knowledge17

http://clabs.link/lab132014

WORK at LIGHTSPEED

Advanced Reporting 201

Dan Grady
Sr. Advisory Solution Consultant
ServiceNow

Silvia Mihit
Sr. Software Engineer
ServiceNow

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servicenow

Agenda

- Introductions
- Objectives, What You Will Learn
- Discuss Importance of Reporting
- Benefits of Being In-Platform, Performance Analytics vs. Reporting
- Now Let's Do Some Labs!
  - Labs with pre-lab slides
- Teaser / Trailer - What to Expect From the Jakarta Release

Note: Start up your Lab instance using the lab URL below

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Speaker Introduction



Name: Dan Grady

Title: Senior Advisory Solution Consultant

Function: Customer Success

Company: ServiceNow

Experience: 1 Year at ServiceNow, 20+ Years in Business Intelligence and Analytics

Expertise: Reporting, Analytics, Dashboard Design, Performance Measurement, Search-Based BI

Twitter: @tweetgrady

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Speaker Introduction



Name: Silvia Mihit

Title: Senior Software Engineer, Performance Analytics and Reporting

Function: Development

Company: ServiceNow

Experience: One year working for Dev-Reporting, almost 2 years for Dev-Canvas

Expertise: UI Development, Responsive Dashboards

Achievements: Part of the successful release of Canvas dashboard system in Helsinki and Responsive Dashboards for all users in Istanbul.

Current Projects: Responsive Dashboards new features

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Objectives and What You Will Learn

Objectives

- Introduce you to some more advanced reporting concepts that will help you more effectively leverage the data that you are generating in the ServiceNow platform

What you will learn

- How to work with more than one data set when building a report
- Database views – what, why and how to use them
- Using Metrics to generate more granular visibility into a process/service
- Different strategies for enhancing Report presentation, navigation, and interactivity
- How to share content

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Why Reporting?

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What is Reporting?



It enables you to visualize data



Informative & actionable



And always real-time

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Reporting Top Tips!

With visualizing data, always ask yourself…

- Who is the target audience?
- What information will make an **impact**?
- What follow up questions will they have? Why?

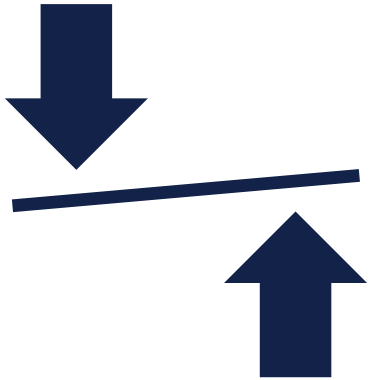
Just having lots of reports or dashboards doesn't make you a data-driven organization…

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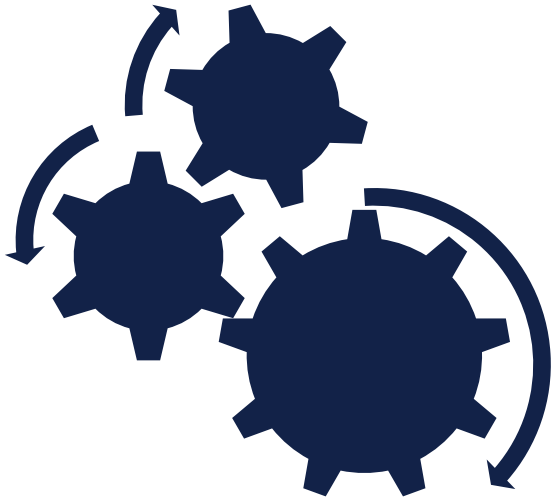
Impact

Move a Metric

(Outcome)



Change a behavior



Create a new product/service



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What is Reporting within ServiceNow?

- **In-platform reports delivered within the apps**
- **Ability to create and customize reports**
- **All the Reporting features & functionality, like…**
  - Dashboards to show data visualizations on
  - Distribute reports by
    - Sharing
    - Adding it to dashboards
    - Schedule & Export reports
    - Publish
  - Using interactive filters *PA Premium
  - Setting up Drilldown and Multiple datasets in the same report
  - Creating simple join relations to another table's conditions
  - Report on Metrics, or variables
  - Additional group by / stack by options
  - Report ranges
  - Many administrative features like
    - Report Statistics
    - Setting up Report Sources & Maps
    - …

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Benefits of Being ‘In-Platform’



REAL-TIME

Make fast decisions with confidence.

Because your data stays in-platform at all times, it retains its **integrity**. Your scorecards and dashboards show to-the-minute information, empowering you to adapt at the speed of business.



NATIVE

Make smart, data-driven actions.

Out-of-the box content precisely tuned to and optimized for ServiceNow workflows; best-practice metrics developed in tandem with application teams; designed for teams to communicate and collaborate.



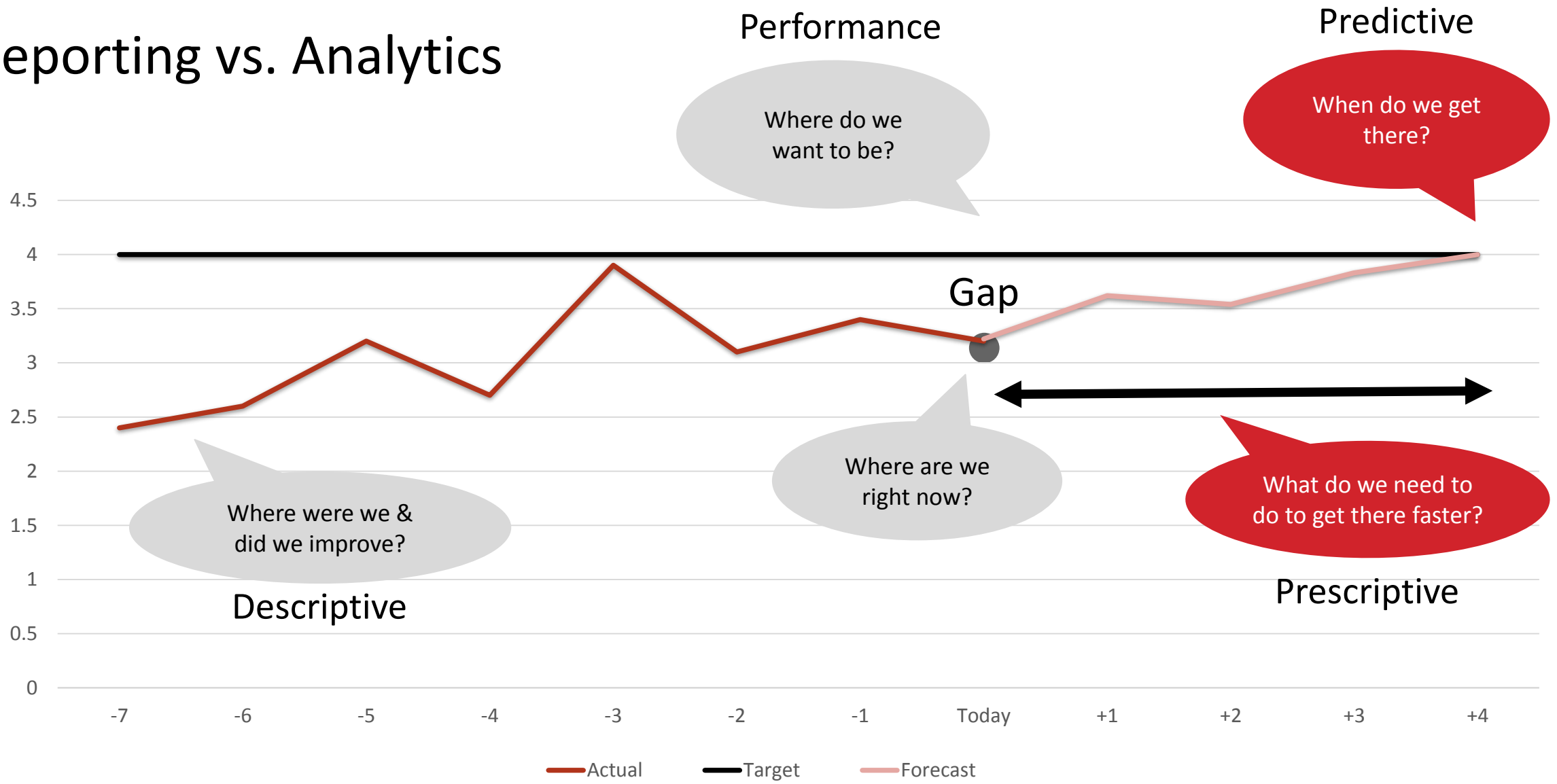
SECURE

Reduce cost and risk.

No data is duplicated or leaves the secure ServiceNow enterprise cloud. Data is protected at all times by the same access control lists you implement across the platform.

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Reporting vs. Analytics



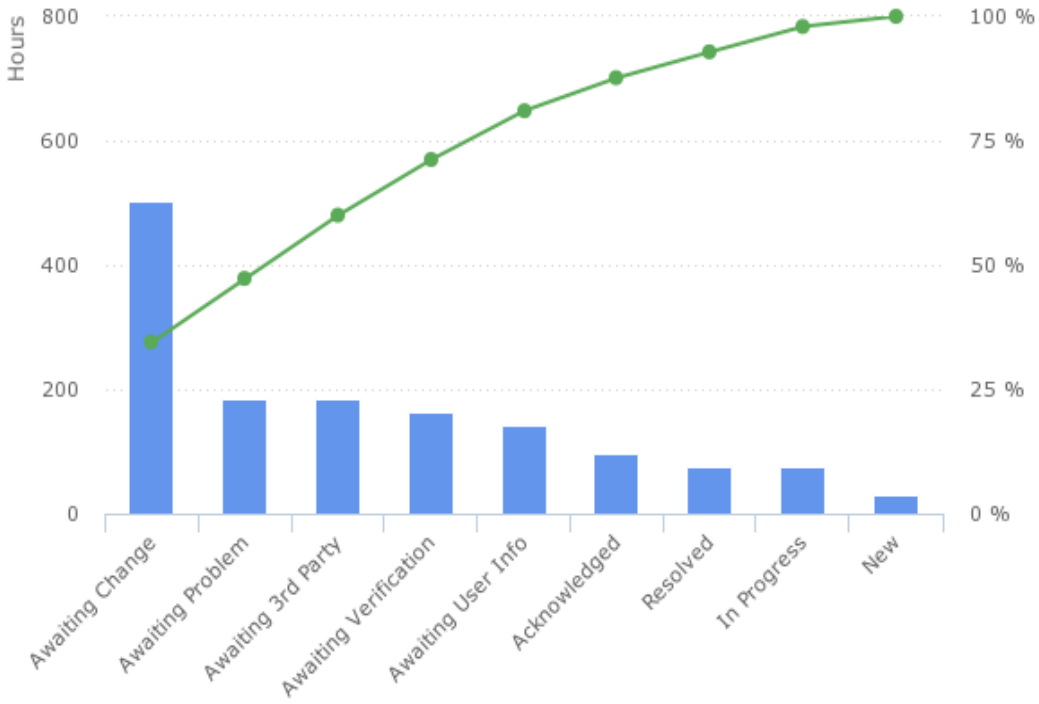
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Lab 1.1 Reporting on Metric Instances

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Metrics

- A metric measures and evaluates the effectiveness of IT service management processes.
- With metrics, the time that a record (an incident) has been in a particular state, assigned to a group, or assigned to a person is measured and stored in a separate table.
- Metrics are not limited to durations only. Any change of value of a field can be captured by a metric.



