

SAP BUSINESS OBJECTS LUMIRA ON SAP HANA

DECEMBER 13, 2017 [KAUSTUBH SATPUTE](#) [LEAVE A COMMENT](#) [EDIT](#)

Welcome one and all to another reporting on HANA tutorial. In this one, we try to the understand the SAP Business Objects Lumira. Like [Explorer](#), it is a data exploration tool. Lumira opens up avenues of data exploration like never before. It now allows a business user to not rely on their IT developers to create reports for them whenever they wish to do some slice and dice data exploration.

Explorer had it's limitations wherein the business user still needed someone to create an information space first which created a dependency on IT. But lumira users can connect to HANA views directly by themselves and use it for building reports. Lumira, unlike explorer also allows the user to do transformations to data in order to cleanse the dataset as per the user's demand. It is a really powerful tool and is one of SAP's best offering currently in this use case. The tool is also optimized to run with the SAP HANA database. So it's great with respect to performance too.

Note: In Mid-2017, SAP plans to provide a single solution combining the data exploration capabilities of lumira and the dashboarding capabilities of SAP Design Studio (It's in our next tutorial.. just in case you don't know about it). This tool will be called Lumira 2.x which will have 2 components – Lumira Discovery (for data exploration) and Lumira Designer (for dashboards).

