

# Big Data Analysis using GBI Sales Monitor with SAP ERP on HANA

This case study introduces the GBI Sales Monitor as a data analysis and visualization tool using three exemplary scenarios based on GBI sales data.

## Product

SAP ERP on HANA  
Release 6.07  
G.B.I.

## Level

Undergraduate  
Graduate  
Beginner

## Focus

Big Data Analysis

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## Version

2.40

## Last Update

June 2015

## MOTIVATION

This case study describes how to analyze and visualize data using the GBI Sales Monitor. The scenario (three questions varying from easy to difficult) is based on sales data of the Global Bike Inc. enterprise in the US and Germany.

The main learning objective is to analyze and report on extensive sales order data based on the GBI dataset using a simple web-based analysis application.

## PREREQUISITES

The free-of-charge demo system is hosted at SAP UCC Magdeburg. The application is available via the following link:

<http://gbionhana.ucc.ovgu.de>

**User** TEST\_USER  
**Pass** hana2015

For more scenarios please check the GBI Sales Monitor exercises.

## NOTES

This case study uses the Global Bike Inc. (G.B.I.) data set, which has been created exclusively for SAP UA global curricula.

The authors would like to thank Tom McGinnis and Simha Magal as well as the many hardworking graduate students at Grand Valley State University and Otto von Guericke University Magdeburg who contributed to the development of this curriculum material.

## Process Overview

**Learning Objective** Get familiar with data analysis and visualization.

**Time** 30 min

**Scenario** Every day, Global Bike Inc. employees use various standard sales reports implemented both in SAP ERP and SAP BW. In addition to these operational problems management requests need flexible ad-hoc reporting. In contrast to desktop tools like SAP Lumira (see Big Data Analysis Using SAP Lumira Desktop curriculum), the GBI Sales Monitor is a light-weight web application running in any Internet browser.

**Employees involved** Alex Kuhn (Vice President Marketing US)  
Karim Messalem (Sales Person US West, San Diego)  
Jacque Bonnet (Sales Person Germany South, Heidelberg)

**Scenario 1** Alex Kuhn (Vice President Marketing US) needs an ad-hoc report on total revenue for Big Apple Bikes.

Scenario details

**Scenario 2** Karim Messalem (Sales Person US West) is looking for order details of sales order #8077.

**Scenario 3** Jacque Bonnet (Sales Person Germany South) needs to find the best and third-best product (by profit) of customer NeckaRad .

## Scenario 1 – Total revenue

**Task** Report the total revenue for Big Apple Bikes.

**Time** 10 min

**Short Description** Use the GBI Sales Monitor web application to find out the revenue total for customer Big Apple Bikes.

**Name (Position)** Alex Kuhn (Vice President Marketing US)

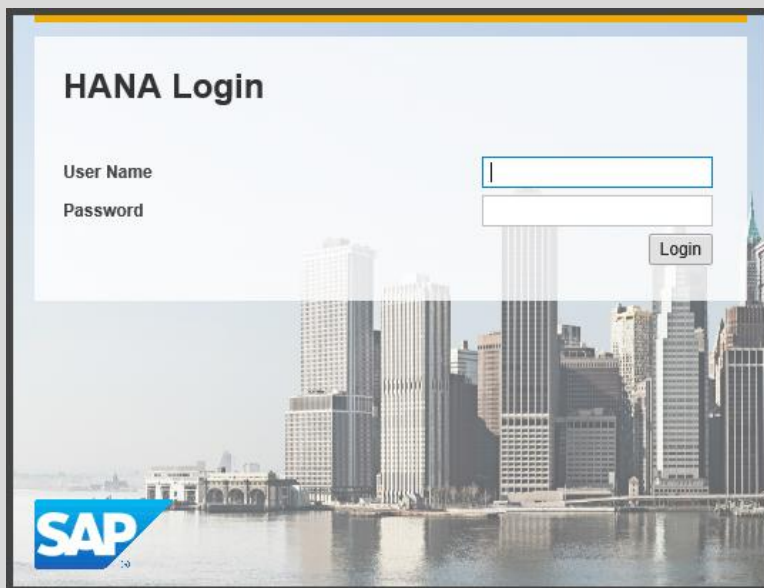
In order to run the GBI Sales Monitor web application, open an Internet browser and type in (or copy) the following URL:

Web application link

<http://gbionhana.ucc.ovgu.de>

The following HANA Login screen should appear.

