



ZERO TO HERO WITH SAP ANALYTICS CLOUD

ANA264

EXERCISE 4:

How to add Smart Discovery to your data analysis in SAP Analytics Cloud.

Las Vegas:
Ian McAlpine / Matthias Badaire

Bangalore:
Jayanth Sunder Kashyap / Narashimman K S / Samarth Narayan

Barcelona:
Stephane Perdigeon / Sven Frick

TABLE OF CONTENTS

INTRODUCTION3

CREATING A SMART DISCOVERY BASED ON AN EXISTING MODEL4

INTRODUCTION

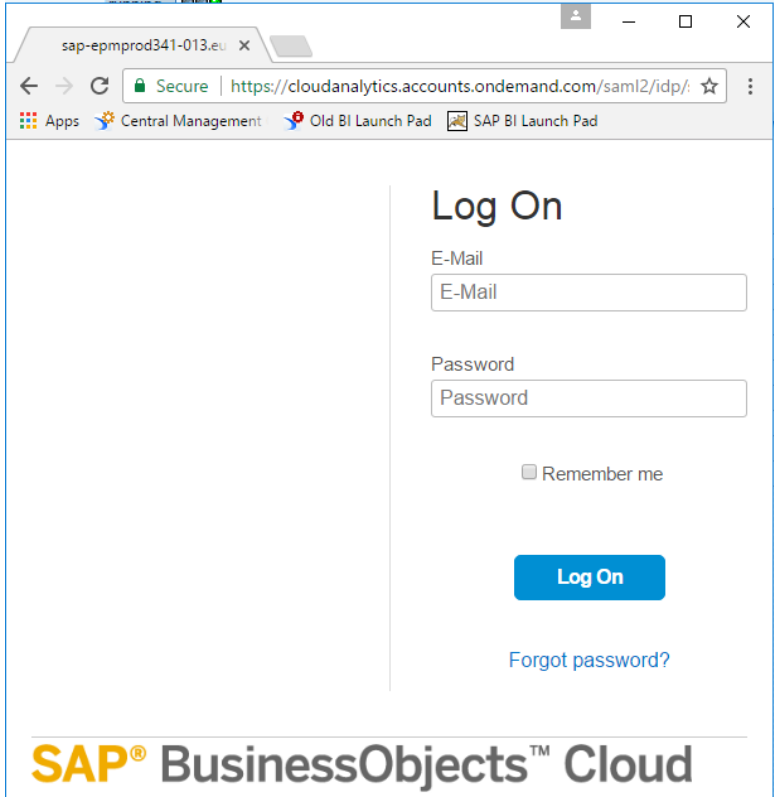
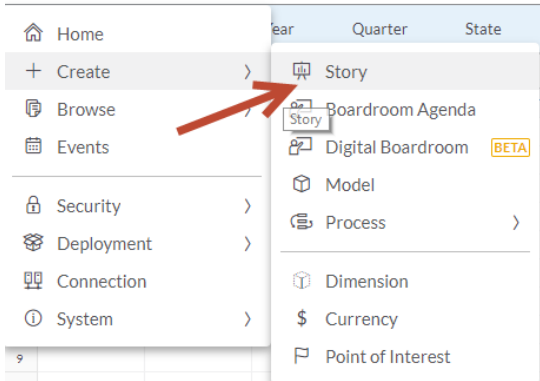
The goal of this exercise is to show you some of the Predictive features you can leverage in SAP Analytics Cloud (SAC) such as:

