

# Business Intelligence

with Standard ERP



## Table of Contents

<a href="#">Introduction</a> .....	2
<a href="#">Setup</a> .....	3
<a href="#">Configuration</a> .....	3
<a href="#">Access Groups</a> .....	3
<a href="#">Reporting Periods</a> .....	4
<a href="#">Key Performance Indicators</a> .....	6
<a href="#">Definitions Card</a> .....	8
<a href="#">Sales Card</a> .....	10
<a href="#">CRM Card</a> .....	10
<a href="#">Dashboard</a> .....	11
<a href="#">BI</a> .....	13
<a href="#">BI on other records</a> .....	18
<a href="#">Exercises</a> .....	19
<a href="#">Preparation</a> .....	19
<a href="#">KPI</a> .....	19
<a href="#">Dashboard</a> .....	19
<a href="#">BI</a> .....	19
<a href="#">Appendix</a> .....	20
<a href="#">Terminology between different versions of English language</a> .....	20

## INTRODUCTION

Business Intelligence (BI) is a data analysis process aimed at boosting business performance by helping corporate executives and other end users make more informed decisions. BI consists of a variety of tools and methodologies that enable organizations to gather data from internal systems and external sources, prepare it for analysis, develop and run queries against the data, create reports and dashboards to make the analytical results available to corporate decision makers as well as operational workers. Standard ERP is a multi-user, integrated accounting, CRM (Contact Relationship Management) and ERP (Enterprise Resource Planning) tool, which means that analyzing data is faster and simpler.

BI technology also includes data visualization for designing charts, as well as tools for building BI dashboards and performance scorecard hats display visualized data on business metrics and key performance indicators in an easy-to-grasp way.

The potential benefits of business intelligence programs include:

- accelerating and improving decision making
- optimizing internal business processes
- increasing operational efficiency
- driving new revenues
- gaining competitive advantages over business rivals.

BI systems can also help companies identify market trends and spot business problems that need to be addressed.

BI data can include historical information, as well as new data gathered from source systems as it is generated, enabling BI analysis to support both strategic and tactical decision-making processes. Initially, BI tools were primarily used by data analysts and other IT professionals who ran analyses and produced reports with query results for business users. Increasingly, however, business executives and workers are using BI software themselves, thanks partly to the development of self-service BI and data discovery tools.

Well-designed BI applications can give anyone in your company the ability to make better decisions by quickly understanding the various “information assets” in your organization and how these interact with each other. These assets can include supply chain information, personnel data, manufacturing, product data, sales and marketing activity, as well as any other source of information critical to your operation.

Business intelligence can be applied to the following business purposes, in order to drive business value:

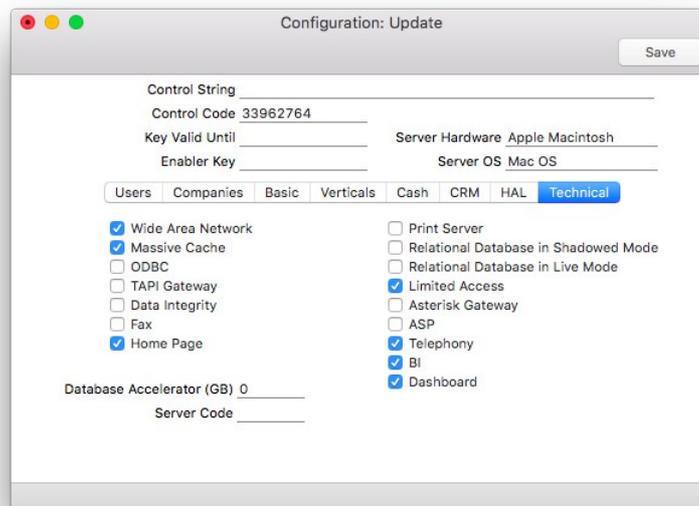
- Measurement – creates a hierarchy of performance metrics and benchmarking that informs business leaders about progress towards business goals.
- Analytics – builds quantitative processes for a business to arrive at optimal decisions and to perform business knowledge discovery.
- Reporting – builds infrastructure for strategic reporting to serve the strategic management of a business, not operational reporting.
- Collaboration – gets different areas (both inside and outside the business) to work together through data sharing and interchange.
- Knowledge management – makes the company data driven through strategies and practices to identify, create, represent, distribute, and enable adoption of insights and experiences that are true business knowledge.

BI and Dashboard in Standard ERP are sales-oriented and offers a wide range of possibilities to produce different graphical reports.

## SETUP

### Configuration

Make sure the Configuration settings in the System module allows you to create KPIs and view BI and Dashboard. Go to the System module, choose Settings and select Configuration. Go to the Basic tile and check that the KPIs checkbox is ticked. Then, go to the Technical tile and tick BI and Dashboard checkboxes. Save the setting with the Save button.



### Access Groups

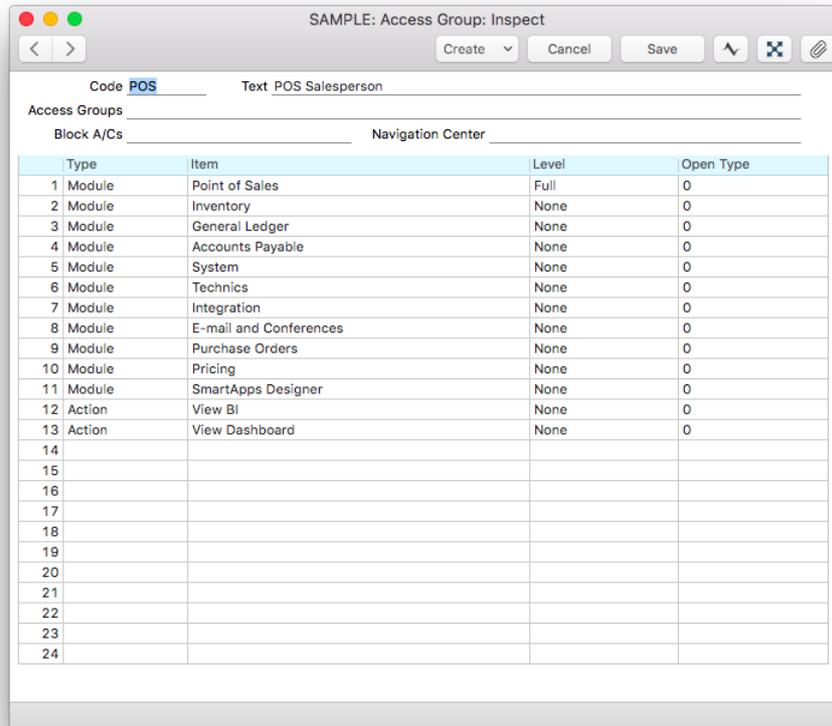
To add BI and Dashboard to the Access Group open Settings and choose Access Groups. Open the same Access Group that was assigned to a user.

On the first free row select Type – Action and go to next field. On Item field select “View BI” and choose either Level – None, Full or Read.

