



regoUniversity 2019

SAN DIEGO

Introducing Apptio Agile Insights

Your Guides: Doug Greer and Rob Greca

Introductions

- Take 5 Minutes
- Turn to a Person Near You
- Introduce Yourself
- Business Cards



Agenda

- Introduction
- State of Agile
- Challenges
- Agile Insights Introduction & Capabilities
- Agile Investment Planning

Agile Governance Questions

- Does your organization **lack insight into Agile** work being done? Are you struggling with the **governance of Agile**?
- Would you like to **quantify the cost and value of Agile** delivery, such as cost per team, cost per feature, cost per story, or value delivered per PI?
- Do you have **both PPM and Agile** tools, operating independently with separate reporting?
- Do you have a good **view into Agile work** that is being done, including metrics & dashboards, and do you have **processes in place to govern** that work?
- How do you **bring together Agile and PPM** data for an enterprise-wide view of what work IT is doing?

The Shift from Waterfall to “Agile at Scale” ...

Business Value Alignment

- Delivers incremental value based on customer needs
- Ongoing re-prioritization ensures right focus
- Rapid iteration with customer improves value alignment

Time to Market

- Focus on MVP
- More rapid release cycles
- Continuous delivery of incremental value

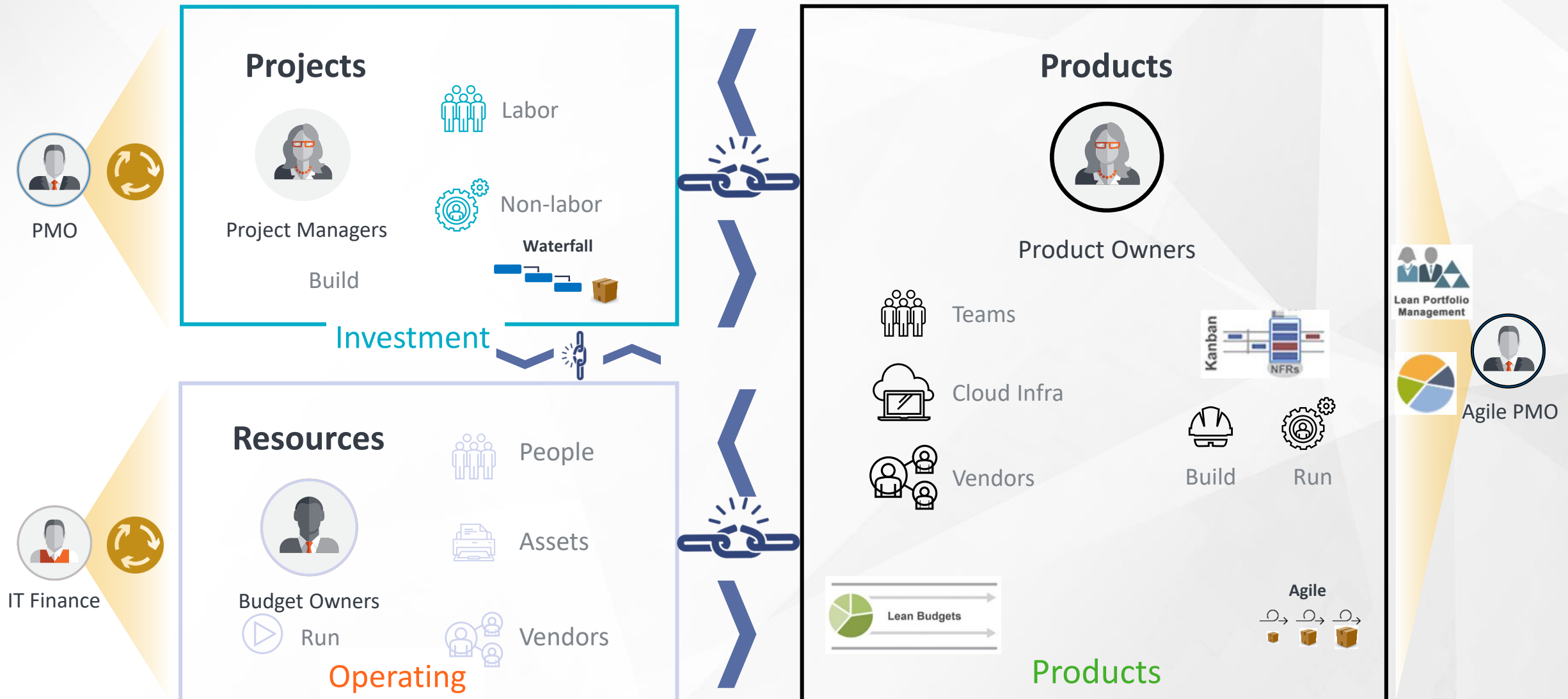
Improved Productivity

- Merges App Dev and operational processes
- Focus on prioritized backlog
- Quality issues addressed on ongoing basis



“Agile-fall” is Causes Transformation issues

Build phase is done in Agile way, but often the run is address in a waterfall manner



Agile Transformation Business Challenges



Business lacks
visibility into the
initiatives they fund



Unable to measure the
financial impact of Agile
Development



Increasingly difficult to
understand what efforts
to capitalize

Key Trends Gartner Has Observed

- **Labor tracking is still the most used methodology** for identifying labor capitalization in agile despite our recommendations to move to story/story point tracking.
- **Financial reviews are typically done on a quarterly basis** for multiple purposes (e.g., estimating cost, labor capitalization, is there sufficient value to continue, etc.)
- **Value tracking is a key improvement area** — CIOs tell us that cost and value tracking (with an emphasis on the latter) are still big challenges in an agile/product world.

Common Agile Cost Accounting Examples

Capitalizable Efforts

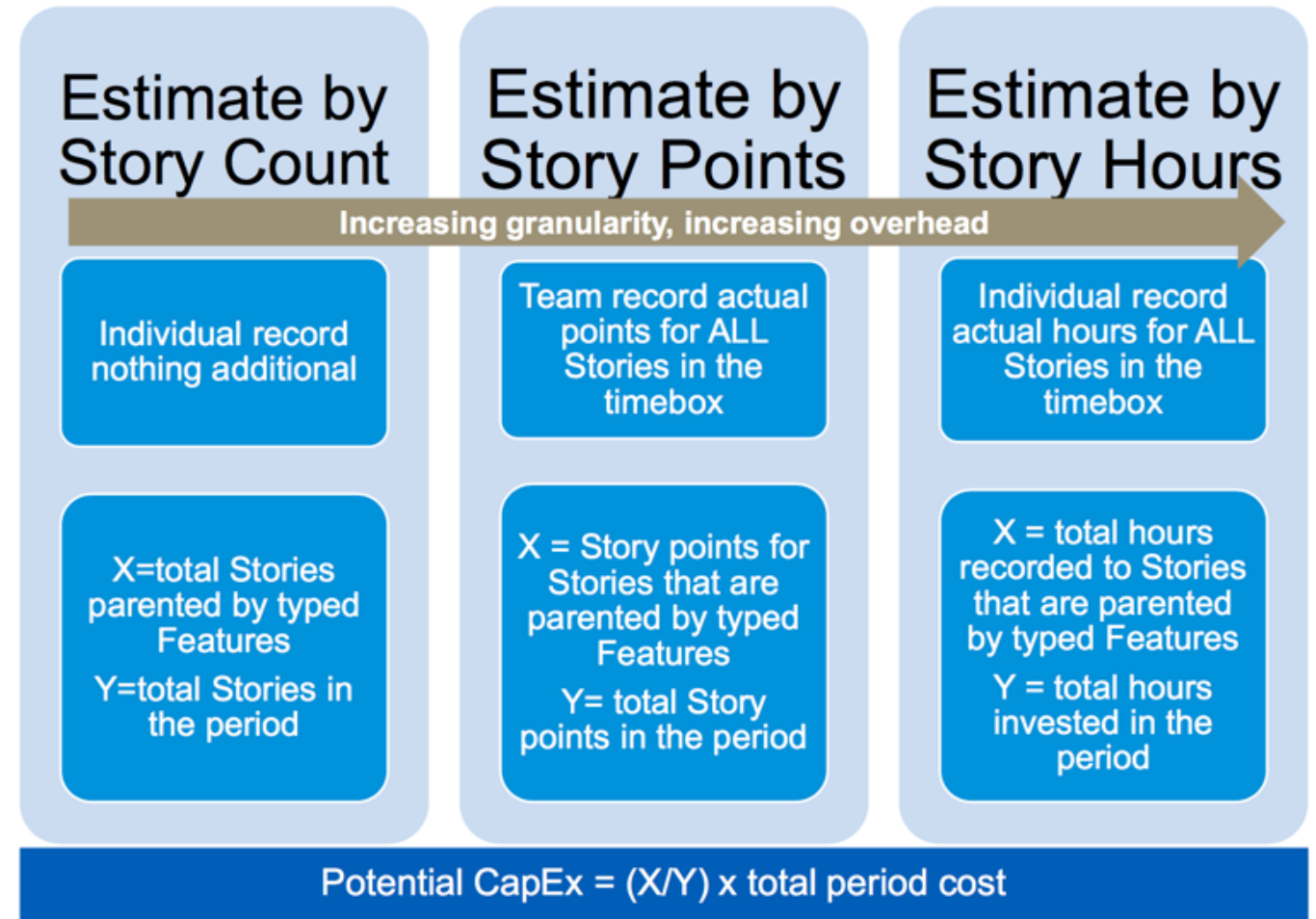
All efforts during sprint development should be considered CapEx except:

- Defects fix – considered maintenance work
- Development of Enabler stories for infrastructure, exploration, refactors
- Knowledge acquisition work: such as prototype, proof-of-concept, experiments, and design spikes.