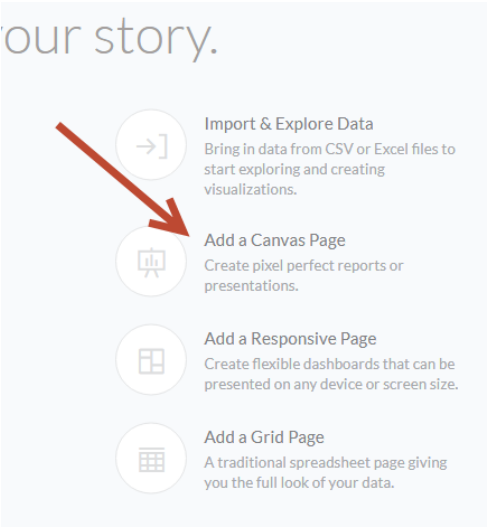
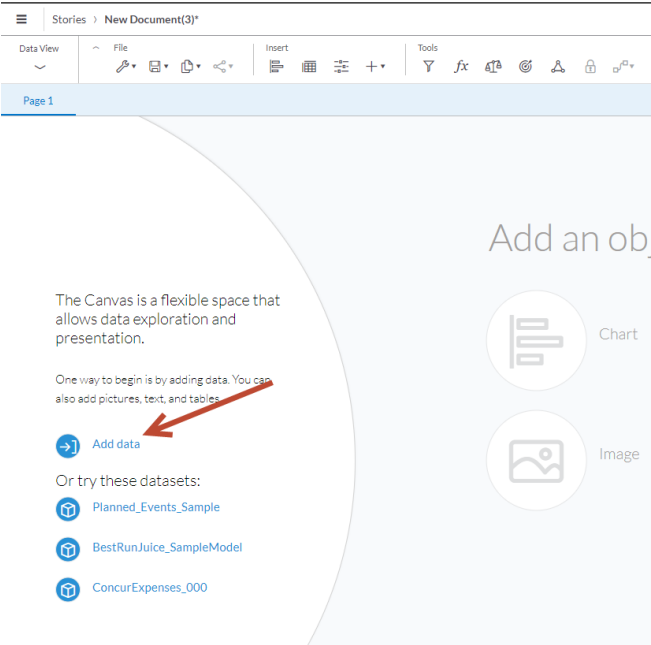
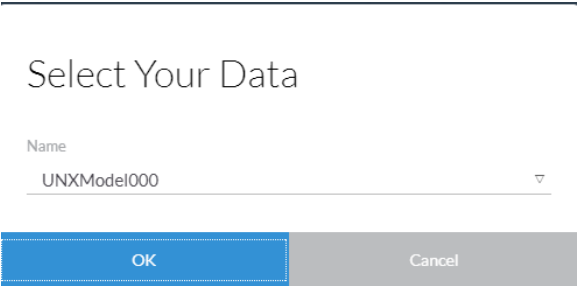
- Key influencers
- Unexpected values, and
- Simulation

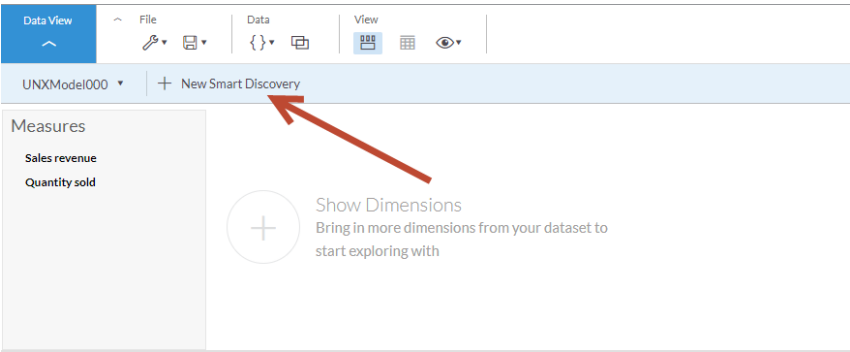
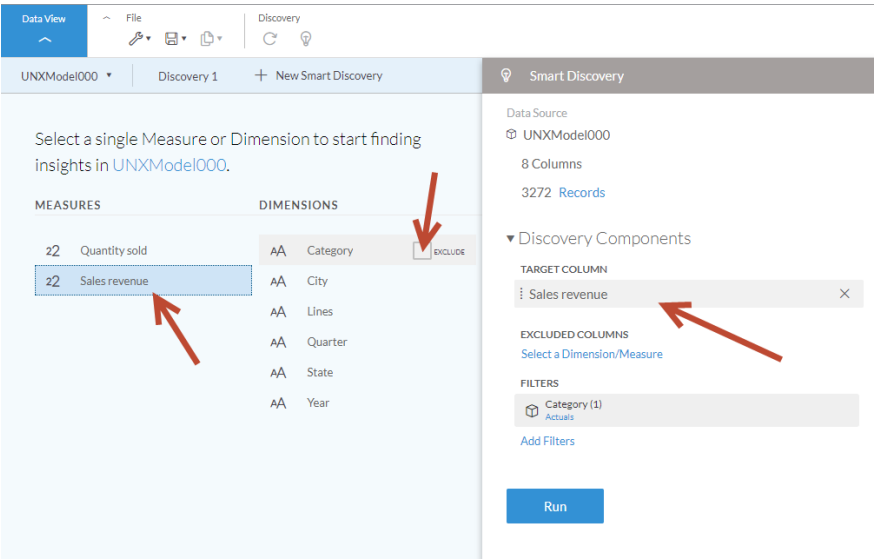
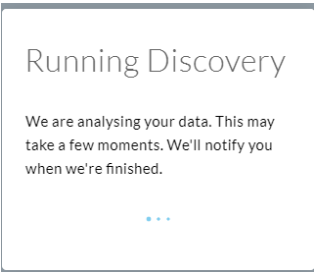
To demonstrate these features, we will use an acquired model that we created previously.

