utilized Labor models. The Agile Activity object will allocate directly into the Epics and Initiatives object based on the Epic ID. The Epic ID should be queried and uploaded with the Activity data. This ID should tie to the extraction of Epics queried from the same Agile ALM solution. The allocation of spend to epics does not require a weighting. It's likely that the relationship will be a many-to-one relationship.

Configure Products Master Data

The Products Master Data may or may not live in a source system. It's possible that a list of products is maintained in your Agile ALM solution in a way that associates tickets to the product they support. However, metadata that supports the product would likely not live in one of these systems. To generate the best insights, extract or create a list of products supported by your Agile teams, and include the product name, information about the organization, the product owner, and the product leader.

In order to gain deep visibility into the development efforts across your products, you must map Epics and Initiatives Master Data to the products that receive the benefit. Where possible, this data should come with the Epics & Initiatives data.
1. Upload raw Product Data.
2. Append the raw Product Data into the Products Master Data. See the Apptio Value Explorer for required columns and mapping.
3. Allocate Epics, Activity, and Agile team metrics to the Products object across the following models:
   - **Agile Dev Cost model** - Allocate Epics to Products based on the product name.
   - **Agile Activity model** - Allocate Epics to Products based on the product name.
   - **Agile Dev Budget model** - Allocate Agile Team Budget to the Products object based on the organization identified in both Agile Team Master Data and Products Master Data. Alternatively, weigh the Agile team costs to the Products based on both the Organization and your expected product investment goals. These goals can come in the form of revenue numbers or as a distribution of product investments over the course of a year.
   - **Utilized Labor model** - Allocate Epics to Products based on the product name.

Agile Insights reports

For an overview of Agile Insights, see About Agile Insights.

Agile Insights includes the following report collections and their associated reports:

The Agile Insights report collection:
- Agile Insights main report
- Executive Dashboard
- Agile Activity Dashboard

The Agile Labor report collection
- Capitalizable Labor
- Labor Resource Distribution
- Agile Teams by Resource Type
- Agile Labor Plan Variance

The Agile Activity report collection
- Agile Development Analytics
- Cost of Quality
- Development Analytics by Sprint
- Backlog Costing Analytics

The Agile Data Quality report collection
- Ticket Hygiene

The Agile Delivery report collection
- Product Investments
- Product details
- Product Development Analytics
- Product Value by Epic

The Agile Insights report collection

Reports in the **Agile Insights** report collection provide the following high-level Agile Insights reports:
- Agile Insights main report
- Executive Dashboard
- Agile Activity Dashboard

To access reports in the **Agile Insights** report collection:
1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Insights**.
3. On the bar at the top of the page, select a report in the collection.

Agile Insights report

Use the **Agile Insights** main report to gain high-level visibility into the following information about your Agile project management costs and processes:

- The cost of product and application development
- The size and alignment of your Agile teams
- The cost impact of development in relation to the products and initiatives associated with development

This report allows you to see the core benefits of your Agile development and actionable, insightful KPIs, and to drill down into more detailed analytics for labor, development and quality, and product delivery.

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:

- VP and leaders of enterprise applications, products, or technology
- IT Finance
- Agile transformation leaders
- IT leadership
- IT/Engineering Development
- Scrum masters
- Product owners
- Consuming business units

Data in this report comes from the following sources:

- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

Note, the following regarding the display of key performance indicators (KPIs) on this report:

- If the **Agile Labor Capitalization** component is installed, the **Labor Investments KPI** is hidden and the **Capitalizable Labor KPI** is displayed.
- If the **Agile Labor Capitalization** component is not installed, the **Labor Investments KPI** is displayed and the **Capitalizable Labor KPI** is hidden.

Use the Agile Teams by Resource Type report to see the roles and resources used by your Agile development teams so you can analyze whether the teams meet business goals and expectations. Use the Agile Labor Plan Variance report to understand the variance between actual versus planned labor investment, internal versus external investment, and actual versus planned capacity.

This report aligns to the following business goals:

- **View capitalizable labor by team and product**
  - Obtain the quarterly capitalizable labor metric.
  - Navigate to the Capitalizable Labor report to validate the activity by team and product.
  - Ensure that the activity is associated with the new feature work.
  - Click **Export Full Details** to export your data.

- **Track productivity and quality analytics per Agile team**
  - Review the monthly development spend and throughput.
  - Navigate to the Agile Development Analytics report to look at the trend in activity and cost over time.
  - Click **Cost of Quality** to see the trend in bugs per team and product.
- **Compare value expected to value received so you can provide product visibility to key stakeholders**
  - Review the **YTD Dev Investments & Labor Capacity by Product** chart.
  - Click **Delivery Analytics** to open the **Product Investments** report and review the trend in product costs and capacity.
  - Gain insight into the breakdown of feature versus quality per product.
  - Drill into a product to see the business value of the Agile efforts, cost per team, and the in-progress and remaining work per sprint.

Display the Agile Insights report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Insights**.
3. To export or email your data, click **Export** ( ) on the top-right of the page and select an export format.

The report contains the following elements:
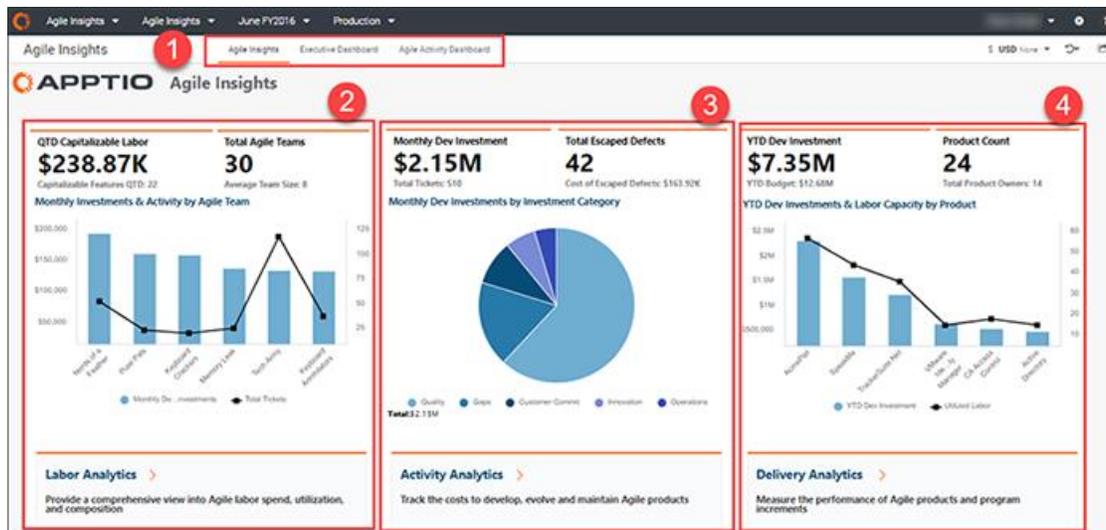
(1) Report collection - The Agile Insights report collection contains the following reports:
- Agile Insights (described in this topic)
- Executive Dashboard
- Agile Activity Dashboard
- Capitalizable Labor
- Agile Development Analytics
- Product Investments

(2) Labor Analytics

- **KPIs** - These labor KPIs provide a high-level view of your capitalizable labor and team metrics so you can ensure productivity and quality, allowing you to move away from manual time-tracking systems:
    - **QTD Capitalizable Labor** - This KPI shows the amount of the labor that can be capitalized QTD. **NOTE**: This KPI is displayed only if the Labor Capitalization component is installed.
    - **Total Agile Teams** - This KPI shows the current count of Agile teams.
- **Chart** - The **Monthly Investment & Activity by Agile Team** chart shows the development cost and number of features across all your Agile team for the last 30 days. This gives visibility into the feature work being done by product and which teams are contributing to that feature work. You can also see the highest spending teams. For a deeper view into your Agile labor spend, utilization, and composition, click **Labor Analytics** to open the [Capitalizable Labor](#) collection.
- **Questions answered:**
    - How much labor can be capitalized?
    - How many stories can be capitalized?
    - What is the size and alignment of my Agile teams?
    - Which teams have the highest spend?
    - How productive are the Agile teams?

(3) Activity Analytics

- **KPIs** - These development KPIs provide a high-level view of the cost and velocity of your application spend, activities, and defects:
    - **Monthly Dev Investment** - This KPI shows the amount spent on Agile development for the current month.
    - **Total Escaped Defects** - This KPI shows the cumulative number of defects found by end users instead of your quality assurance team.
- **Chart** - The **Monthly Dev Investment by Investment Category** chart shows the relative amounts of development investment per category for the last 30 days, for released tickets only. For a deeper view into your Agile development investment and quality data, click **Activity Analytics** to open the [Agile Development Analytics](#) report collection.
- **Questions answered:**
    - How much are we spending on Agile development?
    - How much are we spending per Agile investment category?
    - How many active tickets are associated with our current investments?
    - What is the quality of our current Agile development based on escaped defects?
    - What is the current cost of our escaped defects?

(4) Delivery Analytics

- **KPIs** - These product delivery KPIs provide a high-level view of your YTD investments relative to labor capacity per product:
    - **YTD Dev Investment** - This KPI shows the total cost of development YTD.
    - **Product Count** - This KPI shows the current number of products developed YTD.
- **Chart** - The **YTD Dev Investments & Labor Capacity by Product** chart shows the budget for development investment versus the actual labor utilized YTD in relation to individual products. For a deeper view into the performance of your Agile products and labor capacity, click **Delivery Analytics** to open the [Product Investments](#) report collection.

- **Questions answered:**
  - How much are we spending on product and application development YTD?
  - What is the impact of development on the associated products and initiatives?
  - What is our Agile budget YTD?
  - How many products are currently being developed and how are the owners aligned with those products?

Executive Dashboard - Agile Insights

Use the **Executive Dashboard** for a high-level understanding of the following information about your Agile projects:
- The plan versus actual investment for developing your products and initiatives (epic collections)
- The development investments per executive leader
- The size and alignment of your Agile teams
- The impact of development in relation to the features and bugs in those products and initiatives

This report allows you to see the core benefits of your Agile development and actionable, insightful KPIs with high-level analytics per organization, cost pool, and product.

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- IT leadership
- Agile transformation leaders
- CIO, COO, and CFO

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

This report aligns to the following business goals:
- Compare plan to actual development investment
- View development investments per executive leader
- Compare the size and alignment of Agile teams
- View the impact of development in relation to features and bugs

Display the Executive Dashboard report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Insights**.
3. On the bar at the top of the page, click **Executive Dashboard**.
4. To export or email your data, click **Export** ( ) on the top-right of the page and select an export format.

The report contains the following elements:
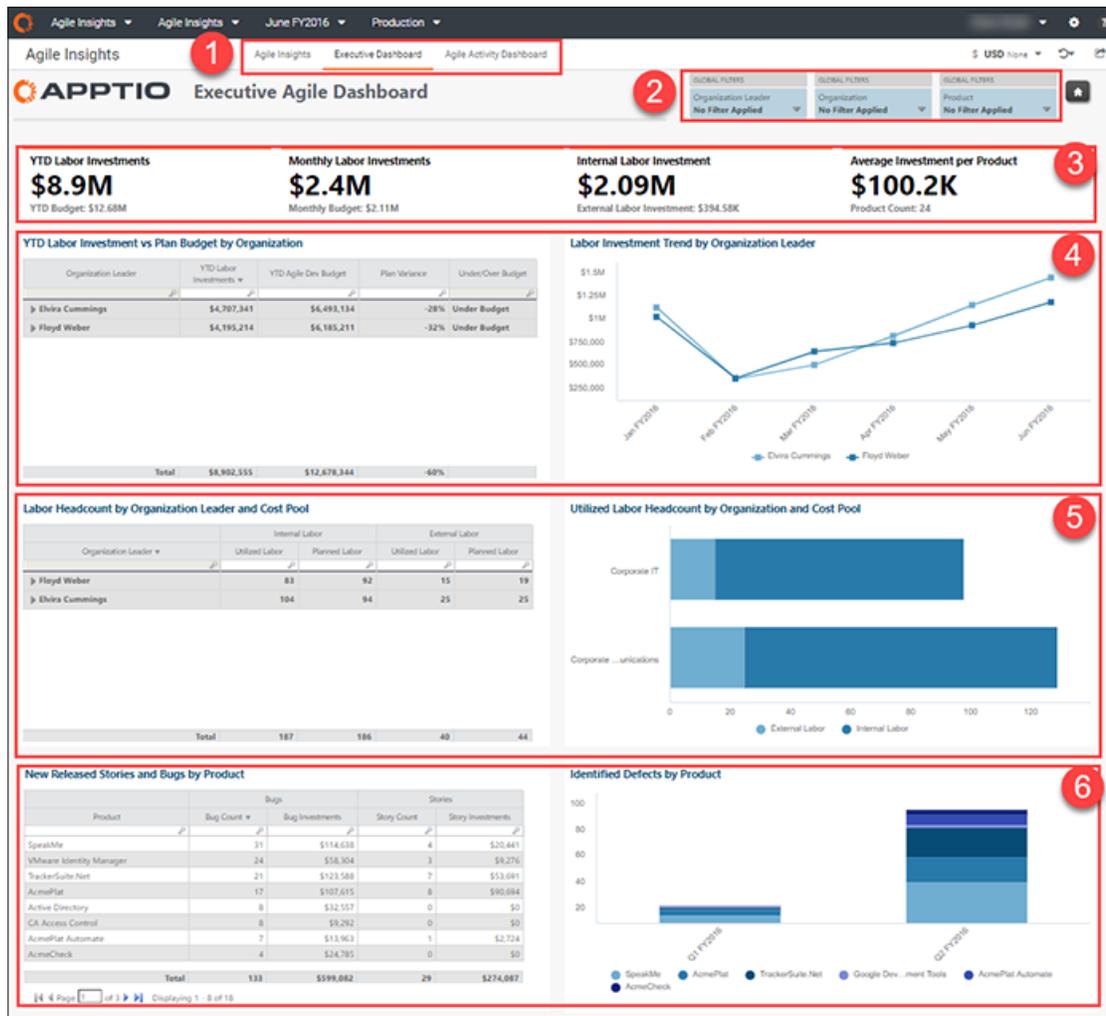
(1) Report collection - The Agile Insights report collection contains the following reports:
- Agile Insights main report
- Executive Dashboard (described in this topic)
- Capitalizable Labor
- Agile Development Analytics
- Product Investments

(2) Slicers - The following global filters are available in this report:
- **Organization Leader** - Filter by a specific person in your executive leadership, so you can see the impact of investments per leader.
- **Organization** - Filter by a major group within your organization, so you can see the impact of investments per group.
- **Product** - Filter by individual products, so you can see the impact of investments in that product.

