



Dashboard Restoration and Training

Why OCA did this project

OCA created an audit dashboard suite to provide near real-time data for internal audit projects and a tool City management can use to monitor and manage risks.

Project scope

Create audit dashboard suite in Power BI with 385 analytics across 13 modules and develop training for how to use dashboards for potential users.

How OCA did this project

- Refine analytics created in Tableau.
- Create audit dashboards in Power BI.
- Create training video and tip sheet for potential users.

Key Results

- To date, dashboard analytics have been used to support testing and reporting for nine audit projects.
- Each project that uses dashboards provides opportunities for ongoing review and refinement of analytics.
- Access to audit dashboards can be granted to key personnel to use as first line of defense for mitigating risks.

Dashboard Restoration and Training

Data analytics provide the ability to monitor risks in nearly real time, identify trends, and determine highest risk areas for auditing. In 2018, OCA began working with a consultant to create an analytics suite. We reviewed, refined, and created 385 analytics across 13 modules. The analytics flag risks surrounding fraud, segregation of duties, system configuration, policy and ordinance violations, and errors. These analytics have been extensively and solely used by OCA for audits of the City's financial system.

Dashboard analytics have been used in nine published audit reports including three financial module reviews, two sensitive payments reviews and four quarterly risk reviews. Each time analytics are used for a project, the audit team reviews the analytics' current validity and refines them, if necessary. In this manner, OCA has developed a system of continuous improvement and customization of analytics to improve efficiency of our financial system audits.

Visual display of analytics information was created in Tableau. In May 2022, due to cost and sustainability concerns, the City of Tulsa changed from Tableau to Power BI. This provided OCA the opportunity to review and refine data analytics previously created in Tableau, add new analytics, and develop training for potential users outside of internal auditing.

A variety of visualizations compare risk flags by modules, across departments, approvers, employees, and transactions. High risk areas, outliers and trends can be easily identified. Data can be sorted via filters, extracted for further analysis, and used to develop customized reports.

Dashboards can be customized to suit the needs of individual users. Training and access to the dashboard suite can be granted to users to improve the first line of defense against risk. For example, key personnel might use analytics to:

- ➔ Target training needed for employees who receive flags due to errors and/or inefficiencies.
- ➔ Identify fraud through review of flags that indicate potential misuse of funds.
- ➔ Ensure compliance with laws and regulations through review of flags for actions not allowed by City ordinances or policies and procedures.

To encourage use by other departments, we created a training video and tip sheet for how to use dashboard modules and navigate the Power BI workspace. BETA users were selected from Finance and Human Resources departments. We received positive feedback on the training and their experience using the dashboards. (See Exhibit 1 for Tip Sheet).

Management is encouraged to contact OCA if interested in access, training, and consulting.

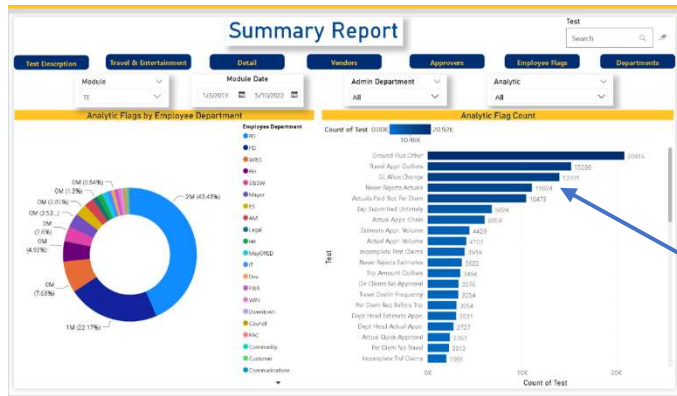
Exhibit 1

Internal Audit Modules in Power BI Tip Sheet

To access Internal Audit reports, use the link [provided by Internal Audit](#).

If you are asked for credentials to log in. Use your normal credentials that you use to get in your computer.

Summary Report Page



Control click on the blue buttons to take you to the pages on the report. Every report will have blue buttons.

Graphs and tables are very user friendly. If you select an item in a graph or table, it will filter the rest of the page based on your selection. Click on the selected item again to clear the filter.

Test Description Page

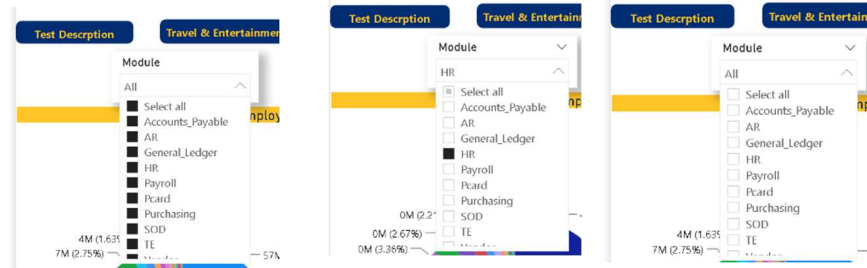
Control click on the Home button to go back to the main page.

Below are the filters on pages.

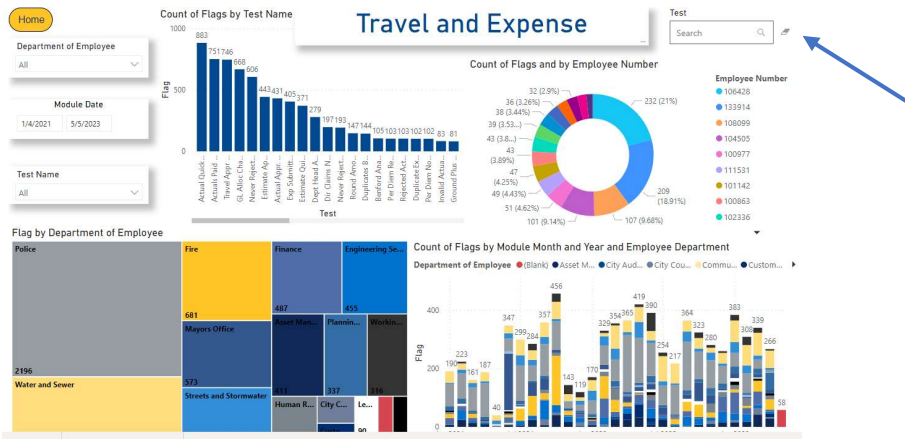


Control click on the blue buttons to take you to the pages on the report. Every report will have blue buttons.

All filters are drop down boxes, minus the Date filter. Click on the down arrow to filter. You can select all or select certain fields. To clear the filter, uncheck the box or go back to selecting select all. If all the boxes are black or blank, it means they are all selected. When selecting the filter, all squares were black. I selected HR and then I unchecked HR-and it goes back to all selected.



Travel and Expense Page – Module page



You can filter each page by test type. Type key word or words to filter on the current page. Click on the magnifying glass to start the search and click on the eraser to clear the search.

If you have a filter and the graph disappears, there are no results. Change the filters, if needed.