Work necessary for understanding the problem or technical feasibility should be expensed.

Efforts to Expense

- Product Planning (Product Backlog)
- Epic and Agile Release Train Planning (Epic/Feature Backlog)
- PI or Release Planning & estimating
- Training
- Release or PI Retrospective
- Application maintenance and operation



Estimation of capitalized labor costs

$$\text{CapEx \$} = \text{Story Points Multiplier} * \text{Total CapEx Burn Rate for the team}$$

Story Points Multiplier

For the user stories completed by teams, the story points multiplier denotes the proportion of story points assigned to stories that are aimed at new feature development

In other words, if:

- X = Total Story Points delivered within a specific period
- Y = Total Story Points associated with user stories that are flagged as capex (i.e. tasks aimed at new feature development)

$$\text{Story Points Multiplier} = X/Y$$

Capex Burn Rate for Team

Role-based assumptions (per table below) are applied to estimate the net Capex burn rate for the team

The % assumptions have been arrived at based on a general understanding of the role and nature of work

Role	% Effort Capexed*
Product Owner	10%
Iteration Manager	60%
Business Analyst	50%
Quality Analyst	90%
Developer	90%

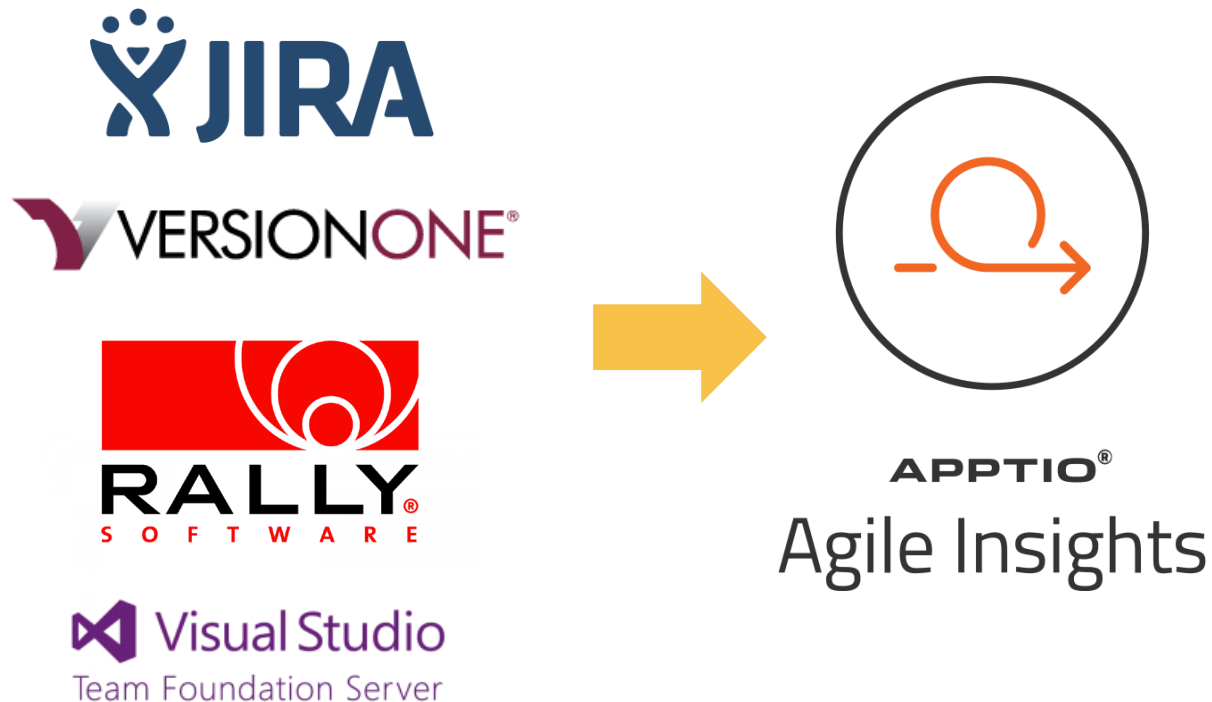
Agile Insights Introduction



Let Rego be your guide.

What is Apptio Agile Insights?

Integrates **financial** information with **work execution** information from Agile automation systems to create a **business performance view of Agile productivity, quality, and labor**.



- Visualize team labor spend & utilization
- Understand the cost to develop, innovate and maintain Agile products
- Track and analyze capitalized and operationalized labor spend and progress toward targets



APPTIO®

Agile Insights

Product Delivery Analytics

- Optimize resource investments
- Justify funding of current products
- Inform decisions to improve velocity

Development & Quality Analytics

- Drive accountability for spend and quality
- Reduce unproductive work
- Inform decisions to improve quality

Labor Analytics

- Inform labor capitalization decisions
- Improve team resourcing decisions
- Track Agile transformation progress

Success Stories - Sysco



"Agile is one of the reasons TBM has been successful and important to us. Knowing where our money is going and being able to find out is that the best place to spend has resulted in significant savings."

Wayne Shurts

Executive Vice President and CTO

Goal

Needed to realign labor organization for Agile centricity and move to 100% Agile and DevOps

How

Used Agile insights to create an all-in view of development

Enabled the business to shift operational savings to growth investments

Eliminated time tracking while preserving GAAP standards

Results

30% reduction in OPEX and 40% reduction overall in cash spend

Shifted investment mix from 80/20 to 50/50 Run/Grow

Doubled adoption rate of digital e-commerce

Success Stories - Mastercard



Finance processes are still GAAP aligned, **but now the finance team uses capacity-based metrics other than hours to estimate cost.** "It wasn't really actually that big of a deal once we came up with a way to eliminate hours," said Griffin. "And, frankly, **our auditors were open to it as well** because other people are struggling with the same challenge: How do you move to Agile and still make people track hours? Those things just don't really align very well."

