

Business Intelligence Report - Basic Usage Guideline



Applies to:

SAP BI 7.0 / SAP Netweaver 2004s. For more information, visit the [Business Intelligence homepage](#).

Summary

This article provides an overview of some important features available on the BI query at run time which helps in analyzing the data easily and consistently.

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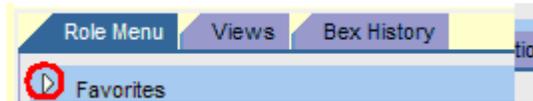
Introduction

Business Warehouse reports can be modified to meet the specific needs of the users. The following steps will show you how you can design your report layout to analyze the data. The techniques described may be used on any BI 7.0 report (BW 3.5 report where features coincide).

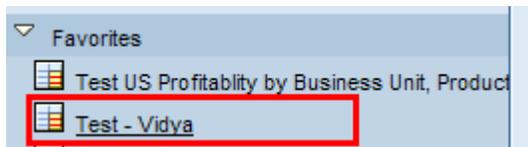
Accessing the BI report on Portal

After logging into the SAP portal, navigate to the report / query of interest.

Click on the triangle next to the report group and any subsequent groups to get to the reports.



Click on the name of the report, **not** the icon to the left of it.



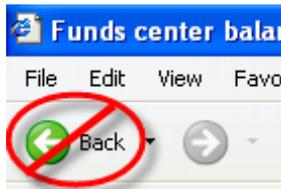
Enter the variables you wish to use for the report along with any required variables.

When you have set all the variables, click on the **Execute** button.



Navigation within Report

While designing the layout of your report, you may need to step backward or return to the original view of the report. **DO NOT** use the **Back** icon at the top of your web browser to step backward.

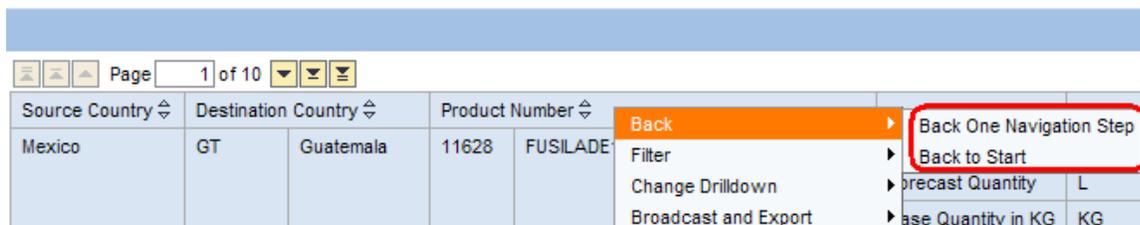


To step back one step: Right-click on any column heading. Select **Back**.

To step back to the original layout of the report: Right-click on any column heading.

Select **Back to Start**.

Caution: Any modifications you have made will be lost.



Report Terms Definition

Rows section

Specifies fields shown in rows in the view of the report.

Columns section

Specifies fields shown in columns in the view of the report.

Free Characteristics section

Fields that are not shown in the initial view, but are available if you want to use them as a column, row, or filter in your view of the report. Free Characteristics are non-amount values or values that describe what a key figure represents and are usually displayed in rows.

Key Figures

Dollar amounts or units; typically displayed in columns.

Structure

Data elements that are grouped together because they are closely related or dependent on each other. Choosing a Structure will provide all of the associated fields in that Structure.

Selection of value on F4

While searching for values for any variable on selection prompt or filter; the F4 functionality provides option for single, range of values depending upon the definition of the variables.