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Metric Definitions and Instances

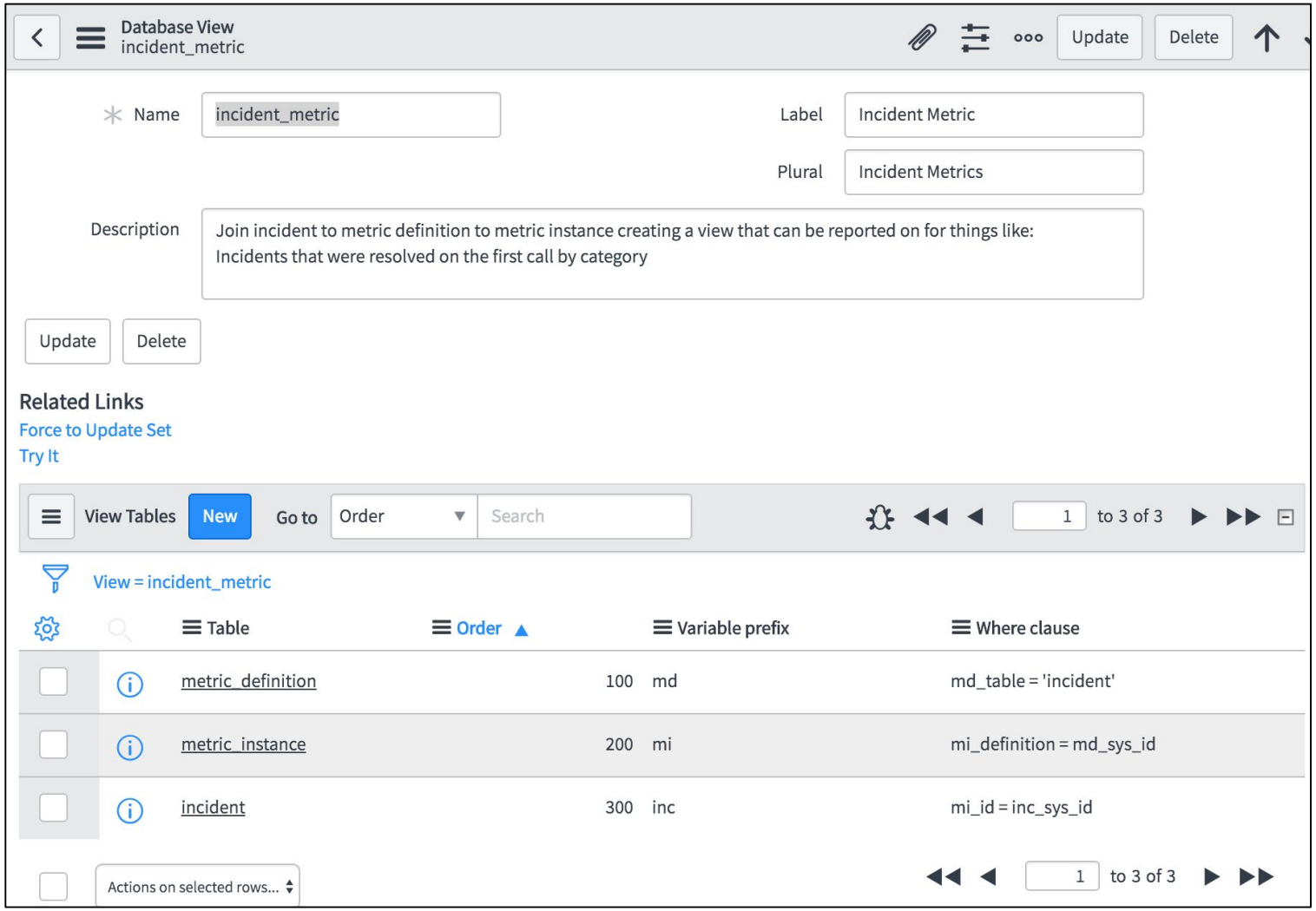
- A **Metric Definition** defines what should be measured (e.g., Incident State Duration). Each definition is stored as a record in the metric_definition table.
- A **Metric Instance** is the occurrence of what is defined in a Metric Definition and stored in the metric_instance table.



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Database Views

- A database view defines table joins for reporting purposes



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Over 30 Out of the Box

- Across Metric and SLA across incident, problem, change, project, request, etc.

Name	Description	Label
change_request_metric	Join change to metric definition to metric instance, creating a view that can be reported on for things like: Changes that were closed by category.	Change Metric
change_request_sla	Join change_request to sla (task_sla), creating a view that can be reported on for things things like change request resolved by sla per change category.	Change Request SLA
change_task_metric	Join change task to metric definition to metric instance, creating a view that can be reported on for things like: Change tasks that were closed by change state	Change Task Metric
change_task_sla	Join change_task to sla(task_sla), creating a view that can be reported on for things things like change tasks resolved by sla.	Change Task SLA
change_task_time_worked	Join change task to task time worked to pull time worked entries associated with incidents.	Change Task Time Worked
incident_metric	Join incident to metric definition to metric instance creating a view that can be reported on for things like: Incidents that were resolved on the first call by category	Incident Metric
incident_sla	Join incident to sla(task_sla) to report on things like incidents resolved by sla per incident category.	Incident SLA
incident_time_worked		Incident Time Worked
pm_project_metric	Join pm_project to metric definition to metric instance creating a view that can be reported on for things like: Projects that were closed by name or date	Project Metric
pm_project_sla	Join pm_project to sla(task_sla) to report on things like project names by sla.	Project SLA
pm_project_task_metric	Join pm_project_task to metric definition to metric instance creating a view that can be reported on for things like: Project tasks that were closed by name or date	Project Task Metric

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Lab 1.1 Reporting on Metric Instances

Use case:

- In this lab we are going to build a visualization that shows us the average time an incidents spend within certain assignment groups. This requires us to use an out-of-the box view that joins 3 tables – incident, metric definition, and metric instance tables.

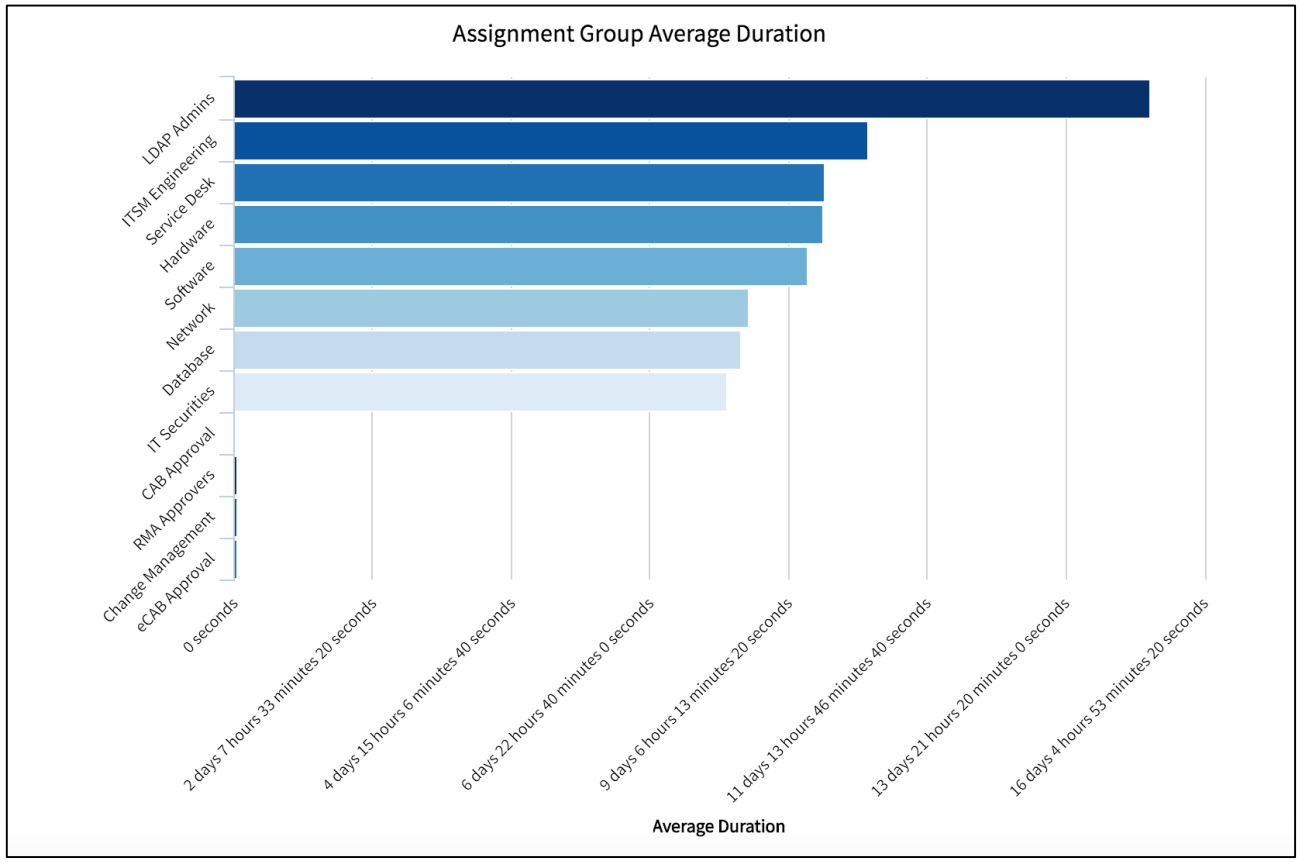
- **Log on the Training instance with admin**
- **Password is demodemo**