(3) KPIs - KPIs provide a high-level view of your development spend and other metrics:
- **YTD Labor Investments** - This KPI shows the amount spent on labor YTD.
- **YTD Budget** - This KPI shows the plan for development YTD.
- **Monthly Labor Investments** - This KPI shows the amount spent on Agile development for the current month.
- **Monthly Budget** - This KPI shows the spending plan for development for the month.
- **Internal Labor Investment** - This KPI shows the amount of spending on internal labor.
- **External Labor Investment** - This KPI shows the amount of spending on external labor.
- **Average Investment per Product** - This KPI shows the average labor spending per product.
- **Product Count** - This KPI shows the current number of products using Agile labor.

(4) YTD Labor Investment vs Plan Budget by Organization - Use this table to see the variance between your labor investment and budget per organization leader. The Labor Investment Trend by Organization Leader chart shows the trending spend per leader over time.
- **Questions answered**:
  - How does our plan differ from actual labor investment per product and initiative?
  - What is our labor investment per organization leader?

(5) Labor Headcount by Organization Leader and Cost Pool - Use this table to see external and internal headcount actuals versus planned per organizational leader. Click the arrow next to a leader's name to expand that organization and view the headcount broken out per cost pool in that organization.
- The **Utilized Labor Headcount by Organization and Cost Pool** chart shows the external and internal headcount per organization.
- **Questions answered**:
  - What is the labor makeup of our Agile teams per organization?
  - What is the labor makeup of our Agile teams per cost pool?

(6) New Released Stories and Bugs by Product
- Use this table to see the number and cost of bugs and stories released YTD.
- The **Identified Defects by Product** chart shows the number of defects per quarter per product.
- **Questions answered**:
  - What is the labor investment per released story and bug?
  - How many defects were identified for each product?

Agile Activity Dashboard - Agile Insights

Use Case - Use this report to do the following:
- View all Agile activity in a single view
- Drill into additional details with a single click
- Monitor current Agile activity health and progress

Use the **Agile Activity Dashboard** to gain a high-level understanding of the following Agile project information:
- Labor investments per product, epic, and Agile team
- Planned versus actual headcount
- Agile team resources per employee type
- Trending labor investments per activity
- Development investment of released work
- Cost of product quality

Agile activity is defined as Quality, Gaps, Innovation, Customer Commit, Maintenance, and Operations. This report allows you to see the core benefits of your Agile activities, with actionable, insightful KPIs with high-level analytics.

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- IT leadership
- Agile transformation leaders
- CIO, COO, and CFO

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

Display the Agile Activity Dashboard report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Insights**.
3. On the bar at the top of the page, click **Agile Activity Dashboard**.
4. To export or email your data, click **Export** () on the top-right of the page and select an export format.

The report contains the following elements:

(1) Report collection - The Agile Insights report collection contains the following reports:

- Agile Insights main report
- Executive Dashboard
- Agile Activity Dashboard (described in this topic)

(2) Slicers - The following global filters are available in this report:

- **Organization** - Filter by a major group within your organization, so you can see the impact of investments per group.
- **Product Owner** - Filter by a specific person in your executive leadership, so you can see the impact of investments per leader.
- **Product Category** - Filter by product category so you can see the impact of investments per category.

(3) KPIs - KPIs provide a high-level view of your development spend and other metrics.

- **Total Agile Teams** - This KPI shows the total number of active Agile teams.
- **% of Workforce on Agile Teams** - This KPI shows the percentage of your total workforce actively working on an Agile team.
- **YTD Dev Investments** - This KPI shows the total cost of development YTD.
- **Monthly Dev Investments** - This KPI shows the plan for development YTD.

- **Avg Cost per Ticket** - This KPI shows the average labor cost per Agile ticket.
- **Agile Activity** - This KPI shows the current total of Agile tickets.
- **Development Tickets** - This KPI shows the current number of Agile tickets being actively worked on.
- **QA Tickets** - This KPI shows the current number of Agile tickets in QA.

(4) Investments by Product - Use this chart to view the labor spending for the current month per product. Click the arrow to the right to jump to the Product Investments report.

(5) Investments by Product Epic, and Agile Team - This section provides a visual analysis of the total development spending per product.
- Hover over any segment of see the percentage of the total spending for that product and the percentage of development costs.
- Click a segment once to drill into the epic. (A box can contain multiple clickable segments.)
- Click a segment a second time to see team-level details.
- Return to the original view by clicking the **Total Agile Dev Cost** breadcrumb just above the image.
- Click the arrow to the right to jump to the [Product Development Analytics](#) report.

(6) Agile Team Planned versus Actual Headcount - Use this chart to compare planned headcount to utilized headcount. Click the arrow to the right to jump to the [Agile Labor Plan Variance](#) report.

(7) Agile Team Resources by Employee Type - Use this chart to view the balance of internal versus external labor. Total labor is recorded below the chart. Click the arrow to the right to jump to the [Agile Teams by Resource Type](#) report.

(8) Investments by Activity - Use this chart to view the monthly trending spend of your Agile activities. Click the arrow to the right to jump to the [Agile Development Analytics](#) report.

(9) Dev Investment of Released Work - Use this chart to view the cost of developing released (competed) work per epic per quarter. Click the arrow to the right to jump to the [Agile Development Analytics](#) report.

(10) Product Quality Costs - Use this chart for an overview the cost of defects product per quarter. Click the arrow to the right to jump to the [Cost of Quality](#) report.
- **Questions answered:**
  - What is the overall makeup of Agile activity across the organization?
  - What are my development costs per released epic?
  - What is the cost of defects in our products?

The Agile Labor report collection

Reports in the **Agile Labor** report collection provide the following Agile Insights labor reports:
- [Capitalizable Labor](#)
- [Labor Resource Distribution](#)
- [Agile Teams by Resource Type](#)
- [Agile Labor Plan Variance](#)

To access reports in the **Agile Labor** report collection:
1. On the **Application** menu, click **Agile Insights** (see [Agile Insights menu](#)).
2. On the **Report** menu, click **Agile Labor**.
3. On the bar at the top of the page, select a report in the collection.

Capitalizable Labor - Agile Insights

Use Case - Use this report to do the following:
- Track and analyze capitalized labor for Agile products
- Spread labor costs over product life
- Capture capital labor in the asset value
- Defend capitalized labor

Use the **Capitalizable Labor** report to make informed decisions about labor capitalization and understand the following information about your software development labor:
- The amount of your software development labor that can be capitalized
- The trend of your capitalizable labor
- The breakdown of your capitalizable labor per product, role, and region
- The data that supports labor capitalization auditability

This report allows you to think about capitalizable activity from a product perspective, in terms of things that bring net-new value to the business. You can see the impact of capitalized development labor by cost, by team, by time, or by internal versus external labor. For example, you might expect to see a lot of capitalizing against a single product over time for a business-facing product or a product with heavy feature work. For products that require only bug fixes, you might expect to see little or no capitalization activity.

To understand the accounting rules used for labor capitalization, see [Capitalize labor in Agile Insights](#). For an overview of the concepts and building blocks behind the Agile Insights application, see [About Agile Insights](#). For a full list of Agile Insights reports, see [Agile Insights reports](#).

This report is designed for:
- Organization leaders
- Leaders of enterprise applications, products, and technology
- IT Finance
- Agile transformation leaders

This report covers the following areas that can help you determine the capitalized costs and timing of the depreciation related to your Agile products:
- **Capitalization thresholds**. The use of this report depends on certain business decisions made by organizations. Some organizations don't set thresholds because they will never be exceeded, therefore eliminating the need to create amortizable assets. Other organizations, however, set capitalization thresholds can be exceeded. In those cases, this report will help them understand how much of their activity and labor is capitalizable, regardless of whether time-tracking is used. Still other organizations might use a rule-based approach, such as capitalizing only their external labor. For organizations that capitalize their development labor, this report can help them comply with SOP 98 standards.
- **Toleration of earnings and time between production releases**. Based on the frequency of software releases and the expenditure spikes caused by development cycles, organizations must determine whether they can tolerate those spikes. If your bottom line can handle a big spike in expenditures based on your release cycle, you might decide against labor capitalization. But if such spikes create too much risk, an organization might opt to capitalize that labor and amortize it over time. This report can provide the information to make such decisions and determine when depreciation can begin.

This report aligns to the **Make informed decisions about labor capitalization per team and product** business goal by providing the means to:

- Obtain the quarterly capitalizable labor metric from the KPI.
- Discover how much development labor can be capitalized.

Display the Capitalizable Labor report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Labor**.
3. On the bar at the top of the page, click **Capitalizable Labor**.
   NOTE: The Capitalizable Labor report is only available if the Labor Capitalization component is installed. For more information, see Agile Insights components and reports.
4. To export or email your data, click **Export** (⬀▾) on the top-right of the page and select an export format.

The report contains the following elements:

(1) Report collection - The Agile Labor report collection contains the following reports:

- Capitalizable Labor (discussed in this topic)
- Labor Resource Distribution
- Agile Teams by Resource Type
- Agile Labor Plan Variance

(2) Slicers - The following global filters are available in this report collection:

- **Organization** - Filter by a major group within your organization, so you can see the impact of investments per group.
- **Product** - Filter by individual products, so you can see the impact of investments in that product.
- **Agile Team** - Select a team name to see analytics for that team only.

(3) KPIs - KPIs provide a high-level view of your application spend and other metrics:

- **QTD Capitalizable Labor** - This KPI shows the amount of development labor that can be capitalized in the current quarter.
- **Monthly Capitalizable Labor** - This KPI shows the amount of development labor that can be capitalized in the current month.
- **QTD Capitalizable Internal Labor** - This KPI shows the amount of the internal labor that can be capitalized QTD.
- **Utilized Labor** - This KPI shows the QTD headcount for utilized internal labor.
- **QTD Capitalizable External Labor** - This KPI shows the amount of external labor that can be capitalized QTD.
- **Utilized Labor** - This KPI shows the QTD headcount for utilized external labor.
- **Capitalizable Product Count** - This KPI shows the total count of capitalizable products using Agile Insights.
- **Teams with Capitalizable Labor** - this KPI shows the number of teams with capitalizable labor.

(4) Charts

- **Top 5 Quarterly Capitalizable Labor Investment by Team** - Use this chart to view your top 5 quarterly capitalizable labor investments.
- **Questions answered**:
    - How much of my software development labor can be capitalized per team?
    - How much of my software development labor can be capitalized this quarter?
- **Capitalizable Labor Trend by Product** - Use this chart to understand the trend of capitalizable labor investments over the past 12 months.
- **Questions answered**:
    - How is my capitalized development trending?

(5) Details - Use the Details table to understand additional details about the data shown in the charts, above, and to see your capitalizable labor per cost pool.

- Select one or more options above the chart to add and hide columns with data for the current month, current quarter, year-to-date, or month-by-month for the previous 12 months (YTD). (You might need to scroll right.)
- **Questions answered**:
    - How much of my software development labor can be capitalized per cost pool?

Labor Resource Distribution - Agile Insights

Use Case - Use this report to do the following:
- Analyze team composition and productivity
- Compare the type and quantity of team roles to the volume of work being delivered
- Optimize team size
- Ensure adequate role coverage

Use the **Labor Resource Distribution** report to make informed decisions about team resourcing and to discover the following information about your Agile projects:
- Development costs per business category, team, product, story, etc.
- The work distribution of your Agile teams
- The total development investment per Agile team and the percentage of effort per team per story, bug, etc.

Rather than capturing specific Agile plans, this report provides insight into team focus so you can understand the quality of your Agile teams and whether you're getting the value you need out of their efforts. While there is no right or wrong team effort, Agile Insights provides information about cost per sprint, the distribution of work per team and product, and labor capacity. This allows you to evaluate whether teams are focused on the things that matter most to your business, giving you the information you need to meet your business needs.

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- IT leadership
- IT Finance
- Agile transformation leaders

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

This report aligns to the following business goals:
- **Determine the quality of an Agile team**
  - Validate whether the focus of your Agile teams and products meet your business goals and expectations in relation to the number of maintenance tickets (bugs) versus innovation (feature tickets).
  - Ensure that type of work done by each team aligns with your development investment and expectations.
- **Make informed decisions about team resourcing**:
  - Obtain the quarterly capitalizable labor metric.

Display the Labor Resource Distribution report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Labor**.
3. On the bar at the top of the page, click **Labor Resource Distribution**.
4. To export or email your data, click **Export** (image) on the top-right of the page and select an export format.

The report contains the following elements:
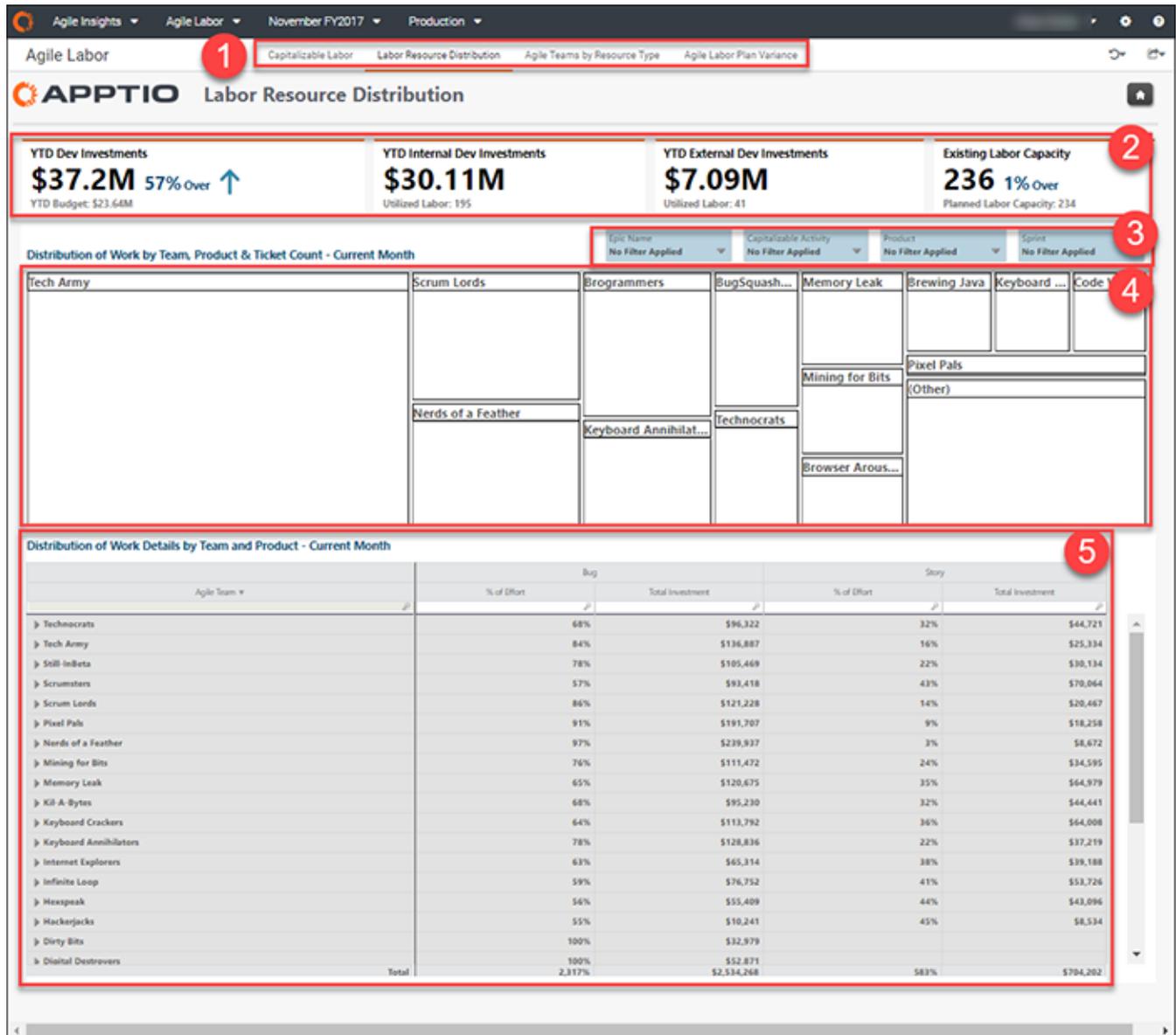
(1) Report collection - The Agile Labor report collection contains the following reports:

- Agile Labor - Labor Resource Distribution (discussed in this topic)
- Capitalizable Labor
- Agile Teams by Resource Type
- Agile Labor Plan Variance

(2) KPIs - The following KPIs provide a high-level view into the resource distribution across your Agile projects:
- **YTD Labor Investments** - This KPI shows the total cost of labor YTD.
- **YTD Budget** - This KPI shows the plan for development YTD.
- **YTD Internal Labor Investments** - This KPI shows the total spent on internal labor YTD.
- **Utilized Labor** - This KPI shows the spending plan for internal labor YTD.
- **YTD External Labor Investments** - This KPI shows the total spent on external labor YTD.
- **Utilized Labor** - This KPI shows the spending plan for external labor YTD.
- **Existing Labor Capacity** - This KPI shows the current labor capacity. The difference between this KPI and Planned Labor Capacity is expressed to the right as a percentage above or below planned capacity.
- **Planned Labor Capacity** - This KPI shows the labor capacity plan.

(3) Slicers - The following global filters are available in this report (an example use case may include you using the Product or Sprint filters to compare the cost of an Agile team versus a standard program increment):
- **Epic Name** - Filter by a specific epic to see the resource distribution per epic.
- **Capitalizable Activity** - Select Yes to display only capitalizable activities in all the charts and tables in the report collection.
- **Product** - Filter by individual product to see the resources related to that product. You may also use this filter to compare the cost of an Agile team versus a standard program increment.
- **Agile Release Hierarchy** - Select a release hierarchy level to filter by (for example, TeamName Q3 2018, or a group of multiple teams and releases) to view analytics for that level only.

(4) Distribution of Work tree map - The tree map chart shows the relative number of tickets per team and product for the current month so you can see the distribution of work across your organization. Click on any team in the diagram to drill into details to understand whether the team is focused on bug fixes/maintenance or on innovation.
- **Question answered** - What is the distribution of work per team and product?

(5) Distribution of Work Details - Use the table to understand how team effort is distributed across issue types (customer-defined as bugs, stories, feature, or defects, for example). Click an arrow in the Agile Team column to see the composition of team efforts by product and understand where the team is focusing their time. Weigh this information against your business goals and expectations to determine whether teams need to be redirected, tickets need to be pulled from sprints, or other possible solutions need to happen in order to meet business goals.
- **Question answered** - What are my development costs per category by team, product, story, task, etc.?

Agile Teams by Resource Type - Agile Insights

Use Case - Use this report to do the following:
- Compare team roles (type and quantity) to the volume of work being delivered
- Optimize team size
- Ensure adequate role coverage

Use the **Agile Teams by Resource Type** report to discover the following information about your Agile projects:
- Investment per Agile team
- Labor makeup of Agile teams
- Development costs per team, location, and role type

This report allows you to see the roles and resources used by your Agile development teams so you can analyze whether the teams meet business goals and expectations. Use this report with the Agile Labor Plan Variance report to gain a more complete understanding of your labor resources.

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- IT leadership
- IT Finance
- Agile transformation leaders

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Utilized Labor modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

Agile Insights aligns to the following:
- Analyze Agile team effectiveness:
  - Evaluate whether the roles that make up your Agile teams effectively meet your business goals and expectations.
  - Evaluate whether the balance of internal and external labor effectively meets your business goals and expectations.
  - Ensure the resources used by each team align with your development investment and expectations.
- Evaluate the variances reported in the Agile Labor Plan Variance report and determine whether action is required to meet your business goals and expectations.

Display the Agile Teams by Resource Type report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Labor**.
3. On the bar at the top of the page, click **Agile Teams by Resource Type**.
4. To export or email your data, click **Export** (⬈▾) on the top-right of the page and select an export format.

The report contains the following elements:
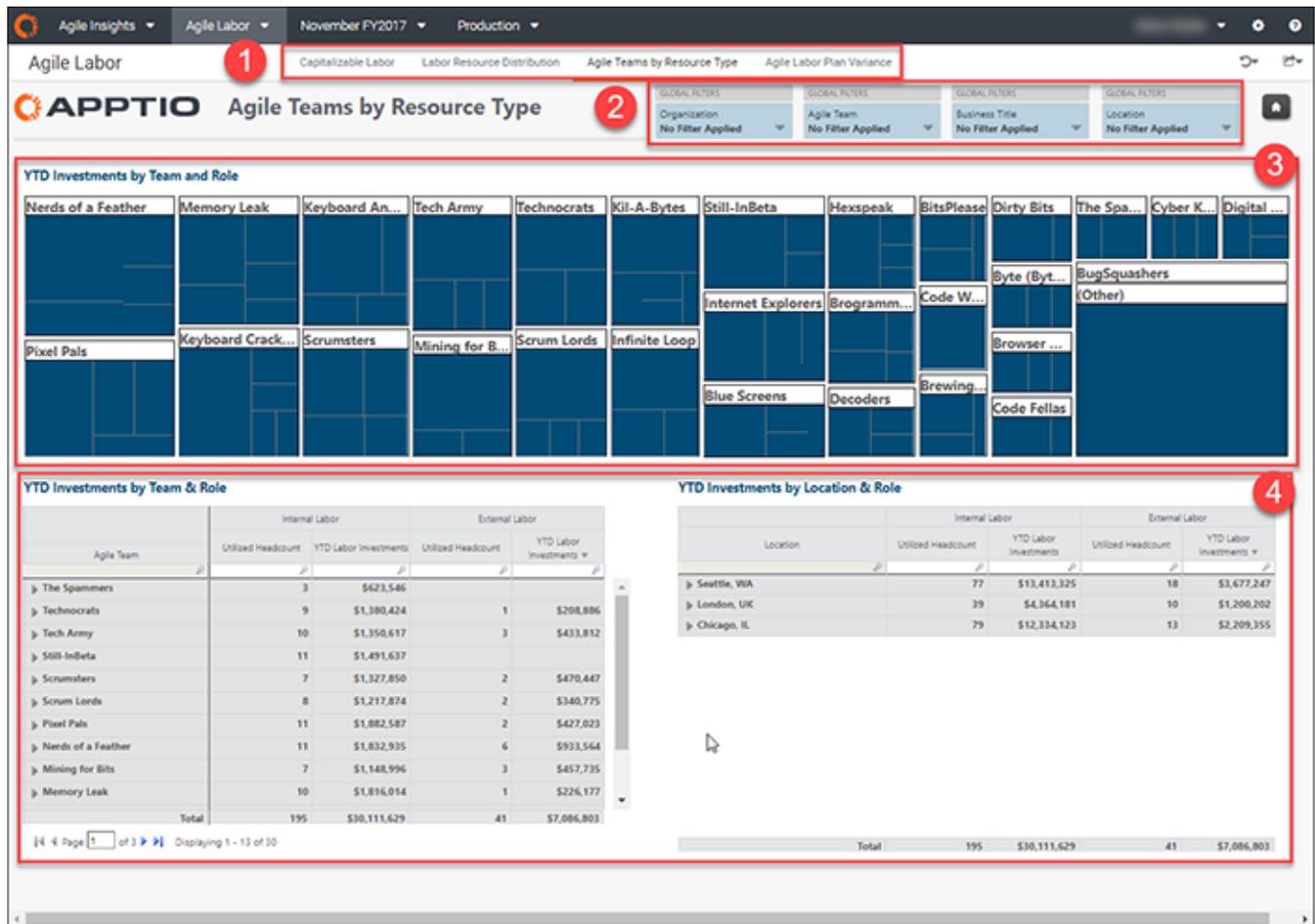
(1) Report collection - The Agile Labor report collection contains the following reports:
- Labor Resource Distribution
- Capitalizable Labor
- Agile Teams by Resource Type (discussed in this topic)
- Agile Labor Plan Variance

(2) Slicers - The following global filters are available in this report:
- **Organization** - Select a specific group within your organization to see the roles and resources specific to that group.
- **Agile Team** - Select a specific team to see the roles and resources specific to that team.
- **Business Title** - Select a specific business title to see the roles and resources specific to that title.
- **Location**- Select a specific location to see the roles and resources specific to that location.

(3) YTD Investments tree map - The tree map chart shows the relative investment in Agile teams across the organization. The largest rectangles on the right are the teams with the largest investment.

- Click any team to see breakdown of the roles on that team.
- Hover over any rectangle (an individual role) to see the following information:
    - The total investment per role on a specific team
    - The percentage of team members with that role on the team
    - The percentage of team resources consumed by that role compared to the total
- **Questions answered**:
    - What roles make up the Agile teams?
    - In which Agile teams is the company highly invested?

(4) YTD Investments tables - The YTD Investments by Location & Role table provide the detailed data used in the tree map. Use the data to understand the number of roles per team and the total compensation broken out as follows:

- Internal versus external labor
- Utilized headcount versus YTD labor plan
- Per location

    Use the table to understand what each team supports and the cost. For example, by seeing how much is being spent per role, you might discover that the organization is spending more than the benchmark or more than you want. You might notice that in some locations, spending is much more efficient. This provides an opportunity to evaluate whether staffing is appropriate and cost-effective, balance headcount, and possibly invest more where headcount is less expensive.
- **Questions answered**:
    - How many Agile teams do we have?
    - How much of our workforce is working on Agile teams?
    - What is the cost of an Agile team compared to a standard increment of a sprint?
    - What are the development costs per team, location, and role?

Agile Labor Plan Variance - Agile Insights

Use Case - Use this report to do the following:
- Compare actuals for Agile team composition to plan
- Compare the actuals for team members by role, team, and location
- Prioritize staffing
- Adjust teams

Use the **Agile Labor Plan Variance** report to understand the variance between actual versus planned labor investment, internal versus external investment, and actual versus planned capacity. As this report is maintained over time, you can better understand the following:
- Labor planning and how labor resources can be used to best benefit your products
- How to optimize labor Investments and improved team productivity
- How to improve team structures and align them better with business goals and expectations
- Labor capitalization and the impact on new products from a new feature perspective
- How to improve team resources by understanding the amount invested and how the spending is spread across roles and resources

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- IT leadership
- Agile transformation leaders
- CIO/COO/CFO

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

This report aligns to the **Compare actual Agile resource usage to planned usage** business goal by providing the means to:
- Validate whether the focus of your Agile teams and products meet your business goals and expectations in relation to the current headcount versus planned.
- Evaluate the effectiveness of your onshore versus offshore, and internal versus external development investment and expectations.

Display the Agile Labor Plan Variance report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Labor**.
3. On the bar at the top of the page, click **Agile Labor Plan Variance**.
4. To export or email your data, click **Export** (⬦▾) on the top-right of the page and select an export format.

The report contains the following elements:
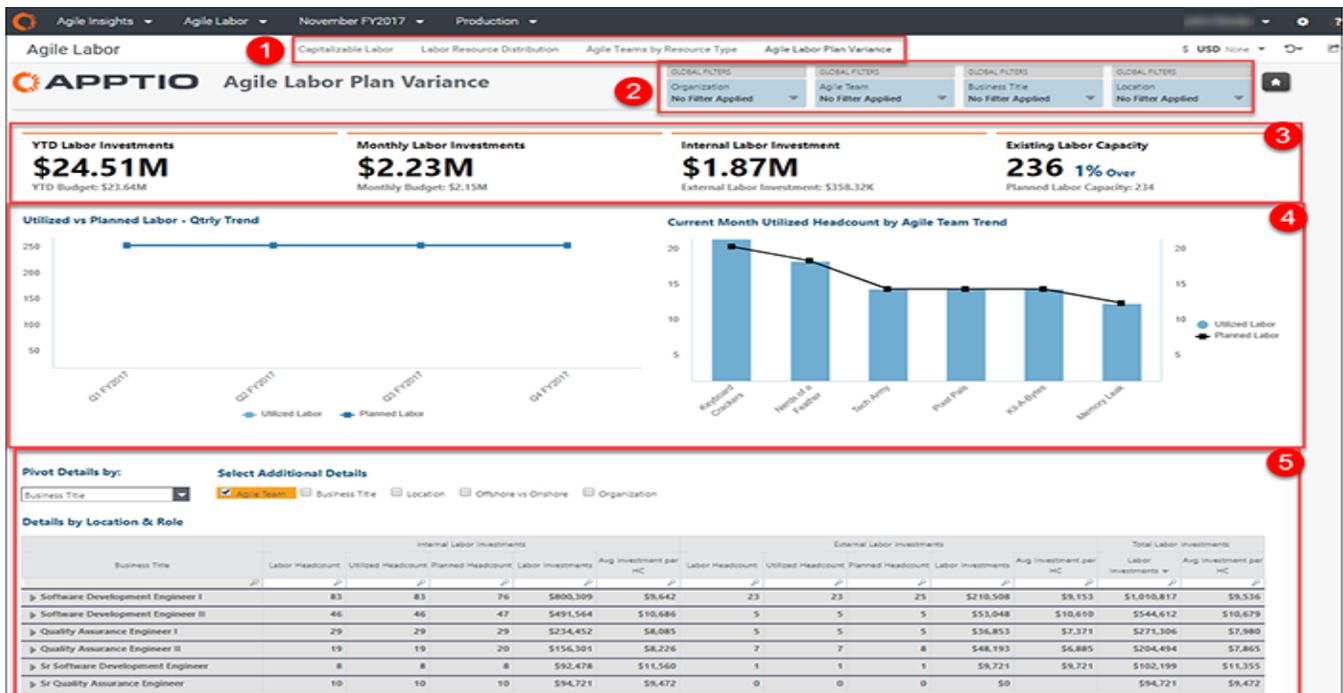
(1) Report collection - The Agile Labor report collection contains the following reports:
- Labor Resource Distribution
- Capitalizable Labor
- Agile Teams by Resource Type
- Agile Labor Plan Variance (discussed in this topic)

(2) Slicers - The following global filters are available in this report:
- **Organization** - Select an organization name to see the variance details per organization.
- **Agile Team** - Select a team name to see the variance details per team.
- **Business Title** - Select a business title (for example, Product Manager or Software Development Engineer I) to see the variance details per title.
- **Location** - Select a team location to see the variance details per location.

