

IBM Cloud Pak for Business Automation

Demos and Labs

Operational Intelligence

IBM Business Automation Insights

Explore Business Performance Center Dashboard

V 1.0

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1 Lab Introduction

In this lab, you will explore Client Onboarding Workflow Dashboard that has already been built for you. You will learn how a business user can get a real-time actionable business insight into *Client Onboarding* Workflow.

1.1 Introduction to IBM Business Automation Insights

IBM Business Automation Insights enables the capture of events generated by the operational systems implemented with the IBM Business Automation products. Captured events are aggregated into business-relevant KPIs, and presented in dashboards for lines of business to have a real-time view of their business operations.

More technical information about BAI: <https://ibm.box.com/v/IBM-BAI-Tech-Intro>

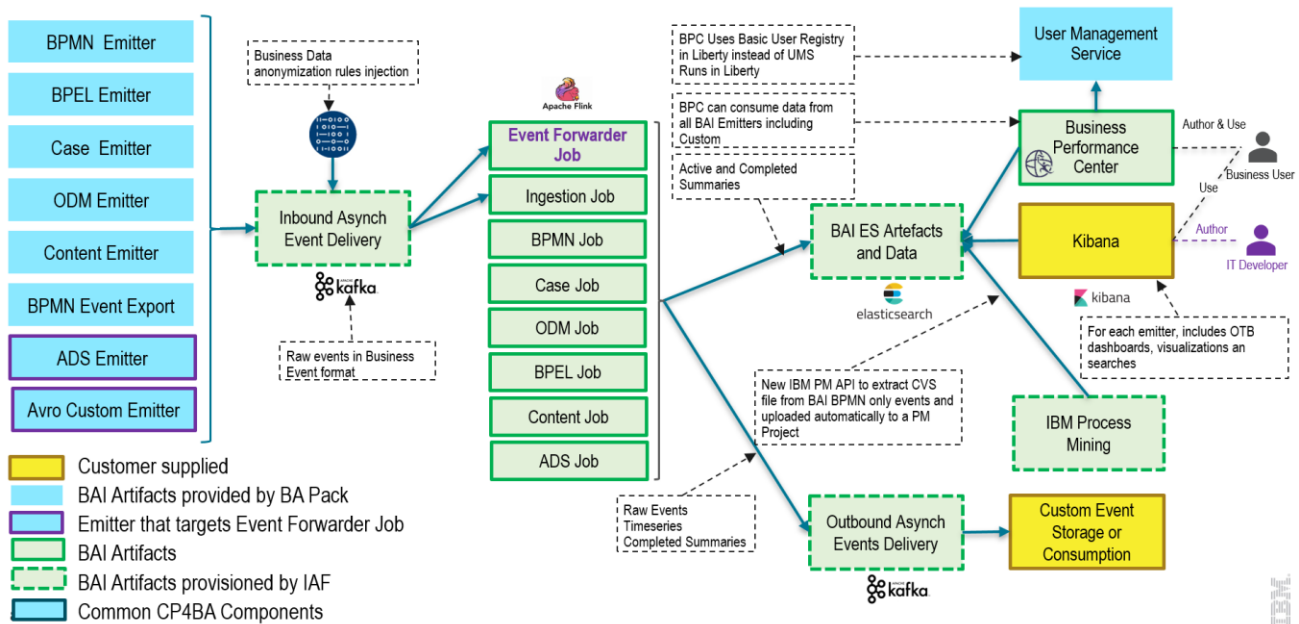


Figure 1. IBM Business Automation Insights 21.0.3 Architecture

Business Performance Center (BPC), shown in Figure 1 above, is the no-code business monitoring application native to IBM Cloud Pak for Business Automation. Using BPC business users (with no IT assistance) can:

- Design and share dashboards in minutes that capture business data in near real-time and provide awareness of essential business activities and processes.
- Prepare, track, and design visualizations of metrics, key performance indicators (KPIs), and other business performance measurements in customizable dashboards.

More information about BPC: <https://ibm.box.com/v/BusinessPerformanceCenter>

1.2 Lab Overview

The solution used during the labs is *Client Onboarding* Workflow automation implemented as a Case with several BPMN processes that implement Case Activities. The automation contains a single Case Type *Client Onboarding Requests*, which contains activities that need to be performed, data, documents, and conditions driving the processing.

Client Onboarding Request

Case Type Properties Views Case Folders Stages Rules **Activities**

All activities ⓘ 🔒

Required activities

- Initialize Request**
File selected documents to the Case folder and handle pending
Precondition: Case Start
Set: <None>
- Notification**
Notify the client and client rep that the review has been
Precondition: Stage started: Notification
Set: <None>
- Perform Scoreboarding**
Scoreboard the client (Classifies them into a segment and assess
Precondition: Stage started: Scoreboarding
Set: <None>
- Update Backend Systems**
Update backend systems with client information
Precondition: Stage started: Backend Systems Up...
Set: <None>

Optional activities

- Review Client Documents**
Renew any new documents coming in from the client
Precondition: Documents: Any document
Property ...
Set: <None>

All five Case Activities above are implemented by BPMN Processes (shown below) in an automatically generated Process App (Client Onboarding)

IBM Automation

Business automations /

Client Onboarding

Process App Settings (Read-only)

Client Onboarding

Processes

User interface

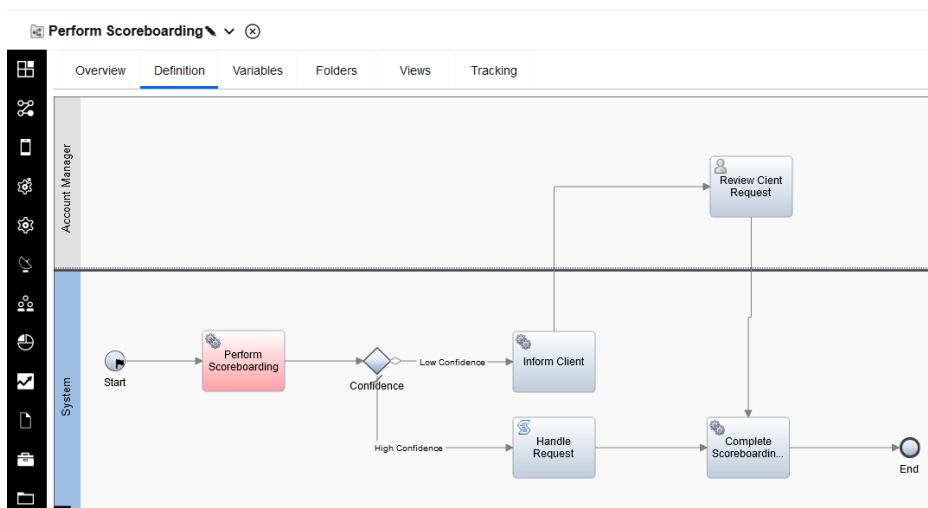
Exposed Automation Services

Type Processes

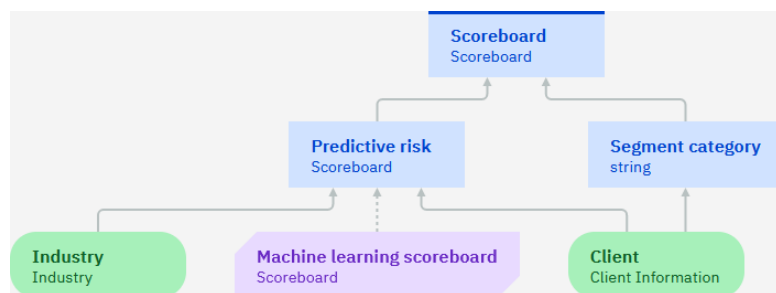
Process 6

- Initialize Request
- New Client Onboarding Request
- Notification
- Perform Scoreboarding
- Review Client Documents
- Update Backend Systems

The *Perform Scoreboarding* Activity (shown in light red below) is of particular interest. It uses Automation Services to invoke Scoreboard decisions implemented using Automation Decision Services.