HANA Login screen



Please type in the below login credentials and press Enter.

Demo user

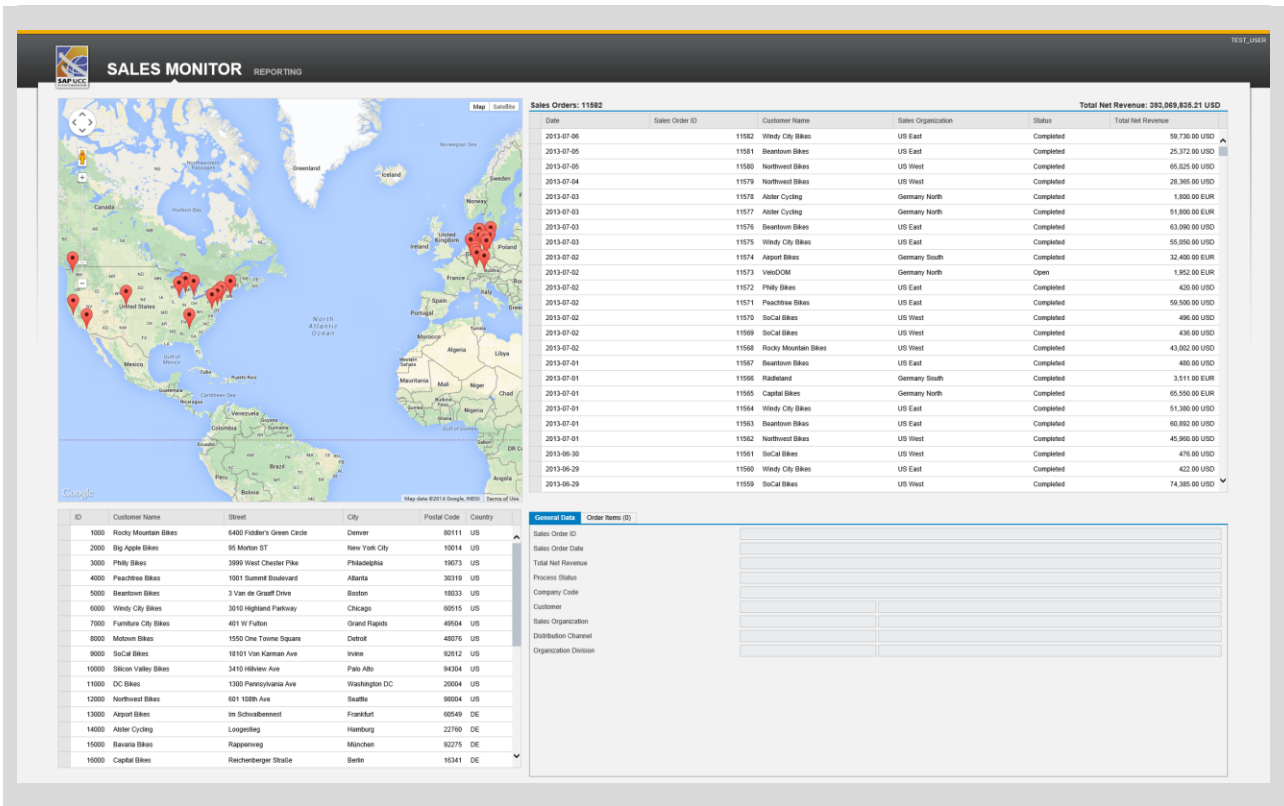
**User** TEST\_USER

**Pass** hana2015

Now, you should be displayed the first tab (Sales Monitor) of the web application – see screenshot below. Initially, you see all sales orders as no particular customer was preselected.

GBI customers

All customers are shown on the world map as well as listed in the table beneath – sorted by their IDs in GBI's SAP ERP system.



On the right, you see a list of all GBI sales orders (11582) with a revenue total of 393,069,835.21 USD.