<https://www.tbmcouncil.org/awards/2018/mastercard>

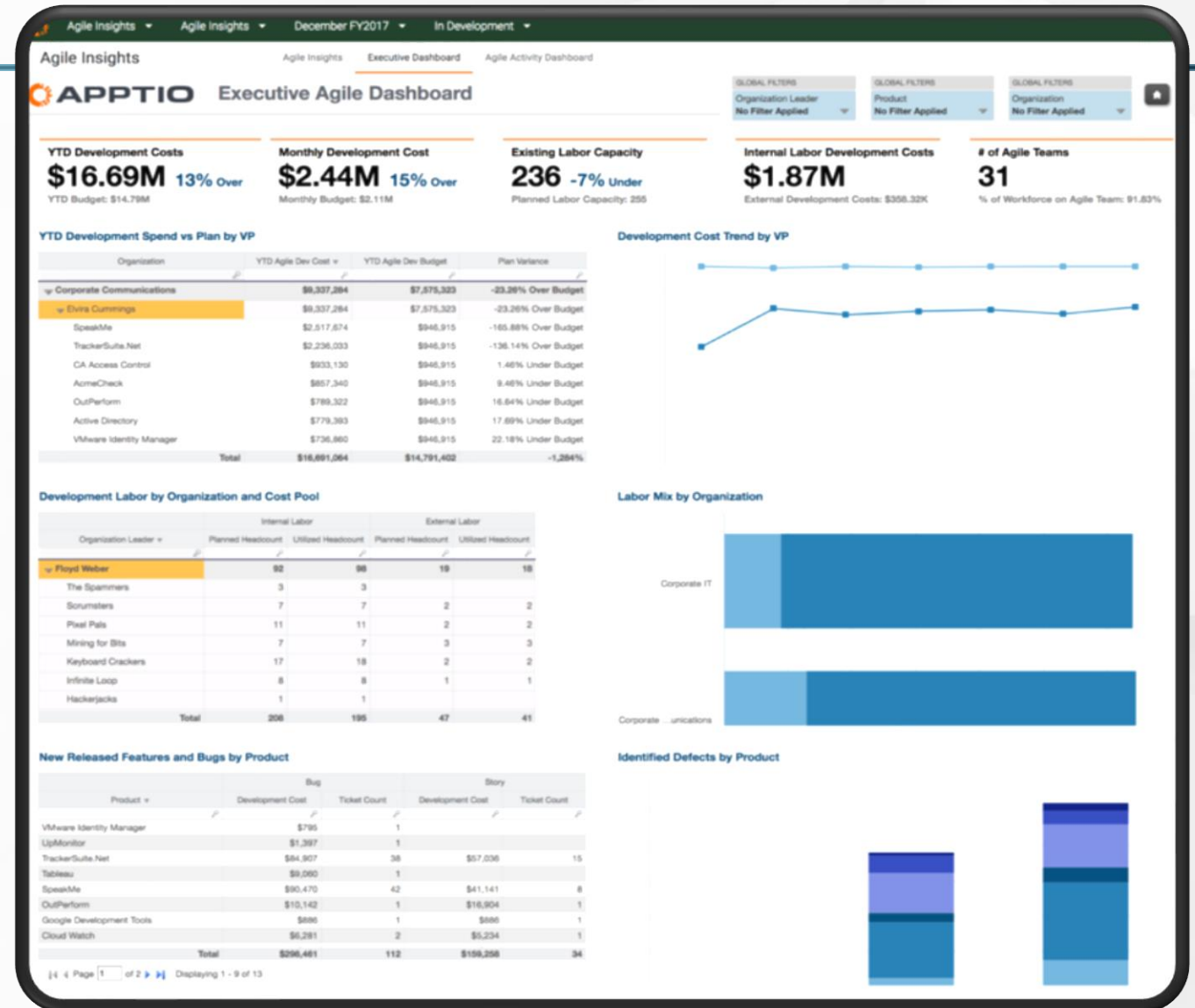
Executive Agile Dashboard

► Who does this help?

- IT Leadership
- Agile Transformation Leaders
- CIO/COO/CFO

► Questions Answered

- What is the Plan vs Actual development costs for Products & Initiatives?
- What are my Development costs by Executive Leaders?
- What is the labor makeup of my agile teams by Organization?
- How much Investment and Activity were release by Features and Bugs?



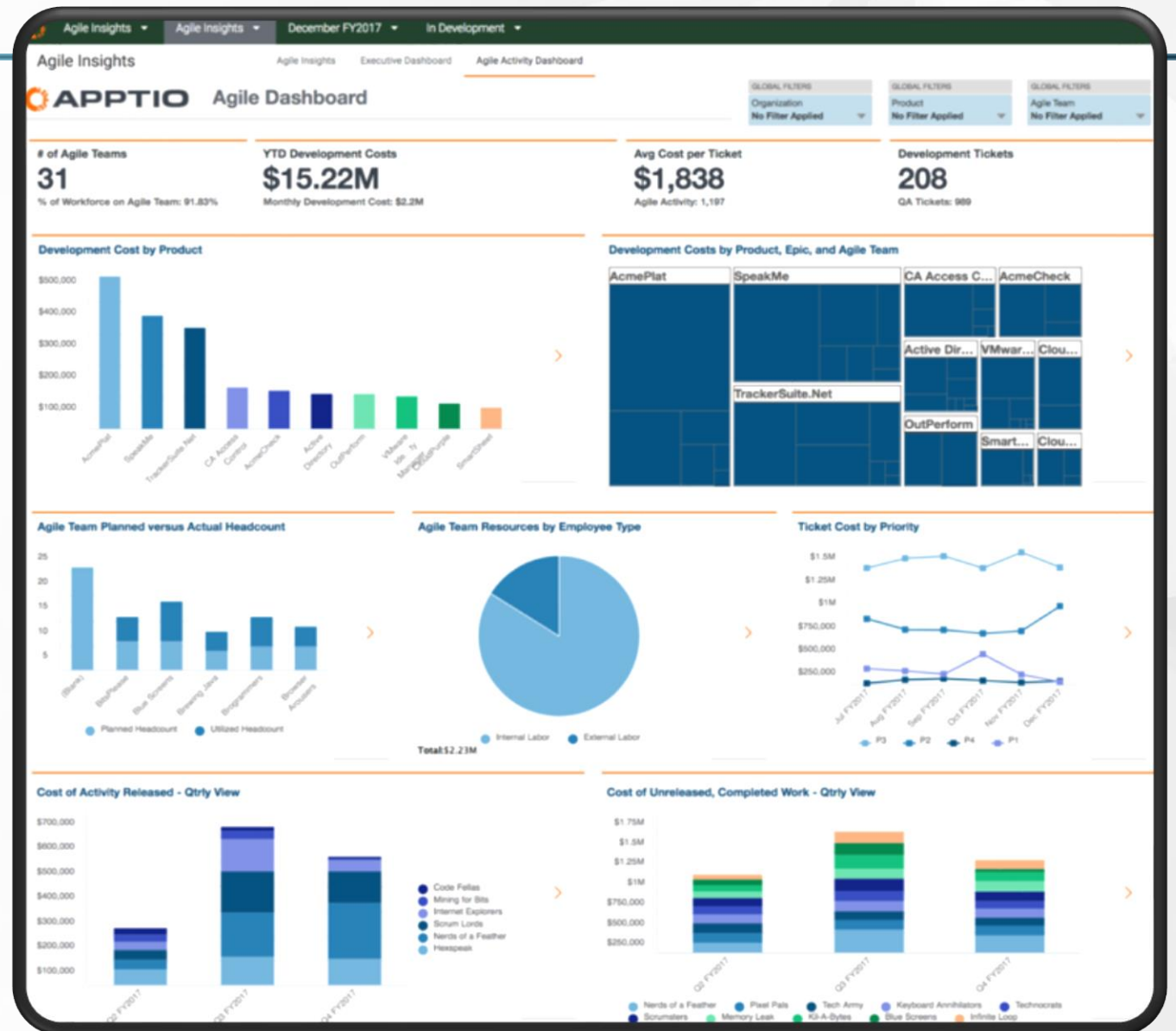
Agile Activity Dashboard

Who does this help?

- IT Leadership
- Agile Transformation Leaders
- CIO/COO/CFO

Questions Answered

- How many Agile Teams do we have and how much of our workforce is dedicated to a team?
- What is the velocity of Dev throughput and how does that impact our Sprint Planning
- How do my initiatives, Agile Teams and Products relate?
- How much of my Agile team workforce is Onshore vs Offshore
- What are development costs by various business categories?
- What is the cost of development not delivered?



Three Core Capabilities

► Labor Analytics

- Qtrly Capitalizable Labor and activity
 - Who cares:* Organizations are trying to move away from the manual time tracking processes. Apptio can support data driven analysis of what labor is deemed capitalizable to eliminate this process.
- Total # of teams and the average team size
 - Who cares:* Many companies are transitioning to Agile and have a target number of teams and average team size to ensure productivity and quality