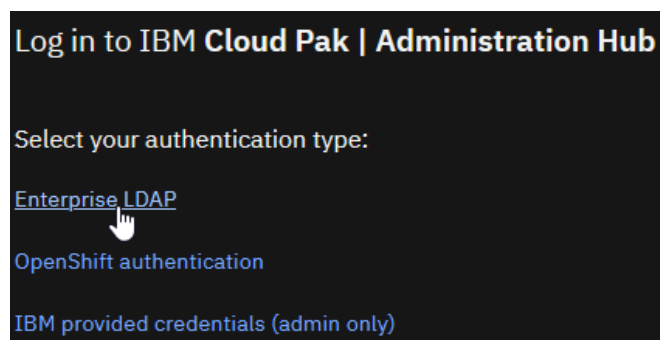
The Scoreboard ADS Decision determines if a client is risky using an ML-based predictive model and classifies the client into a segment.



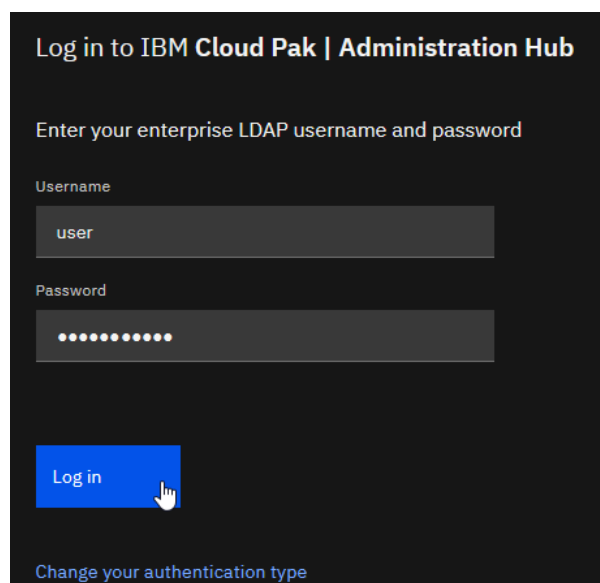
When authoring one of the Charts, you will be using data generated by the above decision.

1.3 Lab Setup Instructions

- _1. If you are performing this lab as a part of an IBM event, access the document that lists the available systems and URLs and login instructions. For this lab, you will need to access **IBM Business Performance Center**.
- _2. Paste the Business Performance Center URL to your web browser.
- _3. Select **Enterprise LDAP** login option



- _4. Enter the supplied to you *Username* and *Password* and then click **Log in**



2 Exercise: Explore Client Onboarding Workflow Dashboard

2.1 Introduction

In this lab exercise, you will explore Client Onboarding Workflow Dashboard that has already been built for you. You will learn how a business user can get a real-time actionable business insight into *Client Onboarding Workflow*.

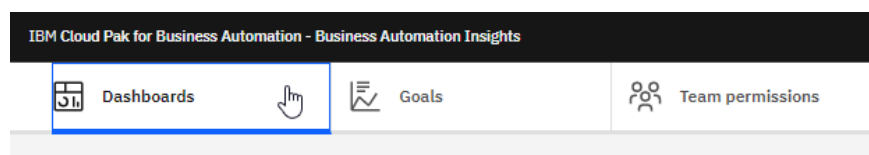
Note that BAI events were already generated for you. But, since you are using a live shared environment with you and other users working on Client Onboarding cases, you may see new events arriving as you examine the dashboard. Consequently, some of the screenshots in the lab instructions may not look as captured in the screenshots.

2.2 Exercise Instructions

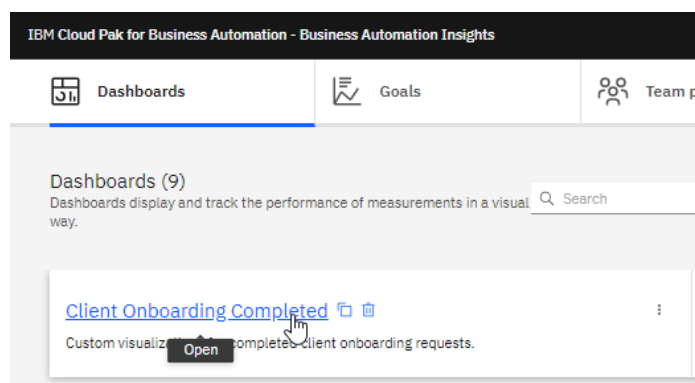
Let's examine the charts in the Client Onboarding Workflow Dashboard. Each Chart serves a specific business objective by providing a unique insight into the Client Onboarding process. Some charts provide interactive features to enable further exploration.