(3) KPIs
- The following KPIs provide a high-level view into the resource distribution across your Agile projects:
  - **YTD Labor Investments** - The total cost of labor YTD.
  - **YTD Budget** - The labor plan YTD.
  - **Monthly Labor Investments** - The cost of labor for the current month.
  - **Monthly Budget** - The labor plan for the current month.
  - **Internal Labor Investments** - The total spent on internal labor.
  - **External Labor Investments** - The total spent on external labor.
  - **Existing Labor Capacity** - The current labor capacity. The difference between this KPI and Planned Labor Capacity is expressed to the right as a percentage above or below planned capacity.
  - **Planned Labor Capacity** - The labor capacity plan.
- **Questions answered**:
  - What is the current composition of my Agile teams in terms of internal versus external labor?
  - What is the current capacity of my Agile workforce?

(4) Trend charts
- **Utilized vs Planned Labor - Qtrly Trend** - Use this chart to understand the trending relationship between the current Agile headcount versus planned headcount per team over the last four quarters.
- **Current Month Utilized Headcount by Agile Team Trend** - Use this chart to understand the trending relationship between the current Agile headcount versus planned headcount per team for the current month.
- **Questions answered**:
  - What is the trending headcount of my Agile workforce by quarter and for the current month?

(5) Details

- Use the **Details by Location & Role** table to understand the details used to render the trend charts (4).
- Select an option in the **Pivot Details by** list, select the **Select Additional Details** options, then click an arrow in the first column to see details about the composition of your Agile teams based on your selections. You can also see total labor investments per location or role, and the average investment per headcount.

This table provides information on team throughput to help you understand whether a team has enough headcount to support the amount of work they're given, and to see discrepancies, inconsistencies, and imbalances in your Agile workforce. Weigh this information against your business goals and expectations to determine whether resources need to be redirected, tickets need to be pulled from sprints, or other possible solutions need to happen in order to meet business goals.

- **Questions answered**:
  - How much of my Agile workforce is internal versus external, or onshore versus offshore, and do those numbers support the business goals and expectations?
  - What is the average investment per role on my Agile teams?
  - Do we have the right roles in the right locations to support the business goals and expectations?
  - Where should I ship resources or spending to fill gaps and meet goals and expectations?

The Agile Activity report collection

Reports in the **Agile Activity** report collection provide the following Agile Insights activity reports:

- Agile Development Analytics
- Cost of Quality
- Development Analytics by Sprint
- Backlog Costing Analytics

To access reports in the **Agile Activity** report collection:

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Activity**.
3. On the bar at the top of the page, select a report in the collection.

Agile Development Analytics - Agile Insights

Use Cases - Use this report to do the following:

- Compare completed work to planned activities
- Track Agile adoption
- Compare the output of Agile teams to team investment

The **Agile Development Analytics** report provides an overview of your Agile backlog, effort, value created, and the priority of epics to empower your decision-making and allow you to create value faster.

As one of the reports in the Agile Activity collection, the Agile Development Analytics report provides the following analytics:
- Your monthly and YTD development investment
- Your spending on new features and quality efforts
- The cost of unreleased work
- The cost and effort per team and investment category

The Agile Activity report collection can help you do the following:
- Track the cost to innovate, evolve, and maintain your Agile products
- Drive accountability for spending and quality by understanding development costs per organization, product, leader, and team
- Reduce unproductive work by analyzing the ratio of development to QA per product
- Inform decisions about quality improvement by understanding development costs per business category and activity type

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- IT Finance
- Agile transformation leaders
- IT leadership

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

This report aligns to the following business goals:
- **Analyze team activity** - Ensure that the activity is associated with the new feature work.
- **Determine business alignment of activity** - View the tables and charts to understand whether the work being delivered aligns to strategic goals, as well as the planned investment mix.

Display the Agile Development Analytics report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Activity**.
3. On the bar at the top of the page, click **Agile Development Analytics**.
4. Set a global filter for a specific team.
5. To export or email your data, click **Export** ( ) on the top-right of the page and select an export format.

The report contains the following elements:
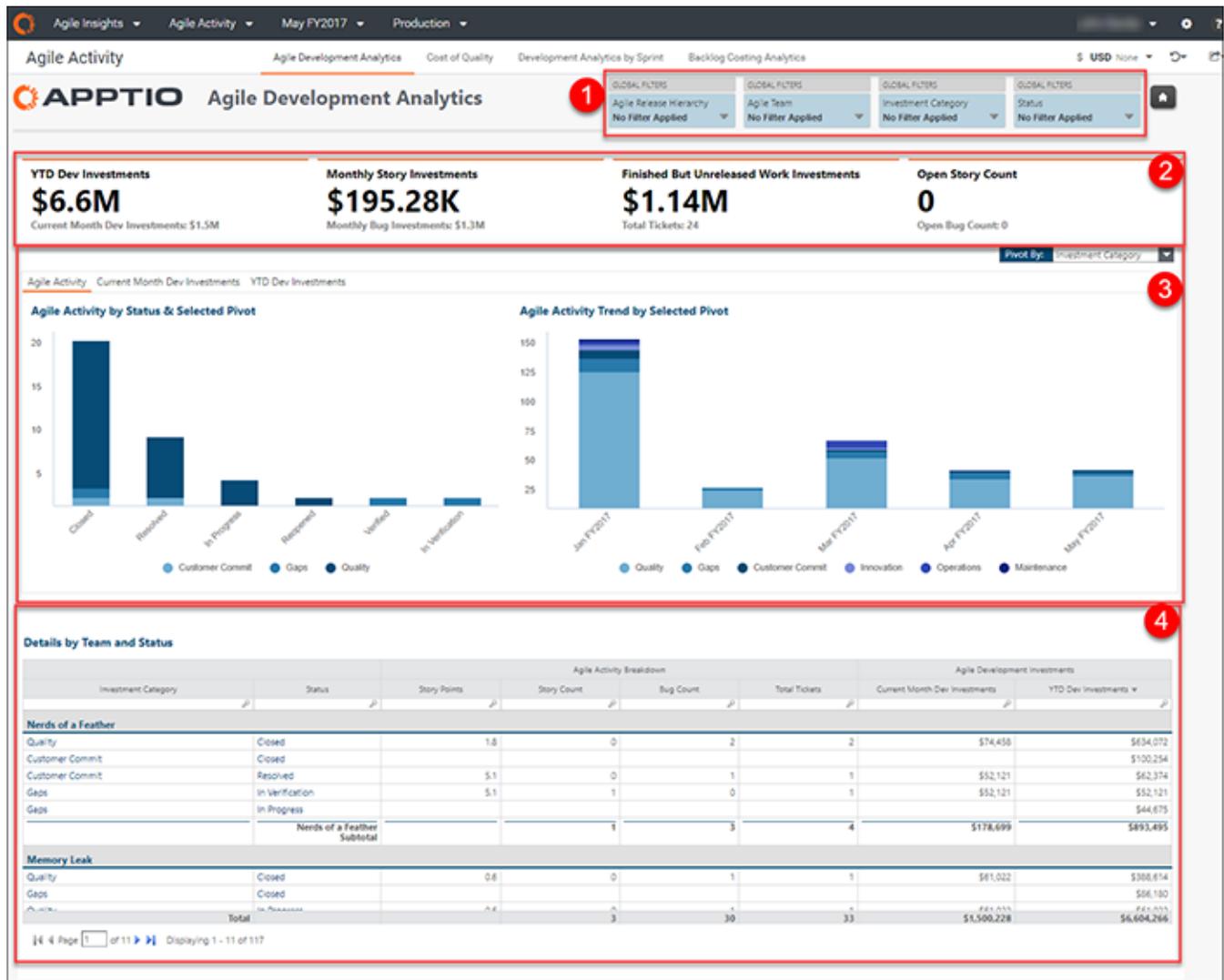
(1) Report collection - The Agile Activity report collection contains the following reports:
- Agile Development Analytics (described in this topic)
- Cost of Quality
- Development Analytics by Sprint
- Backlog costing analytics

(2) Slicers - The following global filters are available in this report collection:
- **Agile Release Hierarchy** - Select a release hierarchy level to filter by (for example, TeamName Q3 2018, or a group of multiple teams and releases) to view analytics for that level only.
- **Agile Team** - Select a team name to see development analytics for that team only.
- **Investment Category** - Select a category (for example, Gap, Innovation, Maintenance) to see development analytics for that category only.
- **Status** - Select a status (for example, Open, In Review, Resolved) to see development analytics for work in that status only.

(3) KPIs

- KPIs provide a high-level view of your development spend and other metrics.
    - **YTD Dev Investments** - This KPI shows the total cost of development YTD.
    - **Current Month Dev Investments** - This KPI shows the dev investments for the current month.
    - **Monthly Story Investments** - This KPI shows the total spent in the current month to work on stories.
    - **Monthly Bug Investments** - This KPI shows the total spent in the current month to fix bugs.
    - **Finished but Unreleased Work Investments** - This KPI shows the current spending on completed work that is not released.
    - **Total Tickets** - This KPI shows the current number of active Agile tickets.
    - **Open Story Count** - This KPI shows the number of stories currently open.
    - **Open Bug Count** - This KPI shows the number of bugs currently open.
- **Questions answered**:
    - What are my monthly and YTD development costs?
    - What is the cost of work that is not released?

(4) Charts - Each tab in this report contains two charts:
- **Agile Activity**
    - **Agile Activity by Status & Selected Pivot** - Use this chart to understand your ticket investment for the current month.
    - **Agile Activity Trend by Selected Pivot** - Use this chart to understand the trend of your tickets for the current year.
- **Current Month Dev Investments**
    - **Current Month Dev Investments by Status & Selected Pivot** - Use this chart to understand your developer investments for the current month.
    - **Current Month Dev Investments by Selected Pivot** - Use this chart for a broader overview of developer investments for the current month.
- **YTD Dev Investments**
    - YTD Dev Investments by Status & Selected Pivot - Use this chart to understand your developer investments for the current year.
    - Dev Investment Trend by Selected Pivot - Use this chart to understand the trend of your developer investments for the current year.
- **Questions answered**:
    - What are my monthly and YTD development costs and activities per team, category, epic, and issue type?

(5) Details
- Use the **Details by Team and Status** table to understand additional details about the data show in the charts, above. The **Pivot By** options above the bar charts controls the data displayed in this table as well.

  Use the information in this table to evaluate the cost of innovating and maintaining your Agile products, and to reduce unproductive work. By understanding development costs per organization, you can drive accountability for spending and QA, and make more informed decisions about quality improvement.

Questions answered:
- What are my monthly and YTD development costs?
- Are the Agile teams providing enough ROI?
- Are the Agile teams productive and focused on activity that meets business goals and expectations?

Cost of Quality - Agile Insights

Use Case - Use this report to do the following:
- Monitor team yield and quality of work over time
- Increase visibility into quality of work and spend level team to team

As one of the reports in the Agile Activity collection, the **Cost of Quality** report provides solid data that can affect change within an organization based on financial, rather than subjective, information. This report provides a financial perspective into the funding of your Agile teams so you can see the financial impact of defects. Understanding the monthly cost of the development and quality work associated with your Agile stories and defects can empower your decision-making and allow you to create value faster and more consistently. Organizations that use applications like VersionOne, TFS, or Jira can track defects, but Apptio allows you to see those defects broken out as pre-release and post-release defects (identified by customers or during QA) so you can understand the financial impact of those defects.

For example, if you discover that a team has only ten defects that cost more than $100,000 in a quarter to fix, you might consider making changes in that team. Alternatively, you might discover a team that costs a lot of money to develop features actually costs twice as much because of the effort needed to fix their own defects. This type of information can help coaches and management understand where education might be needed and how to better align teams to be more efficient. Perhaps the individual skills within a team don't compliment each other in a beneficial way. Perhaps a single team is carrying more than 25 tickets, which costs more than half your total development costs of $132,000. Is that where you want to invest? Perhaps another team has only 15 tickets but the cost is lower, so you might decide to let them continue as is while you develop a strategy to help another team reduce their defect count.

This report provides the following analytics:
- The financial impact of defect work
- The quantity and type of defects
- The development investment per feature
- The status of tickets in relation to Agile activity and cost
- The ratio of innovation to bug fixing

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- IT and engineering development leaders
- Scrum masters
- IT leadership

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

Agile Insights aligns to the following business goals:

- **Determine the quality of your investments**:
  - Analyze the total investment reported in the KPIs for **Bug Investments** and **Avg Investment per Bug**. Do these amounts align with your business goals and expectations?
  - Determine which teams are responsible for post-delivery defects by sorting on the **Cost of Escaped Defects** in the **Details** table.
  - Determine whether the resulting development cost and activity align with your business goals and expectations.
- **Determine the average cost to fix bugs per team** - Analyze the total investment reported in the KPI for **Avg Investment per Bug**. Do these amounts align with your business goals and expectations?
- **Determine the cost of post-delivery defect work** - Analyze the information in the **Count of Defects** chart, the **Cost of Escaped Defects** KPI, and the **Count of Escaped Defects** in the **Details** table. Do these amounts align with your business goals and expectations?
- **Determine which teams are responsible for post-delivery defects** - In the **Details** table, sort the **Count of Escaped Defects** column to see the number of defects per team.

Display the Cost of Quality report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Activity**.
3. On the bar at the top of the page, click **Cost of Quality**.
4. (Optional) Set a global filter for a specific team.
5. To export or email your data, click **Export** (⤴) on the top-right of the page and select an export format.

