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A short report on Qlik Sense, a BI software.

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### **QLIK SENSE**

Today, with the developing technological opportunities, companies have become easier to reach people from all over the world, and the size of the data they obtain has increased considerably. However, the need and demand for visualization has increased considerably in order to facilitate the interpretation and analysis of this big data obtained. Visualization makes it easy to detect values, detect and communicate outliers in chunks of data consisting of hundreds or perhaps thousands of rows. It becomes easier to transfer these visualized data to people and to perform various operations on the data.

One of the software developed to visualize data is Qlik Sense. Qlik Sense is a Self-Service Business Intelligence and Visual Analytics Platform. Qlik Sense enables data models to be loaded easily with drag-and-drop without the need to manually edit scripts, and provides fast discovery of data with its relational engine.

## **QLIK VIEW VS QLIK SENSE**

Qlik Sense has many similarities with the previous Qlikview. However, there are also some differences. Some differences of Qlik Sense are,

- Self-Service Analytics: Given the opportunity to integrate individual data and create their own applications.
- Developed with HTML5
- Makes insights quick and easy to produce
- Does not require filters
- Has no OLAP capabilities
- Has storytelling function, data mining and smart search

### **QLIK SENSE ENVIRONMENTS**

Qlik Sense is used in three different environments; desktop, enterprise on windows and cloud editions.

*Qlik Sense Desktop:* No App sharing feature, no Autosave function, dynamic views are not supported, duplicating apps is not supported.

*Qlik Sense Enterprise:* It is Multi-cloud: Server-based or Saas, applications are centrally located on a server, Automated Data refresh and rule based security, admins are the only that can upload apps into the hubs.

*Qlik Sense Cloud Editions:* It is a Saas Service, does not have a central dedicated server, users can share, collaborate and create their dashboards via web browser, no data refresh function, all users can see each app created

#### LOADING DATA INTO AN APP

In the data manager section, the tables in the dataset loaded into the application are represented by bubbles. Here, the add data button can be used in the data manager view to add more than one table. However, data loading can be done using the script editor path by opening the data load editor view in the data manager subtab in a new tab. Here, click the plus button to create a new section, and then click the select data icon and the data file to be uploaded can be uploaded to the application by drag and drop method. When the code file of the loaded data table is seen, the load data button is clicked to complete the process of adding another table to the application. Going back to the data manager view, the newly loaded data table is represented by another bubble. When a data file containing more than one data table is wanted to be added, the plus button is clicked in the data manager view and the data file is loaded by drag and drop method. Then, the ones that want to be added to the application from the listed tables are loaded by ticking the boxes next to them. Tables added using the script editor workflow must be synchronized before specifying which tables to associate. Once this is complete, the suggested associations panel for associating data tables presents a list of suggested associations based on an

examination of the field names and field contents for associating the data tables. It correctly associates the tables to create the data model provided by this data source by clicking the apply all button. With the Load data option, the data upload process is completed. A data model is now created that can be used for visualizations.

## CREATE AN APP AND VISUALIZATION WITH QLIK SENSE

*Hub:* It is the starting point of the application and all the apps that can be accessed are found here.

*App*: It is the term used to describe a Qlik Sense file created while developing a visualization or dashboard.

Sheet View: This is where you can develop or edit your apps and take snapshots of visualizations.

There are three different visualization approaches with Qlik Sense;

- 1- Generate Insights-*Insight advisor:* Using this approach, charts are created automatically and guidance can be provided by selecting areas or key elements to guide the insight consultant to create charts based on data of interest.
- 2- Fields First-*Chart suggestion assistance*: Using when there is a specific field or fields to be displayed in a visualization. The chart type is automatically selected based on the selected field types; however, there are alternative chart types to choose from.
- 3-Charts First-*No assistance:* You can proceed without any help by first selecting the type of chart you want to display, then adding the fields that will serve as dimensions and measures, as well as other chart properties.

#### KPI VISUALIZATIONS

Key Performance Indicator is a visual cue that shows the amount of progress made towards a measurable goal. KPIs are a great choice; to measure the distance to a target. "How far ahead or behind am I?" answers the question.

The KPI visualization can show one or two metric values and is used to monitor performance. Used to get an overview of performance values central to an organization. Color coding and symbols are used to indicate how numbers relate to expected results.

Advantages

KPIs provide a quick understanding of performance in an area.

Disadvantages

KPI is somewhat limited when it comes to graphical components. Symbols can be used to help illustrate performance, but an indicator can be used if a more conspicuous component is desired.

In a KPI visualization, you can have one or two measures and it can be dimensionless. With two measures, the second value automatically becomes a complementary value and is displayed with a smaller font size.

KPI is a measurable parameter that indicates the level of achievement of a goal. For example, the number of page views on your website is not a KPI. Because pageviews don't have an absolute impact on your broad goal. Drive customer conversions from website visits: You may have a very high number of visitors to your website, but none of them turn into actual customers. In this case, the conversion rate of website visitors to customers is the right KPI for you.

KPI visualizations are becoming an essential part of the way businesses and organizations track their metrics and use them to develop agile strategies for the future.

# **SOURCES**

- 1- Qlik Sense Tutorial for Beginners Qlik Sense Training, Simon Sez IT on YouTube
- 2- Qlik Learning Portal, Getting Started with Qlik Sense
- $3-https://help.qlik.com/en-US/sense/May 2021/Subsystems/Hub/Content/Sense\_Hub/Visualizations/KPI/KPI.htm$
- 4-https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-kpi
- 5-https://humansofdata.atlan.com/2016/09/kpi-visualization/