2.3 Open Client Onboarding Dashboard

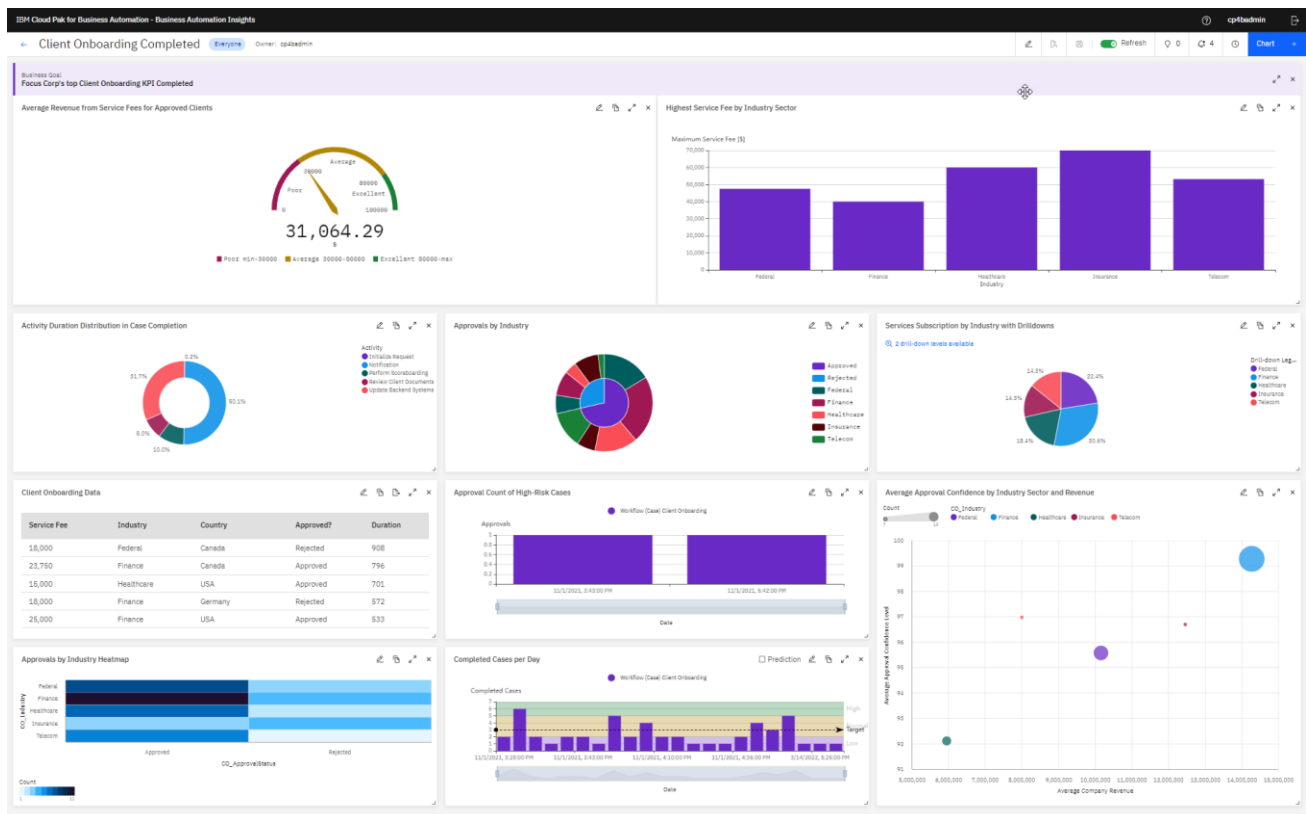
_1. Click **Dashboards** tab



_2. Click **Client Onboarding Completed**



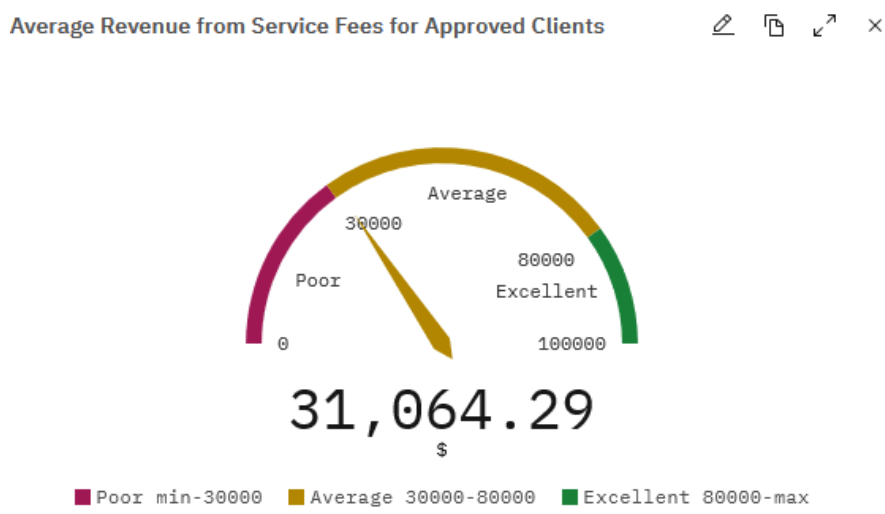
You should now see the contents of the Client Onboarding Dashboard.



2.3.1 "Average Revenue from Service Fees for Approved Clients" Chart

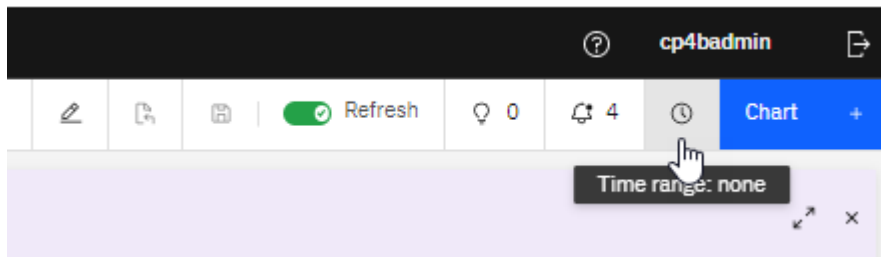
This Gauge Chart shows the average revenue from service fees for approved clients.

- _1. Note that the chart needle reflects the current value of this KPI, which is also displayed in bold, large font below the gauge.
- _2. Also, the Chart is divided into color-coded sections: Poor, Average and Excellent.



The Chart is based on all the data captured from the "beginning of times."

_3. Click the **Time range** icon.



_4. Select **Fixed date**, change the *Start date* to **11/01/2021**, *Start time* to **17:00**, *End date* to **11/01/2021**, *End time* to **18:00**, and then click **Apply changes**

Time range ×

Shortcuts ▾

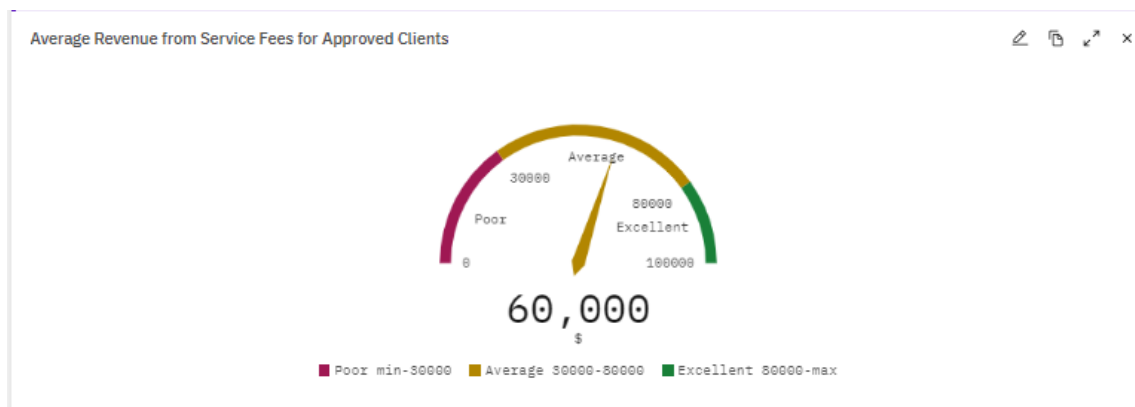
☒ Fixed date ☐ Sliding date ☐ No range

Start date: 11/01/2021 📅 Start time: 17:00 Current timezone: GMT-4 ▾

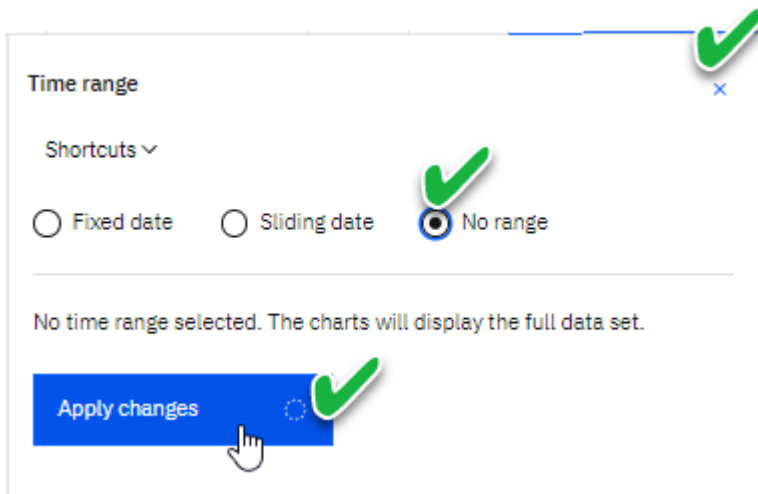
End date: 11/01/2021 📅 End time: 18:00 Current timezone: GMT-4 ▾

Apply changes 🔄

Note that the Average Revenue value has changed to reflect the period you just selected.



_5. Click **No range**, then **Apply changed**, and finally click **X** to close the Time range slide window.