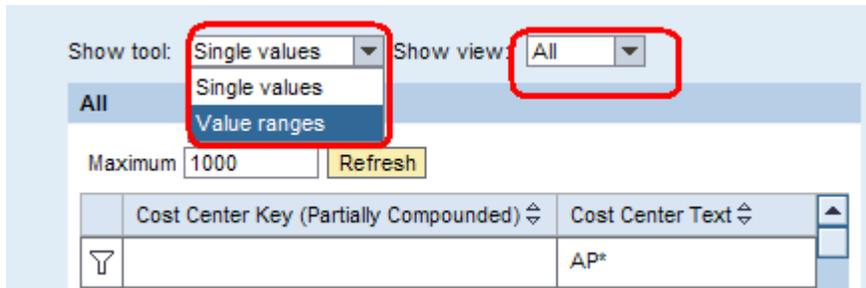
Text search is enabled but is case sensitive. Wild card usage is helpful to list down values with similar pattern.

Y		AP*
	NCPC/63113	AP Horizon BTM
	NCPC/63114	AP Target
	NCPC/63116	AP Horizon
	NCPC/63117	AP Tilt
	NCPC/63118	AP Axial
	NCPC/63123	AP Total Approach
	NCPC/63343	AP CB/HO
	NCPC/63345	AP TO Products
	NCPC/63533	AP ST General
	NCPC/6311801	AP Achieve EG
	NCPC/6311802	AP Achieve 80
	NCPC/6312301	AP Touchdown

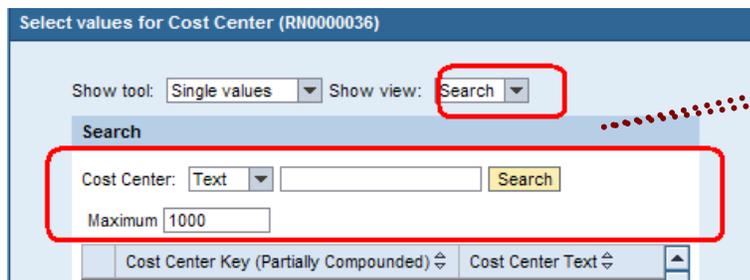
Enter a value for Cost Center:

Using wild character search

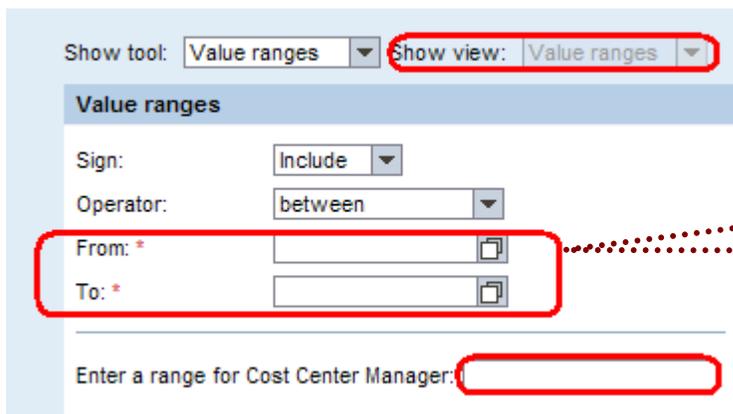
Direct Entry of values



By selecting on show view tab: you can determine to search with key or text for characteristic.



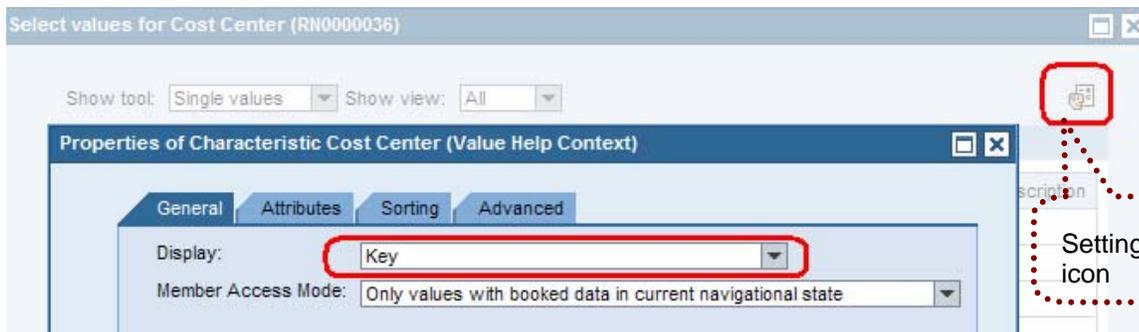
Select on basis of text or key values



Choosing range of values

On the F4 help screen you can see settings icon highlighted on right hand upper corner.