On the next row select Type – Action and go to next field. On Item field select “View Dashboard” and choose Level – None, Full or Read.

In this way you can control access to the BI and Dashboards.

Select Save to save the setting. Restart the application for the changes to take effect.



## Reporting Periods

BI uses default Reporting Periods. A Period field is available in the BI window, where you can change selected periods. Therefore it is good to check and update default periods if needed.

Open Settings in the System module and choose Reporting Periods. Here should be the periods that you will commonly use when producing reports: using "Paste Special" from the Period field of a report specification window will bring up a list of the Reporting Periods entered using this setting. For example, if you want to produce monthly reports you should define each month in the setting.

Additionally, once memorized, the Code can be used as a fast way of choosing a Reporting Period. Reporting Periods are also used in maintenances specification windows, wherever there is a period field.

Note that the Reporting Period in the first row of this setting will be offered as a default wherever a Reporting Period is required. You might therefore like to change the first row from time to time so that a useful option is always offered as a default. Chronological order is not important here.

To enter a new Reporting Period, simply select the first blank line and enter the details as appropriate.

**From:** enter the start date of the period, for example 01/01/2019. You can type 01012019 and system will automatically add a separator depending on the settings.

**To:** enter the end date of the period, for example 12/31/2019. You can type 12312019 and system will automatically add a separator depending on the settings.

**Code:** enter a short code for the period, for example CY for the current year (2019) and 1 for January. Once memorized, the Code can be used as a fast way of choosing a Report Period. For example, using the Report Periods illustrated above, type "01" in the Period field of a Report Specification Window when you want the report to cover the period "01/01/2019:01/31/2019".

Save the setting.

Sample: Reporting Periods: Inspect Save

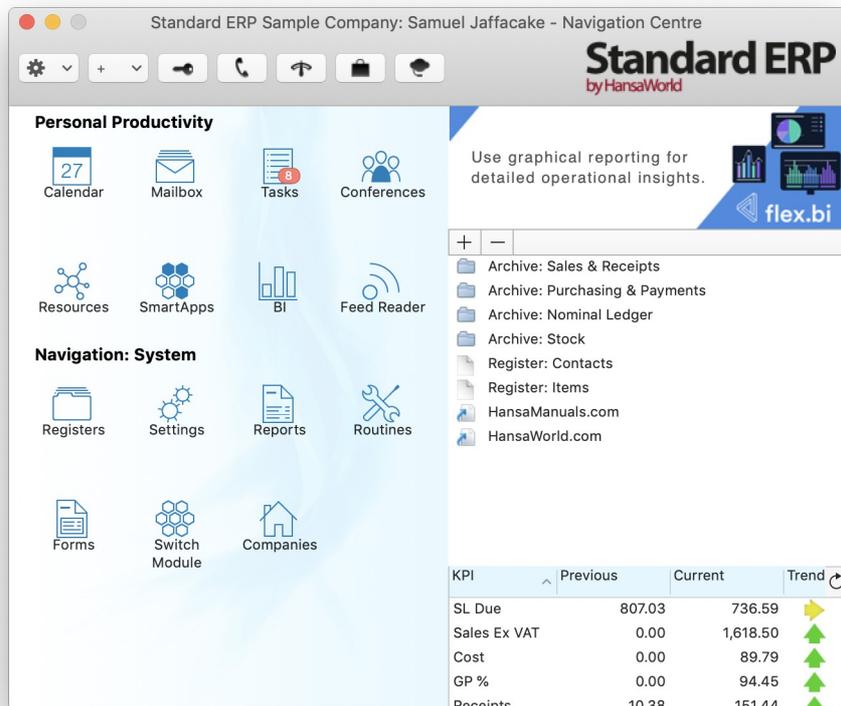
	From	To	Code	Comment
1	01/01/2019	31/12/2019	CY	Current Year
2	01/01/2019	31/01/2019	1	January
3	01/02/2019	28/02/2019	2	February
4	01/03/2019	31/03/2019	3	March
5	01/04/2019	30/04/2019	4	April
6	01/05/2019	31/05/2019	5	May
7	01/06/2019	30/06/2019	6	June
8	01/07/2019	31/07/2019	7	July
9	01/08/2019	31/08/2019	8	August
10	01/09/2019	30/09/2019	9	September
11	01/10/2019	31/10/2019	10	October
12	01/11/2019	30/11/2019	11	November
13	01/12/2019	31/12/2019	12	December
14	01/01/2018	31/12/2018	LY	Last Year
15	01/01/1980	31/12/2030	ALL	All periods
16	01/01/2019	31/03/2019	Q1	First Quarter
17	01/04/2019	30/06/2019	Q2	Second Quarter
18	01/07/2019	30/09/2019	Q3	Third Quarter
19	01/10/2019	31/12/2019	Q4	Fourth Quarter
20				

## KEY PERFORMANCE INDICATORS

A key performance indicator (KPI) is a business metric used to evaluate factors that are crucial to the success of an organization. KPIs are applied in business intelligence to gauge business trends and advise tactical courses of action.

For a manager who is in need of instant visibility into the business's performance, it is important to have all the critical information at their fingertips in order to make immediate and accurate decisions. Using KPIs in Standard ERP will allow you to have that information directly from your Navigation Centre. Key Performance Indicators are an integral part of any business and Standard ERP allows you to have an instant insight into how your business is performing.

In Standard ERP, KPIs are located in the lower right corner of the Navigation Centre. KPIs can be drilled down to the reports that support the figure by selecting the KPI name. Under KPI settings in the System module you can configure the KPIs per user, so that each user of the system will have the KPIs that best fits their needs on their personal desktop.



The screenshot shows the Standard ERP Navigation Centre interface. The top bar includes the title 'Standard ERP Sample Company: Samuel Jaffacake - Navigation Centre' and the 'Standard ERP by HansaWorld' logo. The main area is divided into several sections:

- Personal Productivity:** Includes icons for Calendar (27), Mailbox, Tasks (8), and Conferences.
- Resources:** Includes icons for Resources, SmartApps, BI, and Feed Reader.
- Navigation: System:** Includes icons for Registers, Settings, Reports, and Routines.
- Forms, Switch Module, Companies:** Additional navigation options.

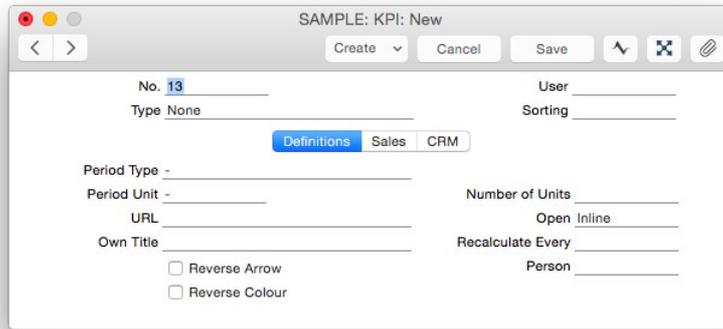
On the right side, there is a 'flex.bi' section with the text 'Use graphical reporting for detailed operational insights.' Below this is a list of archives and registers:

- Archive: Sales & Receipts
- Archive: Purchasing & Payments
- Archive: Nominal Ledger
- Archive: Stock
- Register: Contacts
- Register: Items
- HansaManuals.com
- HansaWorld.com

At the bottom right, there is a KPI table:

KPI	Previous	Current	Trend
SL Due	807.03	736.59	↓
Sales Ex VAT	0.00	1,618.50	↑
Cost	0.00	89.79	↑
GP %	0.00	94.45	↑
Receipts	10.38	151.44	↑

To set up a KPI go to System module setting KPIs. To create a new KPI select the Create button and choose New KPI. For example, let's add new KPI A/R Due, which shows the outstanding total of unpaid Invoices that have exceeded their Payment Terms.