Time range

Shortcuts ▾

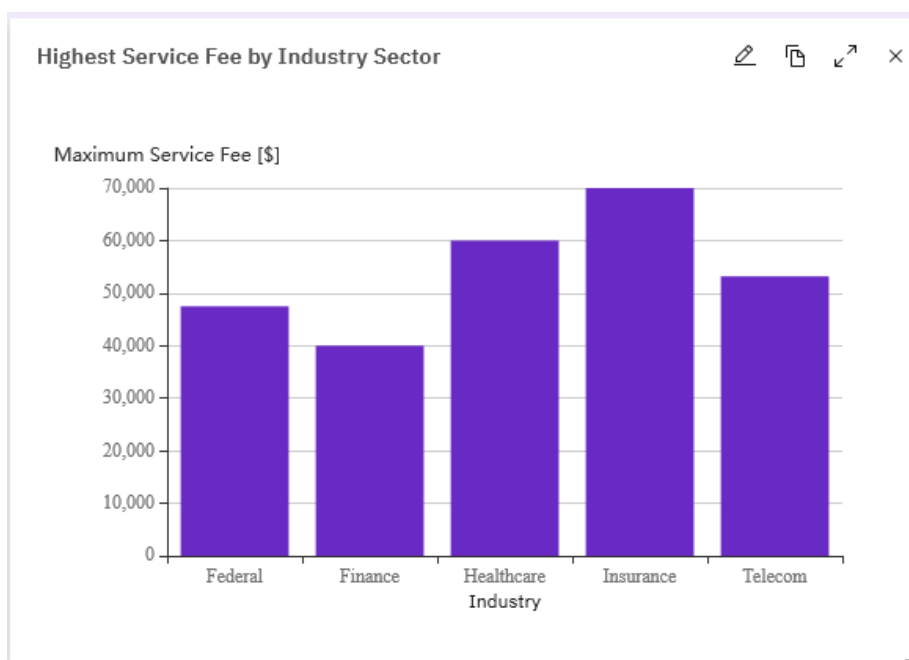
☐ Fixed date ☐ Sliding date ☒ No range

No time range selected. The charts will display the full data set.

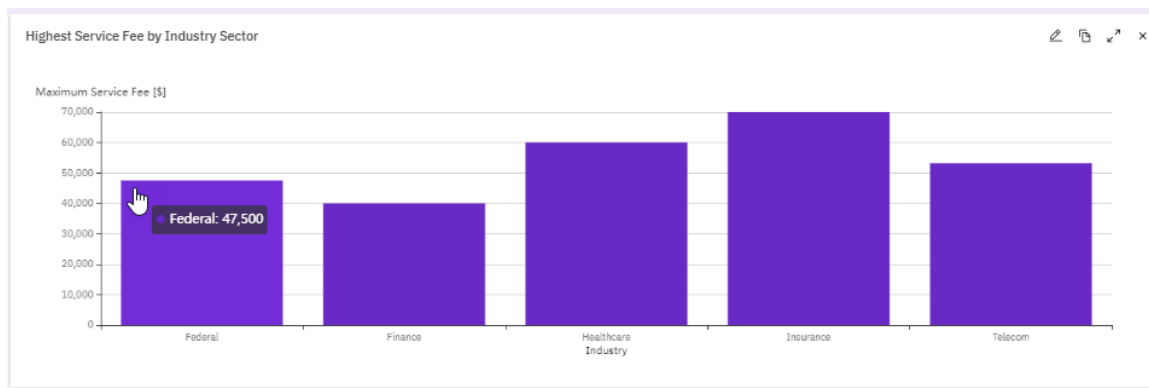
Apply changes

2.3.2 "Highest Service Fee by Industry Sector" Chart

This Bar Chart shows the highest service fee by industry sector.



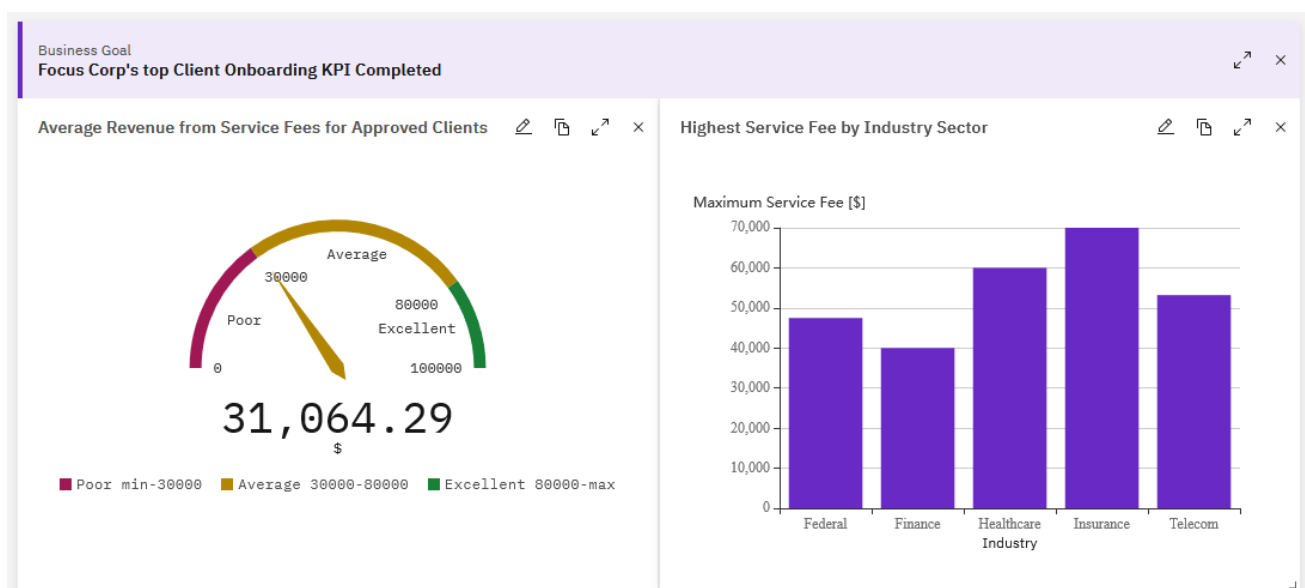
_1. **Hover over the Federal bar** to see the highest service fee changed in this Industry.



2.3.3 Goals

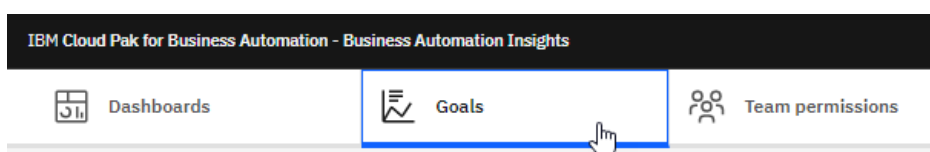
A Goal is a business statement that brings purpose and scope to your dashboards. Goals aggregate charts within a dashboard and give dashboards a business purpose. A Goal's definition includes the details of a specific objective you want to achieve, the time frame for achieving an objective, and identifiers (categories and colors) for the Goal. Any Chart on a Dashboard can be associated with a Goal

_1. Note that the last two charts you examined are "aggregated" into **Focus Corp's top Client Onboarding KPI** goal



Let's examine the Goals View, which allows creating new or editing existing Goals.

_2. Click **Goals** tab



3. Note that there is one Goal defined. Recall that two charts are associated with this Goal.

| Goals (1) | | |
|---|---|---|
| Goals define desired outcomes based on organization policy and objectives. | | |
| | <input type="text" value="Search"/> | Recently updated All goals Create |
| Focus Corp's top Client Onboarding KPI Completed Focus on the three top KPI identified by senior management team | : Dashboard: Client Onboarding Completed Charts: Average Revenue from Service Fees for Approved Clients Highest Service Fee by Industry Sector | Created by: cp4badmin Last updated: 3/14/2022, 5:21:30 PM Priority: High Category: |

Let's switch back to the Client Onboarding Dashboard.