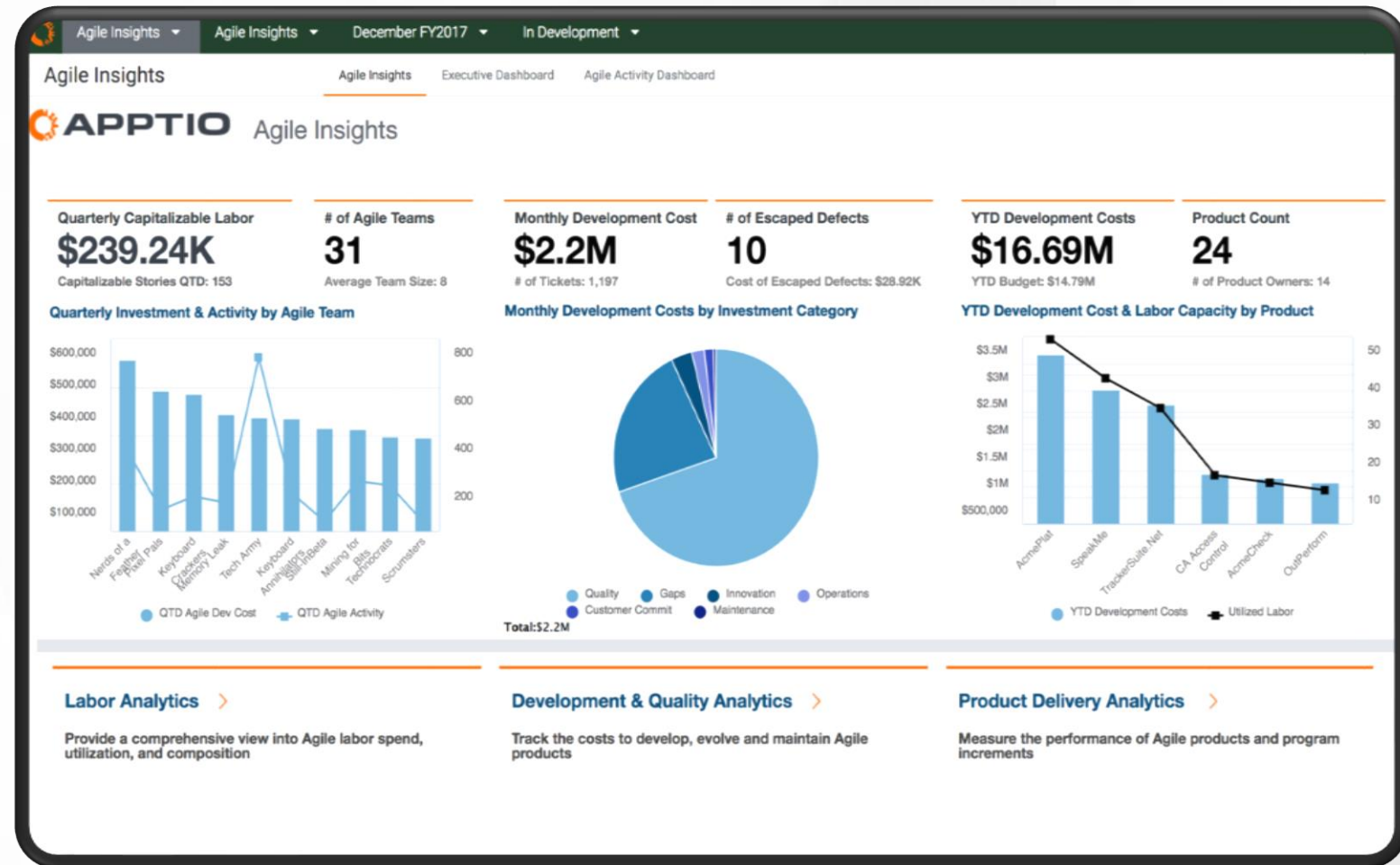
► Development & Quality Analytics

- Monthly development costs & activity
 - Who cares:* Based on the monthly activity and the cost of an agile team, companies can begin to see the trend in monthly development investments and velocity.
- Escaped Defects
 - Who cares:* Escaped defects are bugs that were found post release of a feature. These are potentially bugs found by the customer (internal or external)

► Product Delivery Analytics

- YTD Development Costs vs Budget
 - Who cares:* Based on model allocations, this KPI represents the YTD product development investments compared to a Fixed Capacity Plan from Agile Teams to Products
- Total Products Tracked and Product Owners
 - Who cares:* As organizations adopt Agile more widespread, Agile Insights will likely be tracking new Products, supporting a number of Product Owners.

Overview



Labor Analytics

- Inform labor capitalization decisions
- Improve team resourcing decisions
- Track Agile transformation progress

Labor Capitalization

Who does this help?

- IT Finance
- Agile Transformation Leaders
- IT Leadership

Questions Answered

- How much of my Software Development labor can be capitalized this quarter? By Cost Pool? By Agile Team?
- How has my capitalizable labor investments trended over 6 months?
- What is the breakdown of my capitalizable labor by Product, Role and Region?
- *Drill into supporting data for labor capitalization auditability



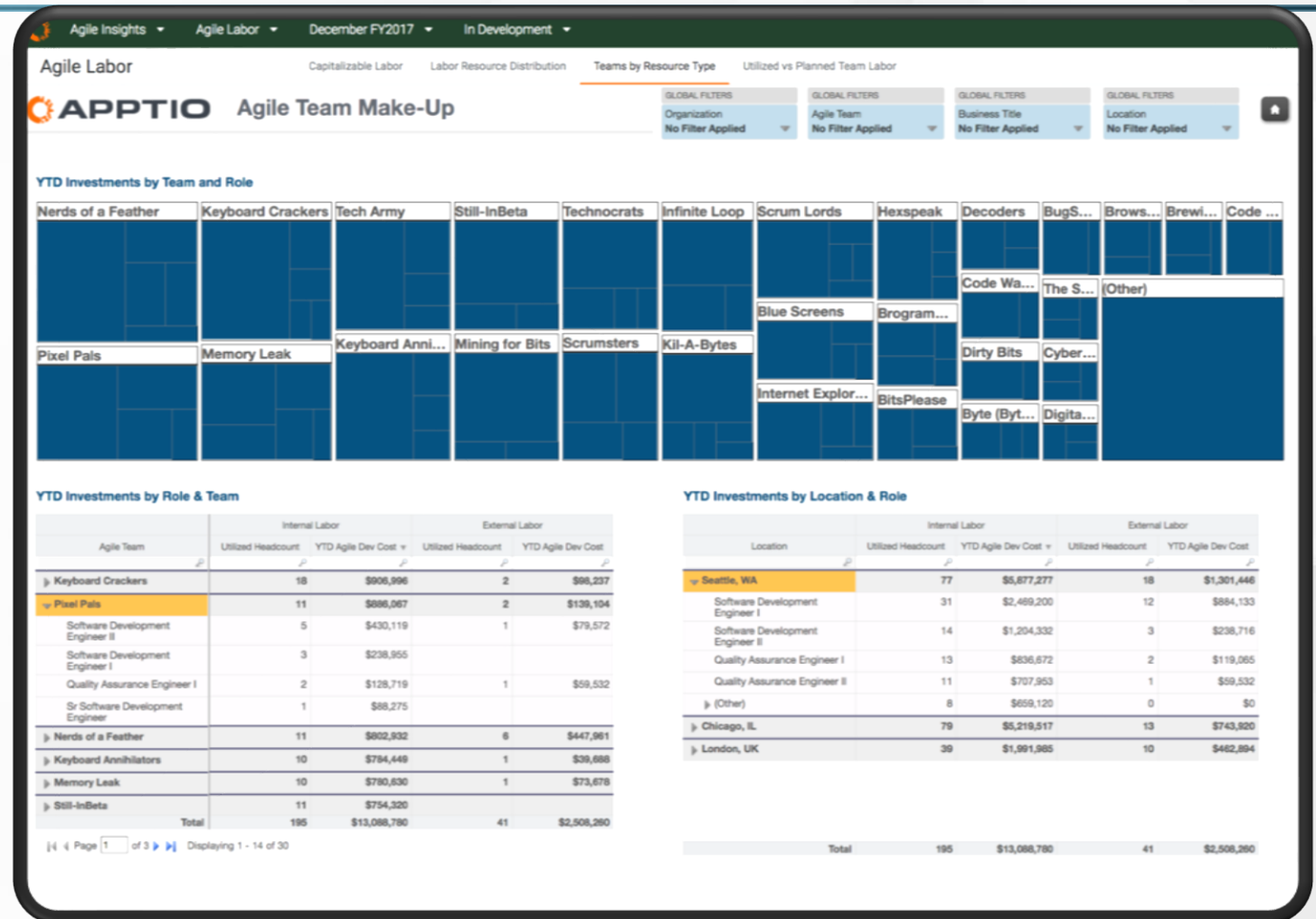
Agile Team Make-Up

Who does this help?

- IT Leadership
- Agile Transformation Leaders
- IT Finance

Questions Answered

- What is the labor makeup of my agile teams?
- Which agile teams am I most invested in?
- Where could I shift resources or spend to fill gaps when/where needed?
- What is the cost of an Agile Team over a standard Program Increment of Sprint?



Development & Quality Analytics

- Drive accountability for spend and quality
- Reduce unproductive work
- Inform decisions to improve quality