**No.:** The unique identifier for the KPI record, generated automatically.

**User:** Specify here the Person in whose Personal Desktop the KPI is to appear. You can enter more than one Person, separated by commas. If you use Paste Special to enter several Persons, type the comma or colon before opening the Paste Special list. This will cause the next Person to be added to those already entered. Otherwise, the previous Person will be overwritten.

In our example, since we are logged in as SJ, let's insert SJ.

**Type:** Use this field to specify the figure that will be monitored by the KPI. The following options are available:

**Activities Cost Time:** The total Cost (Time) from Time Activities with Start Dates falling within the period. A Time Activity is one where the Task Type is Calendar and the Calendar Type is Time. If an Activity has more than one Person, it will be included in the KPI figure once for each Person. Selecting the KPI in the Navigation Centre will open the Activities, Persons report.

**Cost of Sales:** The total cost of sales from approved Invoices dated during the period. Selecting the KPI will not open a report.

**GP%:** The gross margin of approved Invoices dated during the period. Selecting the KPI will open the Gross Profit, Invoices report.

**No. of Activities:** The number of Time Activities with Start Dates falling within the period. If an Activity has more than one Person, it will be included in the KPI figure once for each Person. Selecting the KPI in the Navigation Centre will open the Activities, Persons report.

**No. of Orders:** The number of Sales Orders dated during the period. Closed Orders are not included. Selecting the KPI will open the Order Journal report.

**No. of Quotations:** The number of Quotations dated during the period. Closed and Rejected Quotations are not included. Selecting the KPI will open the Quotation Journal report.

**Outstanding Orders:** The value (excluding Tax) of Sales Orders dated during the period. Invoiced and Closed Orders are not included. Selecting the KPI will open the Outstanding Orders report.

**Outstanding Quotations:** The value (excluding Tax) of Quotations dated during the period. Closed and Rejected Quotations are not included. Selecting the KPI will open the Pipeline report (this report doesn't have a period selection so the figures it shows will not match the KPI figures).

**P/L Due:** The outstanding total from unpaid Purchase Invoices that have exceeded their Payment Terms (i.e. whose Due Date has passed). This figure can also be seen at the bottom of the Accounts Payable report. Selecting the KPI will open the Purchase Ledger report.

**P/L On Acc.:** The On Account balance in the Purchase Ledger, including open On Account Payments and open Prepayments for all Suppliers. This figure can also be seen at the bottom of the Purchase Ledger report. Selecting the KPI will open the Purchase Ledger report using the Only On Account option.

**Receipts:** The value of Receipts taken during the period. Selecting the KPI will not open a report.

**Sales Excluding VAT:** The value excluding VAT of approved Invoices dated during the period. Selecting the KPI will open the Invoice Journal report.

**Sales Including VAT:** The value including VAT of approved Invoices dated during the period. Selecting the KPI will open the Invoice Journal report.

**S/L Due excluding Disputed Invoices:** The outstanding total from unpaid Invoices that have exceeded their Payment Terms (i.e. whose Due Date has passed) and that have not been marked as Disputed. Selecting the KPI will open the Sales Ledger report using the Exclude Disputed option.

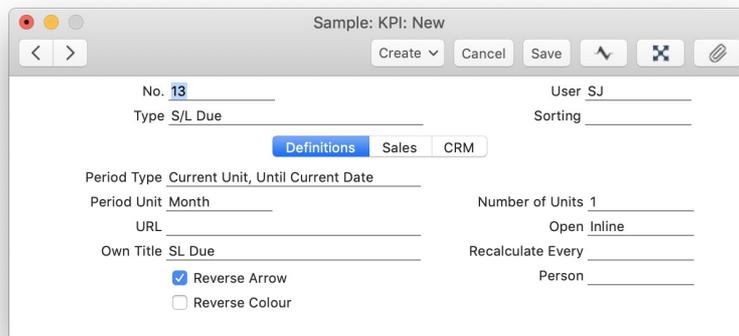
**S/L Due:** The outstanding total from unpaid Invoices that have exceeded their Payment Terms (i.e. whose Due Date has passed). This figure can also be seen at the bottom of the Sales Ledger report. Selecting the KPI will open the Sales Ledger report.

**S/L On Acc.:** The On Account balance in the Sales Ledger, including open On Accounts receipts and open Prepayments for all Customers. This figure can also be seen at the bottom of the Sales Ledger report. Selecting the KPI will open the Sales Ledger report using the Only On Account option.

In our example, let's use Paste-Special function and choose S/L Due.

**Sorting:** Use this field to control the order in which the KPIs will be listed in the User's Personal Desktop. For example, a KPI with "1" in its Sorting field will be listed above a KPI whose Sorting is "2". You should only enter whole numbers in this field.

Definitions Card



**Period Type:** The KPI display in the User's Personal Desktop includes figures for a Previous period (in the column headed "Prev.") and for the Current period (in the column headed "Current"). This field controls how the Prev. and Current periods relate to each other. For example, if the current date is 10 June, the Period Length (below) is "Month" and the Number of Units is 1, the Prev. and Current figures will be calculated as follows, depending on the option in this field:

- 
- Current: 10 July - 10 July
- Previous: 10 July - 10 July
- Until Current Date
- Current: 11 June - 10 July
- Previous: 11 May - 10 June
- Current Full Unit
- Current: 1 July - 30 July
- Previous: 1 June - 31 June
- Current Unit, Until Current Date
- Current: 1 July - 10 July
- Previous: 1 June - 10 June

In our example, let's use "Current Unit, Until Current Date".

**Period Unit:** Use this field to specify whether the KPI will display weekly, monthly or yearly figures. In our example, let's use Month.

**URL:** If you want the User to be taken to a web page when they open the KPI in their Personal Desktop, specify the URL of that web page here.

You must include the http:// or https:// in the URL that you enter in this field.

If you leave this field empty, opening the KPI will open a report showing how the KPI figure has been calculated. The reports that will be opened from each KPI Type are included in the descriptions of the Type options above.

**Own Title:** Specify the name of the KPI, to be shown in the KPI Display in the Personal Desktop. In our example, we can use SL Due.