SAP Business Objects Lumira Key Points

Report Complexity: Medium

Report Users: End Users/Business Users/Business Analysts

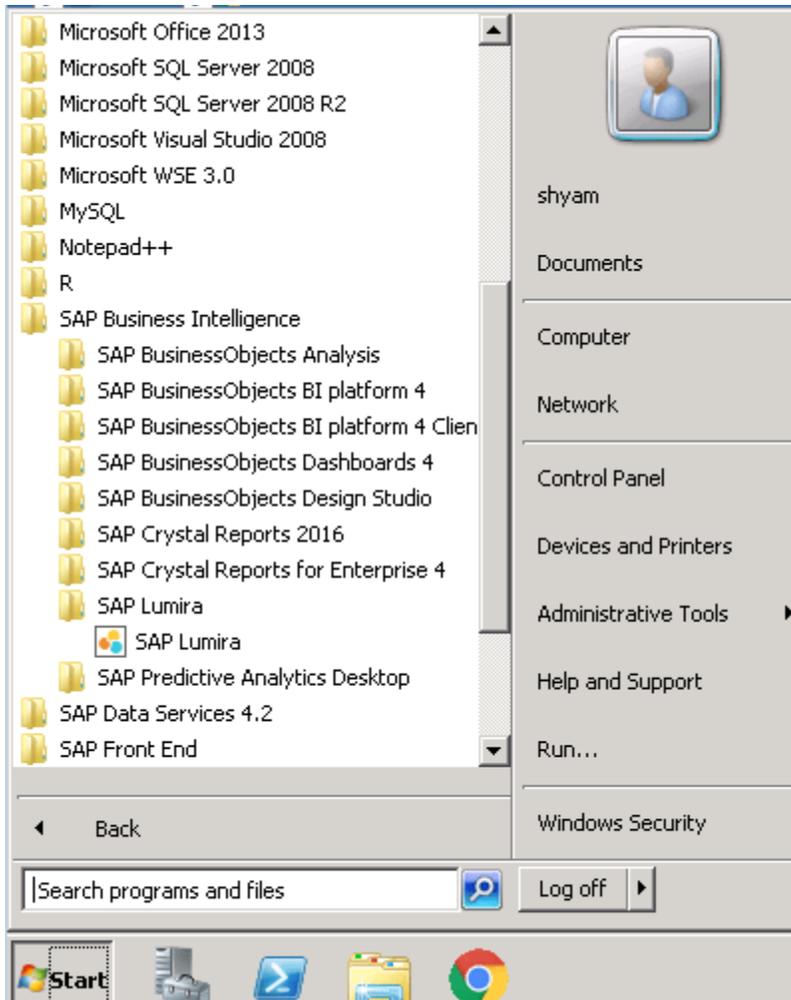
Report Type: Data Discovery

Frequency of use in realtime projects: Medium-High

Effort to develop: Medium

Creating our first SAP Business Objects Lumira Visualization

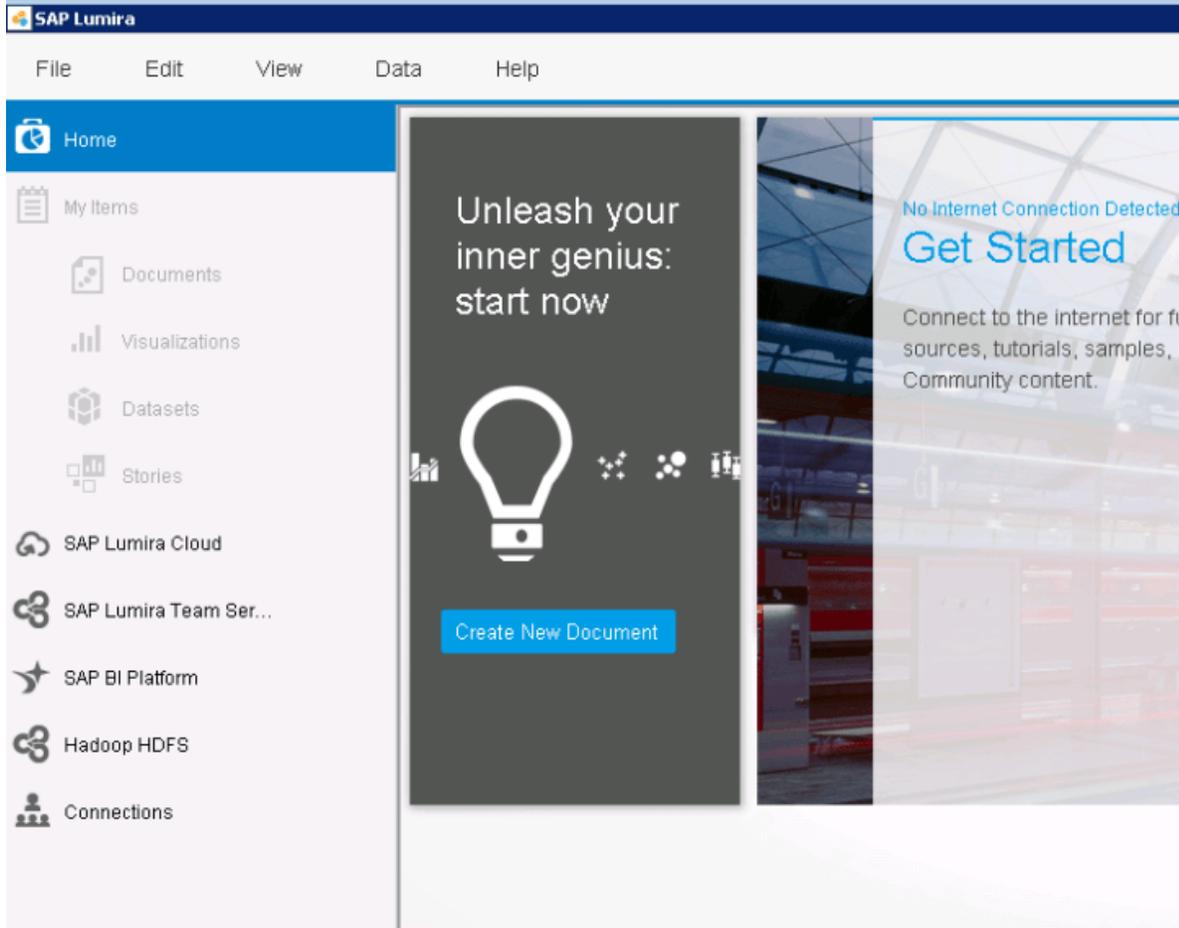
You can find lumira under your SAP Business Intelligence Folder and SAP Lumira sub folder in the start menu. Click on it to open.