The report contains the following elements:
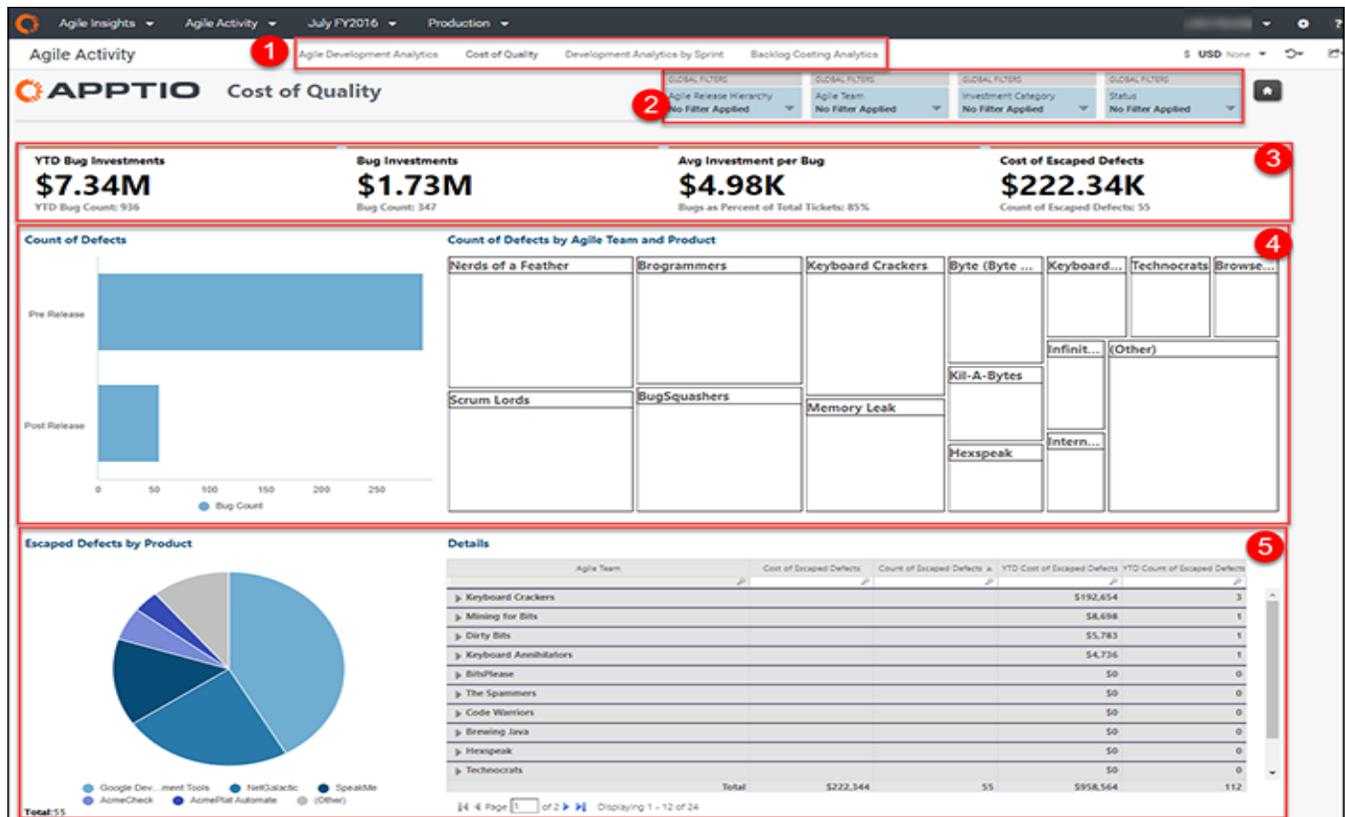
(1) Report collection - The Agile Activity report collection contains the following reports:
- Agile Development Analytics
- Cost of Quality (described in this topic)
- Development Analytics by Sprint
- Backlog Costing Analytics

(2) Slicers - The following global filters are available in this report collection:
- **Agile Release Hierarchy** - Select a release hierarchy level to filter by (for example, TeamName Q3 2018, or a group of multiple teams and releases) to view analytics for that level only.
- **Agile Team** - Select a team name to see development analytics for that team only.
- **Investment Category** - Select an investment category (for example, Quality, Innovation, Maintenance) to see analytics for that category only.
- **Status** - Select a status (for example, Open, In Review, Resolved) to see development analytics for work in that status only.

(3) KPIs
- KPIs provide a high-level view of your development spend and other metrics.
    - **YTD Bug Investments** - This KPI shows the total investment in quality work YTD.
    - **YTD Bug Count** - This KPI shows the total defects YTD.
    - **Bug Investments** - This KPI shows the cost of defects for the current month.
    - **Bug Count** - This KPI shows the total defects for the current month.
    - **Avg Investment per Bug** - This KPI shows the current average cost of to fix defect.
    - **Bugs as Percent of Total Tickets** - This KPI shows the percentage of defects to total tickets.
    - **Cost of Escaped Defects** - This KPI shows the cost of defects reported post-release.
    - **Count of Escaped Defects** - This KPI shows the number of escaped defects per month.
- **Questions answered**:
    - How much have we invested in quality work YTD?
    - What is the cost and quantity of defects reported post-release?
    - What is the average cost of fixing a defect?
    - What is the investment mix of the work being done, and how does that align with strategic goals?

(4) Count of Defects
- **Bar chart** - The **Count of Defects** bar chart shows the total defects separated as post-release and pre-release.

Click a bar in the chart to open the **Escaped Bugs Detail for Pre-release** dialog, where you can see the trending cost of quality work per team for the last 12 months, in addition to a table that includes the details used to create the trend chart.
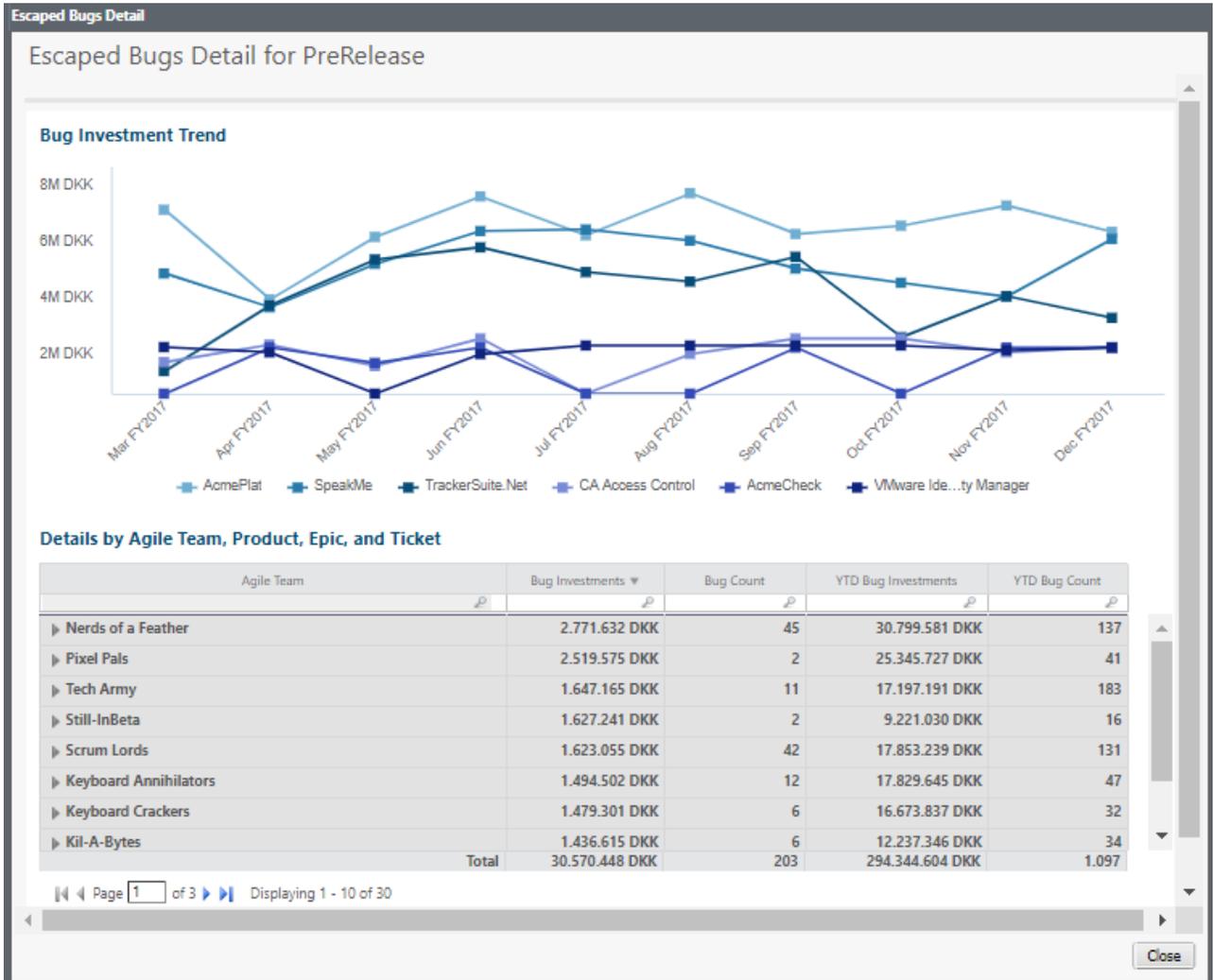
- **Tree map chart** - The **Count of Defects by Agile Team and Product** tree map helps you see the relative number of defects per Agile team so you can understand the distribution of defects across your organization. Click on any team in the diagram to drill into details and understand the mix of pre- and post-release defects for the team.
- **Questions answered**:
    - What is the impact of post-release defects across the organization?

(5) Escaped Defects by Product

- Use the Escaped Defects by Product doughnut chart to understand the mix of post-release defects per product. The Details table provides the data used in the chart, including the current and YTD cost and quantity of post-release defects per team.
- **Questions answered**:
    - Which teams are responsible for the majority of post-release defects?
    - What is the cost and quantity of defects reported post-release?

Development Analytics by Sprint - Agile Insights

Use Case - Use this report to do the following:
- Monitor the yield and quality of work by Agile teams over time
- Increase the visibility into what teams are producing and the number of bugs being worked
- Ensure teams are producing high quality work at a spending level comparable to other teams
- Drive accountability for spend and quality

The **Development Analytics by Sprint** report provides an overview of your Agile backlog, effort, and quality to empower your decision-making and allow you to understand whether your spending is generating value for the organization.

As one of the reports in the Agile Activity collection, the **Development Analytics by Sprint** report helps you understand how much is spent on new features versus quality per sprint. Apply filters for active versus not active sprints to see whether teams are working on defects, customer committed items, or innovation.

This report provides the following analytics:
- The number of active sprints and features
- The cost and effort provided per team, status, and investment category
- The number of development (new feature) tickets versus QA tickets across your organization
- The cost of new features versus quality efforts

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- IT and engineering development leaders
- Scrum masters
- IT leadership

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

This report aligns to the following business goals:
- **Determine the cost and effort provided per team, status, and investment category** - Analyze the activity per sprint, team, and investment category. Do these amounts align with your business goals and expectations?
- **Determine the cost and value of a sprint per team, epic, and product** - Analyze the **Sprint Details by Team, Sprint, Epic, and Product** table. Do these amounts align with your business goals and expectations?

Display the Development Analytics report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Activity**.
3. On the bar at the top of the page, click **Development Analytics by Sprint**.
4. To export or email your data, click **Export** ( ) on the top-right of the page and select an export format.

The report contains the following elements:
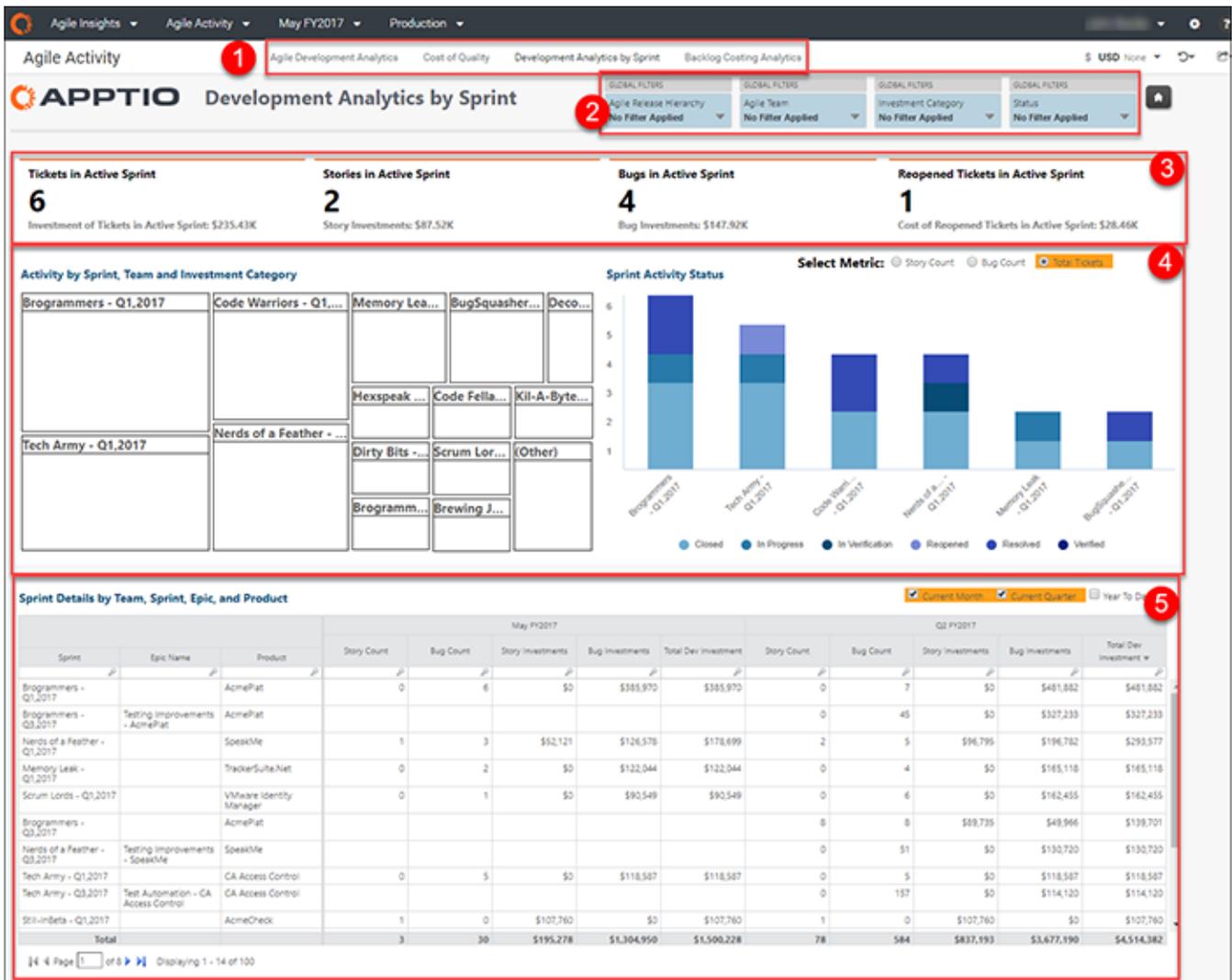
(1) Report collection - The Agile Activity report collection contains the following reports:
- [Agile Development Analytics](#)
- [Cost of Quality](#)
- Sprint Details (described in this topic)
- [Backlog Costing Analysis](#)

(2) Slicers - The following global filters are available in this report collection:
- **Agile Release Hierarchy** - Select a release hierarchy level to filter by (for example, TeamName Q3 2018, or a group of multiple teams and releases) to view analytics for that level only.
- **Agile Team** - Select a team name to see analytics for that team only.
- **Investment Category** - Select an investment category (for example, Quality, Innovation, Maintenance) to see analytics for that category only.
- **Status** - Select a status (for example, Open, In Review, Resolved) to see analytics for work in that status only.