**Reverse Arrow:** This check box controls the arrow that is shown in the Trend column in the Personal Desktop. By default, if the Current figure is larger than the Prev. figure, the Trend column will contain an upward-pointing arrow. This will be appropriate if the KPI is one where a larger Current figure is a positive trend (e.g. "No. of Quotations" or "Sales Including VAT"). In some cases however, a larger Current figure is a negative trend (e.g. "S/L Due") and therefore a downward-pointing arrow is more appropriate. Use the Reverse Arrow option in these cases. Let's check this box.

**Reverse Color:** This checkbox controls the color of the arrow that is shown in the Trend column in the Personal Desktop. By default, if the Current figure is larger than the Prev. figure, the arrow in the Trend column will be green and if the Current figure is smaller than the Prev. figure, the arrow in the Trend column will be red. Although, if the current S/L Due value is smaller than the previous, the arrow should be pointed down and should be green. So, if this checkbox is ticked, a decrease will be looked at as a positive change and therefore should be green and an increase will be looked at as a negative change and therefore should be red.

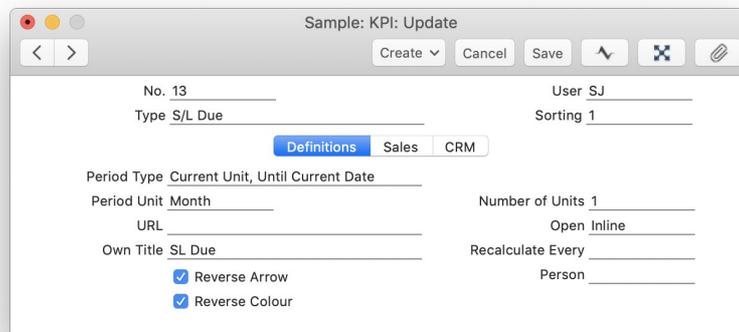
**Number of Units:** This field is related to the Period Unit field above: use it to specify how many Period Units are to be included in the Current and Prev. in the KPI Display. For example, if the Period Type is "Month" and you enter "3" in this field, the Current period will cover the current quarter and the Prev. period will cover the previous quarter. In our example, we can use 1.

**Open:** If you have specified a URL in the field on the left and the User opens the KPI in their Personal Desktop, they will be taken to the relevant web page. If you enter "Inline" here, the web page will be opened in a new window inside Standard ERP. If you enter "External" here, the web page will be opened in the User's machine's default browser.

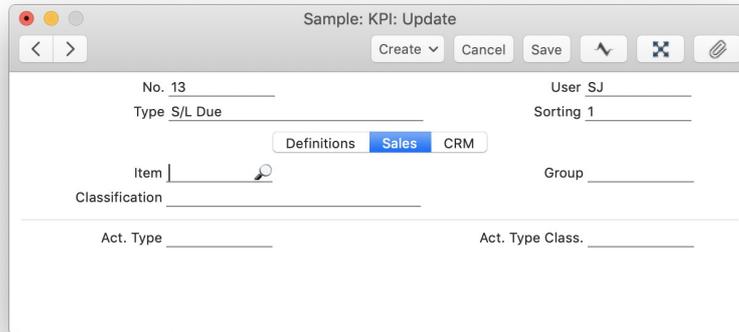
**Recalculate Every:** By default, the KPI figures in the User's Personal Desktop will be updated once an hour. If you would like them to be updated more (or less) often, specify here the time between updates that you need. Use the format hh:mm:ss.

**Person:** Use this field if you need KPI figures to be calculated for a particular Person or Persons. For example, if the Type is "No. of Orders", leaving this field empty will mean the KPI will display the total number of Orders created during the period and the previous period. If you enter a Person's Signature, the KPI will display the number of Orders created by that Person.

Unless the Type is "Activities Cost Time" or "No. of Activities", you can enter more than one Person, separated by commas.



## Sales Card



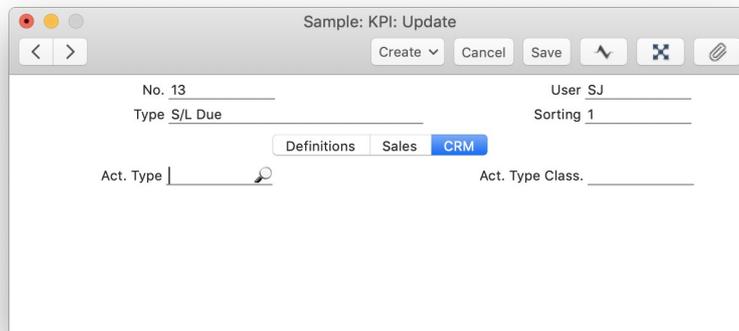
The screenshot shows a dialog box titled "Sample: KPI: Update". It has a standard macOS-style title bar with red, yellow, and green window control buttons. Below the title bar are navigation arrows and buttons for "Create", "Cancel", "Save", and a close button. The main area contains several input fields: "No. 13" (with a dropdown arrow), "User SJ", "Type S/L Due", "Sorting 1", "Item" (with a search icon), "Group", "Classification", "Act. Type", and "Act. Type Class.". A tabbed interface is present with three tabs: "Definitions", "Sales" (which is highlighted in blue), and "CRM".

**Item:** Use this field if you need KPI figures to be calculated for a particular Item. For example, if the Type is "No. of Orders", leaving this field empty will mean the KPI will display the total number of Orders created during the period and the previous period. If you enter an Item Number, the KPI will display the number of Orders containing that Item.

**Classification:** Use this field if you need KPI figures to be calculated for Items belonging to a particular Classification. It operates in the same manner as the Item field. If you enter a number of Classifications separated by commas, KPI figures will be calculated for the Items belonging to all the Classifications listed.

**Group:** Use this field if you need KPI figures to be calculated for Items belonging to a particular Item Group.

## CRM Card



This screenshot is identical to the one above, showing the "Sample: KPI: Update" dialog box. However, the "CRM" tab is now selected and highlighted in blue, while the "Sales" tab is no longer highlighted.

**Act. Type:** Use this field if you need KPI figures to be calculated for a particular Activity Type. For example, if the Type is "No. of Activities", leaving this field empty will mean the KPI will display the total number of Activities created during the period and the previous period. If you enter an Activity Type, the KPI will display the number of Activities with that Activity Type.

**Act. Type Class:** Use this field if you need KPI figures to be calculated for Activities with Activity Types belonging to a particular Activity Class.

Save the KPI record. As soon as you do, the KPI will be added to the User's Personal Desktop.