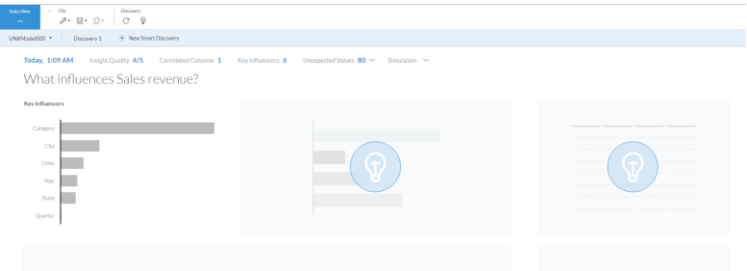
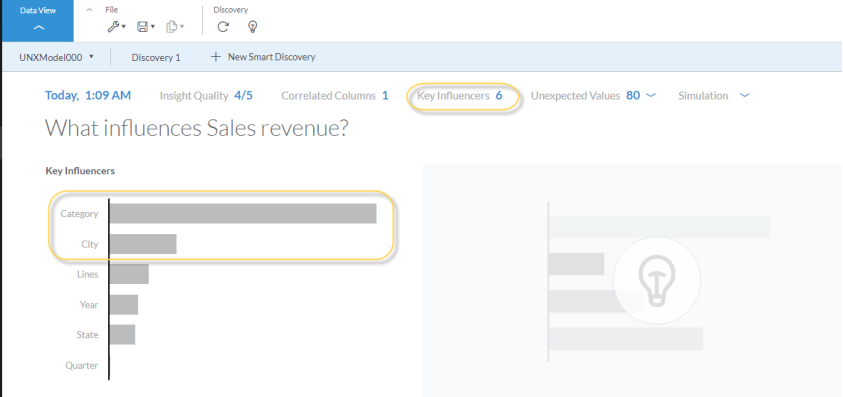
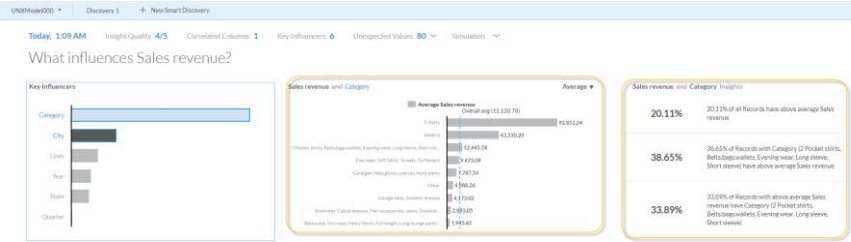
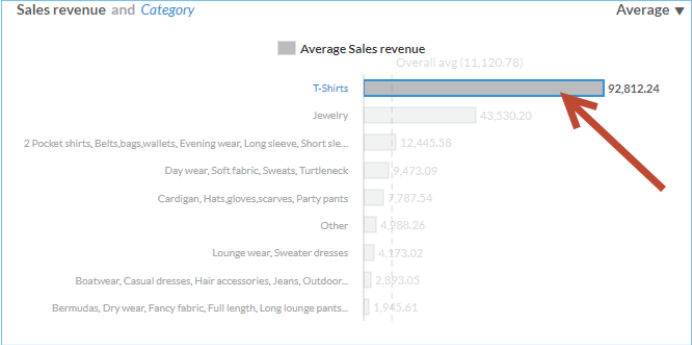
CREATING A SMART DISCOVERY BASED ON AN EXISTING MODEL

