SOLYP Management Dashboard

User Manual
Version 1.0
July 2014

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1.0   Introduction

1.1.   Vision

The SOLYP Management Dashboard application is a data visualization tool specially developed for top level management (including the CEO). The application contains an easy-to-read, easy-to-use, multi-page and "Powerpoint" like user interface, which shows several graphical representations or visualizations of historical and current data and KPIs. The application has at least two elegant controls for efficient operation and optimal usability of the visualizations. The application contains high-level information and also lower level data, so the users can drill-down and see different levels of data aggregation. The application is developed as a tablet application for a Windows environment. The communication with SOLYP's web service back-end is out of the scope of this project. A simplified minimal back-end developed on JSON, jQuery or Java can be considered for this project purposes. Key technologies for development are HTML5 and JavaScript.

1.2.   Usage Scenarios

The application has been developed following several usage scenarios for different departments of a car company. Some summarized examples of the scenarios are presented below:

Sales:

- The Chief of Sales wants to see the evolution over time of the Total Sales for all divisions globally and per region to present it during the annual sales board meeting
- The Director of Global Sales and Marketing wants to have a global overview of all vehicle units sold and customer complaints per product line.

Finance:

- The CEO needs to see the evolution over time of the Net Profit Margin in % for all divisions globally and per region to perform the annual strategic planning.
- The Chief of Finance needs to have an overview of Account Payables and Receivables for the previous fiscal year (euro) per region and country

Competitors:

- The Chief of the car division needs to review different KPI information about the current competitors to have an overview of the market conditions and make strategic decisions.
- He needs to see different strategic KPIs and above all revenues separated in quarters.
- He also wants to have a full overview of all competitors' names.

1.3.   Software Architecture

The current project only considers phase number one, as it is only a three months long endeavor.
The SOLYP Management Dashboard has been conceived as a Windows 8 Application and contains a set of visualizations created using the following technologies: HTML5, CSS and JavaScript. The application utilizes JQuery and Open JS Libraries. It also contains test data as input. The image below is a graphical representation of the software architecture.
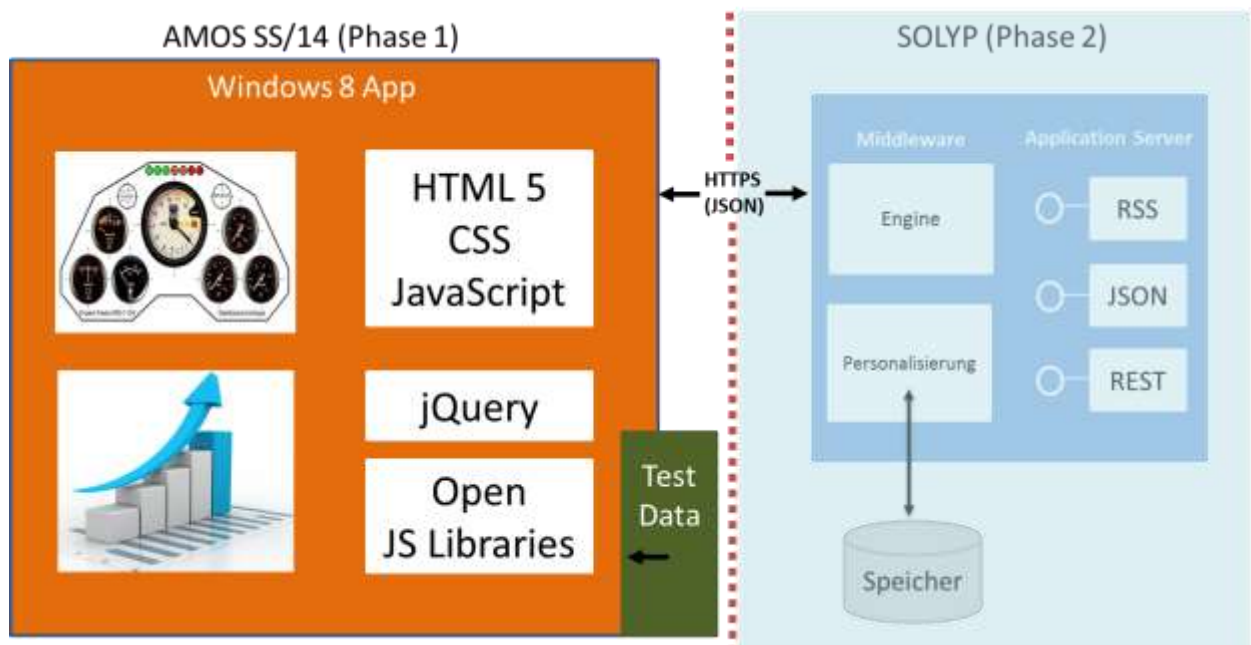
2.0   SOLYP Management Dashboard Usage