This gives options to display the selected characteristic with different combinations of key and text display, sort order for values of characteristic, list down display or navigational attributes of the characteristic and some options of F4 help values.



Settings icon

The above functionality can also be called on context menu through below path:



Menu Toolbar

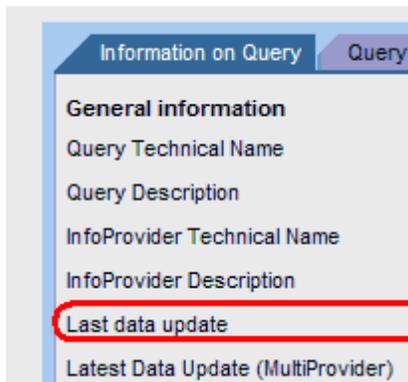


You can use **Save View** tab to save query view created on Web. And the saved views can be retrieved using **Search** option.

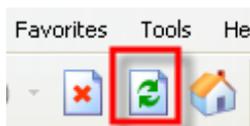
Selection tab allows user to re-select the values of variable entry of query without refreshing the page or using Back button.

Show Chars tab lists down on top left hand side of page the characteristics and key figures in rows/ columns and the free characteristics which can be used for further drill down.

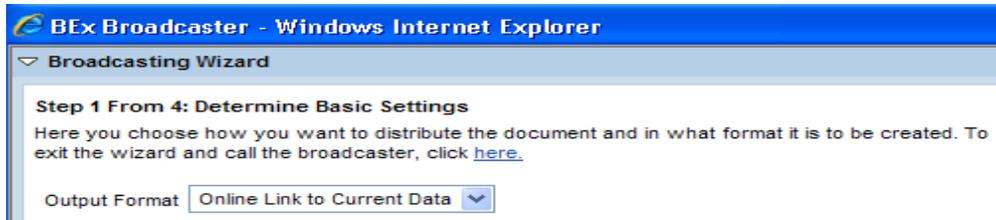
Information tab provides technical information on the query. It also lets you know the last update of data in BW for the selection query.



Tip: If this date is not current, click on your browser's **Refresh** button to refresh the data generated by the query. If it still is not current, the BW Team can be contacted.



Send tab allows user to access Bex Broadcaster tool and pops up screen similar to below:



Bookmark tab

If you want to return to a particular navigational status (that includes the level to which a hierarchy has been expanded) of a Web application or an ad-hoc query that has been created on the Web, you can set a bookmark to enable you to recall this navigational status at a later date. The system creates a URL for the bookmark that you can call up at any time.



Just click on the highlighted bookmark status on top of page and save the link which can be used later for accessing the desired navigated state of query.

Print tab allows saving file in form of PDF with required settings. This saved PDF file can then be printed by normal method.

Excel tab allows saving of report output in form of excel sheet.

Hide Toolbar tab closes the toolbar option.