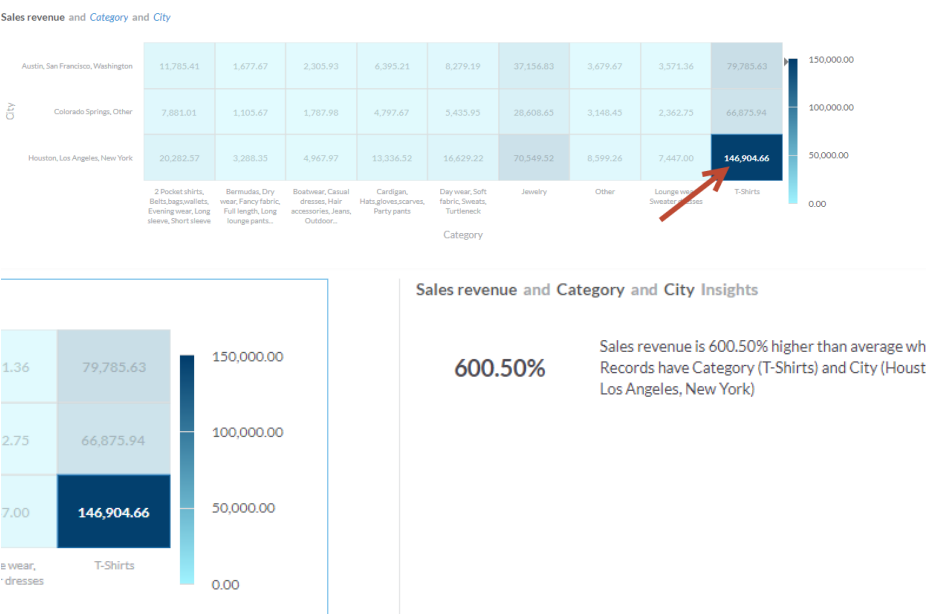
We are going to use the model that we created in the Exercise 2, *UNXModelXXX*, where XXX is the number assigned to you.