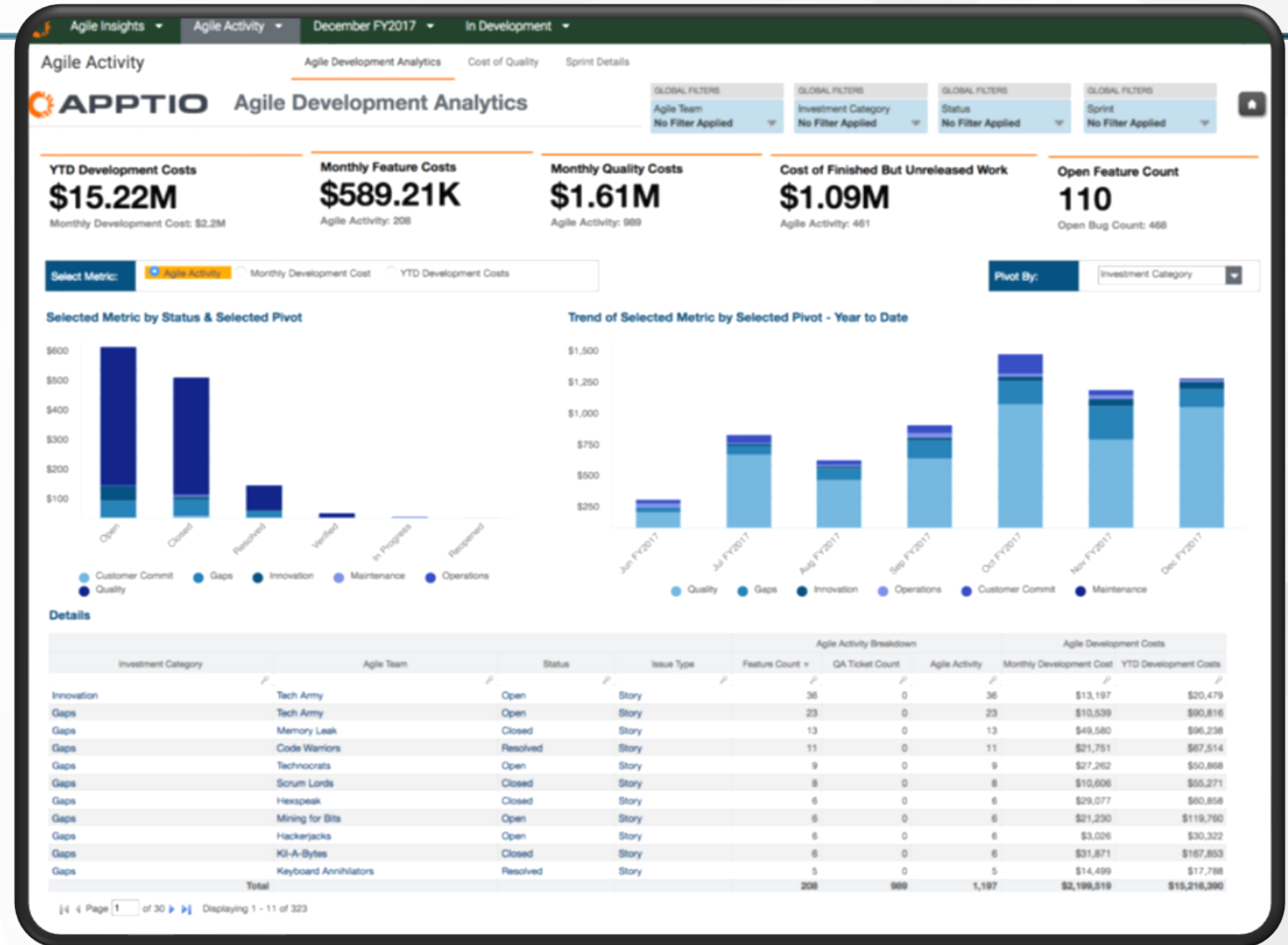
Development Analytics

Who does this help?

- IT/Engineering Development Leaders
- Scrum Masters
- IT Leadership

Questions Answered

- What are my monthly and YTD development costs?
- How much is my organization spending on New Features vs Quality efforts?
- What is the cost of work unreleased?
- What is the cost and effort provided by team, status and investment category?



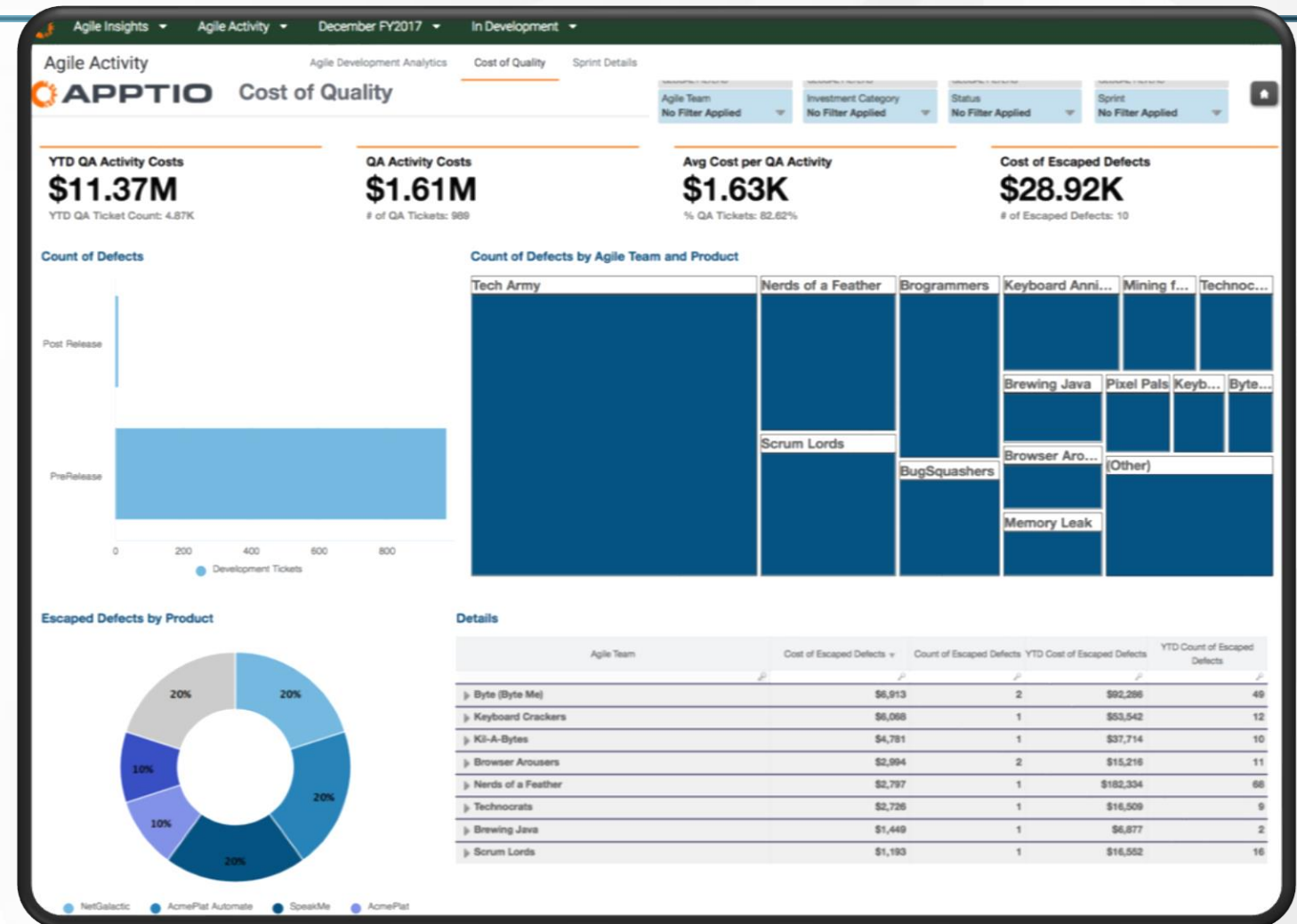
Cost of Quality

► Who does this help?

- IT/Engineering Development Leaders
- Scrum Masters
- IT Leadership

► Questions Answered

- How much have we invested in Quality work YTD?
- What is the cost and quantity of bugs that were found post delivery?
- On average, how much does it cost to fix a bug? By Team?
- Which teams are responsible for the majority of “escaped bugs”?



Product Delivery Analytics

- Optimize resource investments
- Justify funding of current products
- Inform decisions to improve velocity

Product Investments

Who does this help?

- Product Owners
- Consuming Business Units
- IT Leadership

Questions Answered

- What are the total YTD Development costs and variance to my plan?
- How many of the products are being managed in an Agile framework and across how many Product Owners
- What is my actual vs planned capacity?
- Which products are over/under capacity, have higher quality vs feature investments or have unexpected variances to plan?