- **Database Views**
- **Metric Instances**

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Lab 1.1 Result

Lab Success Verification



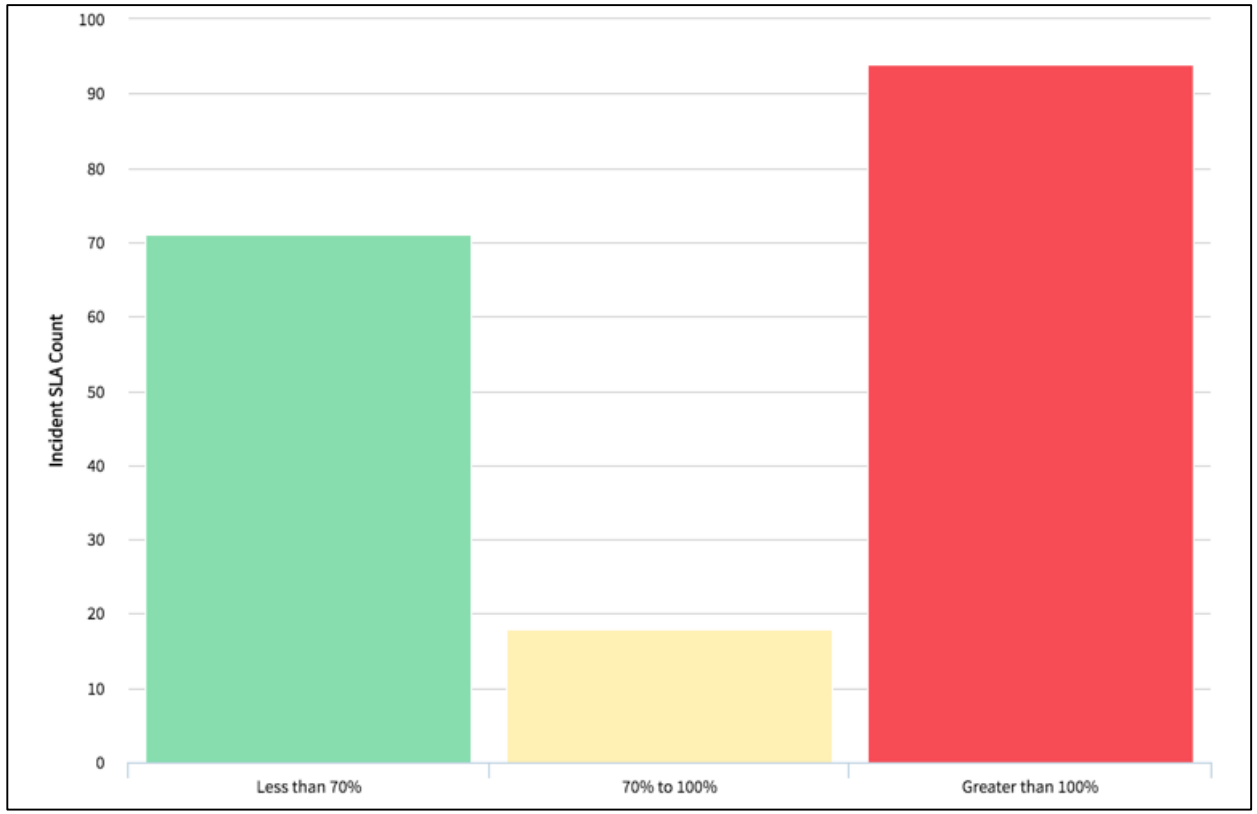
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Lab 1.2 Report Ranges

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Report Ranges

- Better organize information to more effectively communicate.
- A report range to defines data intervals that are used in bar and pie charts.
- Dates, Lists, and Integers
- **Note:** The module for report ranges is hidden by default. You may need to enable the module before use.



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Lab 1.2 Report Ranges

Use case:

- For this lab we are going to create a report range that buckets SLA tasks by the percent completion to help us better understand which SLAs may need adjustment. To do this we are going to use another database view to build the report.

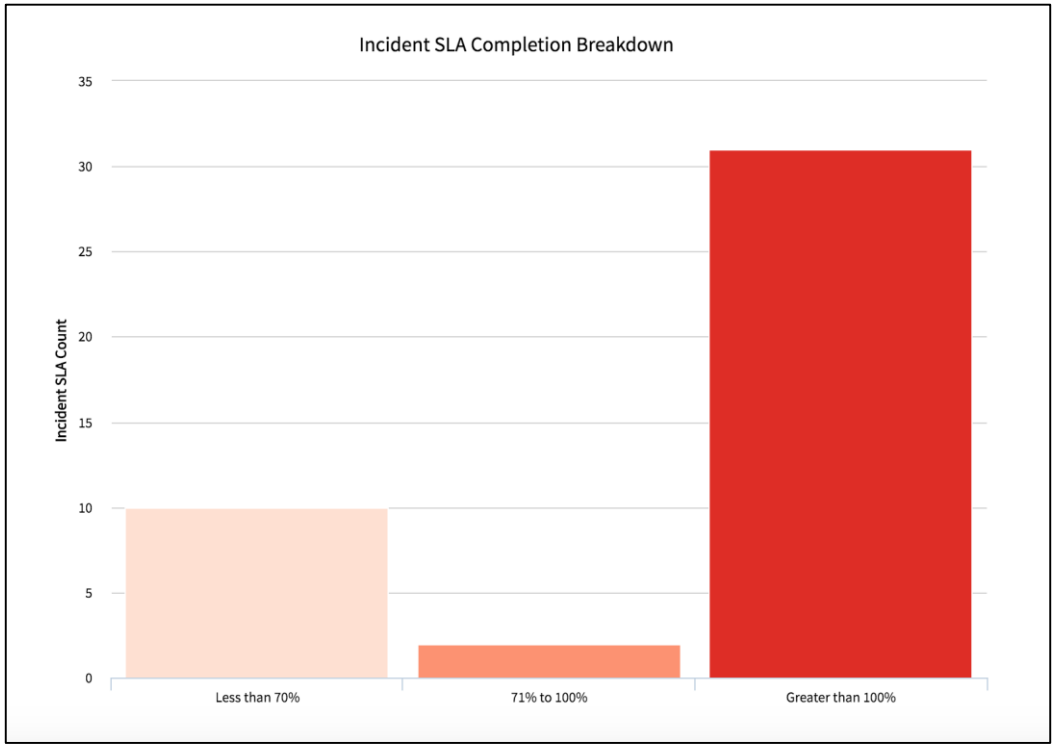
- **Note**: Report ranges work with elements that hold only dates, lists, or integers. Report ranges can be globally applied to all date type fields (date, due date, duration, date/time, date time), or you can limit report ranges to a specific table.
- **Note**: Requires a "**report_admin**" role.

- **Create a Report Range**

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Lab 1.2 Result

Lab Success Verification



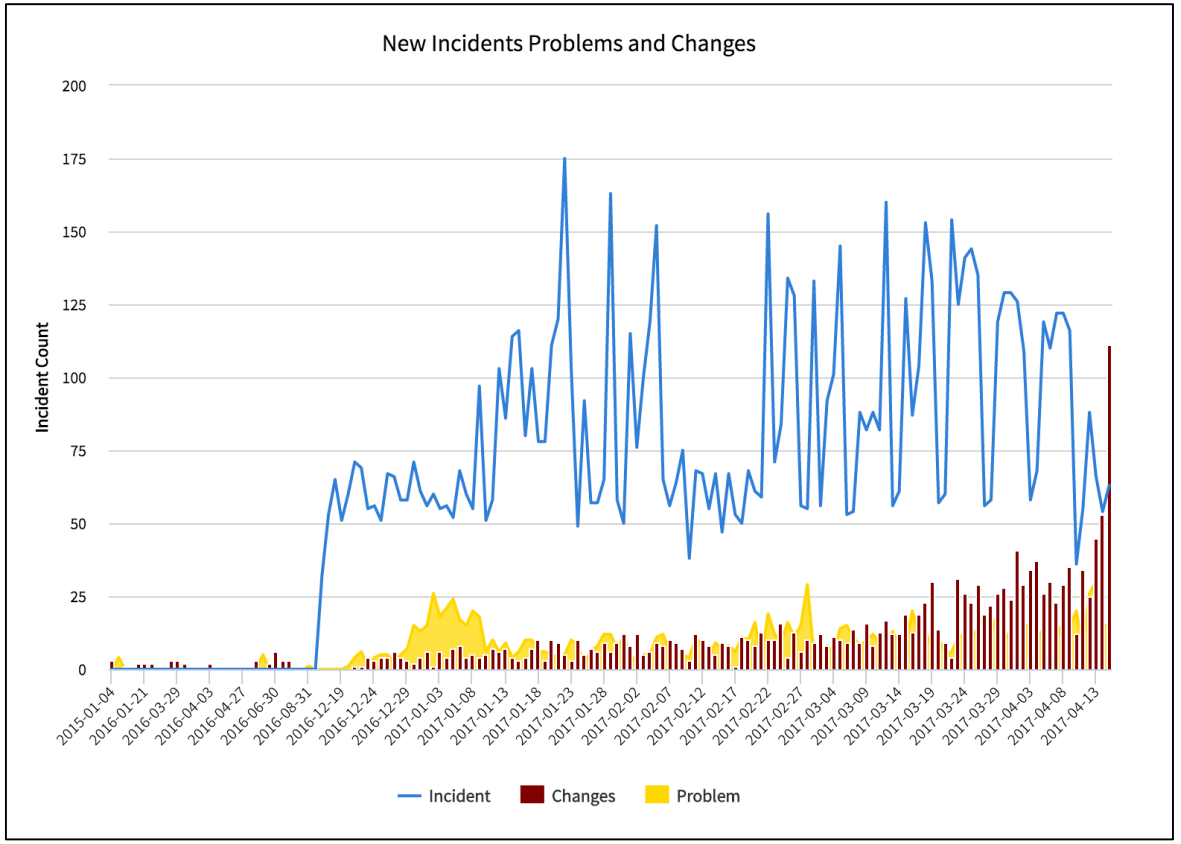
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Lab 1.3 Multiple Dataset Reporting

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Multiple Datasets in a Single Report

- By adding multiple datasets into a single visualization, you give the user the ability to see patterns and trends across different areas of the business.
- Understanding of one actions influence/impact on another.
- **Note**: Multiple data sets requires Performance Analytics Premium.
- **Note**: The following report types support multiple data series: bar, horizontal bar, line, column, area, spline.