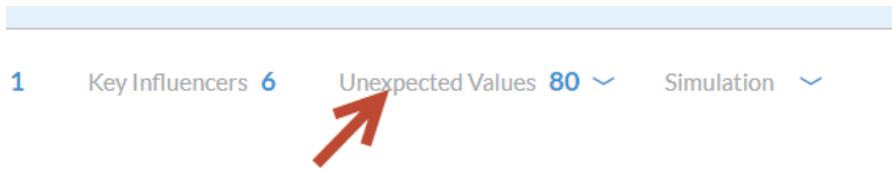

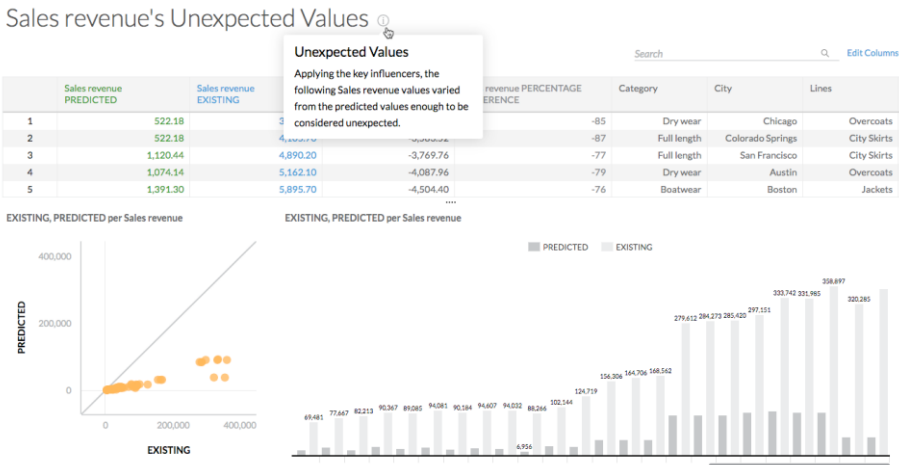

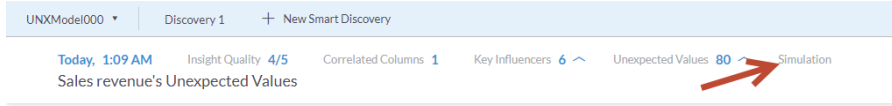
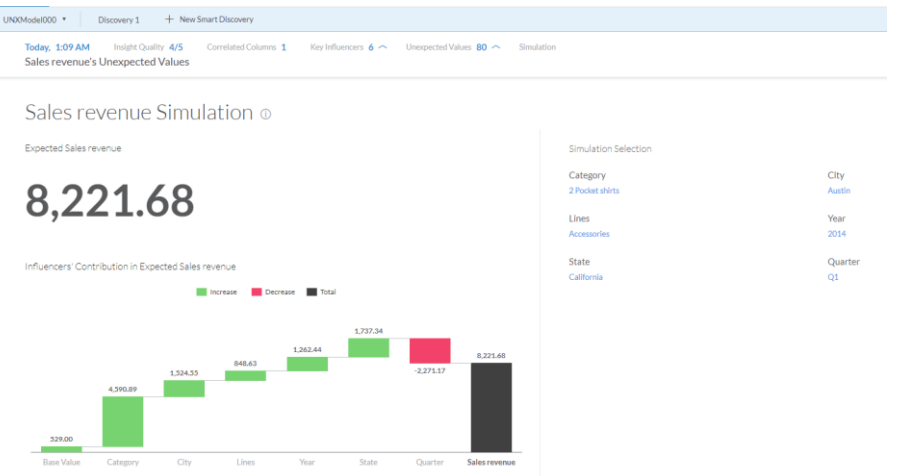
Explanation	Screenshot
<p>Launch Chrome browser, and access the Cloud for Analytics system URL: https://sap-epmprod341-013.eu1.sapbusinessobjects.cloud</p> <p>Log into the system using your credentials: teched17ANA264+XXX@gmail.com ...where XXX is the number assigned to you (for example if you have 089, the email address will be: teched17ANA264+089@gmail.com)</p> <p>Password: Password1</p>	
<p>We are going to create a new Story.</p> <p>Click <i>Hamburger</i> → <i>Create</i> → <i>Story</i>.</p>	