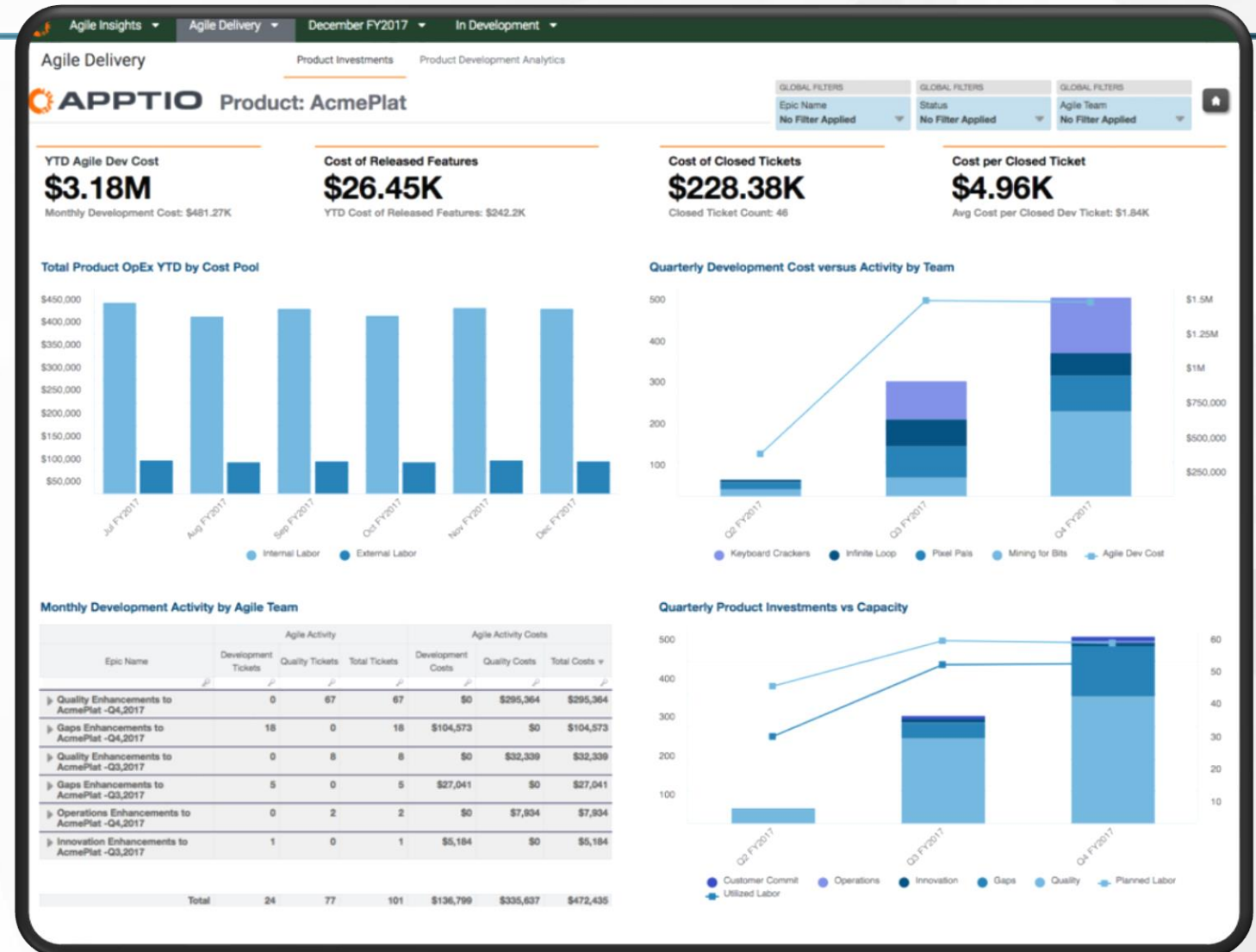
Product Specific Details

Who does this help?

- Product Owners
- Consuming Business Units
- IT Leadership

Questions Answered

- What is the TCO of my Product/Services?
- What is the App Dev (in \$) associated to my Product/Services?
- Which Agile Teams support my Product/Service and what is their associated cost?
- What is the cost associated to Agile Team activity?
- What is the planned and current activity by product



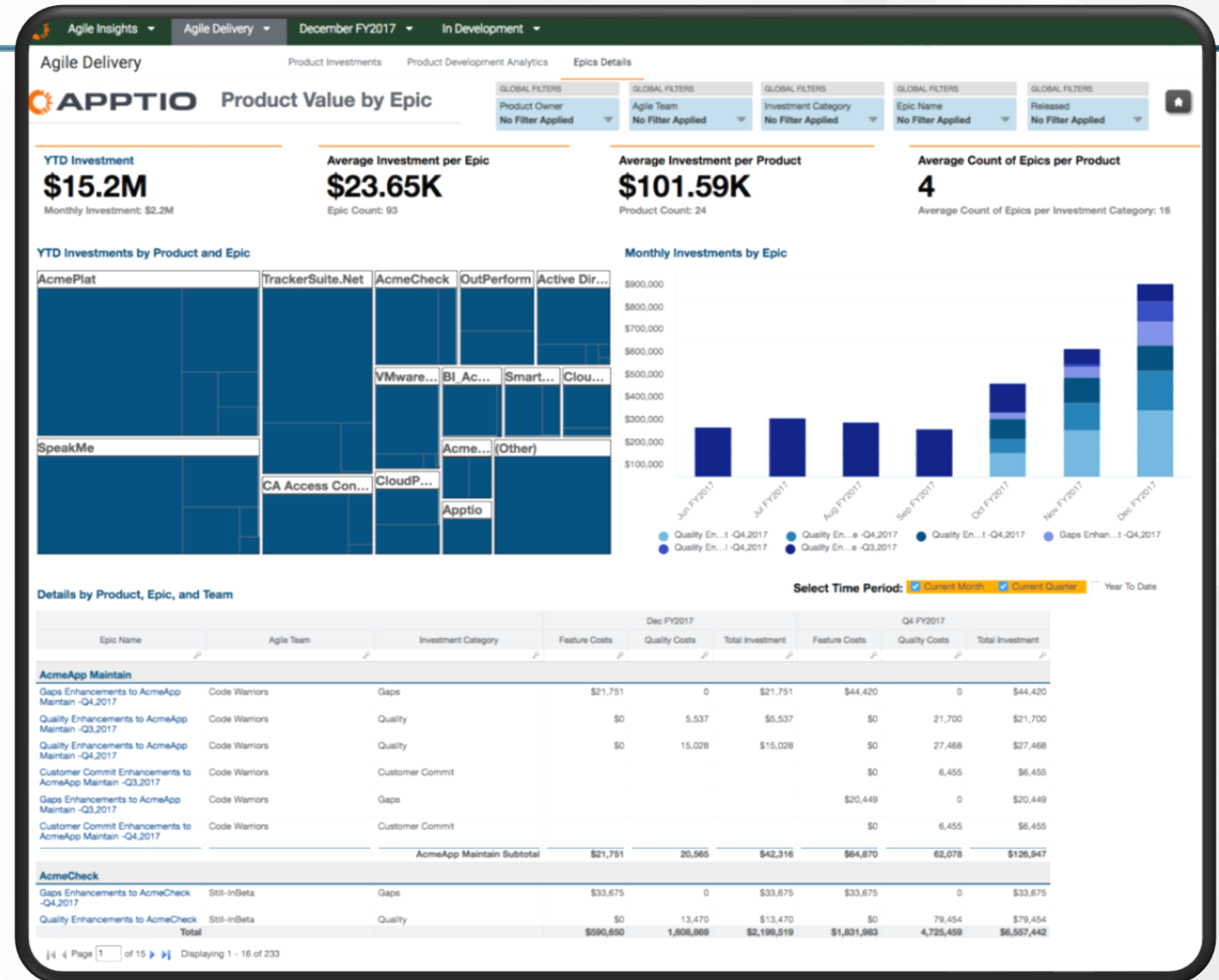
Product Value by Epic

Who does this help?

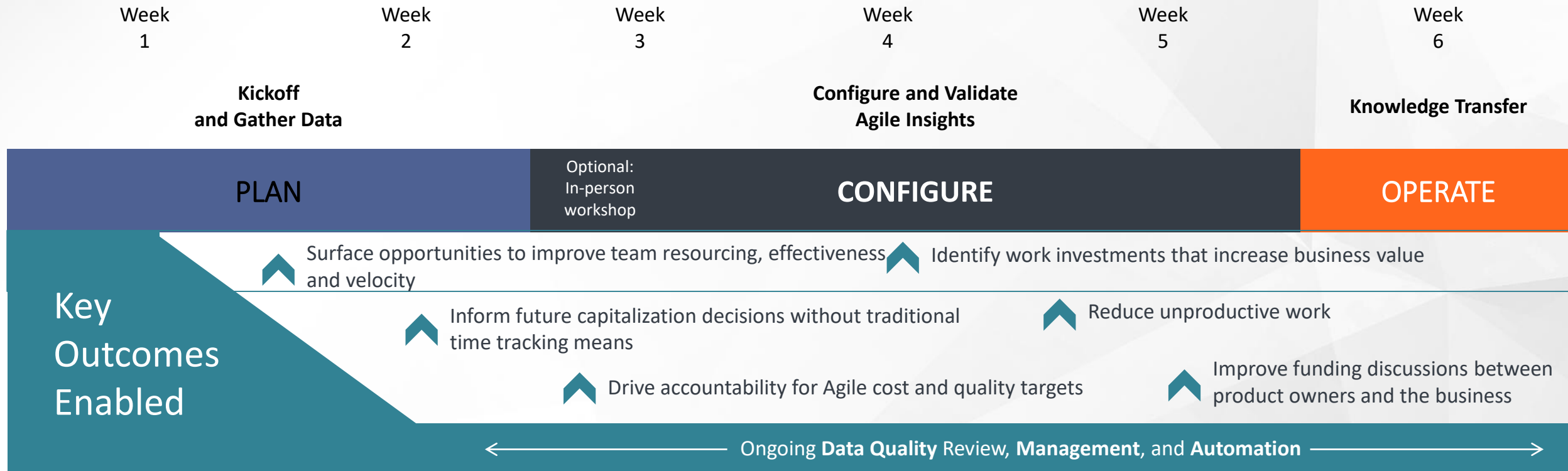
- Product Owners
- Consuming Business Units
- IT Leadership

Questions Answered

- What investments by product have my agile development teams completed?
- By Product, how are my investments distributed across my investment categories?
- By Product, in what sprint did the efforts completed by my teams get released and what specifically was completed?
- What investments by product are my agile development teams actively working on?