2.1.   Starting with the Dashboard IT Inventory

After you have installed the application on your computer running Windows 8 or on your Windows tablet, go to the start screen and click on the application Icon. The application starts automatically.

2.2. SOLYP Management Dashboard Main Screen

The application is separated in five main menus: **Competitors, Finance, Sales, Global Projects and Human Resources**. The five menus are above the tiles and are formatted in white characters:

2.3. Competitors

The competitors menu is divided in two tiles: **Card Comparison and All Competitors cards**.

2.3.1. Cards Comparison

To enter to this visualization, click on the first tile called Card Comparison.

This visualization has been created to compare different entities and to have an overview of different relevant data such as KPIs or sales results.


The leave the Card Comparison visualization, the user just needs to click on the white arrow on the top left corner of the screen. This functionality applies to all other visualizations.

By pressing on the black arrows the application will automatically change the data presented on the table for new information. In this case, new KPIs.

By selecting two or more cards a button appears between the black arrows. The button allows the user to compare the current entities.
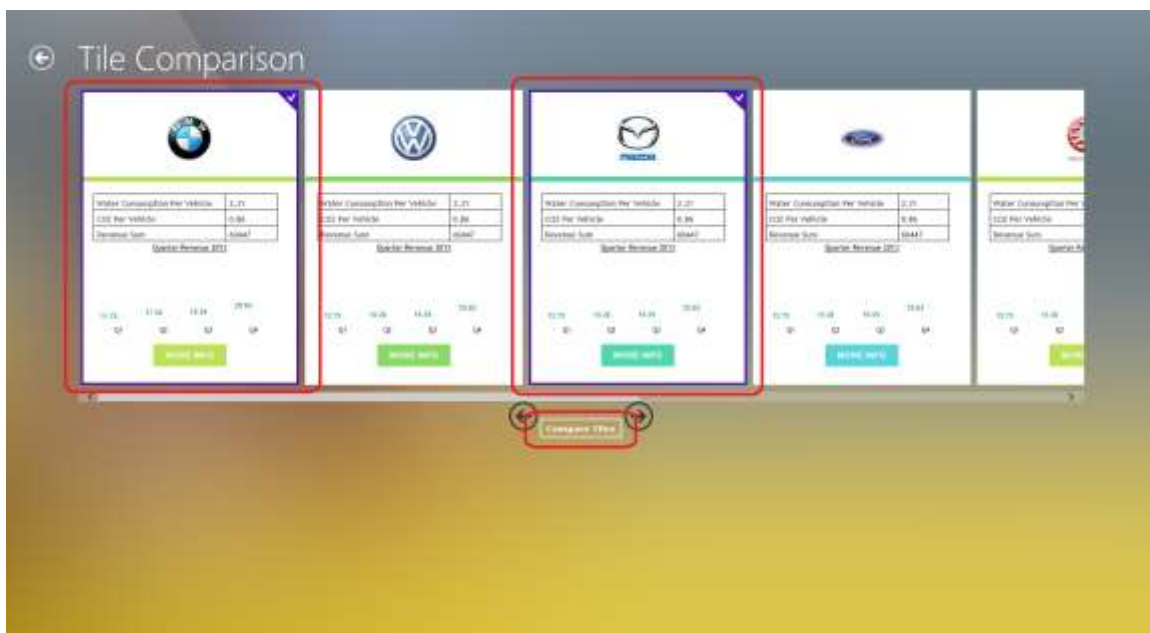
After pressing the button the non-selected entities disappear from the screen. To go back, the user just needs to press on the button "Remove Selection".
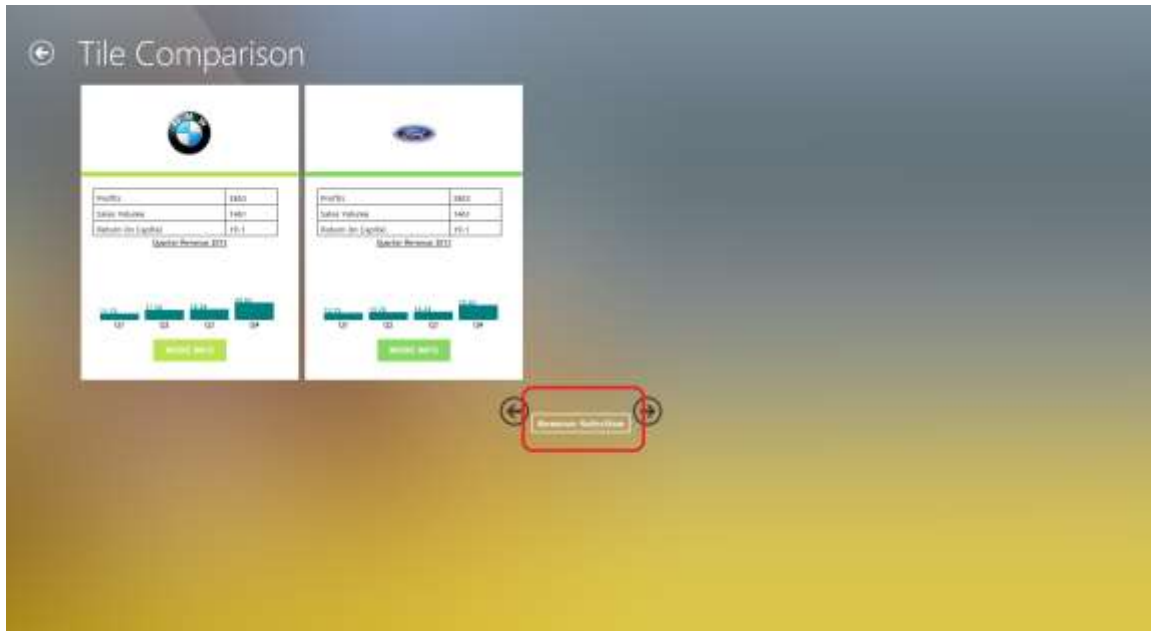
2.3.2.   All Competitors Cards

To enter to this visualization, click on the second tile called Showing All Cards