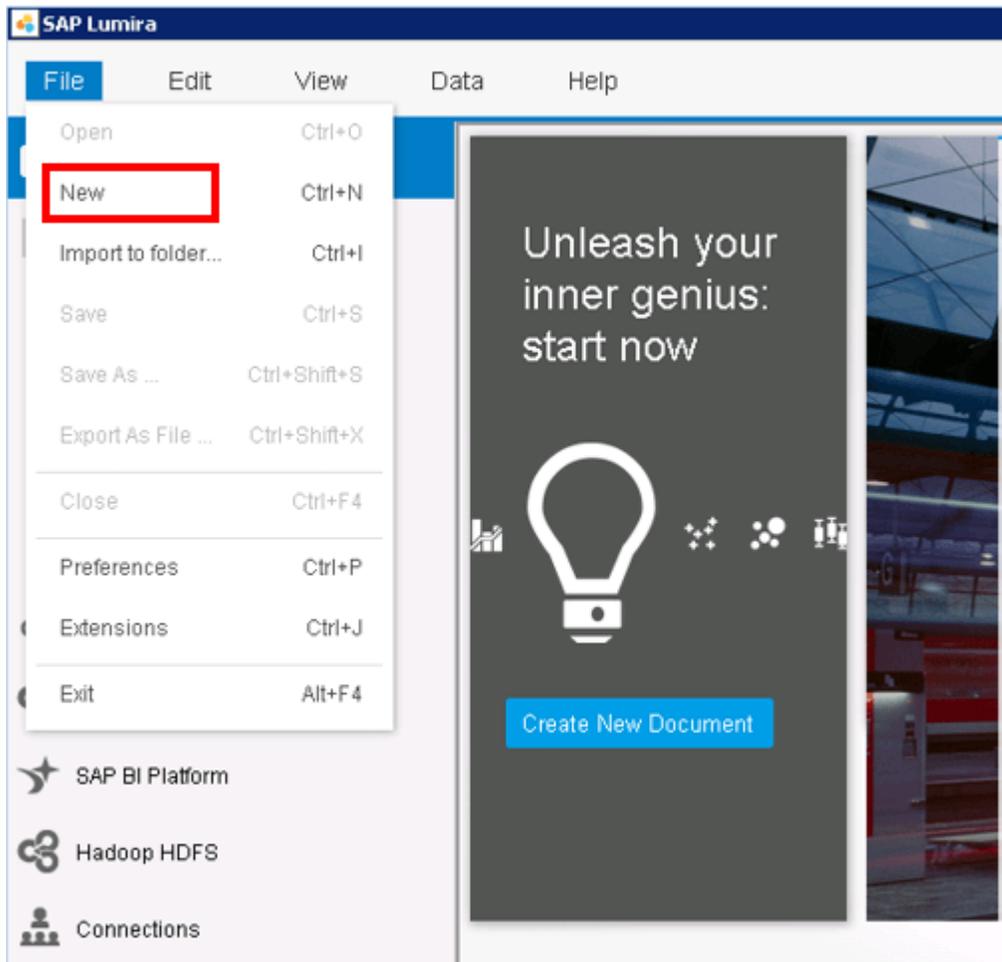
A beautiful window opens up to start the application... Wait for it.



The tool opens as below. Click on File from the context menu.



Click on New to start creating a new report.



The next step would now ask you for the source of your data.

Select the “Connect to SAP HANA” option.

Add new dataset

Select a Source:

-  **Microsoft Excel**
Load an Excel Worksheet as a dataset
-  **Text**
Load a text file (*.csv;*.txt;*.log;*.prn;*.tsv) as a dataset
-  **Copy from Clipboard**
Copy from Clipboard
-  **Connect to SAP HANA**
Connect to data in an SAP HANA View 
-  **Download from SAP HANA**
Download data from an SAP HANA view as a dataset
-  **Universe**
Connect to a Universe and download a dataset
-  **Query with SQL**
Run freehand SQL on a database to download a dataset
-  **Connect to Hadoop**
Load HDFS files as a Data Set

In the next step, you would be asked to provide the connection details to this HANA system where you wish to source data from. Contact your system administrator if you are unaware of the

details to provide here.

Add new dataset

Connect to SAP HANA

Server:

Instance/Port:

Authenticate by Operating System (SSO)

User:

Password:

Save Password

Connect

Previous

Next

I've provided the details for my system below.

Once done, press Connect.