4. Click **Dashboards** tab

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_5. Click Client Onboarding Completed

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Dashboards Goals Team

Dashboards (9)

Dashboards display and track the performance of measurements in a visual way.

[Client Onboarding Completed](#)  

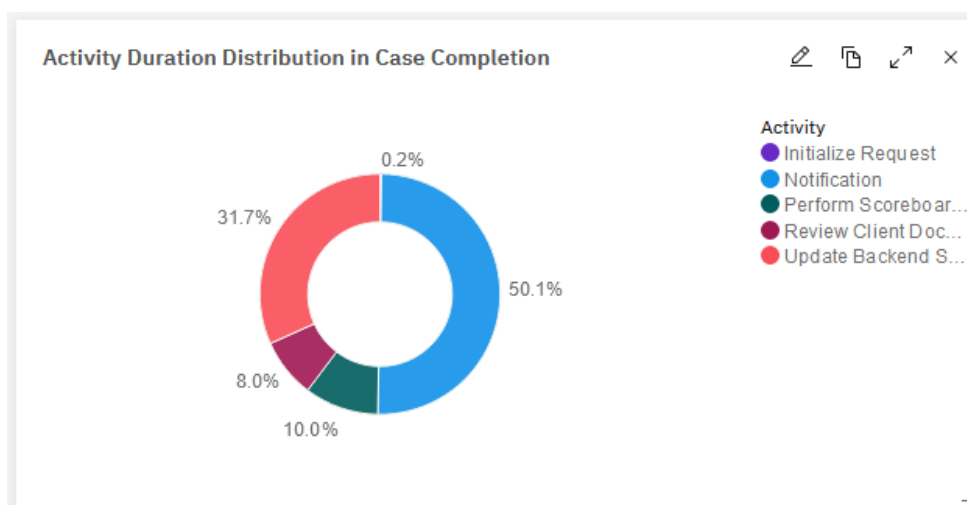
Custom visualization of completed client onboarding requests.

Open

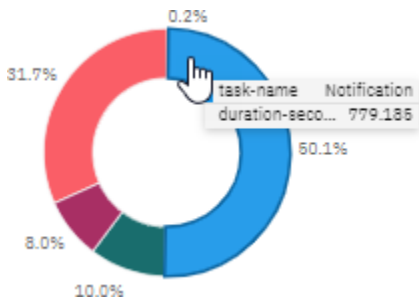
2.3.4 "Activity Duration Distribution in Case Completion" Chart

This Doughnut Chart shows the average time distribution among all activities required to complete a case.

It identifies the most time-consuming or the least time-consuming activity in the Client Onboarding Workflow.



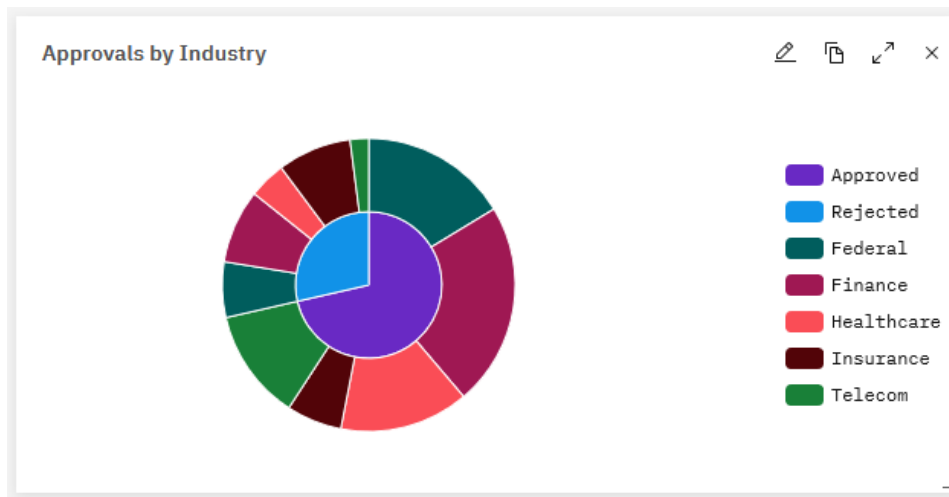
_1. Hover over the **(blue)** Notification activity to see the details



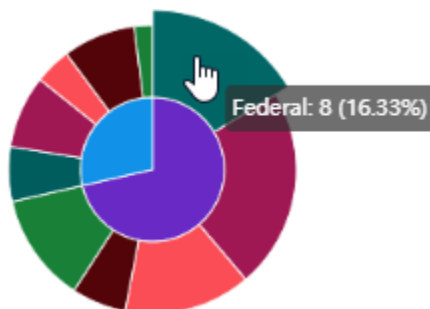
2.3.5 "Approvals by Industry" Chart

This Hierarchical Pie Chart shows the application approval counts by Industry and approval state (Approved, Rejected, Under Review).

The inner-circle represents the split between approved and rejected applications. The outer wedges represent the Industry.

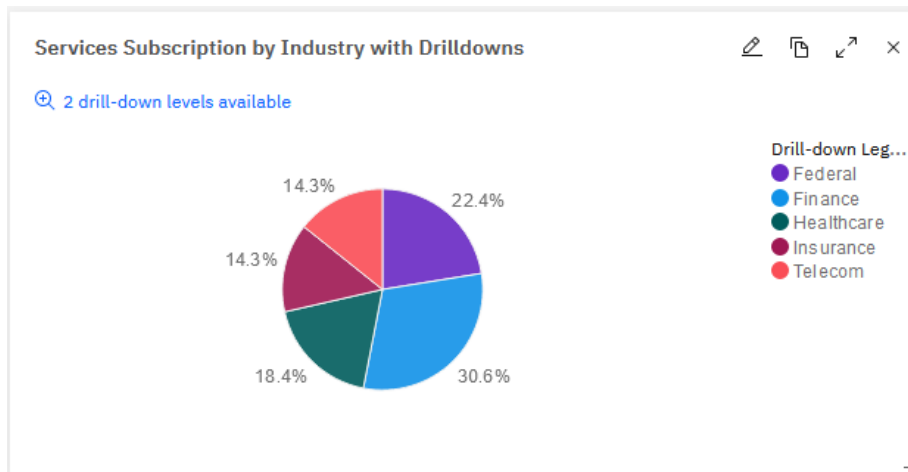


_1. Click **(green)** Federal edge in the **(purple)** Approved section. You should see that 8 Federal requests were approved, representing 16.33 % of all the cases.



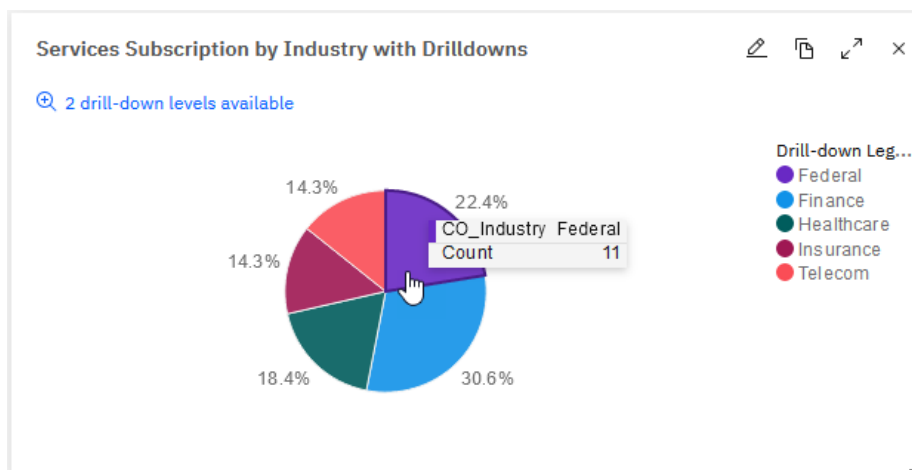
2.3.6 "Services Subscription by Industry with Drilldowns" Chart

This Pie Chart shows the approved service subscriptions by Industry.

