Visualizing Discovery Paths

In our digital society companies gain access to more and more data which also increases the complexity of analyzing and understanding the data. To solve this problem most companies use business intelligence tools to explore and find insights within the data. How these insights and paths of discoveries are made is often hard to explain and share with others. We tackled this problem for a company called Qlik and their BI tool Qlik Sense.

The purpose of many business intelligence tools is to improve these decisions by making data easy to visualize and understand. Qlik Sense allows users to visualize and explore data by filtering it (called making selections). For example, if you are a sales manager for a company and you have data over all the products, sales areas, sales employees etc., Qlik Sense allows you to filter the data and look at smaller sets of data. For example, the lowest sales performer in a certain area or the best selling product for a certain sales employee. However, at the time of this project Qlik Sense did not support visualization of a user’s selection history. Hence, users were not able to share their path to discovery.

This project aimed to find and implement the most suitable way of solving that problem. In our project we show, taking user and expert feedback into consideration, that a suitable way of visualizing discovery paths is done as a tree representation of the selections made by the user. Furthermore, the result of this project forms a well working solution and a solid foundation for further development towards a complete product.

But why is this important? What can user gain from a visualization of the selection history? The final product in this project had two main goals. Firstly, to help Qlik Sense users to share and explain their result to other people by using our solution. Secondly, to make it easier for users to explore and analyzing the data with Qlik Sense. This was done by making our product interactive by allowing users to step back and forward in their selection history. One could compare this to saving bookmarks and viewing the history tab when browsing the internet.

The solution to track and visualize how a user navigates within a program opens up new possibilities since it creates an understanding of the program from a user’s point of view. This could, ultimately, lead to completely automated gathering of user data as it enables the program to track user behavior.

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