(3) KPIs - KPIs provide a high-level view of your development spend and other metrics. FIX ALL
- **Tickets in Active Sprint** - This KPI shows the total of tickets currently in active sprints.
- **Investment of Tickets in Active Sprint** - This KPI shows the cost of the tickets currently in active sprints.
- **Stories in Active Sprint** - This KPI shows the number of stories currently in active sprints.
- **Story Investments** - This KPI shows the cost of stories currently in active sprints.
- **Bugs in Active Sprint** - This KPI shows the number of bugs currently in active sprints.
- **Bug Investments** - This KPI shows the cost of bugs currently in active sprints.
- **Reopened Tickets in Active Sprint** - This KPI shows the number of tickets in the active sprint that were reopened because of defects.
- **Cost of Reopened Tickets in Active Sprint** - This KPI shows the cost associates with tickets that have been reopened in the active sprint.

(4) Activity by Sprint, Team, and Investment Category
- Use the **Select Metric** option to filter the information in the Activity by Sprint tree map chart and the Sprint Activity Status chart to show development tickets, QA tickets, or both.
- The tree map chart shows the relative number of tickets per team in the active sprint so you can see the distribution of new feature work versus QA work across your organization. Click on any team in the diagram to drill into details that help you understand whether the team is focused on new features or QA tickets.
- **Questions answered**:
  - What is the cost and effort provided per team, ticket status, and investment category?

(5) Sprint Details by Team, Sprint, Epic, and Product
- Use the table to understand how team effort is distributed across a sprint. Weigh this information against your business goals and expectations to determine whether teams need to be redirected, tickets need to be pulled from sprints, or other possible solutions need to happen in order to meet business goals.
- **Questions answered**:
  - How much is the organization spending on new features versus quality efforts (fixing defects)?

Backlog Costing Analytics - Agile Insights

Use Case - Use this report to do the following:
- Determine the cost to implement backlog items
- Determine the cost of the ungroomed backlog items
- Determine the nature of backlog items
- Forecast the cost and number of points for future development work

The **Backlog Costing Analytics** report is installed by the Agile Activity component. As one of the reports in the Agile Activity collection, the Backlog Costing Analytics report provides data that allows you to evaluate the overall cost and health of your backlog of Agile tickets and view specific aspects of your backlog, such as team ownership, ticket types, investment categories, and groomed versus ungroomed backlog. This backlog grooming process allows you to view an estimated cost for planned work.

This report provides the following analytics:
- The financial impact of implementing backlog items
- The quantity and type of tickets in the backlog
- Details about estimated and ungroomed backlog items
- The status of items in the backlog

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

Estimated backlog cost is the cost of each backlog item per Agile team and issue type. Backlog items receive an estimated cost based on the historical Agile Dev Cost for worked-on tickets. Apptio determines a rate for backlog items based on the cost and number of tickets worked on within a period of time set by the TBMA. The total cost and the definition of the granularity of costing is determined by the TBMA and loaded into the Agile Teams Cost Master Data.

An item becomes part of the ungroomed backlog when a backlog can't be estimated under the following conditions:

- When a ticket can't be estimated based on historical trends for a specific Agile Team or Issue Type field
- When the Agile Team and Issue Type fields aren't populated
- When the Agile Team and Issue Type fields combined have no historical trend to date

This report is designed for:

- IT and engineering development leaders
- Product Owners
- IT leadership

Data in this report comes from the following sources:

- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

Display the Backlog Costing Analytics report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Activity**.
3. On the bar at the top of the page, click **Backlog Costing Analytics**.
4. To export or email your data, click **Export** () on the top-right of the page and select an export format.

The report contains the following elements:
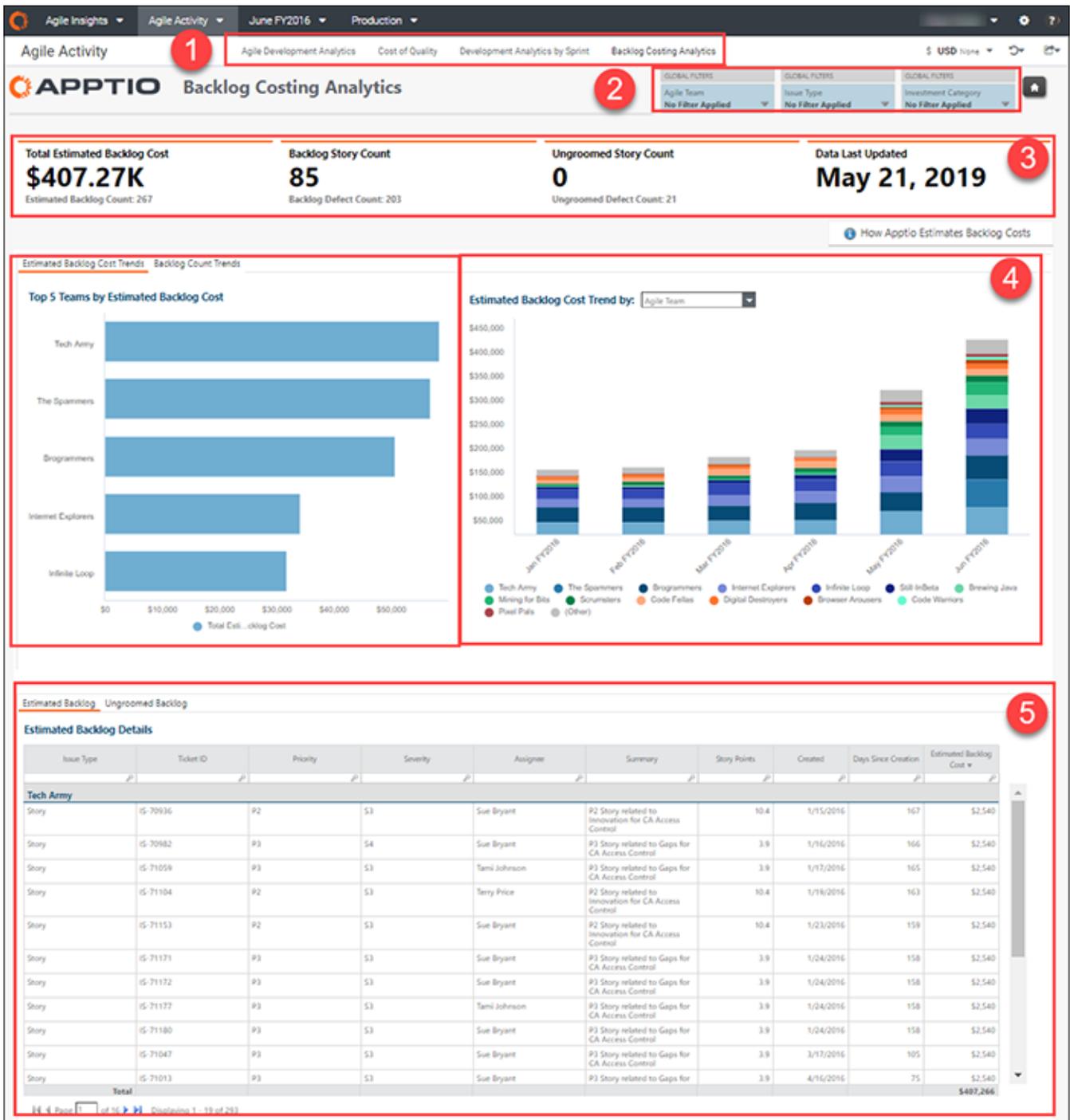
(1) Report collection - The Agile Activity report collection contains the following reports:
- Product Investments
- Product Development Analytics
- Product Value by Epic
- Backlog Costing Analysis (described in this topic)

(2) Slicers - The following global filters are available in this report collection:
- **Organization** - Select an organization to see analytics for that organization only.
- **Product Owner** - Select an owner to see analytics for that owner only.
- **Product Category** - Select a product type to see analytics for that type only.

(3) KPIs - KPIs provide a high-level view of your development spend and other metrics.
- **Total Estimated Backlog Cost** - This KPI shows the cost of your estimated backlog as of the last data update. **Estimated Backlog Count** shows the number of items in the backlog that have the Issue Type set to Story or Feature.
- **Backlog Story Count** - This KPI shows the number of stories in the backlog as of the last data update. **Backlog Defect Count** shows the number of items in the backlog that have the Tissue Type set to Bug or Defect.
- **Ungroomed Story Count** - This KPI shows the number of ungroomed stories (those that can't be estimated) in the backlog as of the last data update. (Ungroomed stories contain blank Agile Team and Issue Type fields.) **Ungroomed Defect Count** shows the number of individual ungroomed defects in the backlog.
- **Utilized Labor** - This KPI shows the current headcount working on products. The difference between this KPI and **Planned Labor** is expressed to the right as a percentage above or below plan.
- **Data Last Updated** - This KPI shows the date (in the format for your region) of the most recent update of the Agile Activity Master Data.

(4) Top 5 Teams by Estimated Backlog Cost
- This chart shows the teams with the highest estimated backlog costs. Use this information to forecast of the future cost of work on backlog items assigned to a current team or another team.
- Use the **Estimated Backlog Cost Trend** chart to the right to see the estimated cost of your backlog trend per month based on your selection from the drop-down list. Use this information to model the cost of future work and understand the historical health of your backlog costs.
- Click the **Backlog Count Trends** tab to view the teams with the highest estimated number of backlog items (**Teams by Backlog Count**) and the trending number of backlog items per month based on your selection from the drop-down list. Use this information to understand the health of your historical backlog, the mix of backlog items per team, and trend of your backlog counts.
- **Questions answered**:
  - What is the size and cost of my estimated backlog?
  - Which teams have the highest count and cost for backlog items?
  - What is the trending cost and count of our backlog items?

(5) Estimated Backlog Details and Ungroomed Backlog
- Use the **Estimated Backlog** tab to view the details of your backlog. You can see the nature and estimated cost of each backlog item per team. Use this information to understand the mix of future work per team, the distribution of future work, and freshness date of each item in the backlog.
- Click the **Ungroomed Backlog** tab to see the same information about your ungroomed backlog. Note that these items don't include information about assigned resource or estimated cost because they aren't assigned to an Agile team or issue. Use this information to understand backlog items that need to be scoped for future work.

- **Questions answered**:
  - What is the size and cost of the ungroomed backlog?
  - What teams are responsible for items in the backlog?
  - What is the distribution of our backlog items across our Agile teams?
  - What is the nature of our ungroomed backlog?

The Agile Data Quality report collection

Reports in the **Agile Data Quality** report collection provides the following Agile Insights data quality report: Ticket Hygiene.

To access reports in the **Agile Data Quality** report collection:
1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Data Quality**.
3. On the bar at the top of the page, select a report in the collection.

Ticket Hygiene - Agile Insights

Use Case - Use this report to identify team activity that is not associated with product workstreams.

This report helps you do the following:
- Establish data standardization across Agile teams
- Determine where resources are being wasted
- Determine the nature of unallocated data
- Determine specific data issues and teams that can fix the issues and reduce unallocated costs

The **Ticket Hygiene** report gives you visibility into issues that can be fixed to improve the productivity of your Agile teams. This report can help you drive data standardization and uncover wasted resources. Use this information to uncover the cost and number of unestimated and unallocated tickets that aren't mapped to an epic or product. With this information, you can assign tickets to specific teams for improvement.

This report provides the following analytics:
- The financial impact of missing data
- The type of data missing from unallocated tickets
- Details about missing data and the teams that can fix the issues

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- IT and engineering development leaders
- Scrum masters
- IT leadership

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

Display the Ticket Hygiene report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Data Quality**.
3. On the bar at the top of the page, click **Ticket Hygiene**.
4. To export or email your data, click **Export** (⬆️) on the top-right of the page and select an export format.