Add new dataset

Connect to SAP HANA

Server:

Instance/Port:

Authenticate by Operating System (SSO)

User:

Password:

Save Password

[Connect](#)



[Previous](#)

[Next](#)

The Connecting.. sign would indicate that the connection is being established.

Add new dataset

Connect to SAP HANA

Server:

Instance/Port:

Authenticate by Operating System (SSO)

User:

Password:

Save Password

 Connecting 

Once connected, the below screen opens up which displays all the available packages the user can see in the HANA system. These packages contain the information views which would act as source of data for the Lumira reports.

As seen below, we have our 0TEACHMEHANA package which houses all the views we created earlier in the tutorial

Add new dataset

Select a SAP HANA View

Dataset Name:

Find

Available Views (369)

- 00_HANA_UKK (4)
 - ACT_ANA_VIEW1 (ACT_ANA_VIEW)
 - COPA_CALC_VIEW1 (COPA_CALC_VIEW1)
 - COPA_CALC_VW_WSTAR (COPA_CALC_VW_WSTAR)
 - COPA_JOIN_CALC_VW_GRP (COPA_JOIN_CALC_VW_GRP)
- 0TEACHMEHANA (4)
 - EMPLOYEE (EMPLOYEE)
 - EMP_FINANCIALS (EMP_FINANCIALS)
 - SALES_SCRIPT (SALES_SCRIPT)
 - SALES_VIEW (SALES_VIEW)
- 0_0HANA_VER (6)
 - CALC_VW_SCR1 (CALC_VW_SCR1)
 - CALC_VW_WSJ (CALC_VW_WSJ)
 - COPA_ACT_AN_VW (COPA_ACT_AN_VW)
 - COPA_ACT_PLN_GRP (COPA_ACT_PLN_GRP)

Previous

Next

Let's create our view on the EMPLOYEE view. Double click on this view inside of the 0TEACHMEHANA package. As soon as you do this, it also appears on the right pane.

Press Next.

Select a SAP HANA View

Dataset Name: EMPLOYEE

Find

Available Views (369)

- 00_HANA_UKK (4)
 - ACT_ANA_VIEW1 (ACT_ANA_VIEW)
 - COPA_CALC_VIEW1 (COPA_CALC_VIEW1)
 - COPA_CALC_VW_WSTAR (COPA_CALC_VW_WSTAR)
 - COPA_JOIN_CALC_VW_GRP (COPA_JOIN_CALC_VW_GRP)
- 0TEACHMEHANA (4)
 - EMPLOYEE (EMPLOYEE)**
 - EMP_FINANCIALS (EMP_FINANCIALS)
 - SALES_SCRIPT (SALES_SCRIPT)
 - SALES_VIEW (SALES_VIEW)
- 0_DHANA_VER (6)
 - CALC_VW_SCR1 (CALC_VW_SCR1)
 - CALC_VW_WSJ (CALC_VW_WSJ)
 - COPA_ACT_AN_VW (COPA_ACT_AN_VW)
 - COPA_ACT_PLN_GRP (COPA_ACT_PLN_GRP)

EMPLOYEE

Previous Next

In the next step, we select the dimensions and measures required to build the report we need. Since we have only 3 fields, let's take all of them. Mark all the checkboxes to select as shown below.

Press the Create button when done.

Add new dataset

Select Measures and Dimensions

Show only selected

Measures (1)

Find

| <input checked="" type="checkbox"/> | Measure Name ↓ |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> |  SCORE Sum |

Dimensions (2)

Find

| <input checked="" type="checkbox"/> | Dimension Name ↓ | Filter | Values Preview |
|-------------------------------------|---|---|-----------------------|
| <input checked="" type="checkbox"/> |  DATE |  | Click here to see sam |
| <input checked="" type="checkbox"/> | ABC EMP_ID |  | Click here to see sam |