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Lab 1.3 Create a Report That Uses Multiple Datasets

Use case:

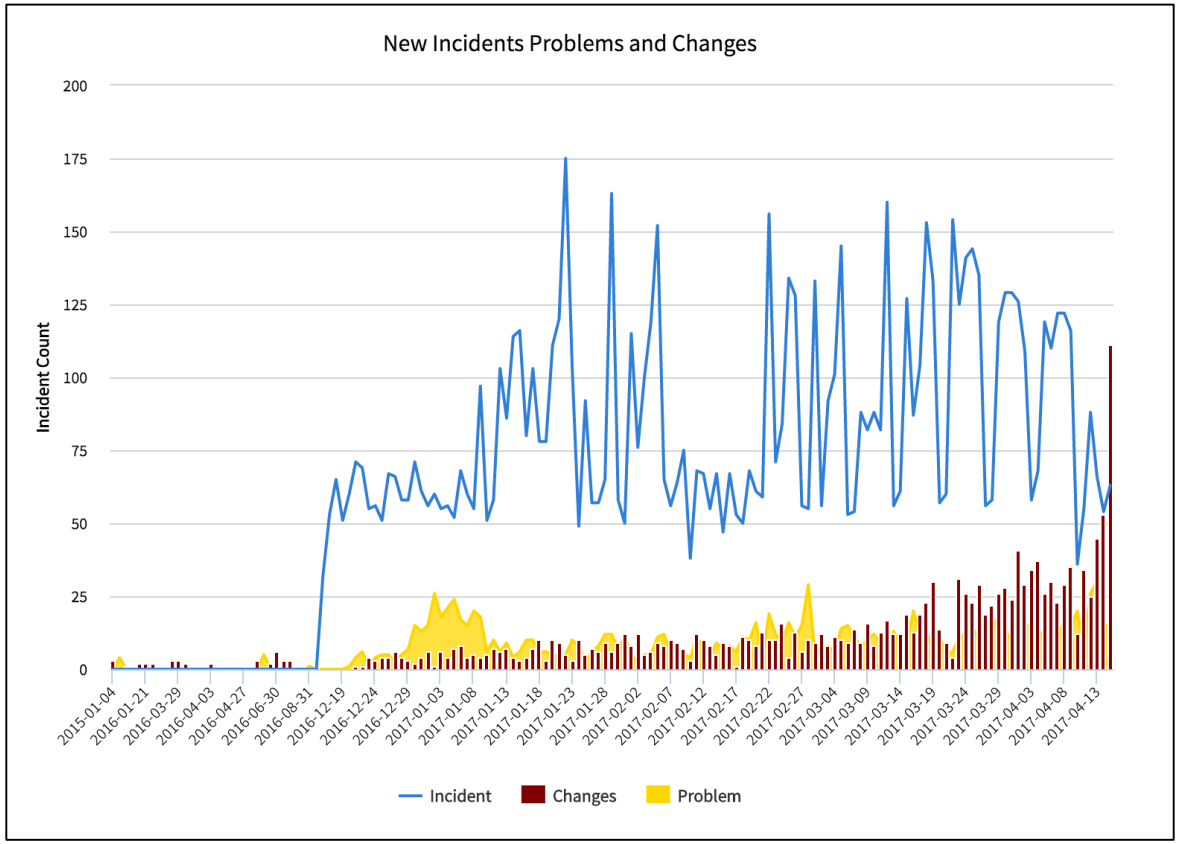
- For this lab we are going to create a chart that visualizes new incidents, problems, and changes over time.

- **Create a report from new Report Designer guided workflow**
  - **Create an Incident Time Series Report**
  - **Add the Problem Data Set**
  - **Add the Change Data Set**

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Lab 1.3 Result

Lab Success Verification



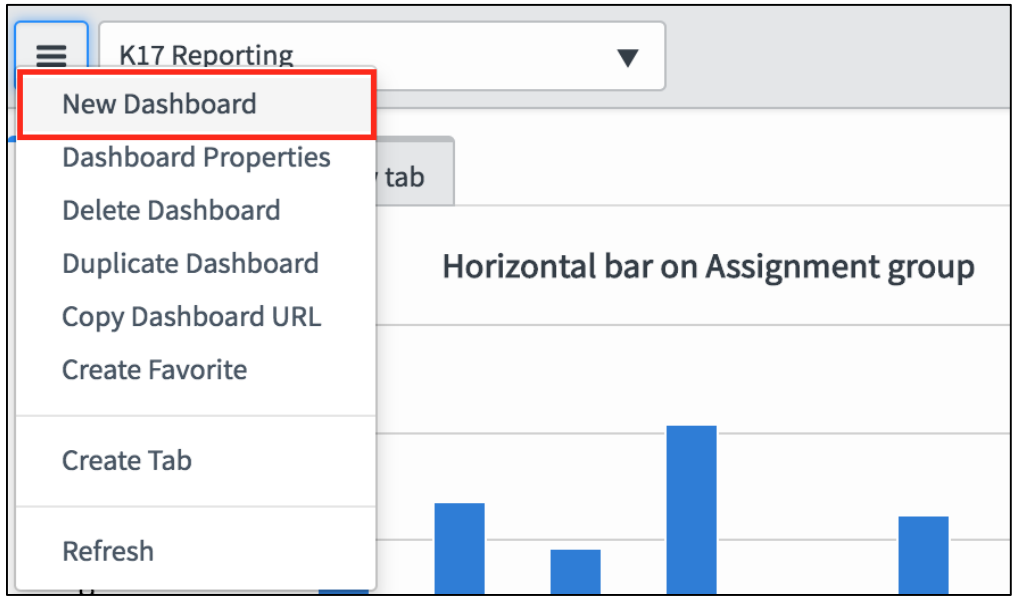
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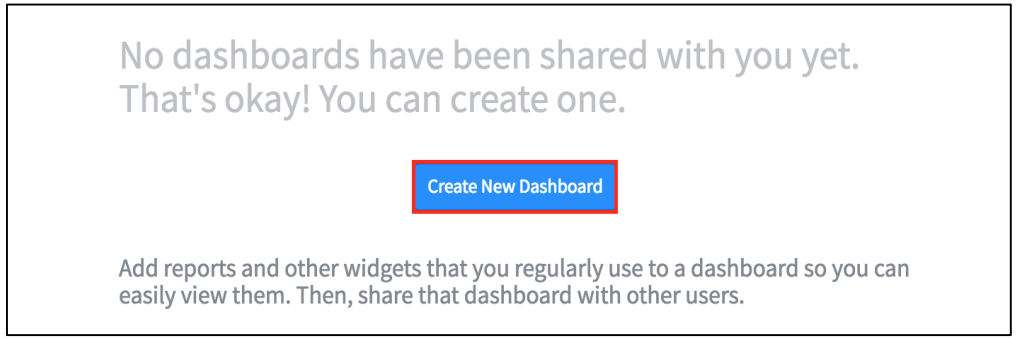
Lab 2.1 Building a Responsive Dashboard

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Lab 2.1 Building a Responsive Dashboard

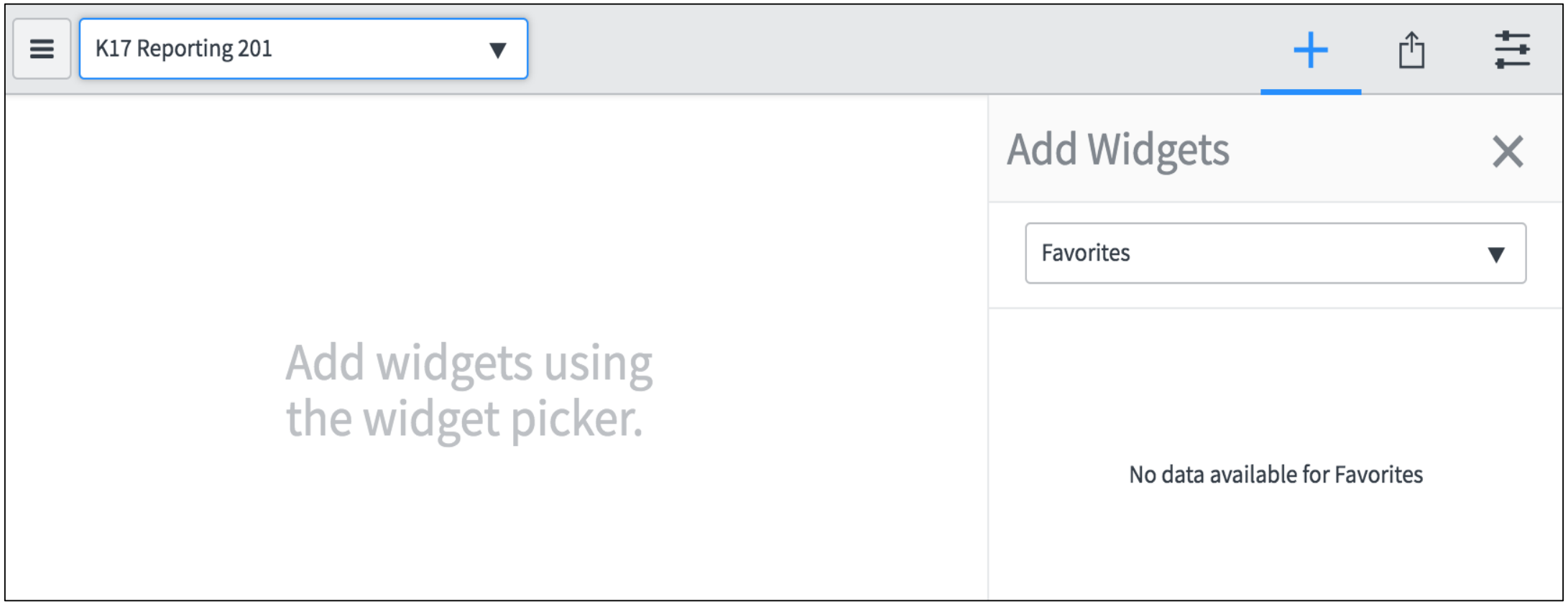
- Responsive Dashboards improve creation and management of dashboard content
- Users with any role can create and share their dashboards
  - Users with no role can view dashboards that are shared with them
- Easier widget layout compared with legacy dashboards and homepages
- Improved sharing capabilities
  - Viewer & Editor permissions assigned per dashboard