Sales order list

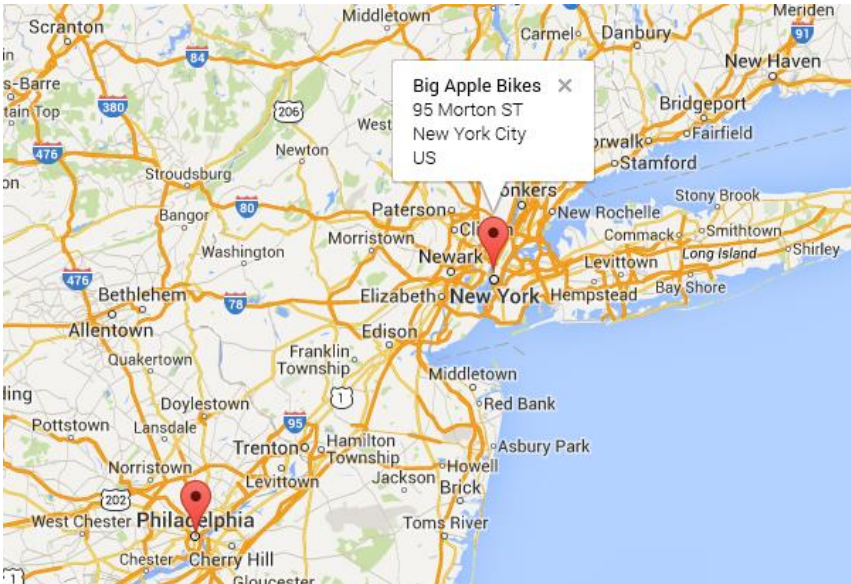
Because no sales order was preselected, the order details beneath the list appear blank.

Sales order details

In order for Mr Kuhn to report the revenue total for Big Apple Bike, he needs to select this customer. There are two options to do so.

Reporting

**Option 1** Zoom into the map and click on the correct pin for Big Apple Bikes (in New York).



**Option 2** Select Big Apple Bikes by clicking on the customer’s row in the table beneath the world map.

2000	Big Apple Bikes	95 Morton ST	New York City	10014	US
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As a result, you see all orders for Big Apple Bikes in the sales order list on the right.

Sales order list

**Sales Orders: 723 (Big Apple Bikes)**

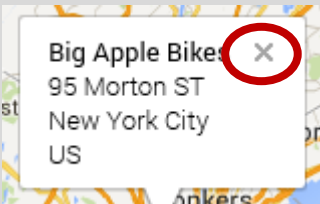
On the very right side, you can read the total net revenue for the selected customer.

Total net revenue

**Total Net Revenue: 28,388,070.75 USD**

**Note** In order to deselect a customer (to go back to the full sales order list for all GBI customers), click on the cross in the customer details pop-up on the world map.

Deselect customer



Scenario 2 – Sales order details

**Task** Find out order details of sales order #8077.

**Time** 10 min

**Short Description** Use the GBI Sales Monitor web application to find out the revenue total, the customer (ID and name), the order status and the line items of sales order #8077.

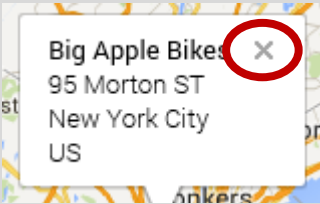
**Name (Position)** Karim Messalem (Sales Person US West, San Diego)

In order for Mr Messalem to find order details of sales order #8077, he needs filter the sales order ID column in the list on the right side.

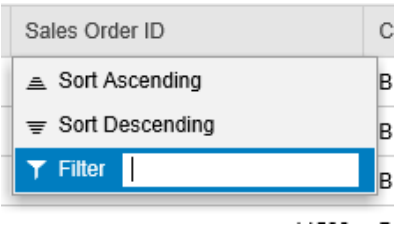
Reporting

**Note** If customer Big Apple Bikes is still selected (from scenario 1) please deselect the customer by clicking on the cross in the customer details pop-up on the world map.

Deselect customer



To filter sales orders, click on the Sales Order ID column header until the following popup appears.



In the Filter text box, type in sales order number **8077** and press Enter. This will reduce the sales order result list to the sales order of interest.