Previous

Next

Create

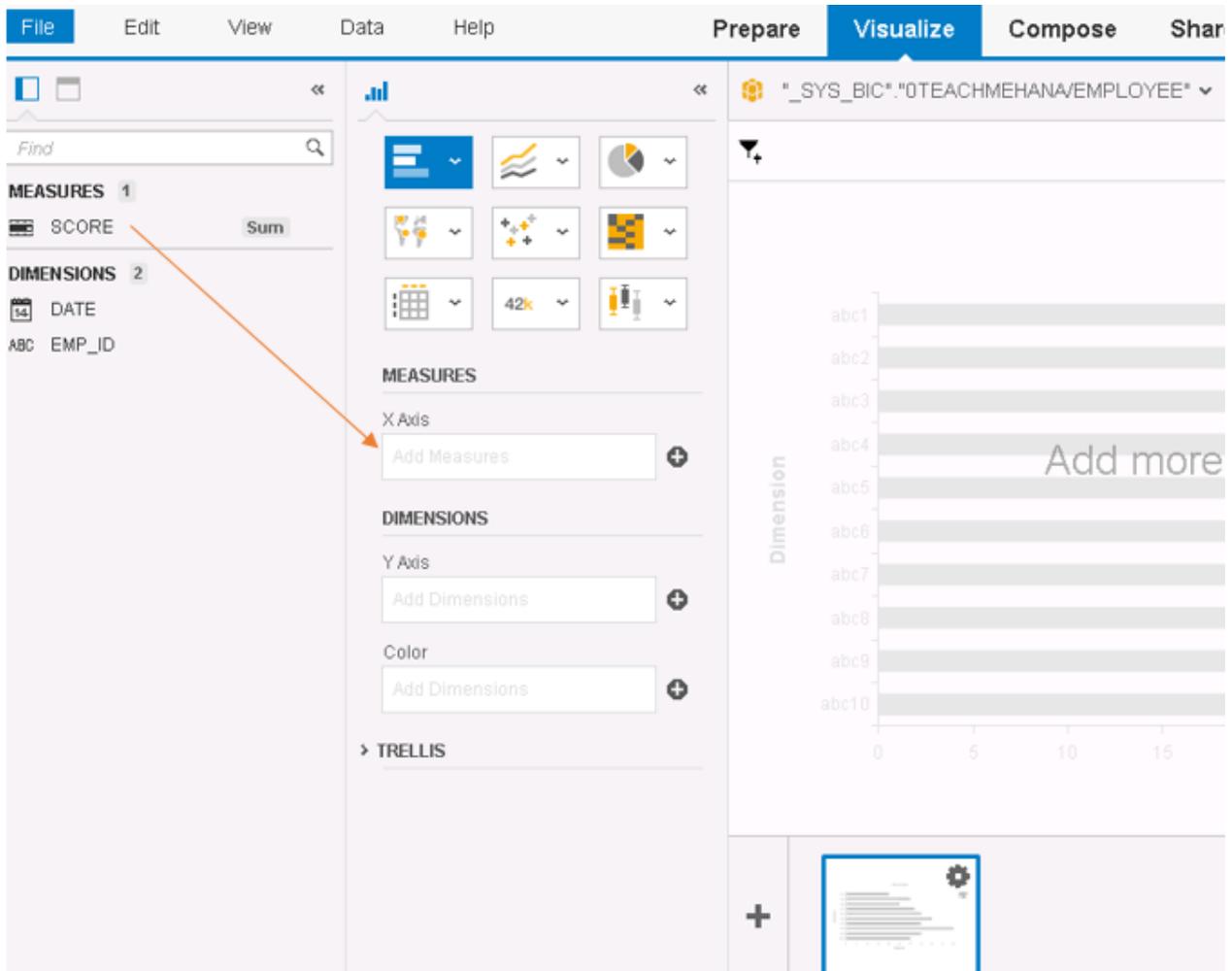
Like most other BO reports, on the left side you have the list of all fields now available to go into the report. In the middle, you have the chart selector which where you would provide the type of chart you wish to create and. On the right, what you have is the output of this report that was built.

Thus, you can see your report output change, as you are building it.