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Lab 2.1 Result



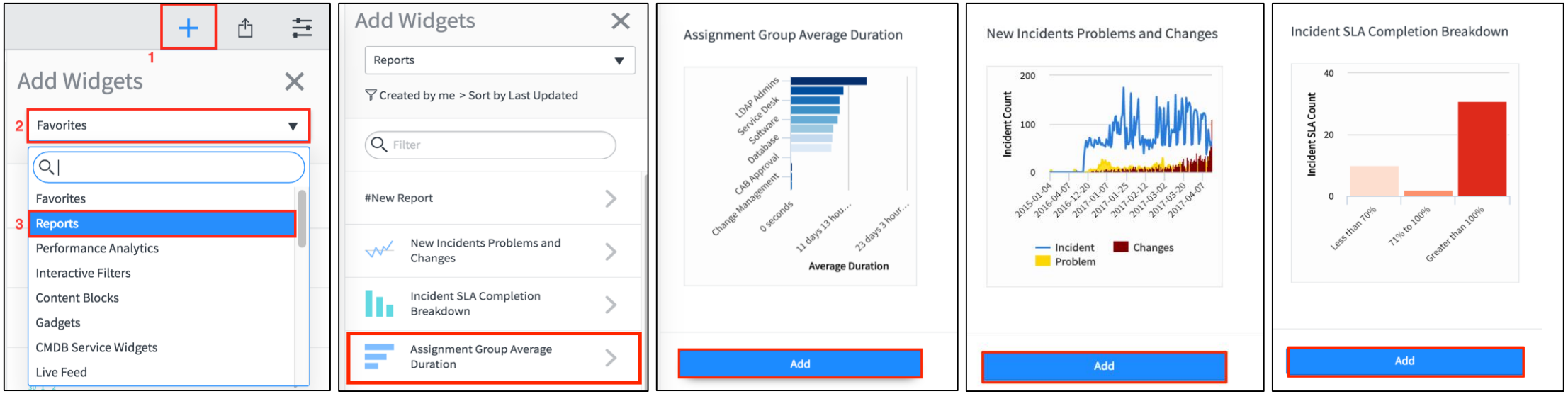
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Lab 2.2
Adding Content to a RESPONSIVE Dashboard

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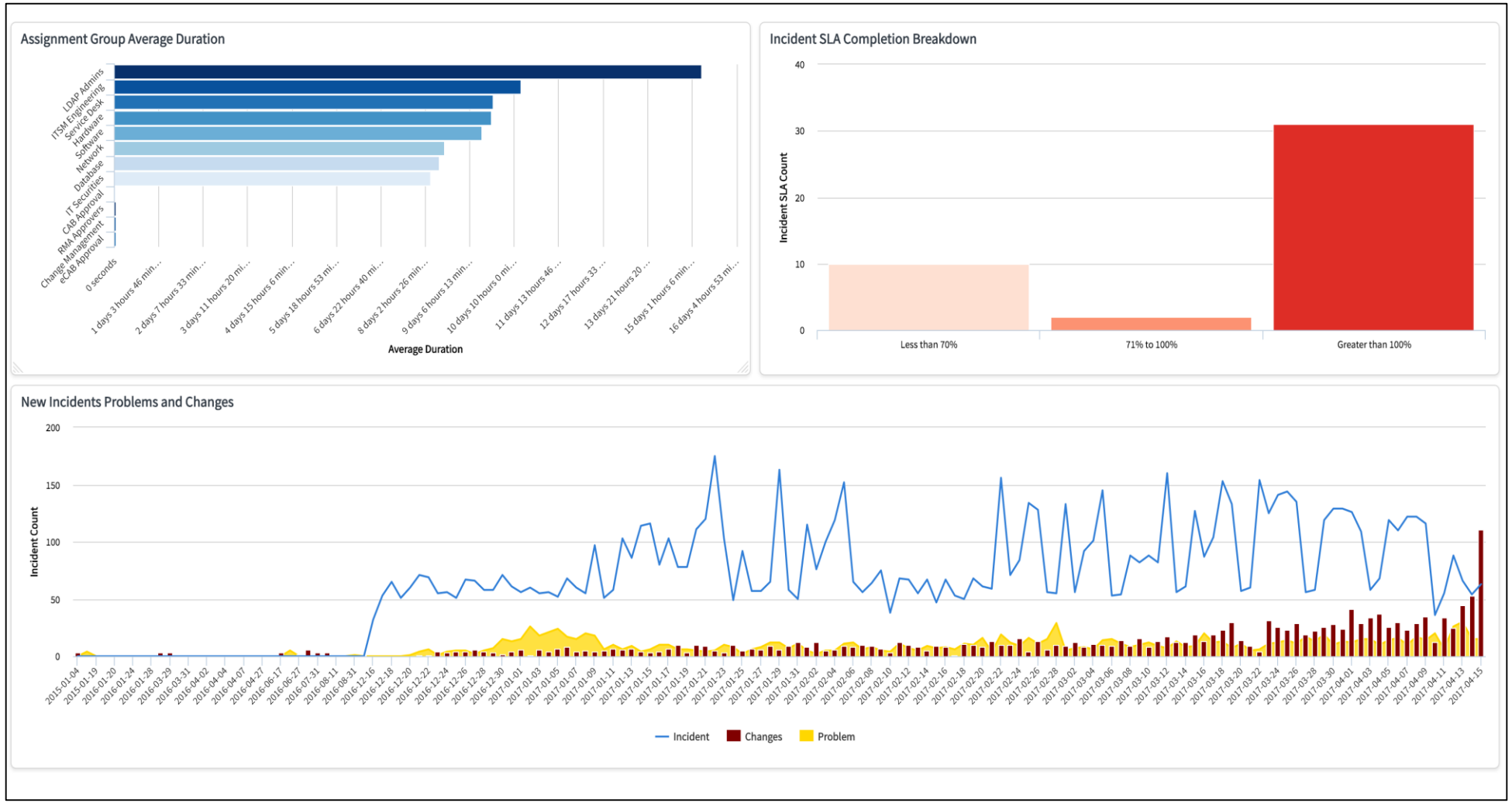
Lab 2.2 Adding Content to a Responsive Dashboard

- Dashboards enable you to display multiple Performance Analytics, reporting, and other widgets on a single screen in an easy way.
- Use dashboards to create a story with data that can be shared with multiple users.
- Use an easy-to-use drag and drop canvas to create, edit, and arrange content, then share with colleagues.



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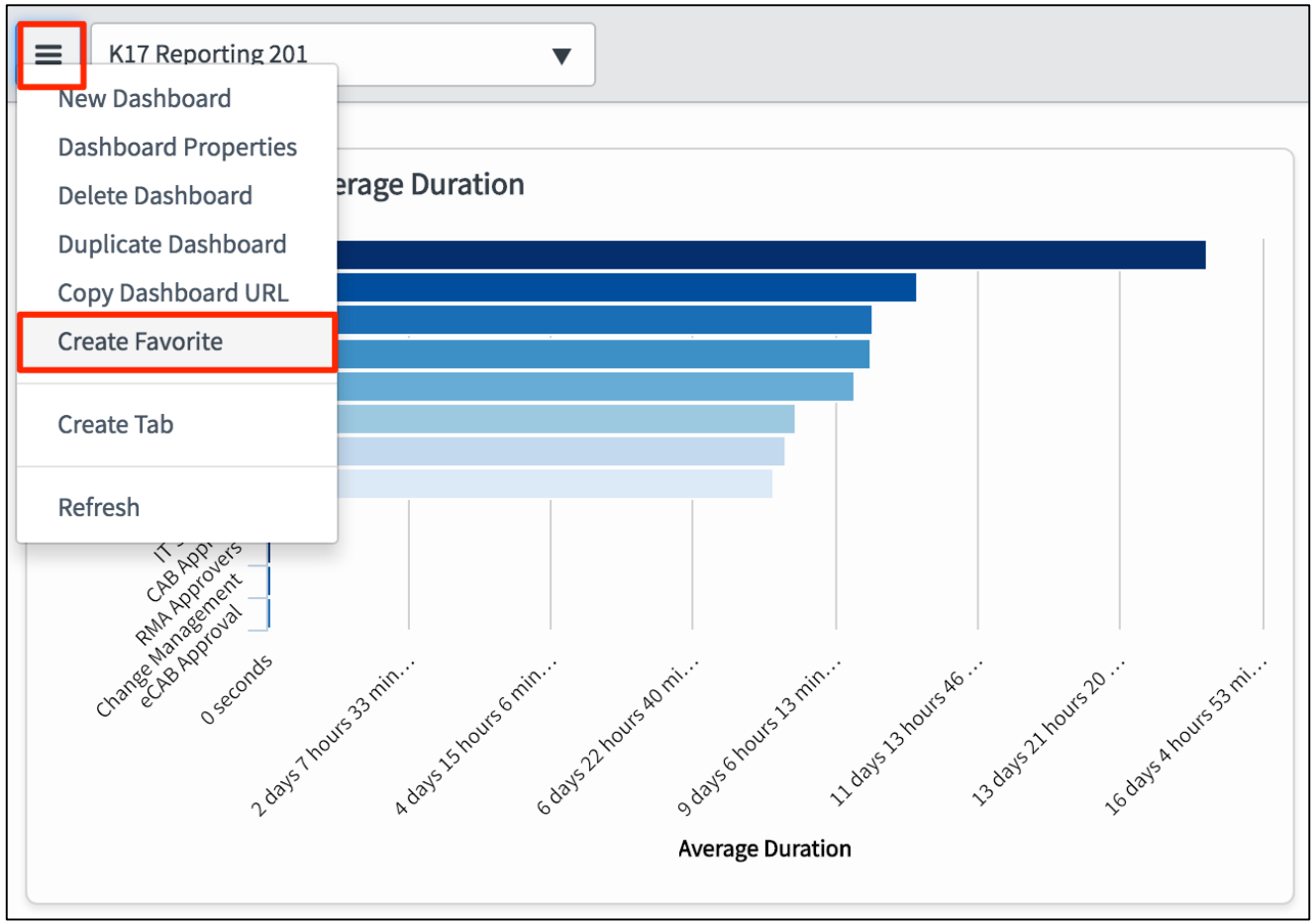
Lab 2.2 Result

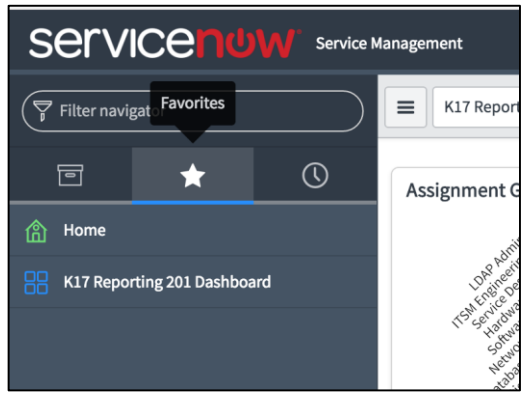


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Lab 2.2 Challenge 1 – “Favorite” Your Dashboard

Easy access to your dashboard from the navigation pane.