This visualization has been created to have an overview of all possible entities that compose the database. In this case all the competitors.
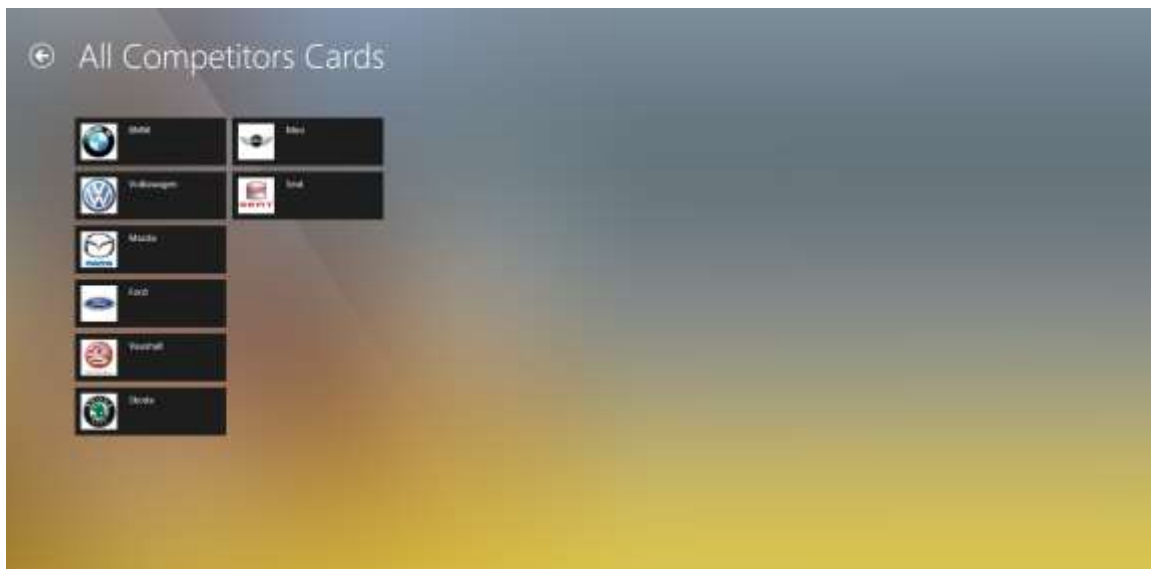
By clicking on one entity a small screen appears that displays further detailed information related to the entity. In this case, all KPIs in the database related to the selected competitor.

2.4.   Finance

The finance menu is divided in two tiles: **Net Profit Margins and Balance.**

2.4.1.   Net Profit Margins

To enter to this visualization, click on the first tile called Net Profit Margins.

This visualization has been created as a line chart to have an overview of a particular data set such as the Net Profit Margins (in %) and review its evolution over time.

It is possible to alter the visualization by clicking on one of the buttons on top, on the left side or at the bottom of the screen.

- By clicking on the arrow next to Worldwide it is possible to change the data set to a different one. In this case the user can observe the results for several regions.
- By clicking the buttons on the left side the colored lines appear and disappear from the screen.
- By clicking on the buttons at the bottom of the screen the user can configure options of the chart, for example if the application should show data when hovering over the data points
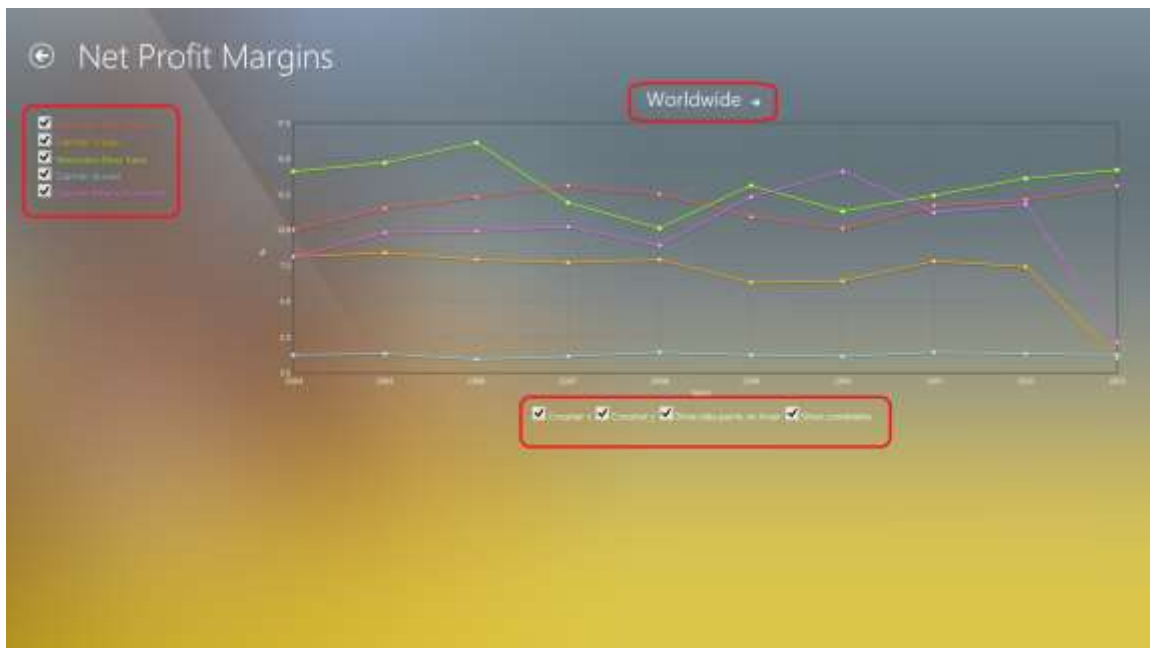
2.4.2. Balance