## DASHBOARD

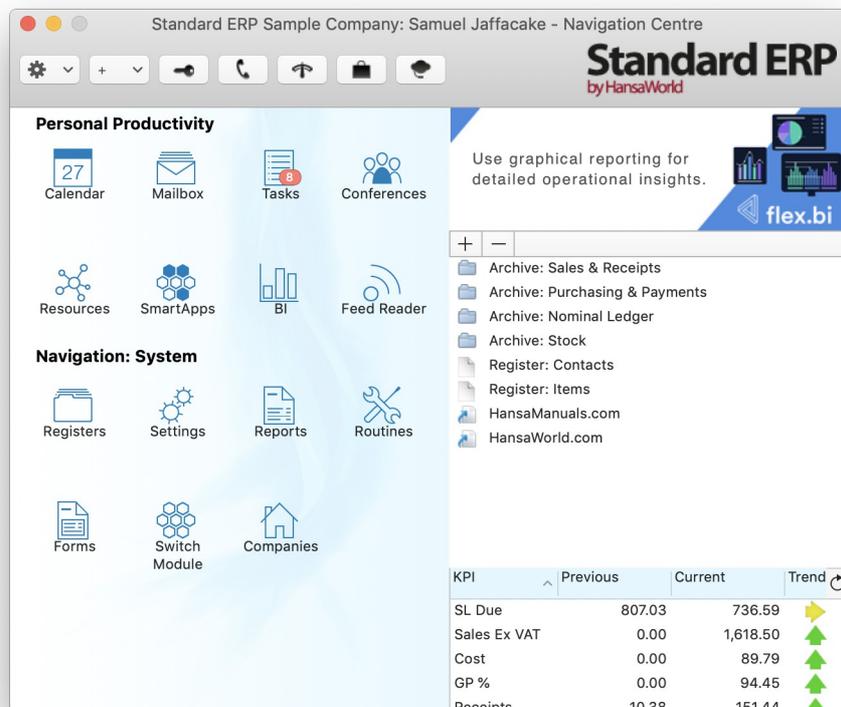
A dashboard is a business tool that displays a set of performance indicators, key performance indicators, and any other relevant information to a business user. A business intelligence dashboard is an interface that provides preconfigured or customer defined metrics, statistics, insights and visualizations from current data. It allows end and power users of BI software to view instant results from the live performance state of the business or data analytics.

Dashboards are simple-to-understand and visually-oriented depictions of the current state of the metrics to your business. Dashboards give signs about a business letting the user know something is wrong or right.

Dashboards can provide an effective solution to the overwhelming amount of data that business users experience every day. A dashboard can save employees time - and companies money - by making everything more intuitive, easier to observe, and allowing for extensive, real-time access instead of going through papers and emails to compile information.

The Dashboard in Standard ERP provides 5 charts and a list of customers. To drill-down even deeper, opening the charts will open a BI window where a more detailed selections can be made.

The BI icon can be found in Navigation Centre on the second row of the Productivity section. If the BI icon is not there, check the Setup chapter above.



Standard ERP Sample Company: Samuel Jaffacake - Navigation Centre

**Standard ERP**  
by HansaWorld

**Personal Productivity**

Calendar | Mailbox | Tasks | Conferences

Resources | SmartApps | BI | Feed Reader

**Navigation: System**

Registers | Settings | Reports | Routines

Forms | Switch Module | Companies

Use graphical reporting for detailed operational insights.

flex.bi

- Archive: Sales & Receipts
- Archive: Purchasing & Payments
- Archive: Nominal Ledger
- Archive: Stock
- Register: Contacts
- Register: Items
- HansaManuals.com
- HansaWorld.com

KPI	Previous	Current	Trend
SL Due	807.03	736.59	▲
Sales Ex VAT	0.00	1,618.50	▲
Cost	0.00	89.79	▲
GP %	0.00	94.45	▲
Receipts	10.38	151.44	▲

After selecting the BI, the Dashboard window will open.



You can find 6 sections in the Dashboard window:

1. Outstanding Invoices, Orders and Quotations
2. Graphical Profit and Loss report
3. Top 5 Customers and Debtors
4. Top 5 Customers
5. Top 5 Salespersons
6. Top 5 Item Groups

In the Outstanding Invoices, Orders and Quotations chart, values of all outstanding due invoices, outstanding Orders and outstanding Quotations are displayed in Base Currency 1 including VAT. The Value axis is located below the chart.

The Graphical Profit and Loss report shows profit or loss for the last 6 months. It takes into account all income account balances and all expense account balances. The Value axis is located on the left of the chart and you can see the months below the chart.

The Top 5 Customers' balances are displayed in Base Currency 1 without a VAT.

The Top 5 Debtors' balances are displayed in Base Currency 1 with VAT. There is a difference between open invoices and open purchase invoices in Debtors balances.

The Top 5 Customers chart shows customers that the company has sold to the most in the current calendar month. The Value axis is located below the chart. To the left of the chart you can find the names of the top customers.

The Top 5 Salespersons chart shows sales people who sold the most in the current calendar month. The Value axis is located below the chart. To the left of the chart you can find the signatures of the top sales people.

The Top 5 Item Groups chart shows which item groups were sold the most in the current calendar month. The Value axis is located below the chart. To the left of the chart you can find the codes of the top item groups.

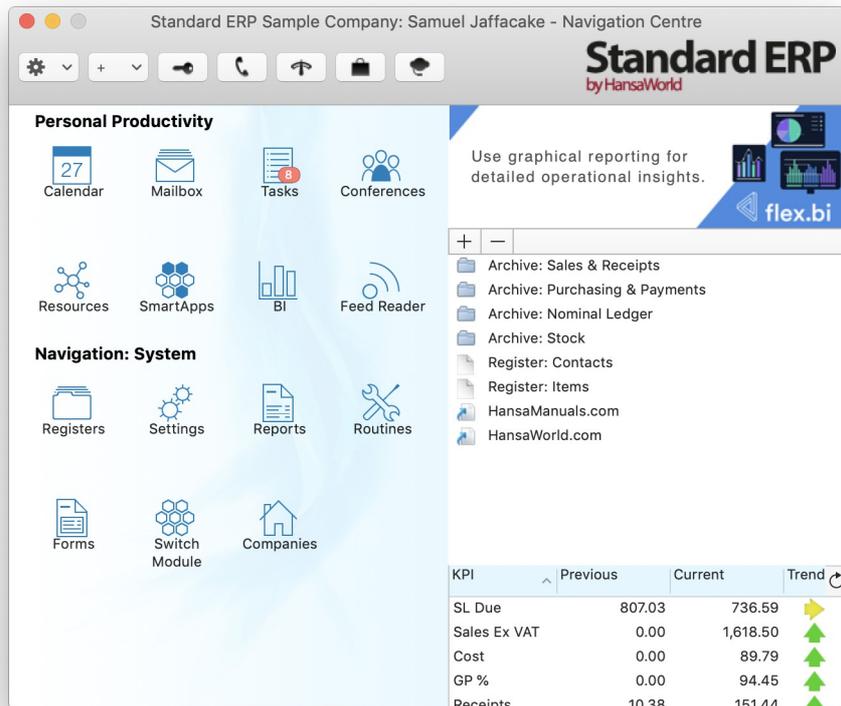
## BI

Standard ERP BI provides interactive graphical reports according to user's selections. Therefore it is easy to collect, analyze and present the information that will help salespeople to keep up to date with customers and find the bestselling items ,especially in highly competitive markets, where volumes are high and margins are low.