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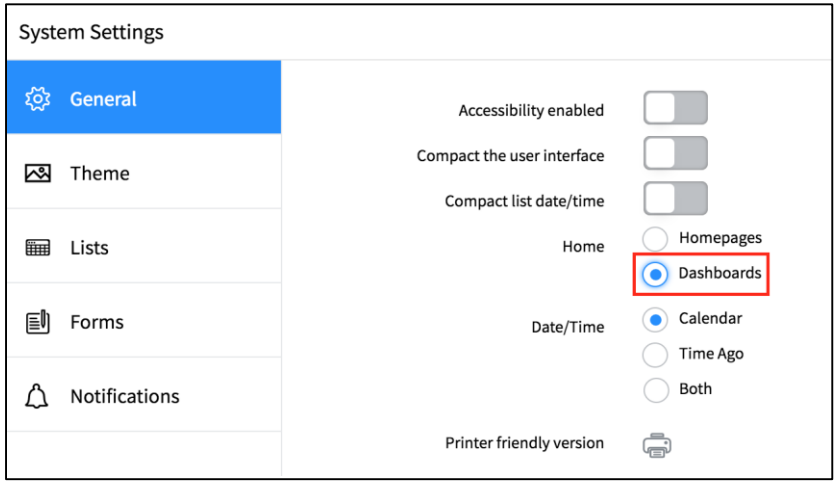
Lab 2.2 Challenge 2 – Set Dashboard as your Home

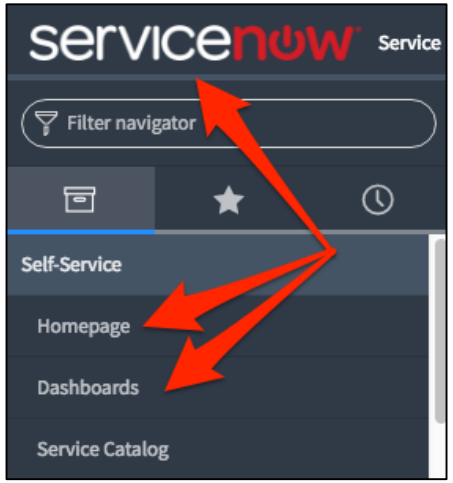
Next time you log in or when you navigate to

Self-Service > **Homepage**,

Self-Service > **Dashboards**,

or click on your company logo, the most recently selected dashboard is always loaded.





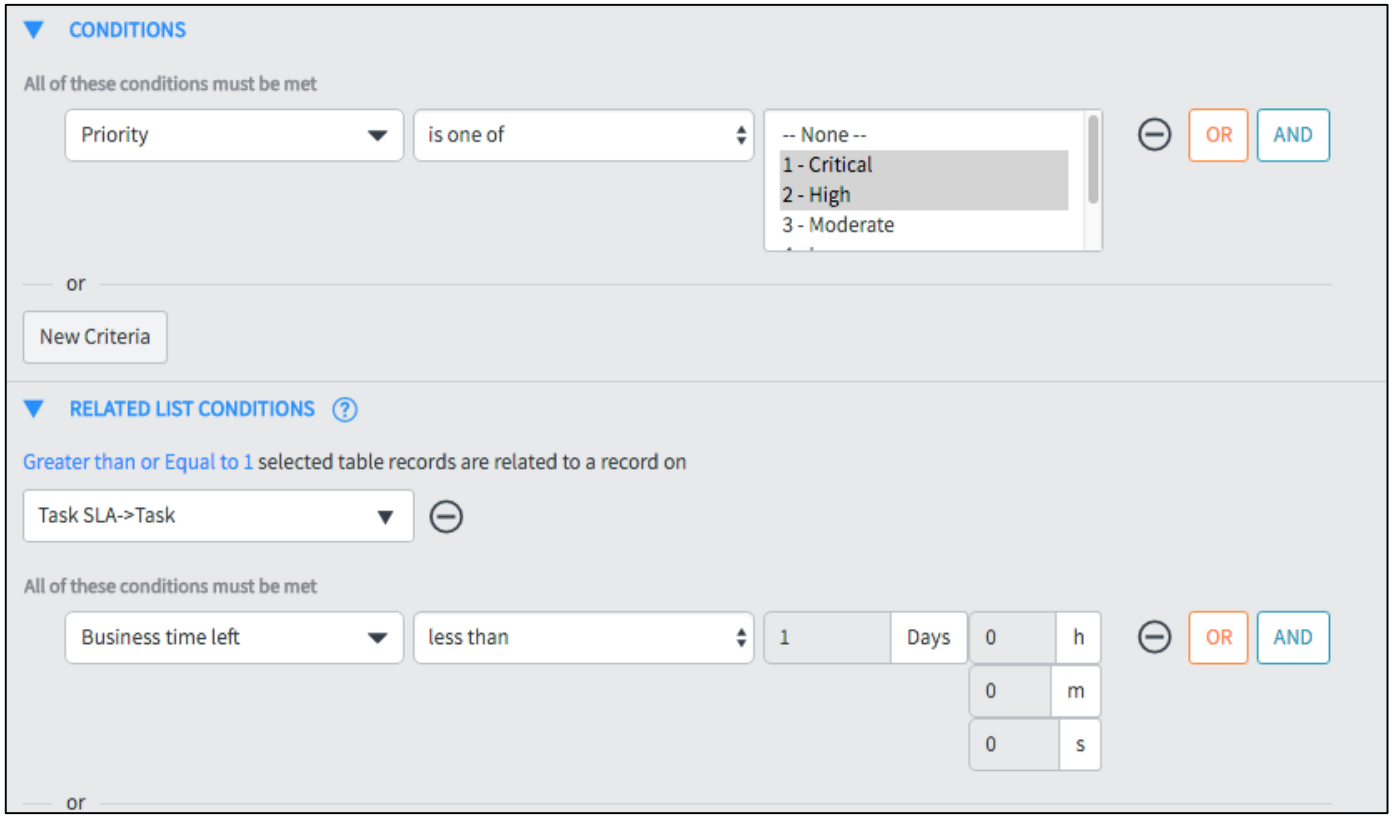
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Lab 2.3 Using the Related List Condition Builder

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Related List Condition Builder

- Related list conditions allow you to include a relationship with another table in the filter. Related list conditions are supported only in List v3.
- For example, you can filter active problems with one or more related incidents that are in the Canceled state. Another example is to filter incidents with a breached service level agreement (SLA).
- **Note**: You can include only one related table in the query, however, you can add multiple conditions for that table.



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Lab 2.3 Using the Related List Condition Builder

Use case:

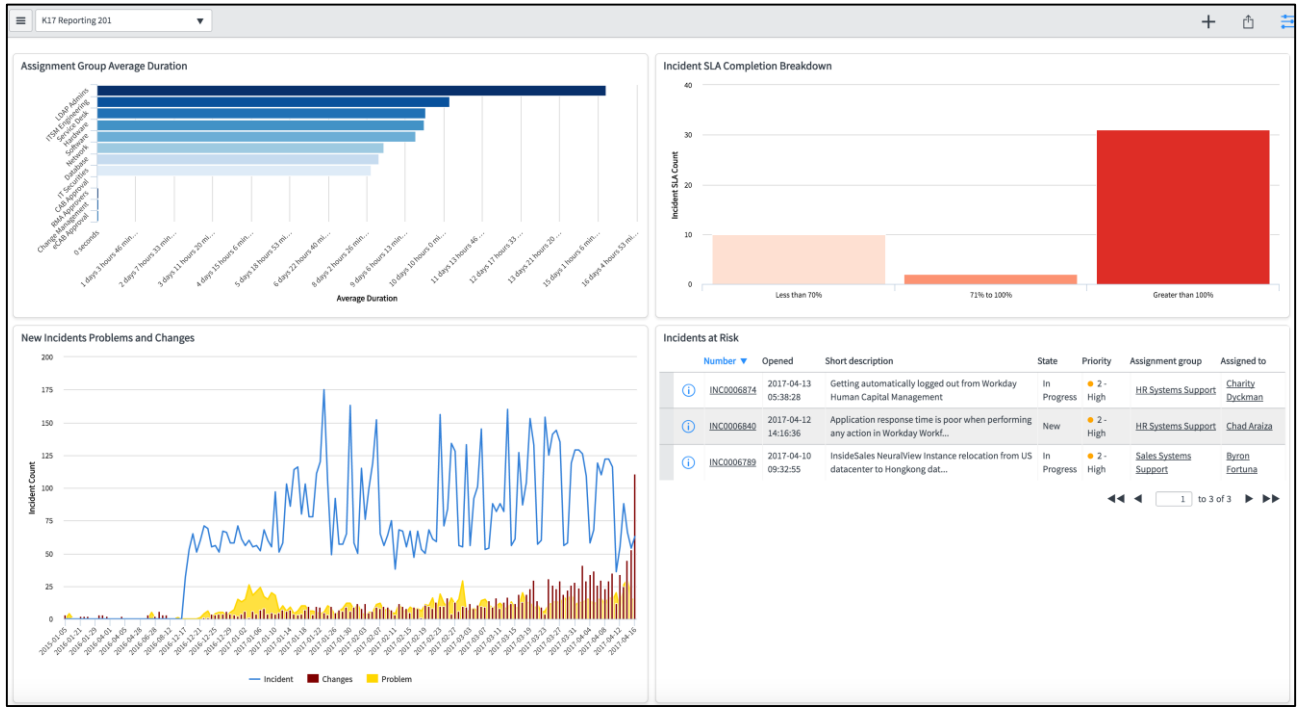
- For this lab we are going to create a report that will show us Critical and High priority incidents that have SLA tasks that have less than 1 day's worth of business time left before they breach.