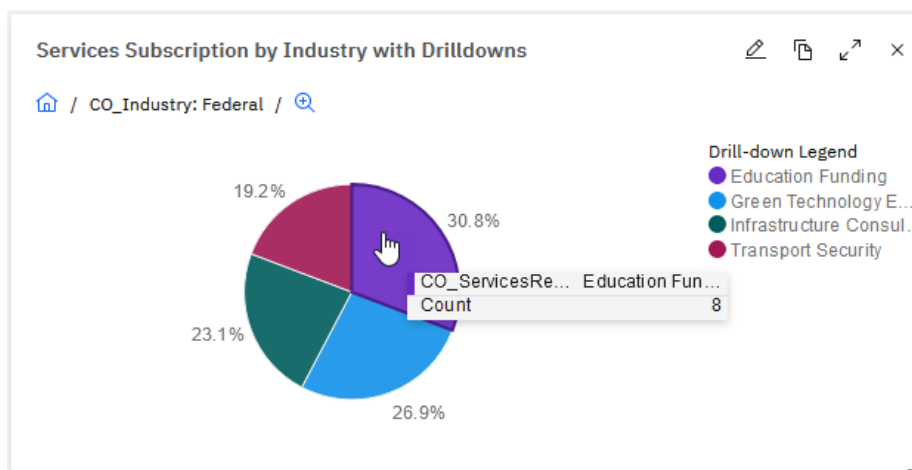


An essential feature of this Chart is drilling down by service > industry > country. Let's explore Drill-down capability

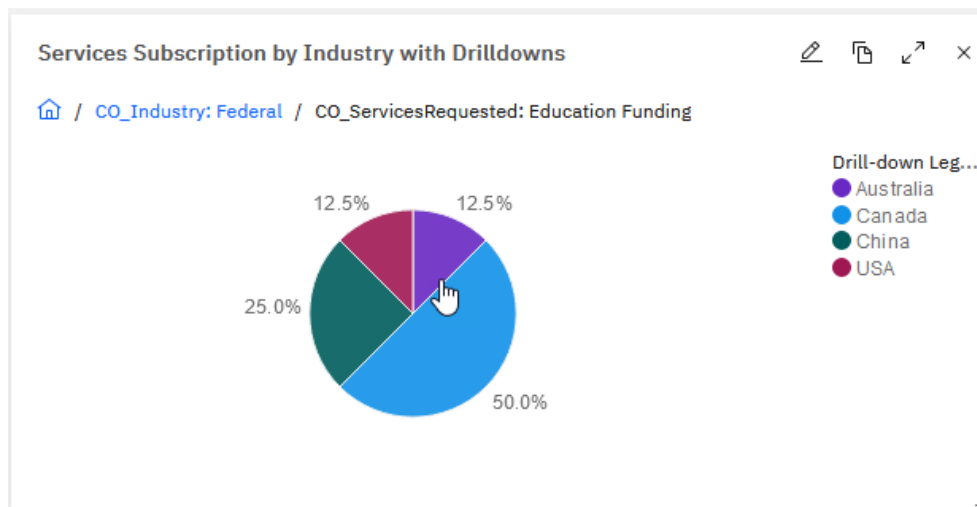
_1. Select first drill-down level by clicking on **Federal** Industry



_2. Select second drill-down level by clicking on **Education Funding** Service

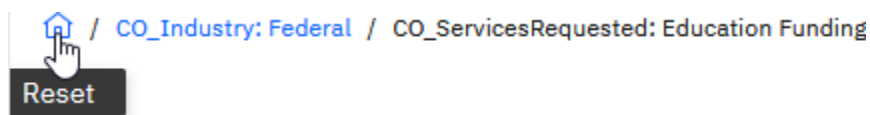


_3. You should now see all the countries for *Federal > Education Funding* grouping.



Note the breadcrumbs.

_4. Click **Reset** to get back to the original view



2.3.7 "Client Onboarding Data" Chart

This Data Chart provided a tabular display of selected Customer Onboarding Workflow metrics.

The rows represent Client Onboarding case instances, and the columns represent selected Client Onboarding case properties.

| Client Onboarding Data | | | | |
|------------------------|------------|---------|-----------|----------|
| Service Fee | Industry | Country | Approved? | Duration |
| 18,000 | Federal | Canada | Rejected | 908 |
| 23,750 | Finance | Canada | Approved | 796 |
| 15,000 | Healthcare | USA | Approved | 701 |
| 18,000 | Finance | Germany | Rejected | 572 |
| 25,000 | Finance | USA | Approved | 533 |

Let's examine two critical features of the Data Chart: sorting and data export.

_1. Click **Industry** column, click **Service Fee** column and then click **Service Fee** column again.

| Service Fee ▾ ² | Industry ▲ ¹ | Country | Approved? | Duration |
|----------------------------|-------------------------|---------|-----------|----------|
| 47,500 | Federal | China | Approved | 1,735 |
| 45,000 | Federal | Canada | Approved | 2,551 |
| 38,000 | Federal | Canada | Approved | 2,069 |
| 34,200 | Federal | China | Approved | 640 |
| 30,400 | Federal | Germany | Approved | 213 |

You should now see the table sorted by Industry (in ascending order) and (within Industry) by Service Fee in descending order.

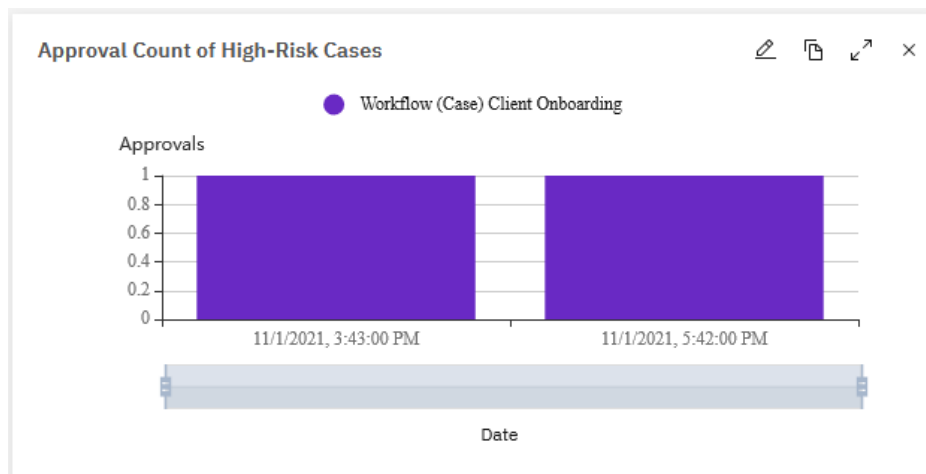
_2. Hover over **Export to TSV**. Note that you can export the data in the Chart as a spreadsheet in the TSV format.

| Service Fee ▾ ² | Industry ▲ ¹ | Country | Approved? | Duration |
|----------------------------|-------------------------|---------|-----------|----------|
| 47,500 | Federal | China | Approved | 1,735 |
| 45,000 | Federal | Canada | Approved | 2,551 |
| 38,000 | Federal | Canada | Approved | 2,069 |
| 34,200 | Federal | China | Approved | 640 |
| 30,400 | Federal | Germany | Approved | 213 |

2.3.8 "Approval Count of High-Risk Cases" Chart

This Bar Chart shows the approval counts for high-risk cases in a given period. High-risk cases are identified by the decision service (which uses ML service to score risk level) and serve as a suggestion for approvers.