The report contains the following elements:
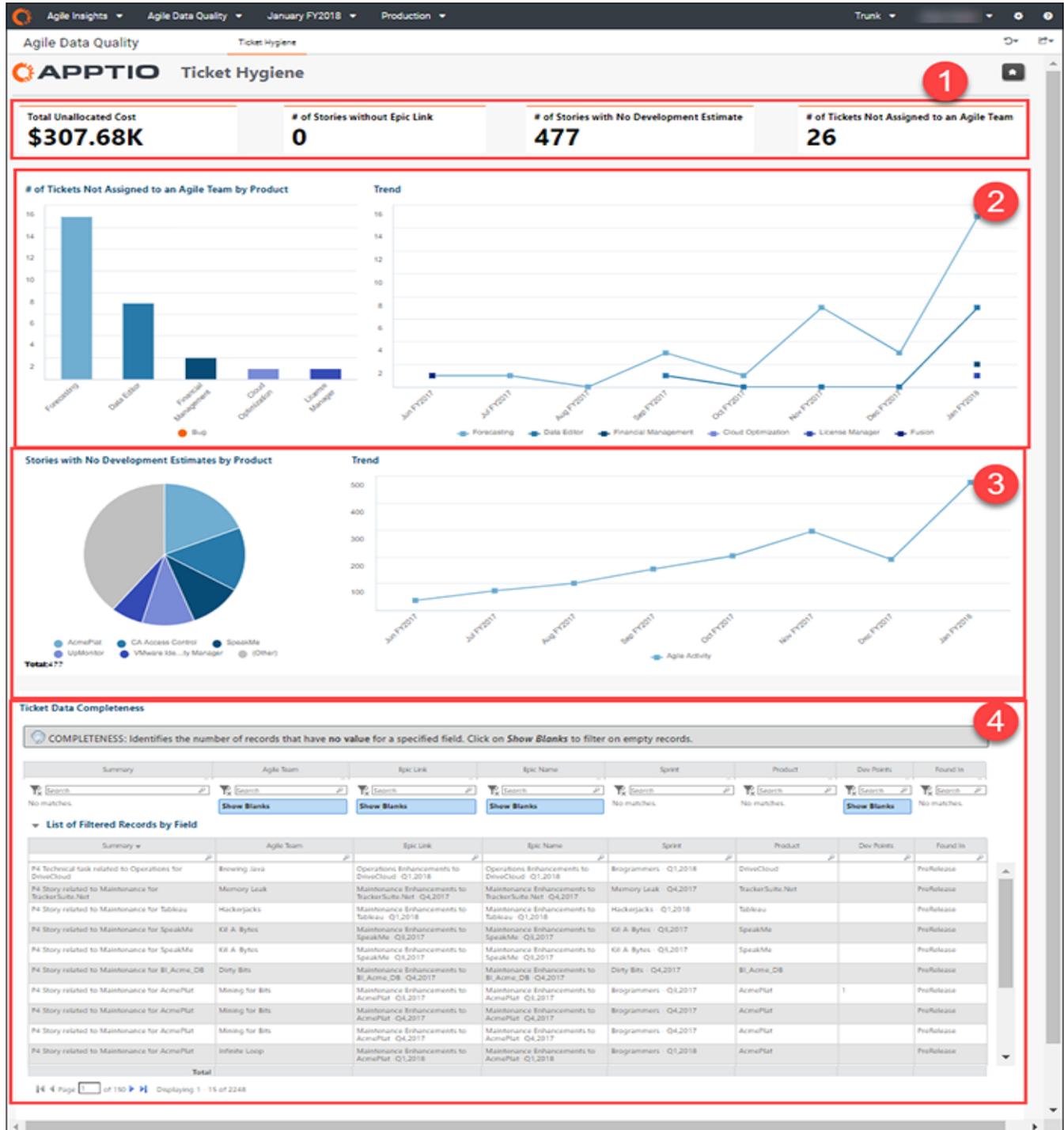
(1) KPIs - KPIs provide a high-level view of your development spend and other metrics.
- **Total Unallocated Cost** - This KPI shows the current cost of tickets that are missing data. This represents the amount of money being wasted because of poor quality data.
- **# of Stories without Epic Link** - This KPI shows the number of stories that are currently unassociated with an epic.
- **# of Stories with no Development Estimate** - This KPI shows the number of stories that are currently missing development estimates.
- **# of Stories Not Assigned to an Agile Team** - This KPI shows the number of stories that aren't currently assigned to an Agile team.

(2) # of Tickets Not Assigned to an Agile Team
- This chart shows the products with the highest number of tickets currently unassigned to an Agile team. Use this information to understand which products are unallocated and in need of clean-up.
- The **Trend** chart to the right shows the monthly trend in the number of unassigned tickets per product.
- **Questions answered**:
  - What products are missing team assignments?
  - How many products are missing team assignments?

(3) Stories with No Development Estimates by Product
- This chart shows the products with the highest number of stories with missing points for development. Use this information to understand which products are unallocated and in need of clean-up.
- **Questions answered**:
  - What products are missing development estimates?
  - How many products are missing development estimates?

(4) Ticket Data Completeness
- This table allows you to see the specific issues in your unallocated tickets and the Agile team assigned to the tickets. Use this information to inform specific teams to fix specific issues.
- **Questions answered**:
  - What specific fields are missing in tickets contributing to the Total Unallocated Cost?
  - What teams can fix the issues that are contributing to the Total Unallocated Cost?

The Agile Delivery report collection

Reports in the **Agile Delivery** report collection provide the following Agile Insights product delivery reports:
- Product Investments
  - Product details
- Product Development Analytics
- Product Value by Epic

To access reports in the **Agile Delivery** report collection:
1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Delivery**.
3. On the bar at the top of the page, select a report in the collection.

Product Investments - Agile Insights

Use Case - Use this report to do the following:
- Analyze the cost of labor resources dedicated to a product
- Understand and communicate total labor costs so you can compare across products
- Justify funding of current products
- Prioritize and adjust resources across products

Use the **Product Investments** report to gain visibility into the milestones of your Agile teams, such as the products they deliver, the timing of delivery, and the business value of their efforts. By understanding the costs, effort, and epics associated with each product, you have a better view into what's going on, the impact of what's going on, and the quality of the work.

This report is especially useful in managing the business value of your Agile team. By defining and measuring business outcomes and stakeholder feedback, the frequent and adequate value tracking provided by this report can help you be more responsive so you can adjust your business and products based on successes and failures.

For an overview of the concepts and building blocks behind the Agile Insights application, see [About Agile Insights](#). For a full list of Agile Insights reports, see [Agile Insights reports](#).

The report provides the following analytics:
- Development cost variance
- Actual versus planned capacity
- Product capacity
- Product ownership
- Product quality versus feature investments
- Unexpected variances

This report is designed for:
- Product owners
- Consuming business units
- IT leadership

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

This report aligns to the following business goals:
- **Evaluate product quality** - Analyze the investment costs reported in the KPIs for **YTD Total Labor Investment** and **Monthly Total Labor Investment**. Do these amounts align with your business goals and expectations?
- **Evaluate team capacity against plan** - In the **Quarterly Product Investments vs Capacity** chart, analyze your actual versus planned investments. Do these amounts align with your business goals and expectations?

- **Evaluate whether teams are over- or under-capacity** - In the **Investments by Product** table, analyze the data in the **Labor Capacity**, **Product Investments**, and **Variance to Plan** columns to determine product capacity, quality investments, and variances. Does this data align with your business goals and expectations?

Display the Product Investments report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Delivery**.
3. On the bar at the top of the page, click **Product Investments**.
4. To export or email your data, click **Export** (⬀▾) on the top-right of the page and select an export format.

The report contains the following elements:
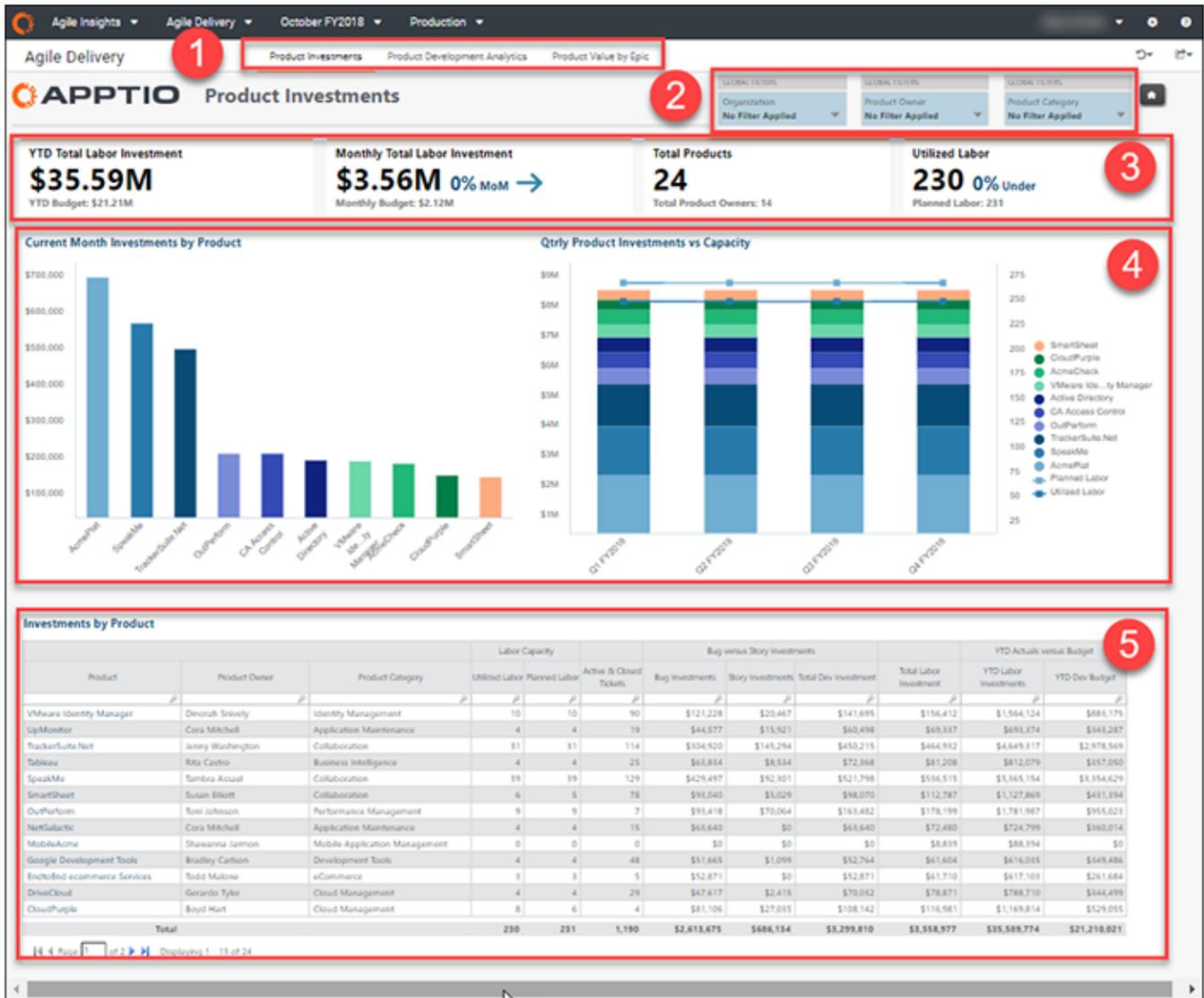
(1) Report collection - The Agile Delivery report collection contains the following reports:

- Product Investments (described in this topic)
- [Product Development Analytics](#)
- [Product Value by Epic](#)
- [Backlog Costing Analytics](#)

(2) Slicers - The following global filters are available in this report collection:

- **Organization** - Select a team name to see analytics for that team only.
- **Product Owner** - Select a name to see analytics for that product owner only.
- **Product Category** - Select a category to see analytics for that category only.

(3) KPIs:

- KPIs provide a high-level view of your development spend and other metrics.
    - **YTD Total Labor Investment** - This KPI shows the YTD spending on labor.
    - **YTD Budget** - This his KPI shows the YTD plan for labor spending.
    - **Monthly Total Labor Investment** - This KPI shows the labor spend for the current month.
    - **Monthly Budget** - This KPI shows the monthly plan for labor spending.
    - **Total Products** - This KPI shows the current number of active products.
    - **Total Product Owners** - This KPI shows the current number of active product owners.
    - **Utilized Labor** - This KPI shows the current headcount working on products. The difference between this KPI and Planned Labor is expressed to the right as a percentage above or below plan.
    - **Planned Labor** - This KPI shows the plan for headcount.
- **Questions answered**:
    - What are the total YTD development costs and variances to my plan?

(4) Current Month and Quarterly Investments

- The **Current Month Investments by Product** chart shows the amount invested per product in the current month so you can see where your investments are spent from an Agile labor perspective.
- Click in the bar chart to open the [Product detail report](#) with details specific to that product, such as the teams that support the product, the associated cost pools, the number and size of the stories, epics, and initiatives associated with the product.
- The **Quarterly Product Investments vs Capacity** chart shows the actual labor investment compared to planned capacity. You can see the total product investment per quarter with an overlay of the total capacity and planned capacity. This chart is especially helpful when you a filter so you can see how products roll up into the organization and the capacity needed to support the products.
- **Questions answered**:
    - What's my actual versus planned capacity?

(5) Investments by Product

- Use the **Investments by Product** table to understand the number of products being developed by your Agile teams and the number of product owners who manage those products. The **Labor Capacity**, **Product Investments**, and **Variance to Plan** columns provide information that helps you understand whether products are under- or over-capacity, the balance of quality work versus feature investment, and whether unexpected variances to plan are occurring.
- Click any row in the **Product** column to jump to the [Product detail report](#) for the selected product.

- **Questions answered**:
  - o What are the current YTD development costs and variance to plan?
  - o How many products are currently being managed in our Agile framework, and by how many product owners?
  - o How is my development capacity allocated to products?
  - o What's my current balance of quality work versus feature investments?

Product details - Agile Insights

The **Product** report provides details about a specific Agile product, including the breakdown of costs per story and ticket. The report is available when you click a bar in the Product Investments report **Current Month Investments by Product** chart.

The report provides the following analytics, specific to the selected product:
- Investment totals per released story and closed ticket
- Investments per cost pool
- Investment and activity per team
- Activity versus capacity
- Operational details

This report is designed for:
- Product owners
- Consuming business units
- IT leadership

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

This report aligns to the following business goals:
- **Evaluate product performance** - Analyze the investment, activity, capacity, and operational information on the page. Do these amounts align with your business goals and expectations?
- **Determine the cost of released stories and closed work items** - Analyze the data in the KPIs. Do these amounts align with your business goals and expectations?

Display the Product details report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Delivery**.
3. On the bar at the top of the page, click **Product Investments**.
4. Click a bar in the **Current Month Investments** by chart to open the Product details.
5. To export or email your data, click **Export** ( ) on the top-right of the page and select an export format.

The report contains the following elements:

(1) Report collection - The Agile Delivery report collection contains the following reports:
- Product Investments (the parent report for the Product details report)
- Product Development Analytics
- Product Value by Epic
- Other Agile reports:
  - Agile Insights main report
  - Executive Dashboard
  - Agile Development Analytics
  - Capitalizable Labor

(2) Slicers - The following global filters are available in this report collection:
- **Agile Release Hierarchy** - Select a release hierarchy level to filter by (for example, TeamName Q3 2018, or a group of multiple teams and releases) to view analytics for that level only.
- **Epic Name** - Select the name of an epic to see analytics for that epic only.
- **Agile Team** - Select a team name to see analytics for that team only.
- **Status** - Select a status (for example, Open, In Review, Resolved) to see analytics for work in that status only.

(3) KPIs
- KPIs provide a high-level view of your development spend and other metrics.
  - **Monthly Labor Investment** - This KPI shows the product investment for the current month.
  - **YTD Labor Investment** - This KPI shows the YTD spending for the product.
  - **Released Story Investments** - This KPI shows the spend for the product per released story.
  - **YTD Released Story Investments** - This KPI shows the YTD total spend for released stories.
  - **Investment of Closed Tickets** - This KPI shows the total cost of closed tickets for the product.
  - **YTD Investment of Closed Tickets** - This KPI shows the average cost of a closed ticket for the product.
  - **Avg Investment per Closed Ticket** - This KPI shows the average cost of a closed ticket for the product.
  - **Closed Ticket Count** - This KPI shows the total number of closed tickets.
- **Questions answered**:
  - What is the current investment for a specific product?
  - What is the cost of a released story or closed ticked for the product?