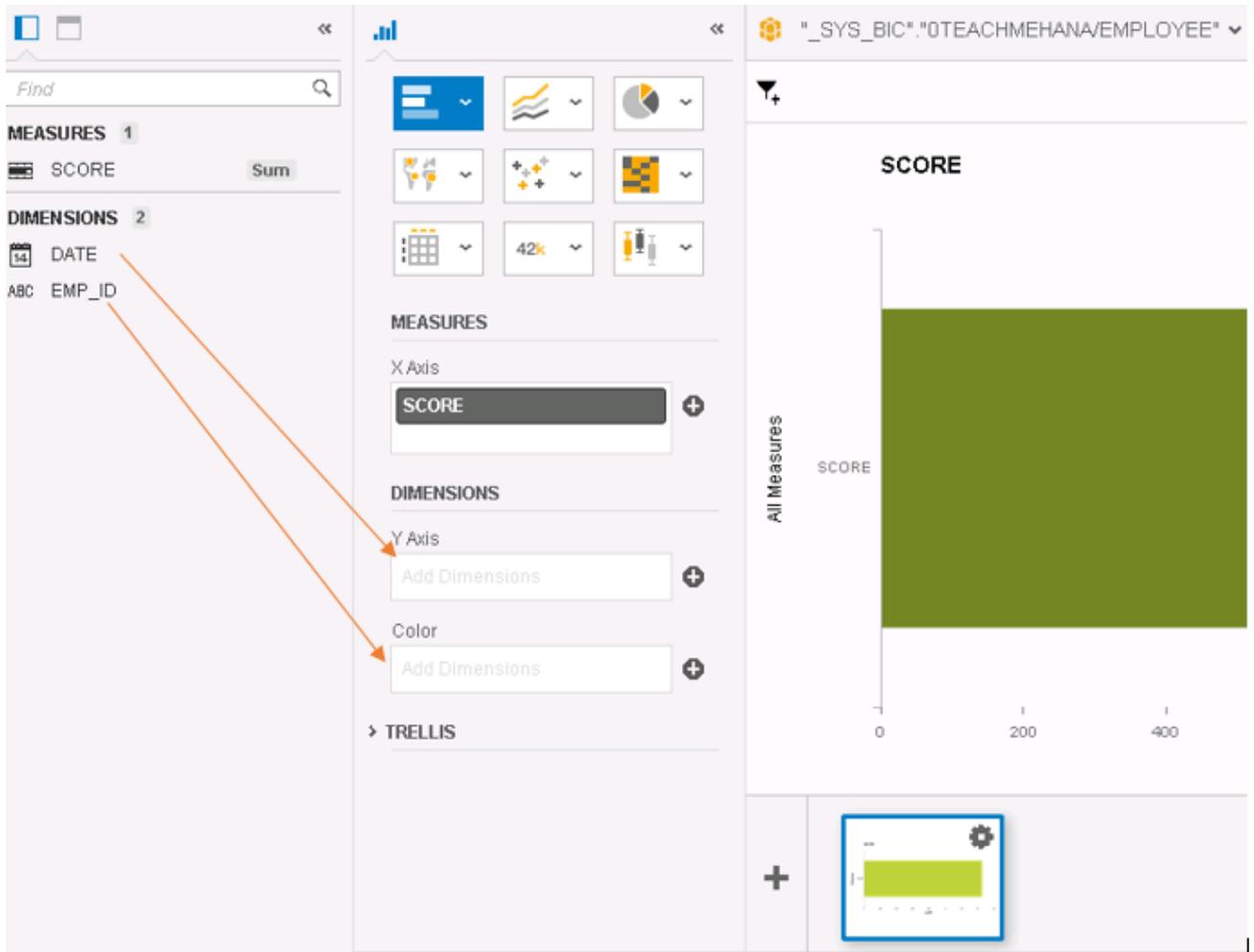
If you are familiar with graphs or charts or even basic mathematics, you would know that on a 2-dimensional plane, you have an X-Axis and a Y-Axis.

Pull the field you wish to see on the X-Axis of the report to the X-Axis field.