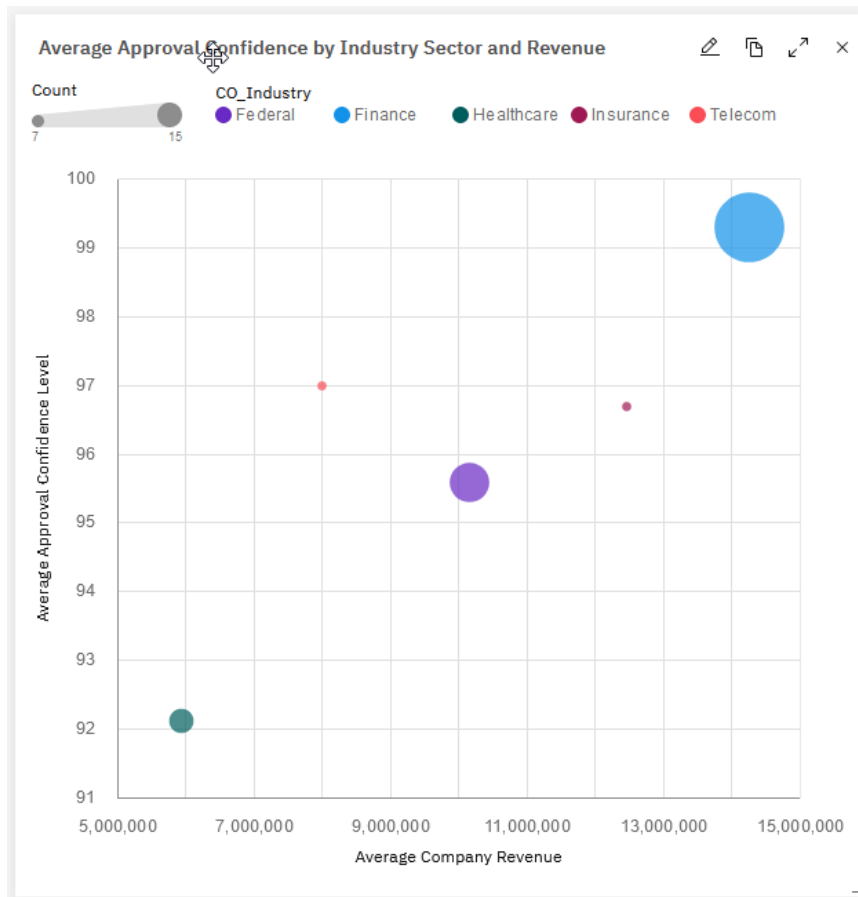
This Chart provides a vital business insight by indicating that the approver overrode the ML model decision, indicating that the ML model may not have been accurate and may need re-training.



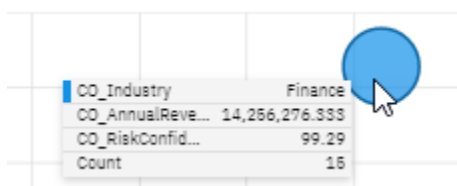
2.3.9 "Average Approval Confidence by Industry Sector and Revenue" Chart

This Bubble Chart examines the average approval confidence by industry sector and revenue.

The bubble color indicates the Industry. The bubble size indicates how many cases are processed for a given industry. The bubbles are positioned in a grid with X-Axis as the average revenue and Y-Axis as the average approval confidence level.



_1. Hover over the **large blue dot** in the top right corner.

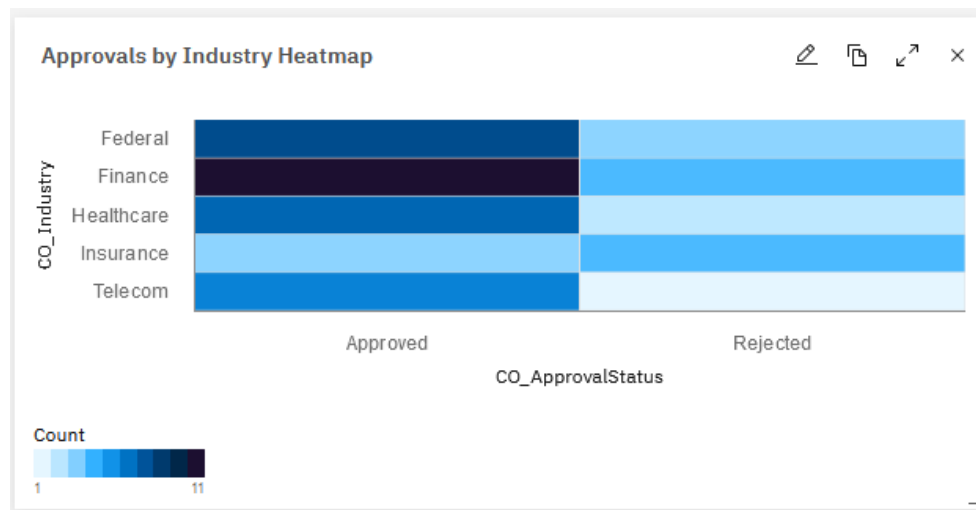


Note the details. The confidence is high (hence the dot appears on top of the Chart). The count is 15 (the highest one, the largest dot size). The blue color of the dot indicates the Finance industry.

2.3.10 "Approvals by Industry Heatmap" Chart

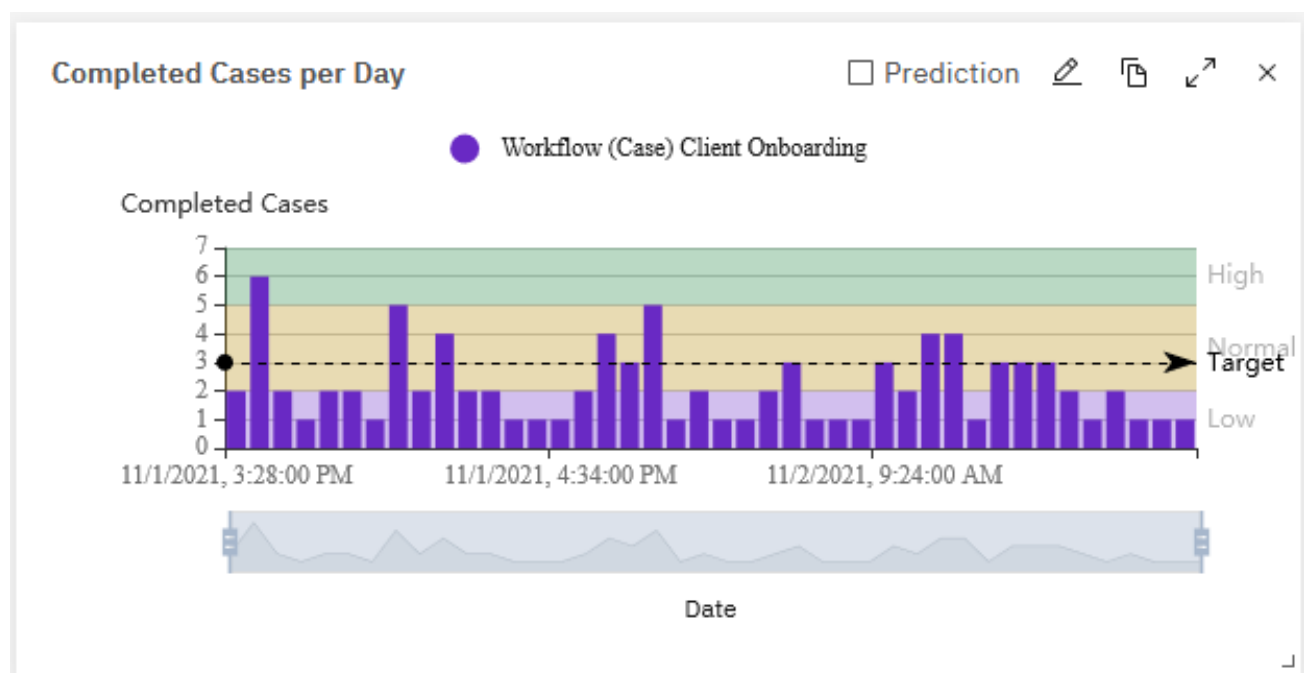
The Heatmap Chart shows application approval state by Industry.