Effective BI can boost your sales and marketing efforts in nine ways:

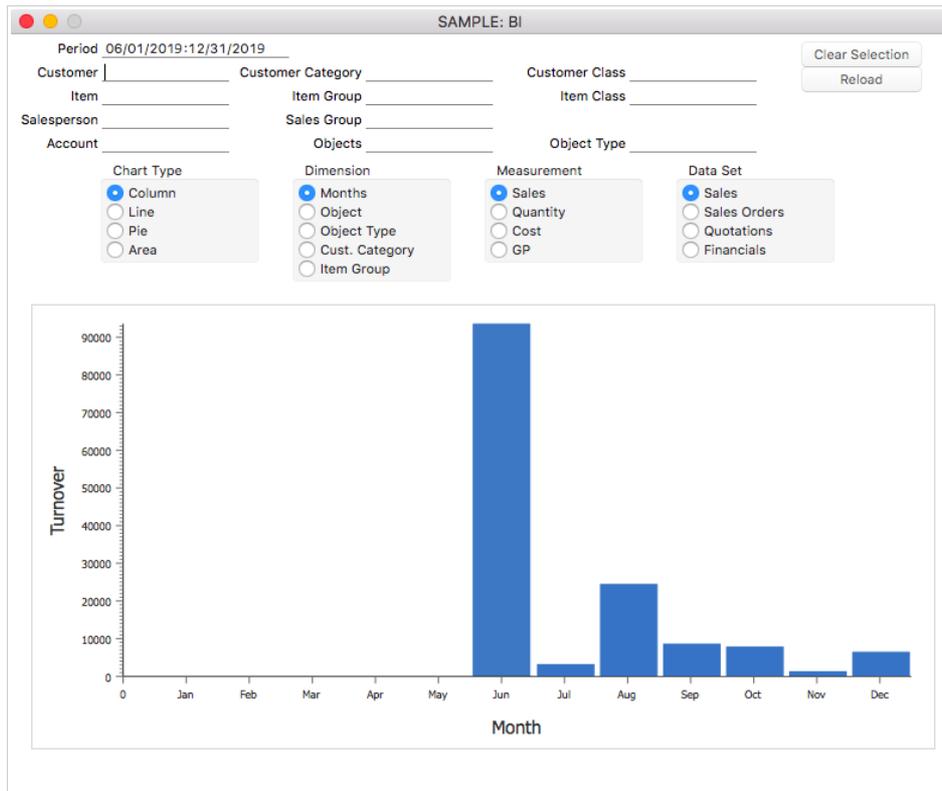
1. Increase sales using “fact-based” selling tools
2. Build profits by targeting profitable activities
3. Increase customer loyalty and retain customers for life
4. Increase the accuracy and timeliness of sales forecasts
5. Achieve budgeted sales
6. Increase the proportion of high-value customers in your customer mix
7. Reduce low-yield activities in the sales process
8. Deploy higher-yield promotions and advertising
9. Predict future behavior of prospects and customers.

BI can be opened from a BI icon that can be found in Navigation Centre on the second row of Productivity section.



The screenshot shows the Standard ERP Navigation Centre interface. The title bar reads "Standard ERP Sample Company: Samuel Jaffacake - Navigation Centre". The main area is divided into sections: "Personal Productivity" (Calendar, Mailbox, Tasks, Conferences), "Navigation: System" (Registers, Settings, Reports, Routines, Forms, Switch Module, Companies), and a "flex.bi" section. The "flex.bi" section contains a list of archives and registers, and a KPI table.

KPI	Previous	Current	Trend
SL Due	807.03	736.59	▲
Sales Ex VAT	0.00	1,618.50	▲
Cost	0.00	89.79	▲
GP %	0.00	94.45	▲
Receipts	10.38	151.44	▲



Then, double-clicking on one of the charts will open a BI window.

The BI window contains a header with specifications, and a chart that corresponds to the specifications above. The Chart can be changed by entering a value in a field or changing a radio button. When choosing or changing something in a field, the chart will change when the cursor is moved to a next field. For example, to choose a Customer, go to a Customer field and select a customer by using the Paste-Special function or just start typing and then choose the correct customer from the Paste Customer window. When a customer is chosen, select Enter to affect the chart or move to the next field.

**Period:** Enter the report period. If you are using four-digit years as in the illustration, the leading digits will be inserted automatically. If your report period is a single day, just enter the date once and this will be converted to a period format automatically. The first row of the Reporting Periods setting is the default value.

**Customer:** Enter the Customer Number by typing it in and then choosing the correct customer from the Paste Customer window or use the Paste Special function.

**Customer Category:** Choose the Customer Category if you want to restrict the report to Customers belonging to a particular Customer Category. You can use the Paste-Special function to do so.

**Customer Class:** Choose the Customer Classification if you want to report on Customers with certain Classifications. If you enter a number of Classifications separated by commas, only those Customers featuring all the Classifications listed will be included in the report.

**Item:** Use this field to limit the report to a single item.

**Item Group:** To limit the report to a single Item Group, enter an Item Group Code here. If both a range of Items and a range of Item Groups are specified, the report will cover only those Items in the range which are members of the specified Item Groups.

**Item Class:** Select an Item Classification. Sales of all Items with that Classification will be included in the report. If you enter a number of Classifications separated by commas, only Items featuring all the Classifications listed will be included in the report.

**Salesperson:** To limit the report to a single Salesperson, enter their Signature here.

**Sales Group:** To limit the report to a single Sales Group, enter the code here.

**Account:** Enter debtors or Sales account and change Data Set to Financials. Note, that Income type of accounts will be displayed with negative values.

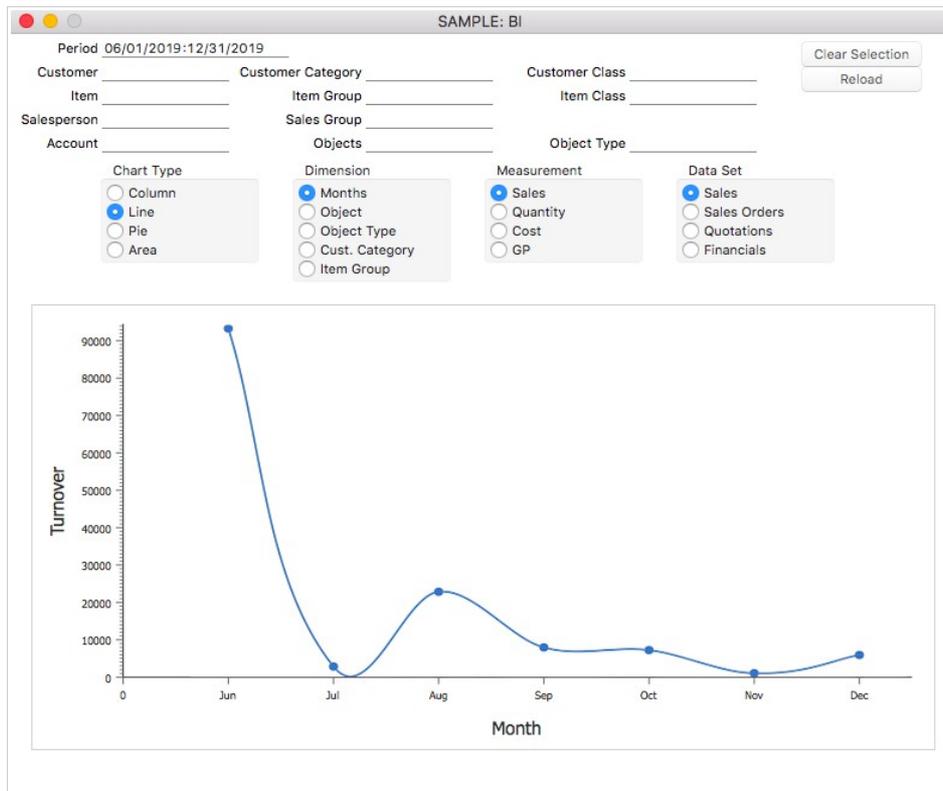
**Objects:** Select an Object to limit the report. This refers to Objects entered both at Invoice level and the Invoice rows. If you enter a number of Objects separated by commas, only those Invoices featuring all the Objects listed will be shown.