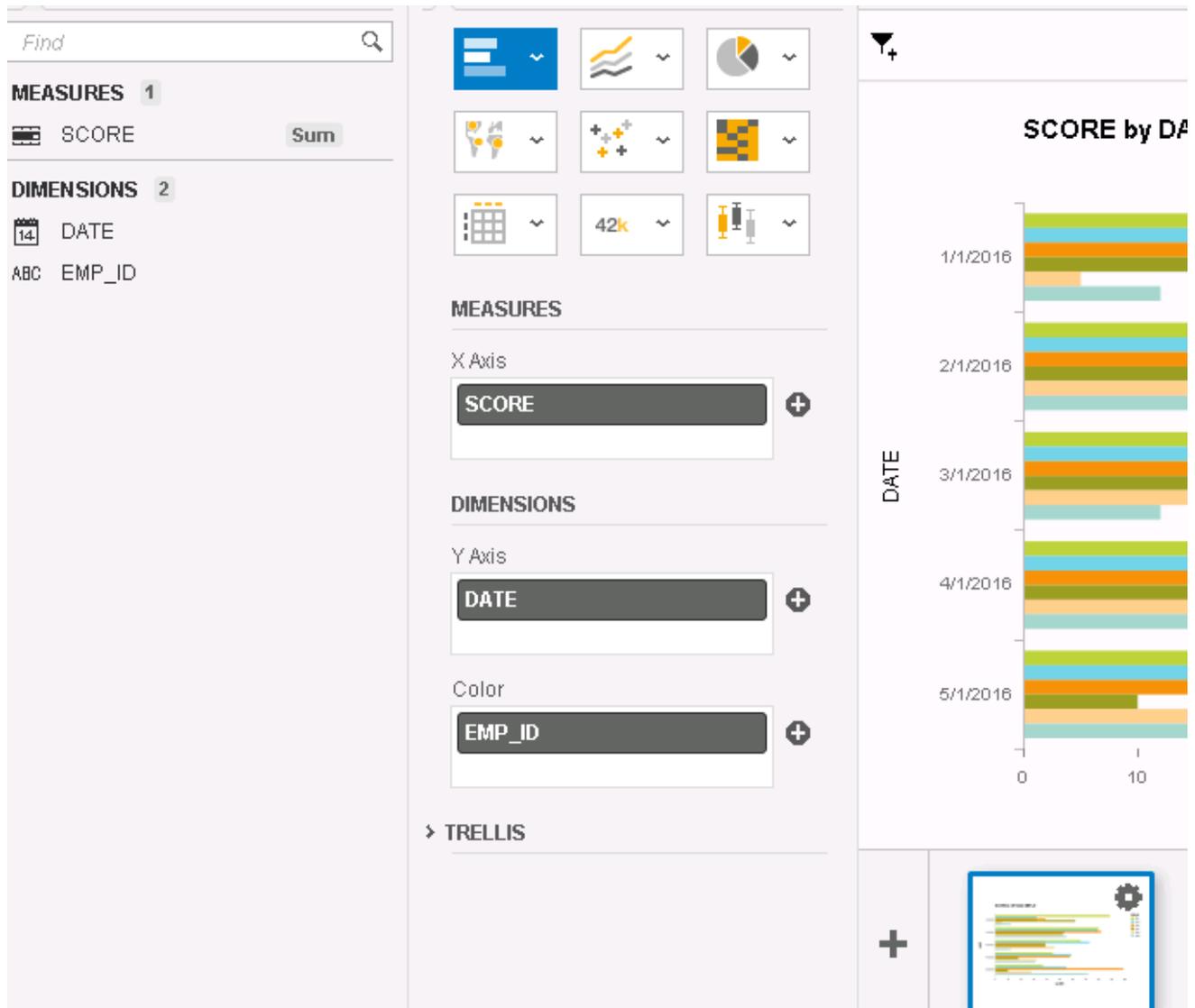
In this example, we pull the field SCORE to the X-Axis as shown below.



Now, we need to decide what goes on the Y-Axis. Let's analyze SCORE by DATE. Pull in DATE to Y-Axis. We have another field called "Color". Let's pull employee ID (EMP_ID) into here. This will ensure that the data splits into different colors for each EMP_ID for each unique DATE.



Once these fields are in in, it should look as below.



On the right side of this screen would also be the output of this report.

As seen below, the SCORE is on the X axis, DATE and EMP_ID on the Y axis slip into different colors based on the EMP_ID.

This was our very first Lumira visualization. Another interesting feature is that you can do more analysis in fresh visualizations by pressing the Plus button marked below. It would add a fresh new report as a new page below.

Let's try it out. Press Plus.



SCORE by DATE and EMP_ID