Explanation	Screenshot
Click <i>Add a Canvas Page</i> .	 <p>The screenshot shows a light blue background with the text "our story." at the top. Below it are four circular icons with corresponding text: "Import & Explore Data" (Bring in data from CSV or Excel files to start exploring and creating visualizations.), "Add a Canvas Page" (Create pixel perfect reports or presentations.), "Add a Responsive Page" (Create flexible dashboards that can be presented on any device or screen size.), and "Add a Grid Page" (A traditional spreadsheet page giving you the full look of your data.). A red arrow points to the "Add a Canvas Page" icon.</p>
Choose the data that we want to analyze by clicking <i>Add data</i> .	 <p>The screenshot shows a software interface with a menu bar (Data View, File, Insert, Tools) and a toolbar. Below the toolbar is a section titled "Add an object" with a large circular graphic. Inside the circle, text reads: "The Canvas is a flexible space that allows data exploration and presentation. One way to begin is by adding data. You can also add pictures, text, and tables." Below this text is a list of datasets: "Planned_Events_Sample", "BestRunJuice_SampleModel", and "ConcurExpenses_000". A red arrow points to the "Add data" button, which is represented by a blue icon with a right arrow.</p>
<p>From the list, select the model that you created earlier using data from the SAP BI universe, <i>UNXModelXXX</i>, where <i>XXX</i> is the number assigned to you.</p> <p>If you did not complete Exercise 2, you can use the backup model, <i>UNXModel000</i>.</p> <p>Click <i>OK</i>.</p>	 <p>The screenshot shows a dialog box titled "Select Your Data". It has a "Name" field with the text "UNXModel000" and a dropdown arrow. Below the field are two buttons: "OK" (blue) and "Cancel" (gray).</p>

Explanation	Screenshot
<p>The <i>Data View</i> will appear.</p> <p>To start exploring your data, normally you would choose a measure and then click <i>Show Dimensions</i> to add the dimensions you want to explore.</p> <p>But this time we will use the Smart Discovery feature.</p> <p>Click on <i>New Smart Discovery</i>.</p>	
<p>To perform a Smart Discovery, you need to choose a single measure or dimension. You can also exclude measures and dimensions from the Smart Discovery which you already know influence the result (e.g. you might exclude Temperature dimension if performing a Smart Discovery on ice cream sales).</p> <p>Select the measure <i>Sales revenue</i>.</p> <p>We will not exclude any dimensions.</p> <p>Click <i>Run</i> to generate the Smart Discovery.</p>	
<p>The Smart Discovery process will take a few moments before the results are displayed.</p>	

Explanation	Screenshot
	
<p>The first chart shows the dimensions that are the Key Influencers on Sales revenue.</p> <p>In this example, 6 Key Influencers have been identified. The top 2 influencers are <i>Category</i> and <i>City</i>.</p>	
<p>Select the top influencer; <i>Category</i>.</p> <p>You start to get interesting new information. The new chart shows the Sales revenue for each Category compared to the Average Sales revenue.</p>	
<p>Select the <i>T-Shirts</i> Category.</p>	

Explanation	Screenshot
<p>You now get more insights into this selection.</p> <p>For example: <i>86.82% of Records with Category (T-Shirts) have above average Sales revenue.</i></p>	
<p>In the Key Influencers bar chart on the left, now select the second influencer, <i>City</i>.</p> <p>Because two influencers have now been selected, we get more insights.</p>	
<p>For example, the darkest color cell in the Heat Map chart indicates that T-Shirts have the highest Sales revenue, with the majority of sales occurring in Houston, Los Angeles and New York.</p> <p>If you select this darkest color cell, you get additional information such as:</p> <p><i>Sales Revenue is 600.50% higher than the average when Records have Category (T-Shirts) and City (Houston, Los Angeles, New York).</i></p>	
<p>At the opposite end of the spectrum, click on the cell with the lightest color (smallest Sales revenue). This reveals:</p> <p><i>Sales revenue is 44.29% lower than average when Records have Category (Bermudas, Dry Wear, Fancy fabric...) and City (Colorado Springs, Other).</i></p>	