- **Create a new report from the dashboard that use the related list condition builder**

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Lab 2.3 Result

Lab Success Verification



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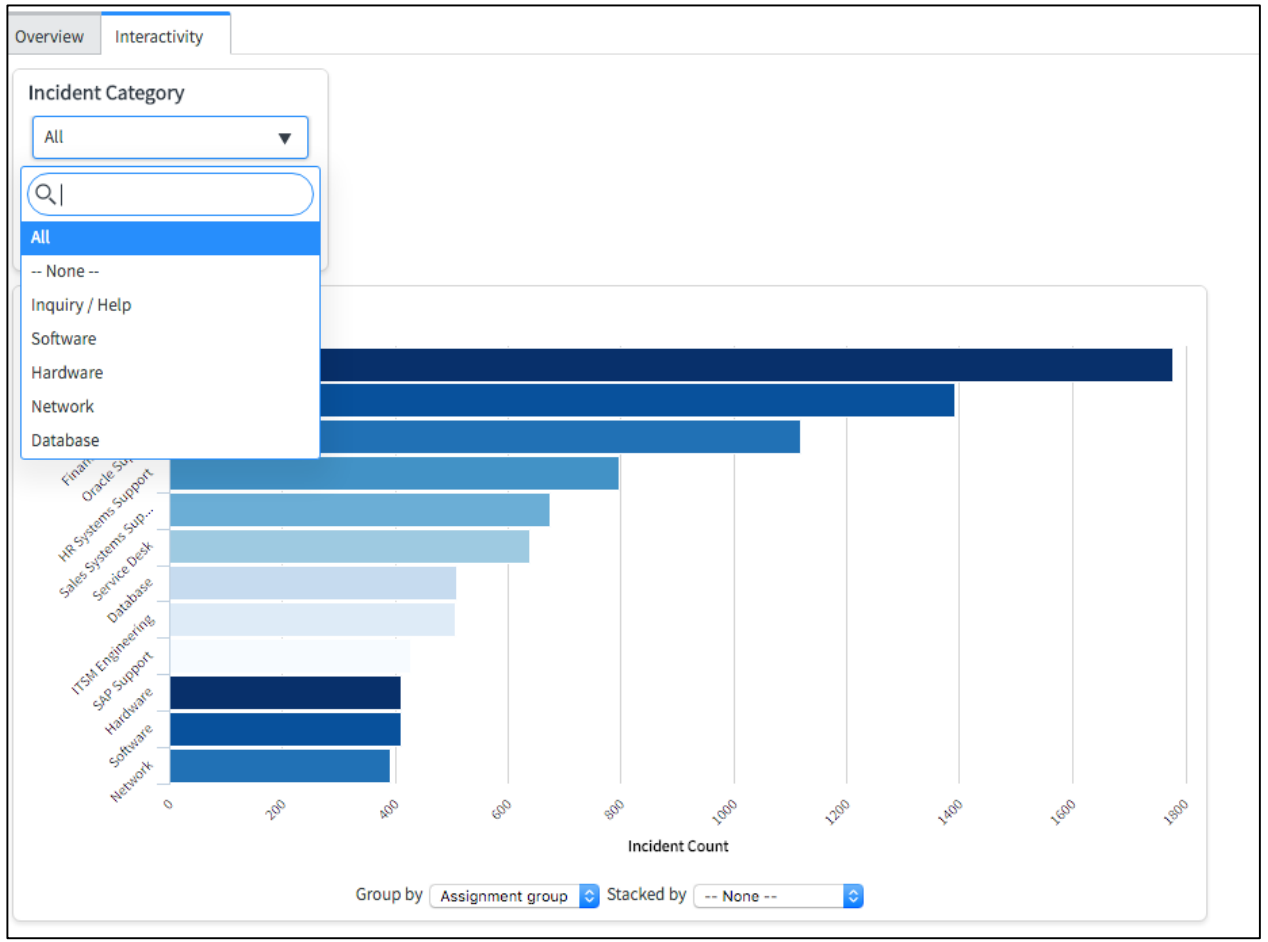
Lab 3.1 Adding Interactivity to Your Reports

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Adding Interactivity to Your Reports

In order to maximize the value of any dashboard that you deploy, you need to ensure that it is adopted and used by the target audience.

One of the ways to maintain and increase user adoption is to add interactivity to the content in a dashboard that allows users to ask follow-up questions of the information being presented to them.

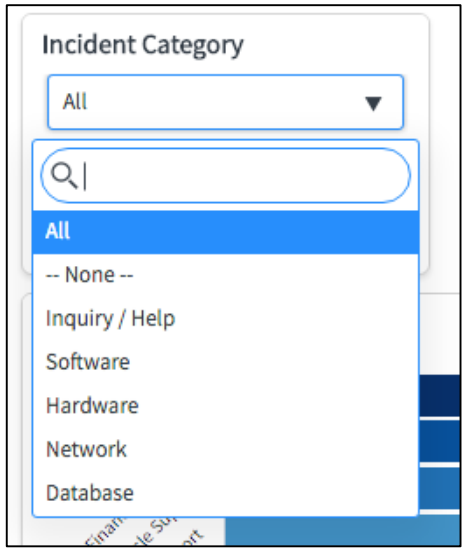


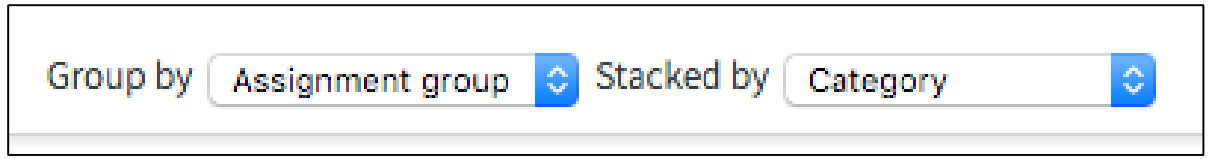
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Lab 3.1 Adding Interactivity to Your Reports

Use case:

- In this lab, we are going to explore 3 different ways to add interactivity to content within a dashboard:
  - Alternative Group By and Stacked By choices for a chart
  - Additional Drilldowns
  - Interactive Filters

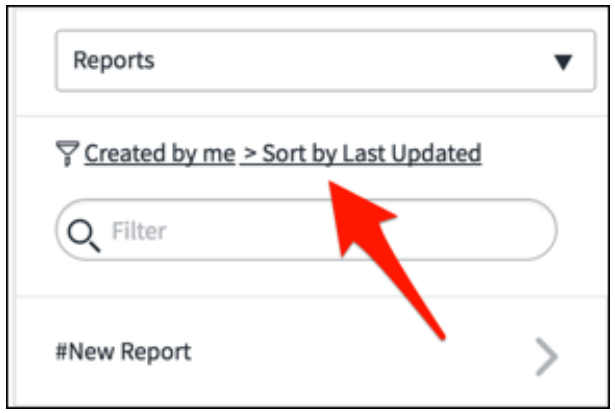


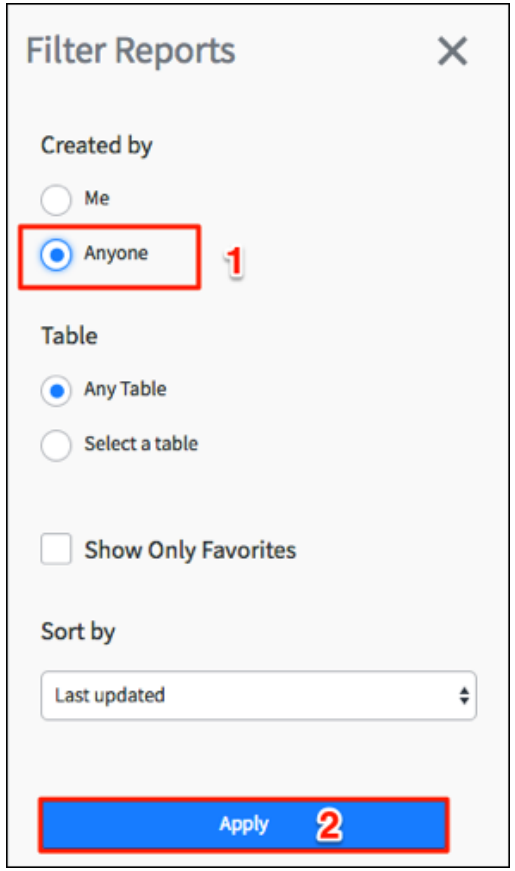


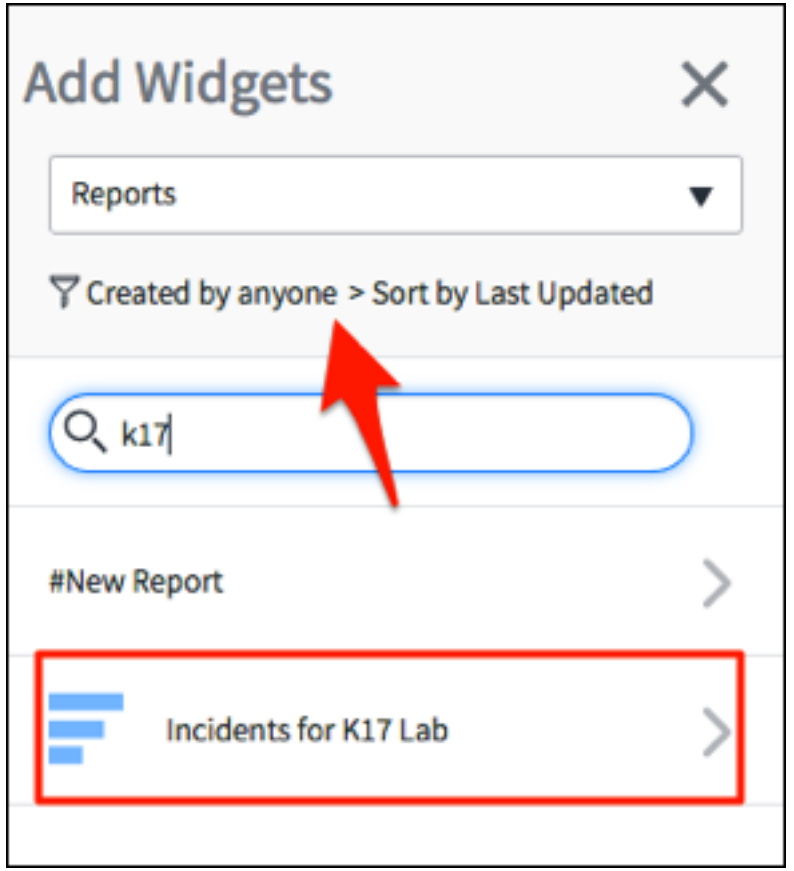
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Lab 3.1 Adding Interactivity to Your Data