8077

Sales Orders: 1					Total Net Revenue: 41,003.25 USD	
Date	Sales Order ID	Customer Name	Sales Organization	Status	Total Net Revenue	
2011-07-08	8077	SoCal Bikes	US West	Completed	41,003.25 USD	

From the sales order overview (sales order list), you can already find the sales order total net revenue (**41,003.25 USD**) and the customer name (**SoCal Bikes**).

41,003.25 USD  
SoCal Bikes

In order to find the other details, you need to select the sales order in the

sales order list by clicking on the one remaining row.

General Data

Order Items (6)

Sales Order ID		
Sales Order Date		
Total Net Revenue		
Process Status	Completed	
Company Code	US00	
Customer	9000	SoCal Bikes
Sales Organization	UW00	US West
Distribution Channel	WH	Wholesale
Organization Division	AS	Accessories

On the General Data tab, you see that the order is **Completed** and that SoCal Bikes’ customer ID in the SAP ERP system is **9000**. Then, click on the Order Items tab.

Completed  
9000

General Data		Order Items (6)						
Item ID	Material Group	Material	Qty.	Delivery Status	Production Plant	Storage Loc.	Net Revenue	
10	BIKES	Women's Off Road Bike	5	Fully delivered	SD00	FG00	11,825.00 USD	
20	BIKES	Men's Off Road Bike	6	Fully delivered	SD00	FG00	13,620.00 USD	
30	UTIL	First Aid Kit	11	Fully delivered	SD00	TG00	415.25 USD	
40	UTIL	Water Bottle Cage	11	Fully delivered	SD00	TG00	187.00 USD	
50	BIKES	Deluxe Touring Bike (black)	5	Fully delivered	SD00	FG00	14,175.00 USD	
60	SFTY	Knee Pads	11	Fully delivered	SD00	TG00	781.00 USD	

Now, the system displays line item details such as material, quantity, and revenue.



### Scenario 3 – Best products by profit

**Task** Find the best and the third-best product of customer NeckaRad.

**Time** 10 min

**Short Description** Use the GBI Sales Monitor web application to find the best and the third-best product (by profit) sold to NeckaRad.

**Name (Position)** Jacque Bonnet (Sales Person Germany South, Heidelberg)

In order for Mr Bonnet to find the best and the third-best product sold to customer NeckaRad, he needs to select the customer first.

Reporting

Either zoom into Germany on the world map and click on the pin for NeckaRad (in Heidelberg) or select the customer from the list beneath the map.



Then, leave the SALES MONITOR tab by clicking on the REPORTING tab (at the top of the screen). On the right, the application displays the top materials by net revenue and profit.

Total Profit by Material (Customer: NeckaRad)	
TOP 1	
Professional Touring Bike (red)	1,082,389.89 USD

You can see that the **Professional Touring Bike (red)** was the best-selling material to customer NeckaRad with 1,082,389.89 USD.

Professional Touring Bike (red)



TOP 2-4
Professional Touring Bike (black) 997,560.60 USD
<b>Professional Touring Bike (silver)</b> 986,312.22 USD
Deluxe Touring Bike (silver) 937,378.80 USD

The third-best product (by profit) sold to NeckaRad was the **Professional Touring Bike (silver)** with 986,312.22 USD.

Professional Touring Bike  
(silver)

Note Before using the GBI on HANA Sales Monitor exercises you should have completed the case study Big Data Analysis using GBI Sales Monitor with SAP ERP on HANA. The case study explains the GBI Sales Monitor application in detail and provides the link to the demo system hosted at SAP UCC Magdeburg together with logon credentials.

### Additional Questions

Please use the sales dashboard to answer the following questions:

1. What is the total revenue of the sales order 8077 and which customer placed the order?
2. What is the total revenue for the customer Big Apple Bikes?
3. What are the best and the third-best product by profit ordered by customer NeckaRad?
4. What is the total revenue for sales organizations US West and Germany South?
5. Which products were sold in sales order 11459?
6. Which US sales organization generates the most revenue?
7. Which product sold to Rocky Mountain Bikes creates the most net revenue? And how high is the total profit of this product?
8. What is the total revenue of all open sales orders and which is the region with the highest number of open orders?
9. Which sales order of customer Beantown Bikes has the lowest revenue and which products were sold in that order?
10. Which customer generated the most revenue overall? List the revenue.