The X-Axis in this Chart represents application state: approved, rejected, approval pending. The Y-Axis reflects the Industry. The tile color intensity reflects the count (the more profound the color, the higher the count).



2.3.11 "Completed Cases per Day" Chart

This Bar Chart shows the number of cases completed in a time period.



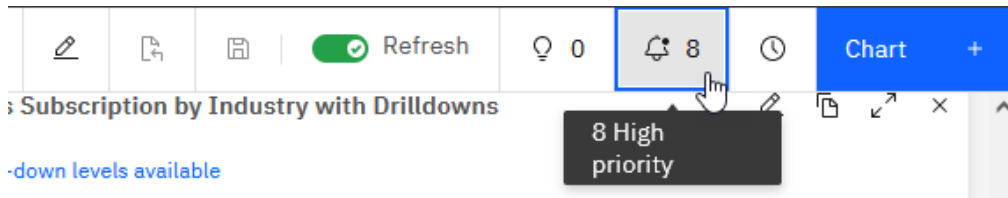
Note that the title states "per Day," but given the data set used for this lab, the scale set "per Minute".

This Chart features two advanced capabilities: KPI Predictions and Alerts.

2.3.11.1 Dashboard Alerts

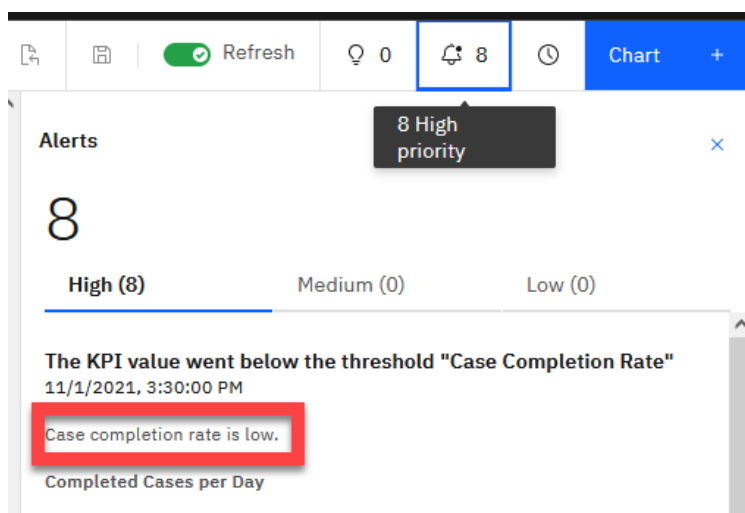
Alerts can alert dashboard users by providing visual indications when the number of cases completed falls below a threshold (in this Chart, the threshold is set to 2) in a given time period.

_1. Click the **Alert** icon in the toolbar on top of the Dashboard



You should now see all the alerts generated whenever the Case Completion Rate just reached or went below the lower threshold (2), defined in the Completed Cases per Day Chart.

Because this is a shared environment, we may see more alerts generated when other users work on the Client Onboarding case.

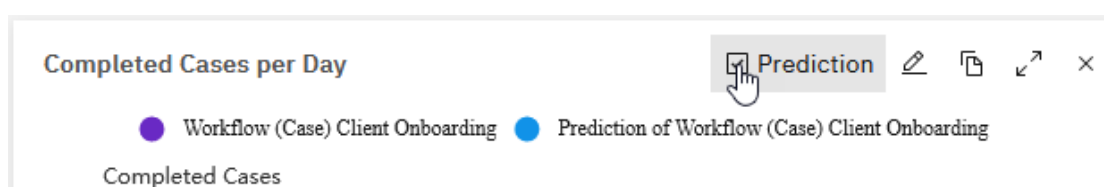


2.3.11.2 KPI Predictions

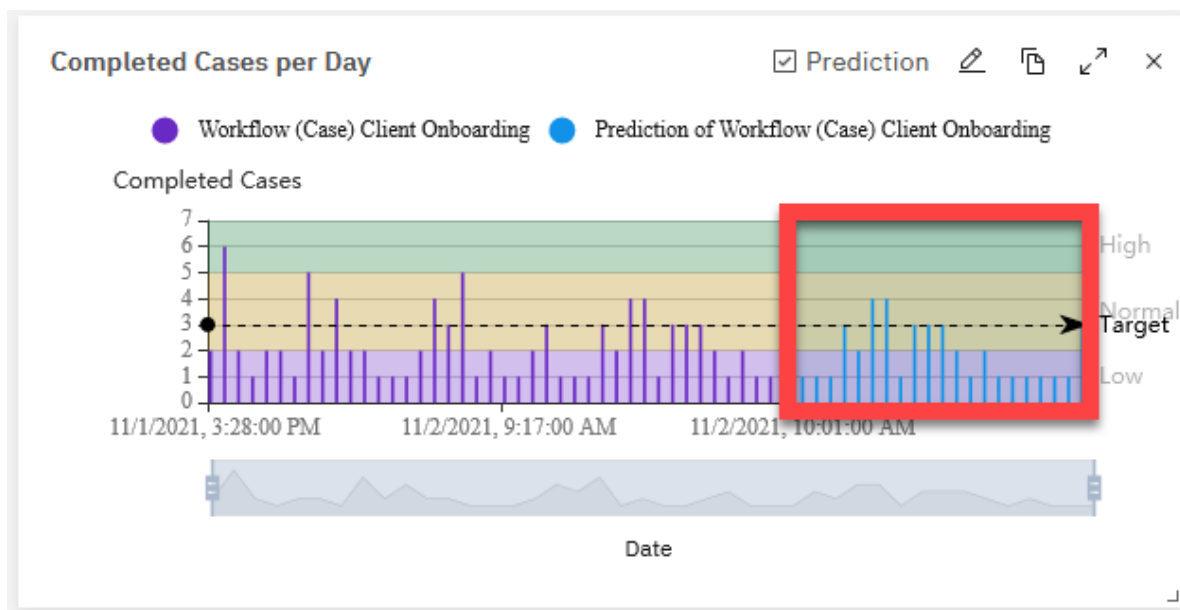
KPI Predictions can predict the number of cases completed in the future. This information may be used for human resource capacity planning.

Note that the KPI Predictions are not based on ML. Depending on the data, KPI Prediction uses ARIMA, Seasonal ARIMA, or Exponential Smoothing.

_1. On the *Completed Cases per Day* chart, click **Predictions**



You should now see the predicted case completion rate information



2.4 Summary

In this lab exercise, you explored Client Onboarding Workflow Dasahbord that has already been built for you. You learned how a business user could get a real-time actionable business insight into *Client Onboarding* Workflow.