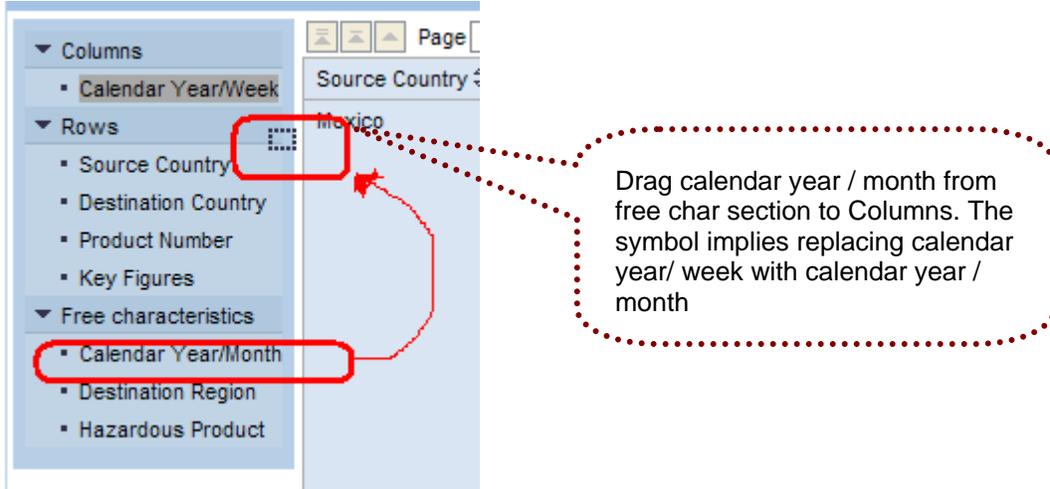
Close Window tab allows user to close the current window and pops a confirmation screen.



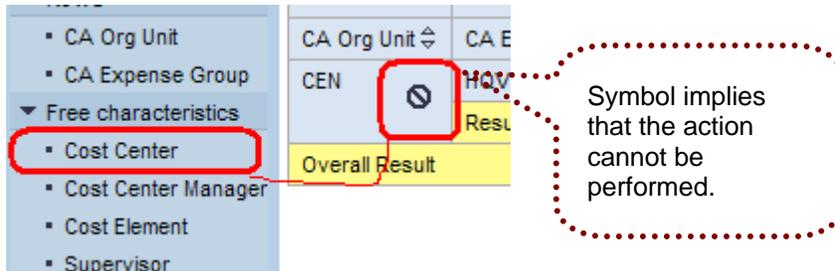
BW Data Analysis Techniques

Drill-Down

To display a field's data in rows, click on the **Drill-down** icon in the first column of settings for the field (found under Show Chars).

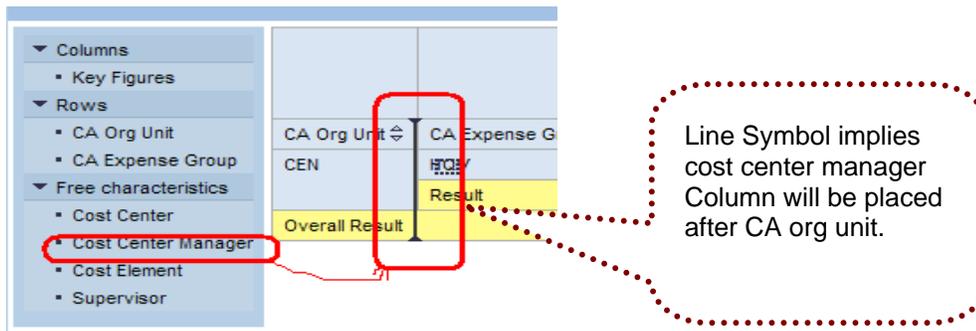


If below symbol is seen then the desired action cannot be performed.



Dropping one element on another element; exchanges their position while dropping an element; removes it.

While drag drop, the highlighted line would let you know the exact position where the new dragged in characteristic is going to be placed.



As shown below:

CA Org Unit ⇅	Cost Center Manager ⇅	CA Expense Group ⇅
CEN	#	Not assigned
		HQV
Result		

Caution: Depending on the data, there may be too many values to display in columns. If there are too many, turn off **Drill-Across** or right-click on the column heading and choose Back.

Filters

Use filters to narrow your view to very specific data.

To adjust filter area, drag characteristics from navigation area into filter area

Calendar Year/Month:
 Calendar Year/Week:
 Destination Country:

Destination Region:
 Hazardous Product:
 Key Figures:

Product Number:
 Source Country:

Also drag and drop can provide filter out features as shown below. The 'X' symbol implies that selected object (column / cell value) will be filtered out of report.