To enter to this visualization, click on the second tile called Balance.

This visualization has been created as a treemap to have an overview of hierarchical data such as the values of Account Payables and Account Receivables by using nested rectangles.

The visualization contains two levels of data. The first is indicated by the different colors and the second one by the divisions inside one color.

It is possible to select a different set of data by clicking on one of the two buttons on the top right. In this case, the user can observe the distribution of account payables and receivables for the displayed countries and regions
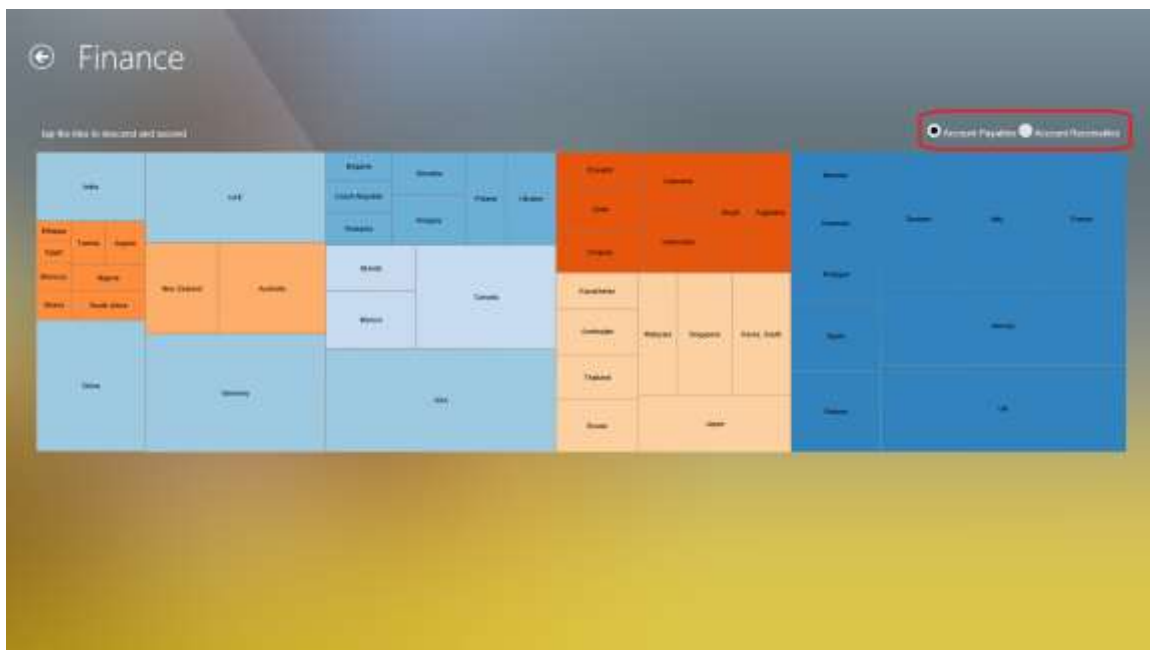
The user can also zoom one of the sets by taping or clicking inside it. The chart will then make a zoom and will only display the selected data set. To go back, the user only needs to click or tap again
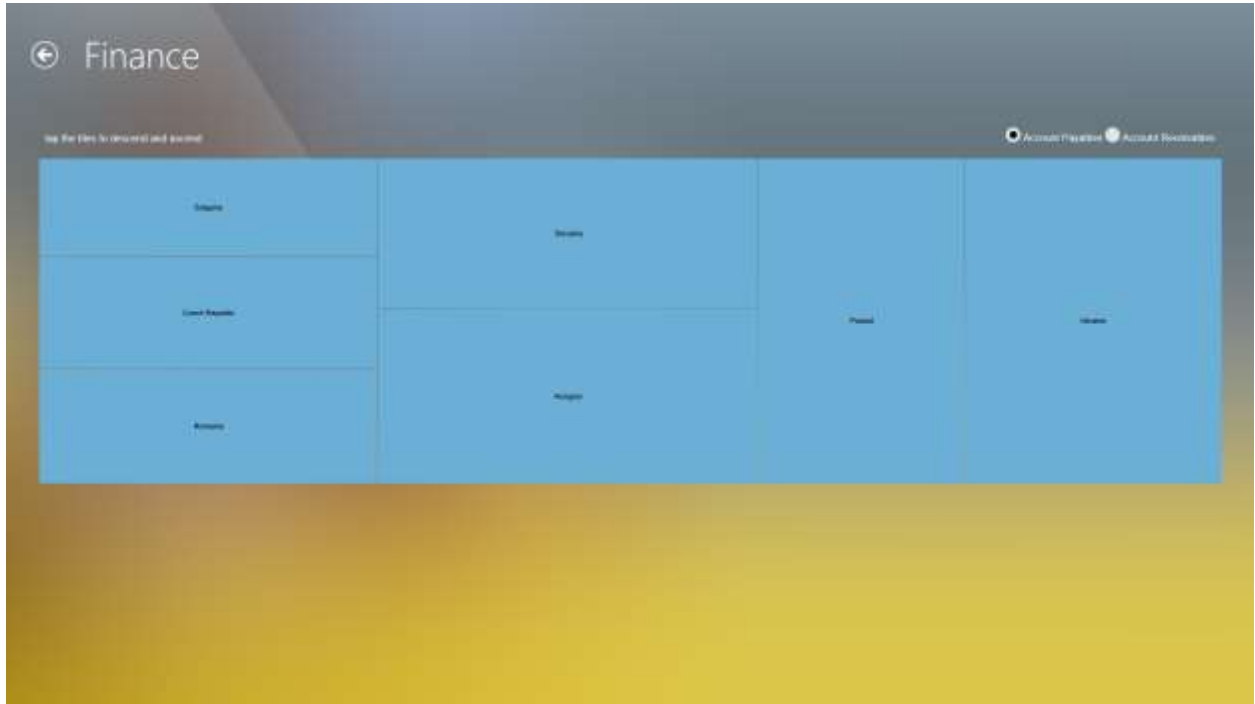
2.5.   Sales, Global Projects and Human Resources

The sales menu is divided in two tiles: **Total Sales and Customer Complaints**. The global projects menu is divided in two tiles: **Total Costs and Global Projects.** The human resources menu is divided in only one tile: **Employee Base.**

The menus above have been put together because they only represent an extension of the functionalities already portrayed. The sales and global projects menus contain a line chart and a treemap to represent information about sales and global projects. The human resources menu, however, only contains a line chart that portrays information about the employee base.

The objective of these menus is to demonstrate that the same visualization can be applied to different areas within a company, as the visualizations have been developed as interchangeable modules, which represents an advantage for further development and expansion.