Agile Insights Deployment Timeline



Agile Insights - Common Data

	Data Sources	Required Data Attributes	Optional Data Attributes
Products	<ul style="list-style-type: none">List of support productsMapping to Epics and Initiatives	<ul style="list-style-type: none">Product NameProduct Owner	<ul style="list-style-type: none">Product Profile (Revenue Driving/KTLO/Internal)
Epics & Initiatives	<ul style="list-style-type: none">Epics & Initiatives Lists	<ul style="list-style-type: none">Epic Name / IDAssociated Product	<ul style="list-style-type: none">Product ManagerStart / End Dates
Program Increment	<ul style="list-style-type: none">Program Increment ListSprint Details	<ul style="list-style-type: none">PI Name / IDPI Start and End DatesSprint ID	<ul style="list-style-type: none">Sprint Start / End DatesAgile Team
Activities	<ul style="list-style-type: none">BugsStoriesTasks	<ul style="list-style-type: none">Ticket ID, Name, and TypeOpened and Closed DateAgile Team Assignment	<ul style="list-style-type: none">Resolution DetailsDev\QA Points
Agile Teams	<ul style="list-style-type: none">Agile Team ListsLabor Details	<ul style="list-style-type: none">Agile Team NameEmployee Type (Internal/External, On Shore/Off Shore)Average Monthly Salary	<ul style="list-style-type: none">LocationsManagement ChainEmployee Name

Agile Development – Conceptual Data Model

- **Products**

- List of products supported by the modeled agile teams.
 - **Metadata to include:** Product Name, Product Owner, Product Profile (Revenue Driving, KTLO, Internal)
- Source: Likely an Excel upload

- **Epics & Initiatives**

- List of Epics & Initiatives tied to the work planned or in progress and associated to products
 - **Metadata to include:** Epic Name, Epic ID, Product Manager, Associated Product, Start date, End date
- Source: Likely PPM tool, Rally, VersionOne or Jira

- **Program Increment**

- List of past, current and planned Program Increments including the sprint detail
 - **Metadata to include:** PI Name, PI ID, PI start/end date, sprint name, sprint ID, sprint start/end date, agile team
- Source: Planning tool (?), Rally, PPM, Excel (?)

- **Activity**

- Full list of bugs/stories/tasks across all modeled agile teams
 - **Metadata to include:** ID, Ticket Type, Ticket Name, Summary, Open date, Resolved Date, Closed Date, Opener, Resolver, Closer, Agile Team, Sprint ID, Dev/QA Points, Release Version
- Source: Rally, VersionOne, TFS, or Jira

- **Agile Teams**

- Full list of Agile teams to be modeled for Agile Insights
 - **Metadata to include:** Agile Team name, Roles, Avg Monthly Salary, Int/Ext HC, On/Offshore HC, Location, Management Chain, Employee Name (optional)
- Source: Excel (?)

Products

Epics &
Initiatives

Program
Increment

Activity

Agile Teams

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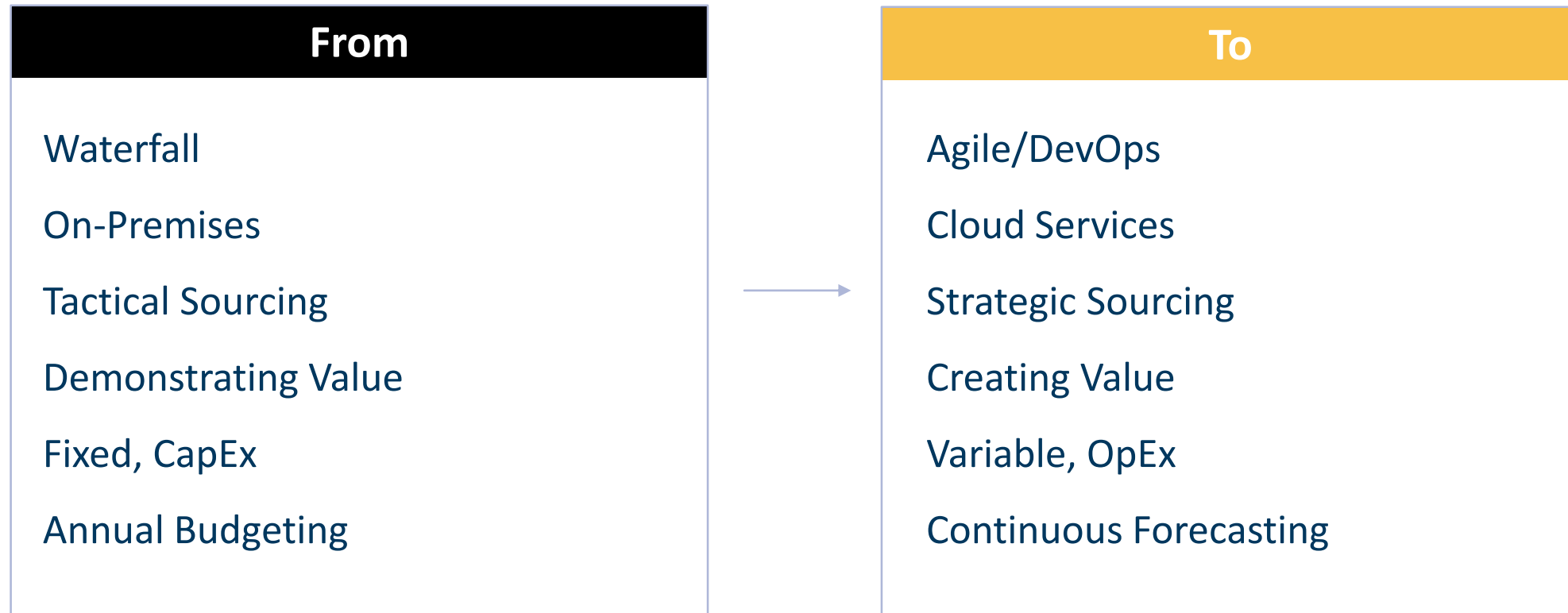
Driver:
Avg Monthly Labor
Costs

Agile Investment Planning



Let Rego be your guide.

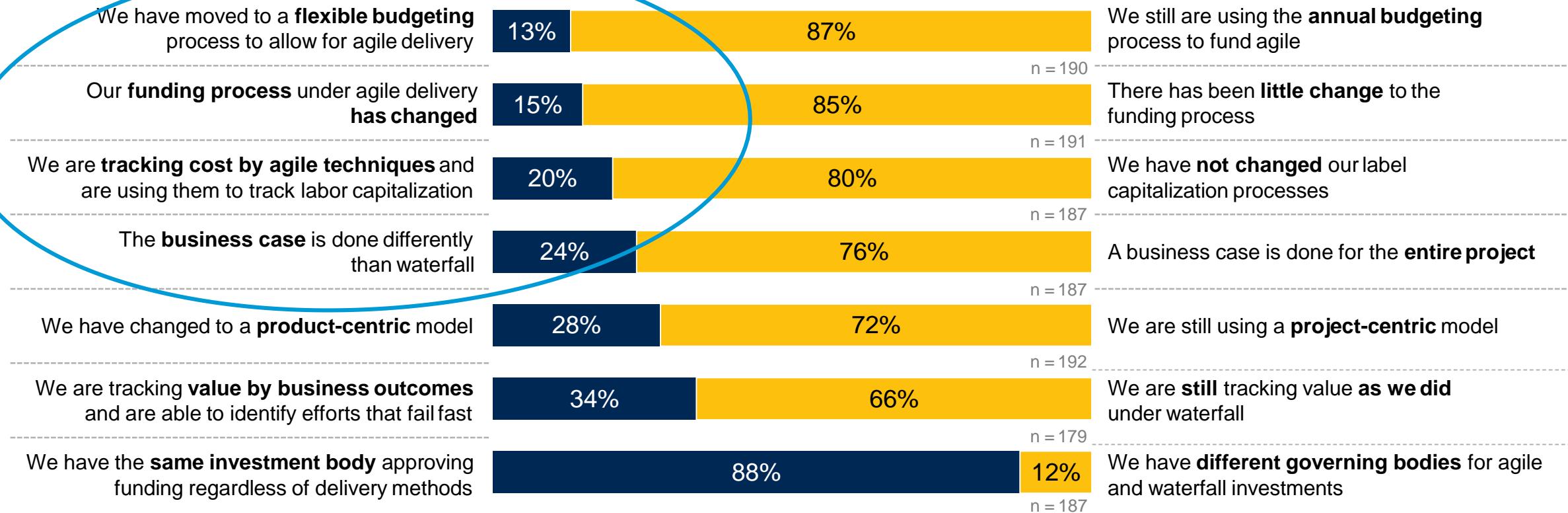
A New IT Operating Model is Required



Financial Governance Practices

Agile Impact on Financial Governance Statement Agreement

Percentage of Respondents



Base: Gartner Research Circle Members; Excludes "Don't know"

Q. Which of the following opposing statements do you **agree with the most**? Please select one response for each statement pair.

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How Should Your Funding Process Change?

What Doesn't?

- The need to effectively balance cost value and risk.
- The finite availability of funding.
- Opex and capex still remain.
- The need for a business case.
- The requirement for financial controls.
- The ability to deliver value via improved business outcomes (ROI).

What Does?

- Funding is done at a product or portfolio level, not by project.
- Business case is still done, just a lighter version at a different level.
- Investment governance is still in place but often splits into a hybrid approach.
- Funding pools are often used.
- Quarterly tracking of product cost and value is typically put in place.