Explanation	Screenshot																																										
<p>In addition to the Key Influencers, you can also look at the Unexpected Values.</p> <p>Unexpected Values are values that fall outside the expected pattern, predicted by the Smart Discovery.</p> <p>In our example, there are 80 unexpected values.</p>																																											
<p>Click on  beside Unexpected Values 80 to view these values compared to the predicted values.</p> <p>In the table, sort on Sales revenue PERCENTAGE DIFFERENCE. This shows that the actual Q1 and Q2 Sales revenue for Jewelry in New York was massively larger than predicted.</p> <p>You could now identify the sales tactics used and potentially replicate at other locations.</p>	 <p>Sales revenue's Unexpected Values</p> <p>Unexpected Values Applying the key influencers, the following Sales revenue values varied from the predicted values enough to be considered unexpected.</p> <table><thead><tr><th></th><th>Sales revenue PREDICTED</th><th>Sales revenue EXISTING</th><th>PERCENTAGE DIFFERENCE</th><th>Category</th><th>City</th><th>Lines</th></tr></thead><tbody><tr><td>1</td><td>522.18</td><td>522.18</td><td>-85</td><td>Dry wear</td><td>Chicago</td><td>Overcoats</td></tr><tr><td>2</td><td>522.18</td><td>522.18</td><td>-87</td><td>Full length</td><td>Colorado Springs</td><td>City Skirts</td></tr><tr><td>3</td><td>1,120.44</td><td>4,890.20</td><td>-77</td><td>Full length</td><td>San Francisco</td><td>City Skirts</td></tr><tr><td>4</td><td>1,074.14</td><td>5,162.10</td><td>-79</td><td>Dry wear</td><td>Austin</td><td>Overcoats</td></tr><tr><td>5</td><td>1,391.30</td><td>5,895.70</td><td>-76</td><td>Boatwear</td><td>Boston</td><td>Jackets</td></tr></tbody></table> <p>EXISTING, PREDICTED per Sales revenue</p> <p>EXISTING, PREDICTED per Sales revenue</p>		Sales revenue PREDICTED	Sales revenue EXISTING	PERCENTAGE DIFFERENCE	Category	City	Lines	1	522.18	522.18	-85	Dry wear	Chicago	Overcoats	2	522.18	522.18	-87	Full length	Colorado Springs	City Skirts	3	1,120.44	4,890.20	-77	Full length	San Francisco	City Skirts	4	1,074.14	5,162.10	-79	Dry wear	Austin	Overcoats	5	1,391.30	5,895.70	-76	Boatwear	Boston	Jackets
	Sales revenue PREDICTED	Sales revenue EXISTING	PERCENTAGE DIFFERENCE	Category	City	Lines																																					
1	522.18	522.18	-85	Dry wear	Chicago	Overcoats																																					
2	522.18	522.18	-87	Full length	Colorado Springs	City Skirts																																					
3	1,120.44	4,890.20	-77	Full length	San Francisco	City Skirts																																					
4	1,074.14	5,162.10	-79	Dry wear	Austin	Overcoats																																					
5	1,391.30	5,895.70	-76	Boatwear	Boston	Jackets																																					
<p>Smart Discovery also allows you to perform a Simulation.</p> <p>Click on  beside Simulation.</p>																																											
<p>In this section, you can change the values for the different Key Influencers to simulate the impact on Sales revenue.</p> <p>The simulation will determine the expected values based on the selection made for each Key Influencer and its contribution to Sales revenue.</p> <p>Play with the simulation by changing the values for the Key Influencers.</p>	 <p>Sales revenue Simulation</p> <p>Expected Sales revenue</p> <p>8,221.68</p> <p>Influencers' Contribution in Expected Sales revenue</p> <p>Simulation Selection</p> <p>Category: 2 Pocket shirts City: Austin Lines: Accessories Year: 2014 State: California Quarter: Q1</p>																																										

Explanation	Screenshot
<p>When you have finished your analysis and found interested information, you can add any of the charts / information to your story.</p> <p>Click on the <i>Sales revenue and Category and City</i> Heat Map.</p>	
<p>In the <i>File</i> section of the main toolbar, click the <i>Copy</i> icon and choose <i>Copy to Page 1</i>.</p>	
<p>The Heat Map chart now appears on Page 1 of the story.</p>	
<p>Save your story as <i>SmartDiscoveryXXX</i>, where XXX is the number assigned to you.</p>	

www.sap.com/contactsap

© 2017 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies. See <http://www.sap.com/corporate-en/legal/copyright/index.epx> for additional trademark information and notices.