**Object type:** Select an Object Type to limit the report.

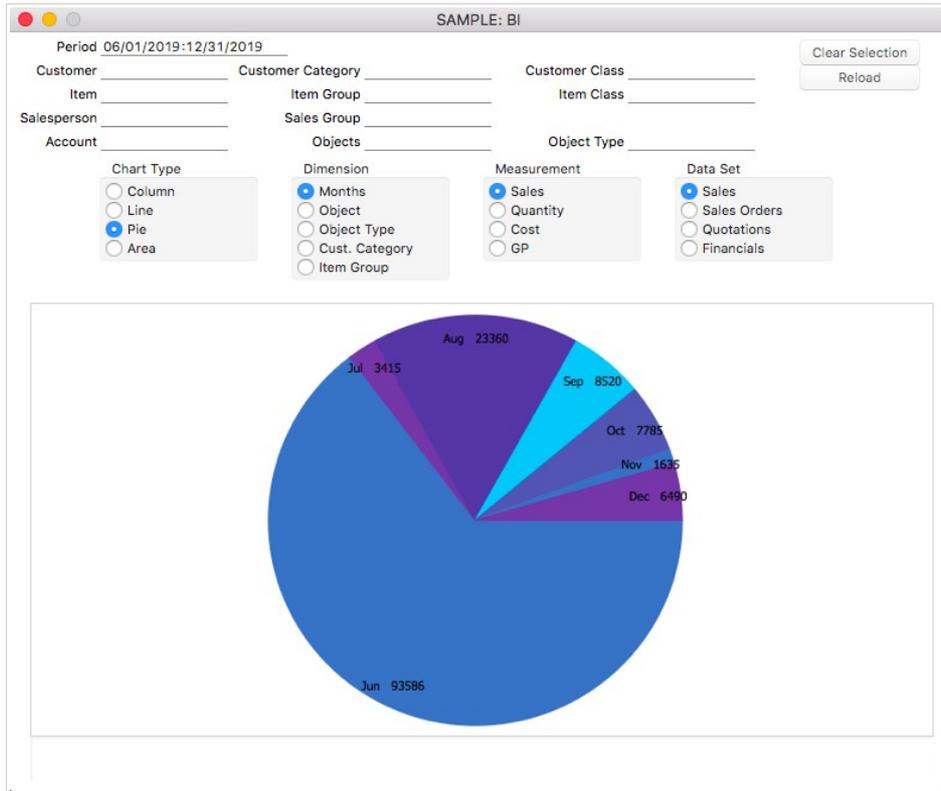
**Chart type:** Choose how you want results to be displayed:

**Column:** Column charts display vertical bars going across the chart horizontally, with the values axis being displayed on the left side of the chart. In the picture below, there is an example picture of a column chart of monthly sales from June to December.

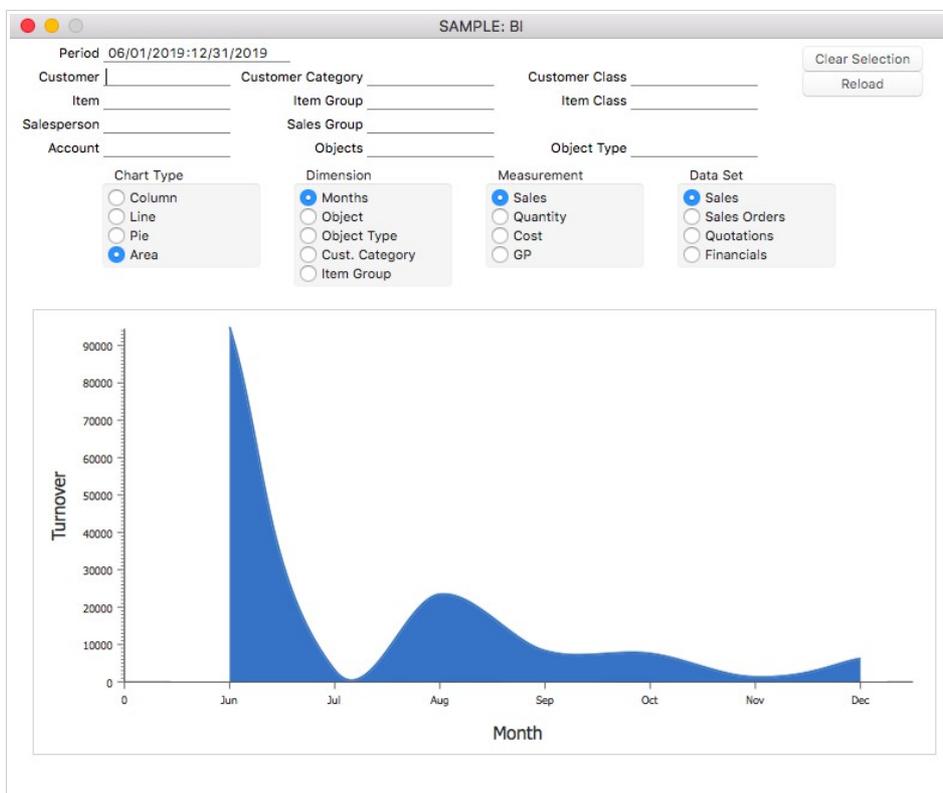
**Line:** a line chart is a graphic representation of data that is plotted using a series of lines. Line charts display lines going across the chart horizontally, with the values axis being displayed on the left side of the chart. In the picture below, there is an example of a line chart showing monthly sales from June to December.



**Pie:** A Circular chart that is sliced into sections, each section represents a percentage. The picture shows a pie chart of monthly sales from June to December.



**Area:** The area chart functions the same way as a line chart only it fills the area between the line and the threshold, which is 0 by default. The values axis being displayed on the left side of the chart. The picture below shows an area of monthly sales from June to December.