Funding typically shifts up — from the project to products

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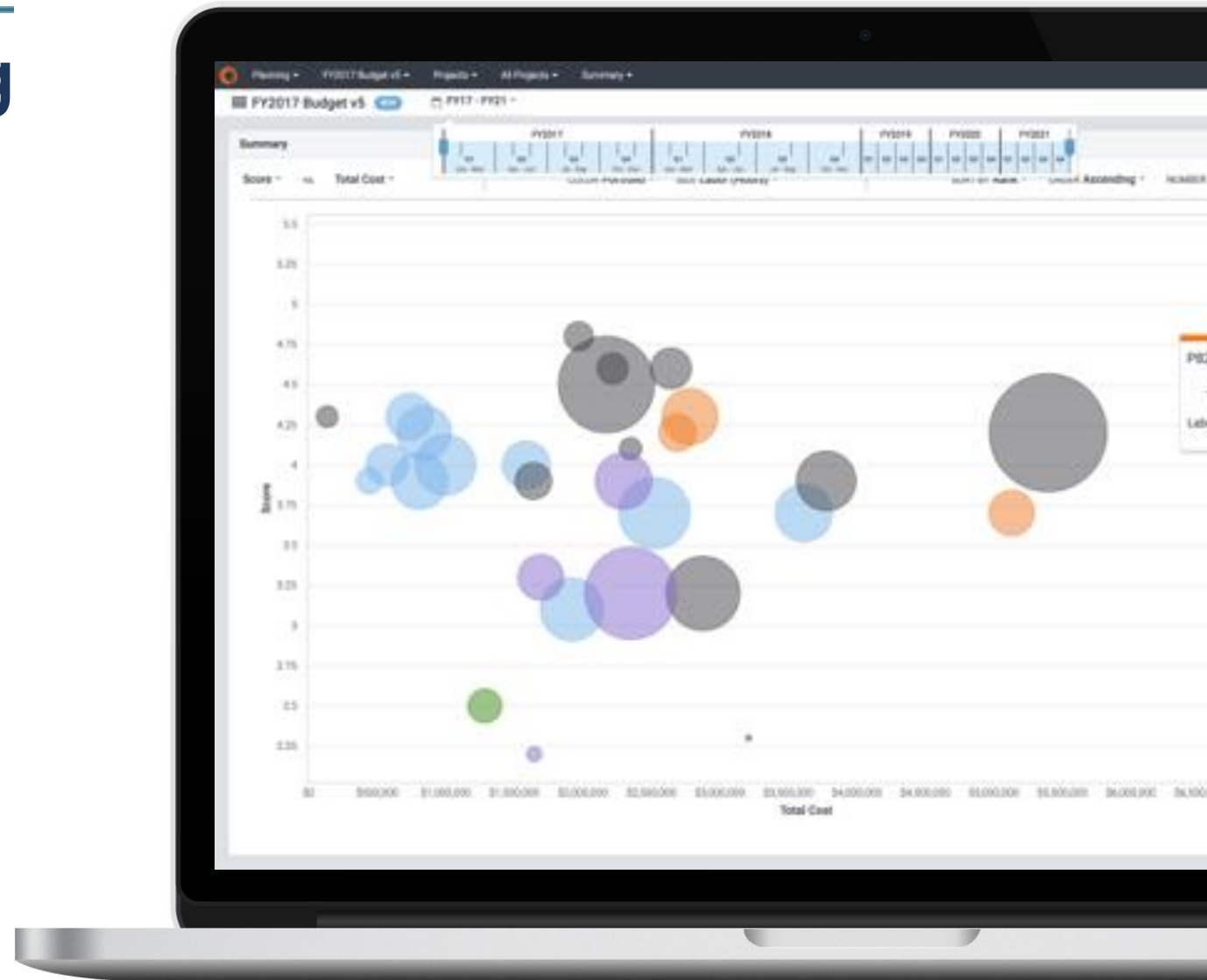
Gartner Recommendations for Agile Investments

- **Funding needs is done at a higher level than projects**, often at the Product or sub-Product level. This is often referred to as block or pool funding.
- **Products should define IT by how it is consumed**, not how it is produced.
- **Ensure that all technology costs are effectively managed** and not just development or labor cost.
- **Consider creating a hybrid set of investment planning processes** that allow for both waterfall and agile funding if necessary.
- **Partner with your finance organization** and ensure that they also understand any changes being made to financial governance.

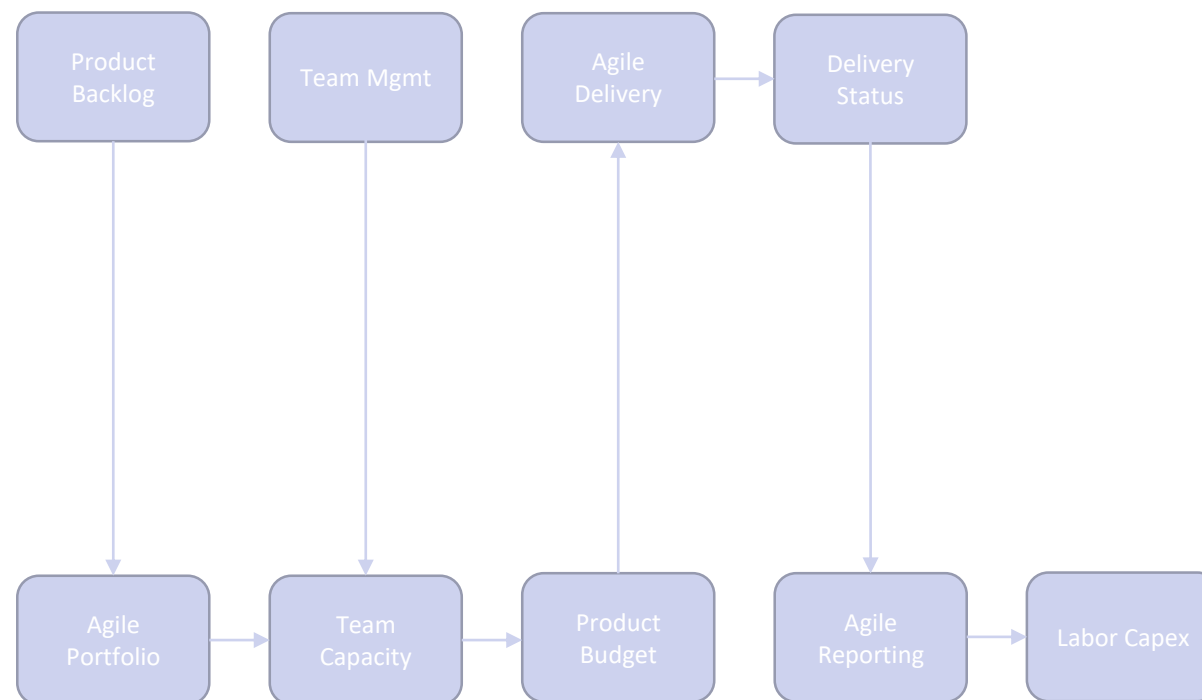
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Agile Investment Planning

- Align portfolio investment with business strategy
- Build & manage financial plans that span waterfall & agile roadmaps
- Plan, track and adjust teams to ensure value delivery
- Assess the impact of current and planned Capex on operational budget
- Plan investments for Agile and project work in a single system



Agile Transformation Financial Solution



FUNCTIONAL MAP



Alternatives vs. Apptio

Build

- Subjectively prioritize investment
- Manually normalize Agile labor data
- Reactively track investment value
- Manual coding for labor effort
- Build and maintain dashboards
- Complex resource scenario modeling
- Decentralized roadmap planning
- Siloed demand vs capacity planning
- Reconcile financial & operation plans
- Months to justify funding decisions

Vs.

Buy

- Normalized business case prioritization
- Automate labor capitalization for Agile
- Proactively track investment value
- Software-driven data-mapping
- Modern, customizable dashboards
- Simple what-if resource modeling
- Centralized roadmap planning
- Portfolio demand vs capacity planning
- Combined financial & operational analytics
- Continuously adjust funding

Implementing Agile Insights & Investment

	Understand & Optimize Resources & Investments	Plan and Prioritize Agile Investments
Apptio Products	Agile Insights	Agile Investment Planning
	<ul style="list-style-type: none">• Analyze the cost of labor resources dedicated to a product• Compare the output of the team to team investment• Compare completed work to planned activities• Identify team activity not associated to product work streams• Monitor team's yield and quality of work over time	<ul style="list-style-type: none">• Capture investment demand from the business• Prioritize product investments• Plan business value of product investments• Create roadmaps that connect feature & investments to strategy• Align product demand and resource capacity
Requirements	ALM data	ALM Data
Resources	.25 FTE	.25 FTE
Time to Value	8 – 10 Weeks	3-5 Weeks

Questions?



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- Click on **Certifications**
- Click on **Maintain My Certification**
- Click on **Visit CCR's** button under the **Report PDU's**
- Click on **Report PDU's**
- Click on **Course or Training**
- Class Name = **regoUniversity**
- Course Number = **Session Number**
- Date Started = **Today's Date**
- Date Completed = **Today's Date**
- Hours Completed = **1 PDU per hour of class time**
- Training classes = **Technical**
- Click on **I agree** and **Submit**



Let us know how we can improve!
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