Add an existing report to your dashboard



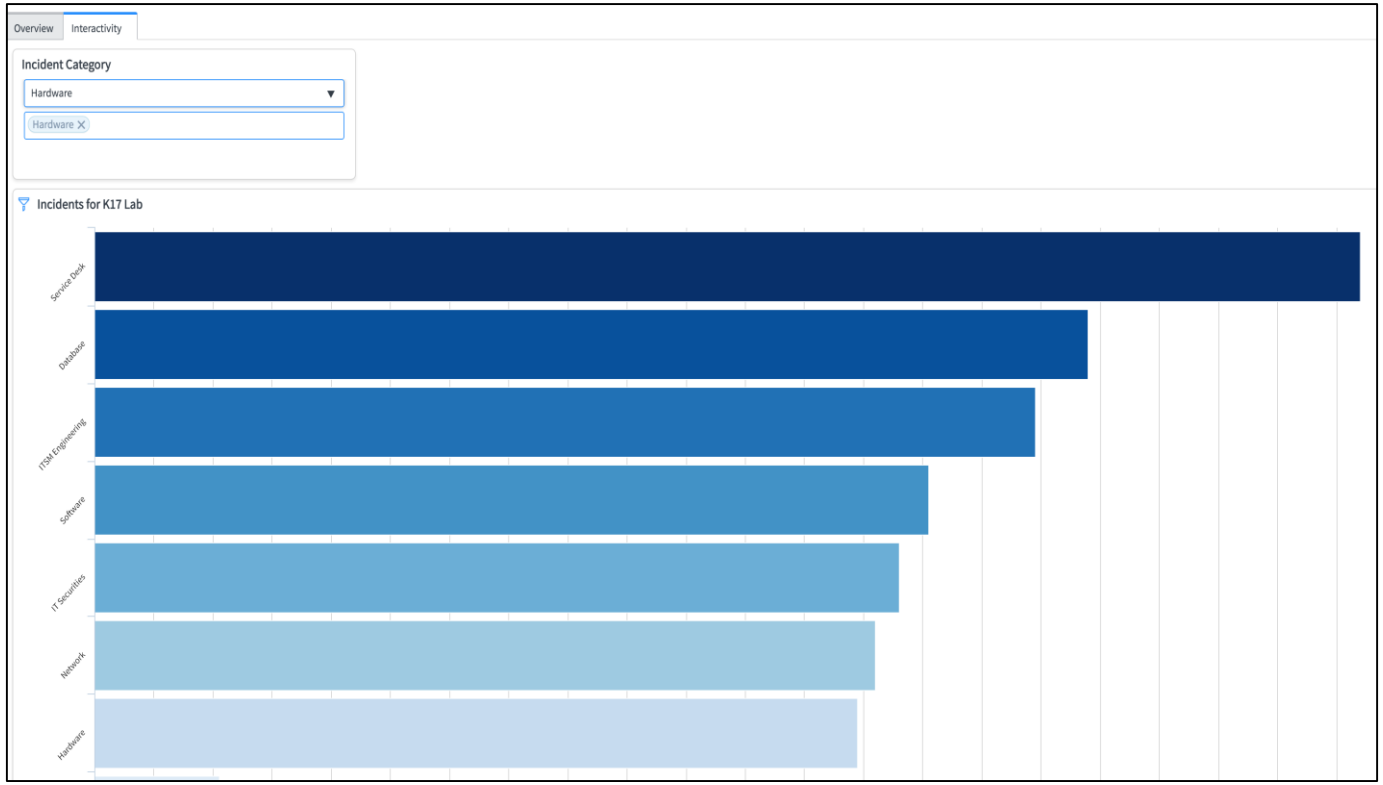




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Lab 3.1 Result

Lab Success Verification



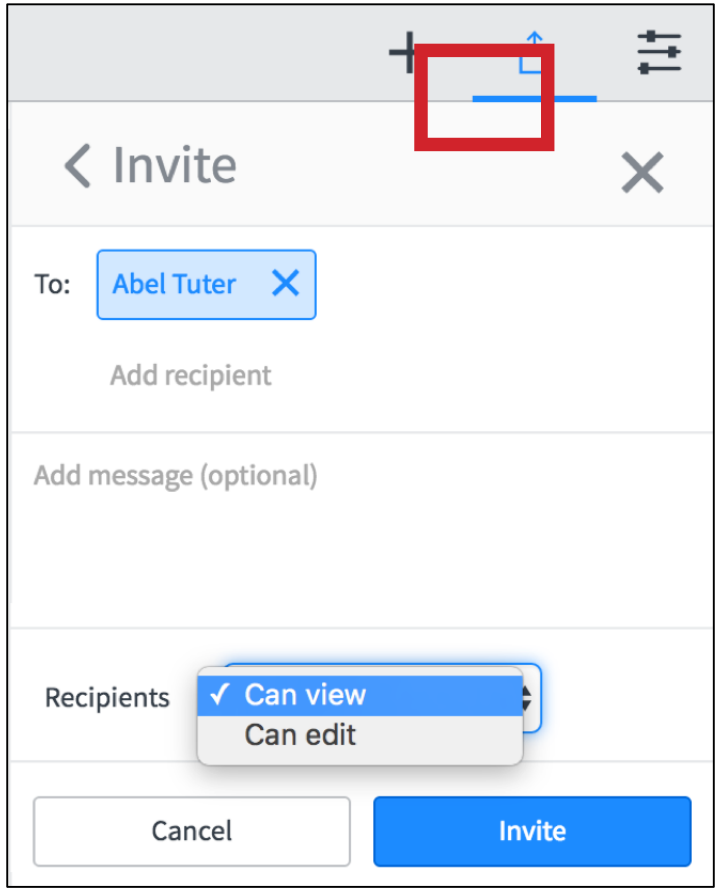
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Lab 4.1 Sharing a Dashboard

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Pre-Lab 4.1 Sharing a Responsive Dashboard

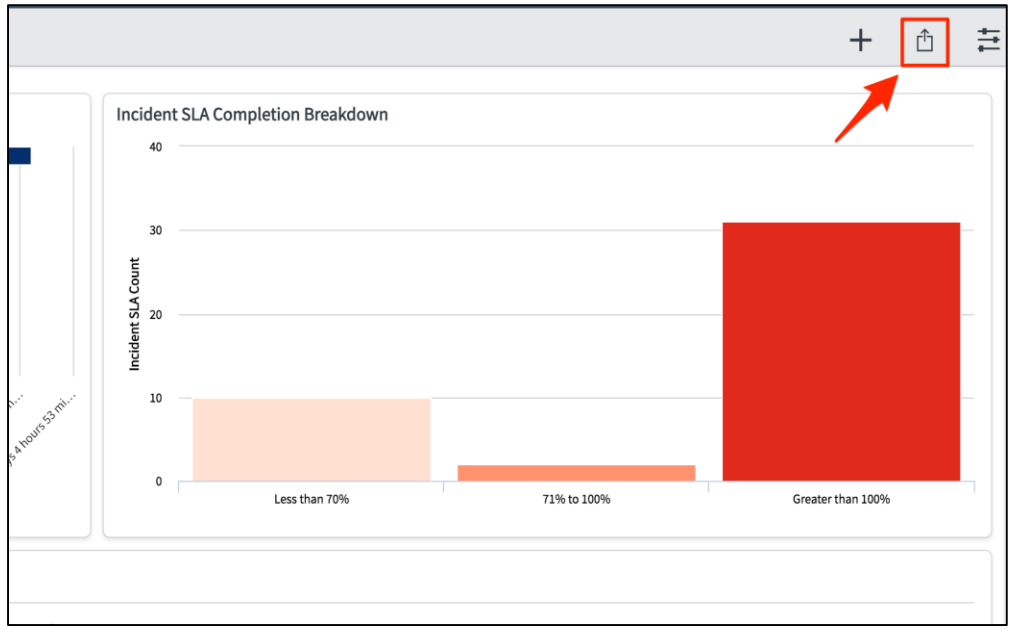
- Users with any role can create and share their dashboards
  - Note: Users with no role can view dashboards that are shared with them
- Viewer & Editor permissions assigned per dashboard
- Users receive an email notification when a dashboard is shared with them
- Dashboards owners can share with groups and users
- Users with the admin, pa_admin, and pa_power_user roles can share dashboards with roles
- Users with admin roles can manage sharing on all dashboards
  - Note: Users with pa_admin or pa_power_user roles can also manage sharing on any dashboard they can edit
- Note: As long as the dashboard is not explicitly shared and is not part of a group that was explicitly shared, it will be visible only to its owner.

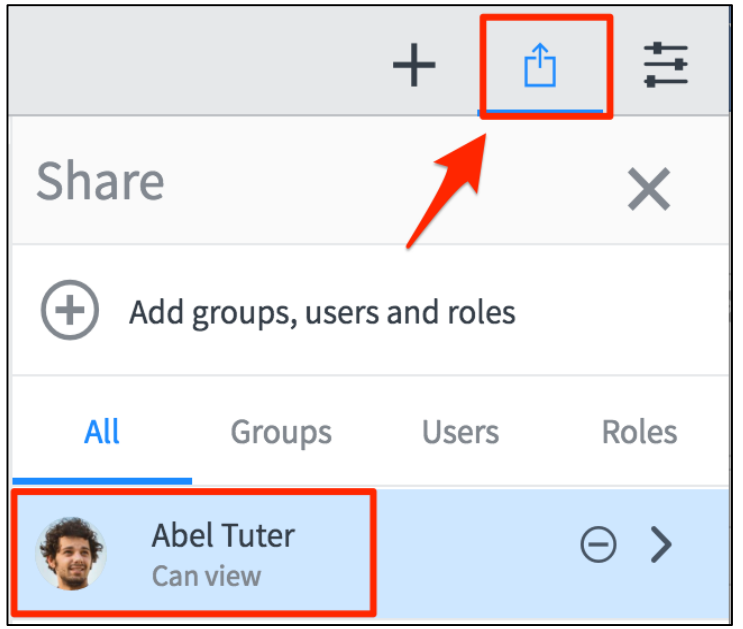


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Lab 4.1 Result

- Abel Tuter can now see the dashboard
- Abel Tuter will receive an email notification that “K17 Reporting 201” dashboard has been shared with him
- Abel Tuter appears in the sharing panel list and his access rights can be edited from there if needed





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Now What to Expect From Jakarta?!

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Dan Grady
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Silvia Mihit
Sr. Software Engineer
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