**Dimension:** Choose the dimension of data.

**Months:** this selection will display Months on the x-axis.

**Object:** this selection will display Objects on the x-axis and data matching the search criteria above will be divided by Objects.

**Cust. Category:** this selection will display Customer Categories on the x-axis and data matching the search criteria above will be divided by Customer Categories.

**Item Group:** this selection will display Item Groups on the x-axis and data matching the search criteria above will be divided by Item Groups.

**Measurement:** select between different measurements.

**Sales:** this option will display the sales of items in the selected period in Base Currency 1 excluding VAT.

**Quantity:** this option will display the quantity of sold items in the selected period.

**Cost:** this option will display the cost of sales in the selected period in Base Currency 1.

**GP:** this option will display the gross profit in the selected period in Base Currency 1.

**Data Set:** choose between Sales, Sales Orders, Quotations and Financial data.

**Sales:** this option will display the value of sold items in the selected period in Base Currency 1 excluding Tax.

**Sales Orders:** this option will display the value of ordered items in selected period in Base Currency 1 excluding VAT.

**Quotations:** this option will display the value of quoted items in the selected period in Base Currency 1 excluding Tax.

**Financials:** this option will display data from General Ledger Transactions. If you selected an Account, you should choose Financials to see the result.

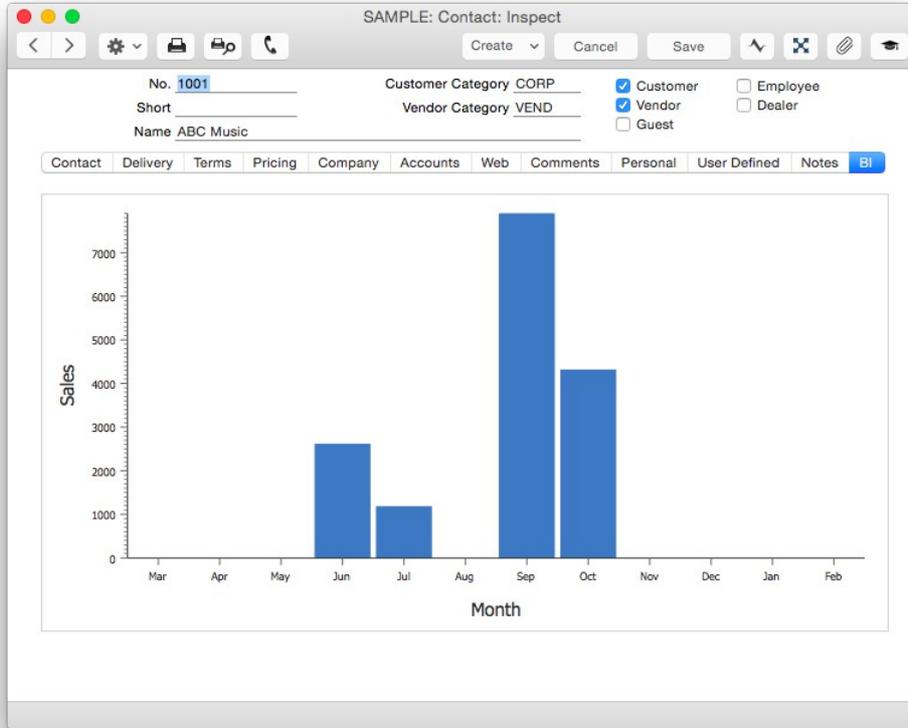
All the types of options above can be combined with each other to produce a wide range of reports.

**Clear Selection:** by selecting this button you will remove all selections in the BI window.

**Reload:** by selecting this button you can include all the information that was entered to the system after you have made your selections.

## BI on other records

A new tile has been added to Contacts, Customer Categories, Items, and Item Groups, for BI. This shows a column chart of sales over the last twelve months, in real time. Currently this feature is only available on Mac.



## EXERCISES

### Preparation

1. Make sure the Configuration settings in the System module allows you to create KPIs and view BI and Dashboard
2. Restrict Access to person AM to only view Dashboard and no BI
3. Make sure the Reporting Periods setting is up to date

### KPI

1. Assign new KPI for user SJ S/L Due. Make sure the arrow color and arrows are represented accordingly.
2. Add the same KPI for user AM
3. Open the created KPI and check if the report matches the KPI
4. Remove the KPI Outstanding Orders from SJ's KPI list

### Dashboard

1. Open Dashboard and make sure that value of outstanding quotations is correct (use Outstanding Quotations report in Quotations module)
2. Open any chart to see that you can open the BI window
3. Log in as AM and try to open BI (AM should not have access to BI)

### BI

1. Open BI window and find out which month was the best sales month of last year (2019)
2. Produce the same data as a Pie chart
3. Check which month was Salesperson HW selling the most in 2019
4. Clear selection
5. Choose KEYBD to the Item Group field and find out how many items were sold in June
6. Change the period to the current month
7. Without closing the BI window create new invoice, OK and Save it
8. Reload the BI window
9. Check the Top 5 Customer's list and open the contact record of the top customer from the Contacts register
10. Go to the BI tile and check which month you have sold the most to that customer.

## APPENDIX

### Terminology between different versions of English language

The language used in this material is American English. There can be slight differences between other versions of the English language, which can lead to confusions. This table should help to clear these up. Sorted alphabetically

British	USA	Canada	Australia + New Zealand	Singapore
Cheque	Check	Cheque	Cheque	Cheque
Colour/coloured	Color/colored	Colour/coloured	Colour/coloured	Colour/coloured
Credit Note(CN)	Credit Memo (CN)	Credit Memo (CM)	Credit Note (CN)	Credit Note
Dialogue	Dialog			
Instalment	Installment			
Jewellery	Jewelry	Jewellery	Jewellery	Jewellery
Licence (noun)	License	Licence	Licence	Licence
Mileage Claim	Miles	Way Lists	Mileage Claim	Mileage Claim
Miles	Miles	KM	KM	KM
Mobile	Cell	Mobile	Mobile	Mobile
Nominal Ledger (NL)	General Ledger (GL)	General Ledger (GL)	General Ledger (GL)	General Ledger (GL)
Post Code	ZIP Code	Post Code	Post Code	Post Code
Profit and Loss Statement	Income Statement	Income Statement	Statement of Profit or Loss	Statement of Profit or Loss
Purchase Ledger	Payable (PL = AP)	Payable (PL = AP)	Purchase Ledger	Purchase Ledger
Sales Ledger	Receivable (SL=AR)	Receivable (SL=AR)	Sales Ledger	Sales Ledger
Salesman	Salesperson	Salesperson	Salesman	Salesperson
Stock	Inventory	Inventory	Stock	Inventory
Stocktake	Inventory Count	Inventory Count	Stocktake	Inventory Count
Stock Depreciation	Inventory Adjustment	Inventory Adjustment	Stock Depreciation	Inventory Adjustment
Supplier	Vendor	Vendor	Supplier	Vendor
Turnover	Revenue	Revenue	Revenue	Revenue
VAT	Sales Tax or Tax	Tax (or GST/PST)	GST	GST/SST/HST