(4) Total Product Investments YTD by Cost Pool - Use this chart to understand the amount invested in the product per cost pool so you can see where your investments are spent on internal versus external labor.
- **Questions answered**:
  - How much was spent YTD on internal versus external labor for this product?

(5) Value Delivered by Epic - Use this chart to understand total product spend compared to the total number of tickets per team.
- **Questions answered**:
  - How much was spent on tickets for this product per team this quarter?

(6) Monthly Product Investments & Activity by Epic and Agile Team

- Use this table to understand how much was spent on total tickets for the month on the product per Agile team.
- Click any item in the Epic column to open a Detailed Analysis dialog with a pivot-enabled table. For the product selected, the dialog shows ticket totals and investment for the product, in addition to issue type, person assigned, priority, release status, and much more. Add column detail to the table by selecting options above the table.

Detailed Analysis

Detailed Analysis for Infinite Loop

Filtered By: Product: **AcmePlat**, Product: **AcmePlat**

Additional Column Detail

☐ Agile Team ☐ Assignee ☐ Closer ☐ Epic Name ☑ Issue Type ☐ Priority ☑ Product ☐ Released ☐ Resolver ☐ Sprint ☐ Status
☐ Summary ☐ Ticket ID

Detailed Analysis

Product	Issue Type	Total Tickets ▼	Total Investment
AcmePlat	Bug	10	$76,752
AcmePlat	Story	7	$53,726
AcmePlat	Technical task	1	$7,675
Total		**18**	**$138,153**

- **Questions answered**:
    - How much was spent this month on bugs and stories for this product per team?

(7) Current Spring Activity vs Capacity by Product

- Use this chart to understand the type of tickets related to the product for the quarter in relation to team capacity.
- **Questions answered**:
    - For the selected product, what kind of tickets are being worked on per quarter?

(8) Operational Agile Detail by Team, Issue Type, Status, and Investment Category
- Use this table to get an overview of the current Agile activity for the product, including the name of the active sprint and the number of story point and tickets associated with the sprint. Expand the rows to see additional detail.

Operational Agile Detail by Team, Issue Type, Status, and Investment Category

Agile Team	Summary	Sprint	Story Points	Total Tickets ▼
▼ Mining for Bits			7	37
▶ Bug			6	29
▼ Story			1	8
▶ Open				6
▼ In Progress	P3 Story related to Gaps for AcmePlat	Brogrammers - Q3,2017		1
▼ Gaps	P3 Story related to Gaps for AcmePlat	Brogrammers - Q3,2017		1
IS-66779	P3 Story related to Gaps for AcmePlat	Brogrammers - Q3,2017		1
▶ Closed	P3 Story related to Gaps for AcmePlat	Brogrammers - Q4,2017	1	1
▶ Pixel Pals				23
▶ Keyboard Crackers			2	23
▶ Infinite Loop			3	18

- **Questions answered**:
  - What is currently happening with the product in terms of sprints, story points, and tickets?

Product Development Analytics - Agile Insights

As one of the reports in the Agile Delivery report collection, the **Product Development Analytics** report helps you understand investments at the team level and provides information on how many teams support a product. This report also provides a breakdown of what teams are working on (quality versus innovation), trending over time.

This report provides the following analytics:
- The number of teams that support each product
- A breakdown of what teams are working on (quality versus innovation)
- Product development trending over time
- Product investments per category

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- Product owners
- Consuming business units
- IT leadership

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

This report aligns to the following business goals:
- **Analyze product quality** - Analyze the data in the **Monthly Agile Team Investments by Product** table. Does this data align with your business goals and expectations?
- **Analyze monthly investments per team, product, category, organization, and portfolio owner** - Analyze the data on the page using filters to focus on the area you want. Does this data align with your business goals and expectations?

Display the Product Development Analytics report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Delivery**.
3. On the bar at the top of the page, click **Agile Development Analytics**.
4. To export or email your data, click **Export** (⬀▾) on the top-right of the page and select an export format.

The report contains the following elements:

(1) Report collection - The Agile Delivery report collection contains the following reports:
- [Product Investments](#)
- Product Development Analytics (described in this topic)
- [Product Value by Epic](#)
- [Backlog Costing Analytics](#)

(2) Slicers - The following global filters are available in this report collection:
- **Organization** - Select an organization to see analytics for that organization only.
- **Product Owner** - Select an owner to see analytics for that owner only.
- **Product Category**- Select a product type to see analytics for that type only.

(3) KPIs
- KPIs provide a high-level view of your development spend and other metrics.
  - **YTD Total Labor Investment** - This KPI shows the YTD spending on labor.
  - **Monthly Total Labor Investment** - This KPI shows the labor spend for the current month.
  - **Total Products** - This KPI shows the current number of active products.
  - **Utilized Labor** - This KPI shows the current headcount working on products. The difference between this KPI and Planned Labor is expressed to the right as a percentage above or below plan.
- **Questions answered**:
  - What are the total YTD development costs and variances to my plan per product?

(4) Monthly Agile Team Investments and Performance
- Use the **Monthly Agile Team Investments by Product** chart to see which teams have the highest spending in the current month. Team investments are separated per product to help you see the distribution of investments for teams.
- Use the **Monthly Agile Team Performance by Product** table to understand the balance of quality work versus feature development for each team, in addition to the number of QA and development tickets generated by each team, the cost of those tickets, the overall development cost, and the trending spend of each team.

- Click any row in the **Agile Team** column to open the Development Investments Details Analytics dialog for the team you selected. The dialog displays a monthly trend chart that is pivot-enabled per team or epic, and a table with investment and ticket totals per quarter.
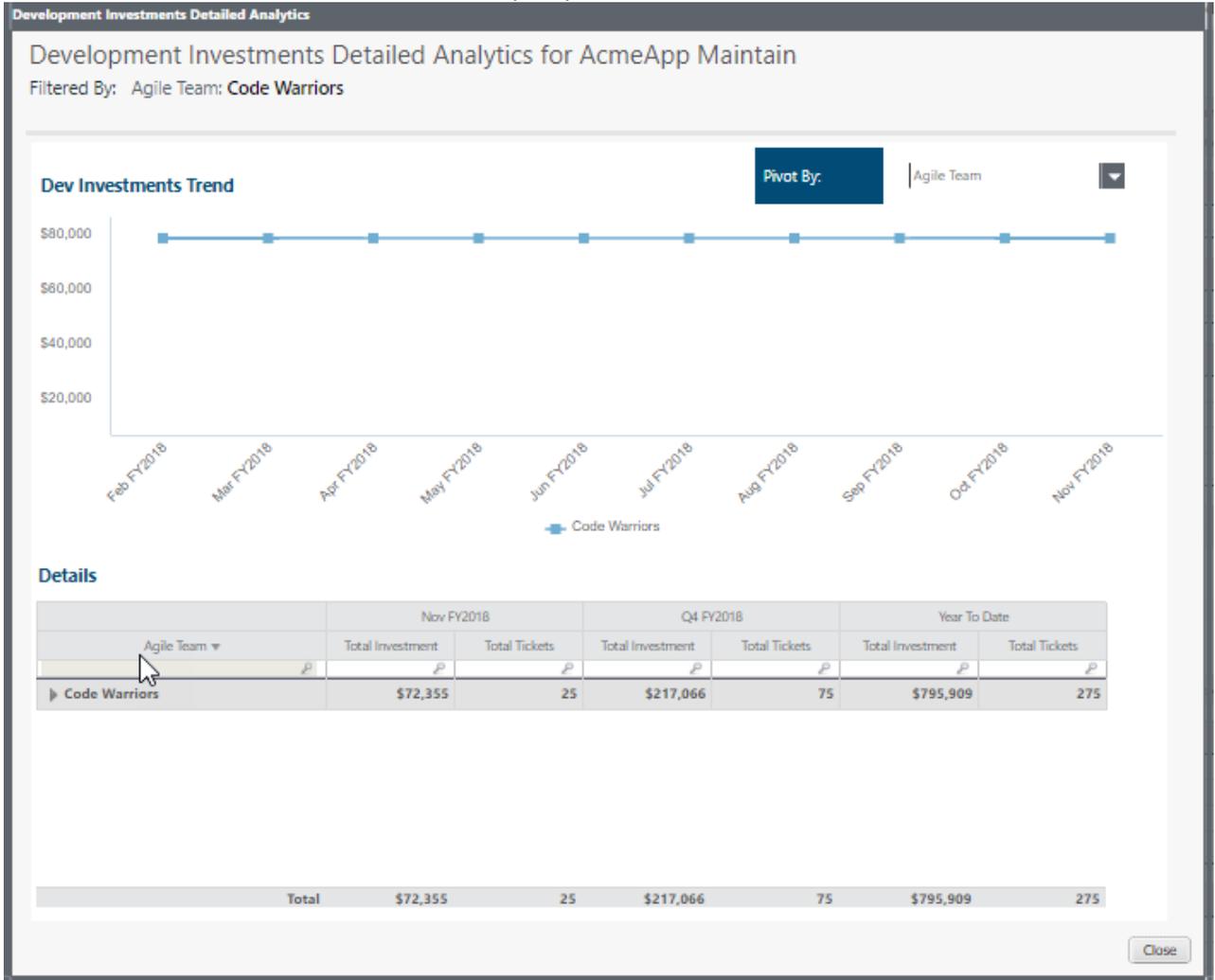
Development Investments Detailed Analytics

Development Investments Detailed Analytics for AcmeApp Maintain
Filtered By: Agile Team: **Code Warriors**

Dev Investments Trend   Pivot By: Agile Team

Details

Agile Team ▼	Nov FY2018		Q4 FY2018		Year To Date	
	Total Investment	Total Tickets	Total Investment	Total Tickets	Total Investment	Total Tickets
▶ Code Warriors	$72,355	25	$217,066	75	$795,909	275
Total	$72,355	25	$217,066	75	$795,909	275

- **Questions answered**:
  - How are the Agile teams performing per product?
  - What is this month's development investment per team, product, category, or portfolio owner?

(5) Monthly Product Investments by Category - Use the chart and table to understand which teams have the highest spending in the current month as well as the categories of tickets they are working on. The table provides the details used in the chart.
- **Questions answered**:
  - How are the Agile teams performing per product?
  - What is this month's development investment per team, product, category, or portfolio owner?

Product Value by Epic - Agile Insights

As one of the reports in the Agile Delivery report collection, the **Product Value by Epic** report helps you understand the number, value, and priority of Agile development work at the epic level. This report is particularly useful to product owners who can see the teams that support the work needed to fix or enhance the products they own, in addition to the tickets that support the work that needs to be done. Information in this report can help decisions about priorities and focus, and a better understanding of your investments per product.

This report provides the following analytics:
- The number of teams that support each product
- A breakdown of what teams are working on (quality work versus innovation)
- Product development trending over time
- Product investments per category

For an overview of the concepts and building blocks behind the Agile Insights application, see About Agile Insights. For a full list of Agile Insights reports, see Agile Insights reports.

This report is designed for:
- Product owners
- Consuming business units
- IT leadership

Data in this report comes from the following sources:
- Agile Dev Cost modeled metric
- Agile Activity modeled metric
- Agile Teams Master Data
- Agile Activity Master Data

This report aligns to the following business goals:
- **Analyze the quality and value of epics** - Analyze the data in the charts and tables in the Product Value by Epic page. Does this data align with your business goals and expectations?
- **Analyze investment mix per epic, team, and investment category** - Analyze the data in the charts and tables in the Product Value by Epic page. Does this data align with your business goals and expectations?

Display the Product Value by Epic report

1. On the **Application** menu, click **Agile Insights** (see Agile Insights menu).
2. On the **Report** menu, click **Agile Delivery**.
3. On the bar at the top of the page, click **Product Value by Epic**.
4. Click a bar in the **Current Month Investments** by chart to open the Product details.
5. To export or email your data, click **Export** (⬀▾) on the top-right of the page and select an export format.

The report contains the following elements:

(1) Report collection - The Agile Delivery report collection contains the following reports:
- Product Investments
- Product Development Analytics
- Product Value by Epic (described in this topic)
- Backlog Costing Analytics

(2) Slicers - The following global filters are available in this report collection:
- **Agile Release Hierarchy** - Select a release hierarchy level to filter by (for example, TeamName Q3 2018, or a group of multiple teams and releases) to view analytics for that level only.
- **Product** - Select the name of a product to see analytics for that product only.
- **Epic Name** - Select the name of an epic to see analytics for that epic only.
- **Agile Team** - Select a team name to see analytics for that team only.
- **Investment Category** - Select a category (for example, Gap, Innovation, Maintenance) to see analytics for that category only.

(3) KPIs - KPIs provide a high-level view of your development spend and other metrics.
- **YTD Total Labor Investment** - This KPI shows the YTD spending on employees doing Agile development work plus leadership overhead.
- **Monthly Total Labor Investment** - This KPI shows the spending in the current month on employees doing Agile development work plus leadership overhead.
- **Average Investment per Epic** - This KPI shows the average cost of an epic.
- **Epic Count** - This KPI shows the number of active epics.
- **Average Investment per Product** - This KPI shows the average cost of a product.
- **Product Count** - This KPI shows the number of active products.
- **Average Count of Epics per Product** - This KPI shows the average number of epics per product
- **Average Count of Epics per Investment Category** - This KPI shows the average number of epics per category (such as Gap, Innovation, Maintenance, etc.)

(4) YTD Investments by Product and Epic
- The tree map chart shows the relative size and category of investments per epic distributed across your Agile products. Hover over any epic to see how much was invested in the previous quarter and the percentage of that investment compared to the total YTD investment. Click on any epic in the diagram to drill into information about the product associated with each epic.
- **Questions answered**:
  - What is the distribution of investments (features versus quality work) per epic and product?
  - How many resources have we allocated this year to epics and products?

(5) Monthly Investments by Epic
- Use this chart to understand which epics comprise the total amount invested per month in Agile work.
- **Questions answered**:
  - How much is invested monthly per epic?

(6) Details by Product, Epic, and Team
- Use this table to understand the details of each epic, including the assigned team and the investment totals (monthly and quarterly) for stories and bugs.
- Click any row in the **Epic Name** column to open the Detailed Analysis dialog for the epic you selected. The dialog displays complete details about the selected epic, including the names of the team members who work on the epic, individual tickets associated with the epic, ticket status, ticket priority, and the investment per ticket. Options above the table allow you to show and hide columns.
- **Questions answered**:
  - How many epics does a product have?
  - How much has been invested in development and quality work per epic, team, and investment category?
  - What tickets are associated with each epic, and how much does each epic and ticket cost?
  - How do my epics align to strategic goals and initiatives?