CA Org Unit ⇅	Cost Center Manager ⇅
CEN	#
	Not assigned

Cross Symbol implies selected column / row will be removed or filtered from report layout.

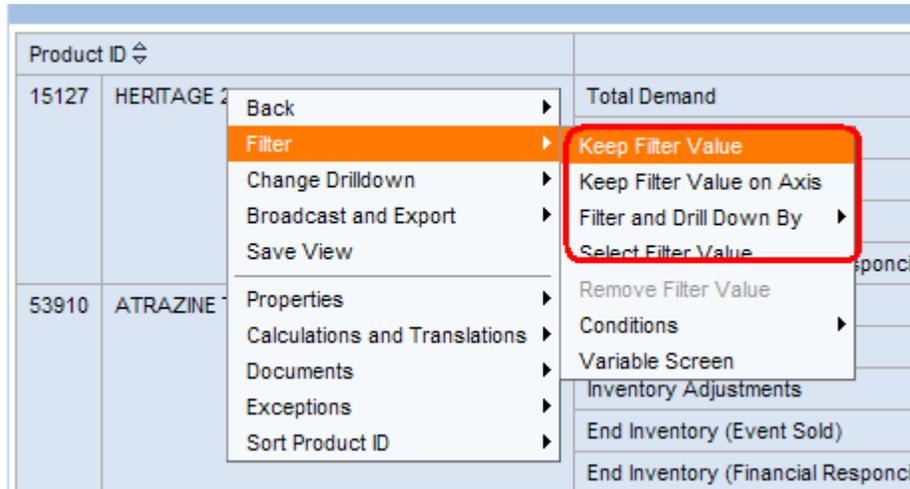
The result is:

Cost Center Manager ⇅	CA Expense Group ⇅
#	Not assigned
	HQV
Result	

Context Menu Options

You also can use a **Context Menu** to turn features of drill-down, drill-across, and filtering on and off; right-click on the field name to access the menu.

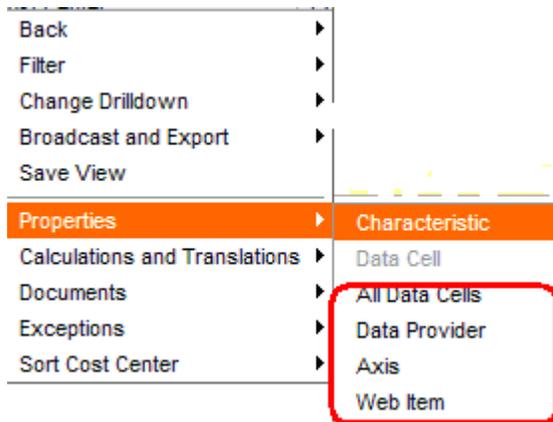
Click on the **Filter** icon to the right of the field name in the settings area.



The **Keep Filter Value** tab filters the query on basis of value of cell on which user right clicks. In above sample; if right click is on the first row then report is filtered on value of 15127 product.

The *Select Filter value* option allows user to select a value on chosen characteristic (even if it is already filtered).

Extra properties on context menu:



Data Cells Properties enable highlighting, scaling factor, decimals and a basic set of calculations that can be done on the results rows under *Calculate Results As* or *Calculate Single Values As*.

Properties of all data cells

General | Number format | **Calculations**

Cumulate After Applying Single Value Calculations and Result Calculations

Reverse Sign

Calculate Single Values As:

Calculation Direction:

Apply Detail Calculation To Results

Calculate Results As:

Calculation Based On Results of Former Detail Calculations

Calculation at run time

Data Provider Properties give a chance to user for changing basic properties on the query itself like zero result suppression, number format, and data position.

Query view properties

Data Formatting | Number format | **Zero Suppression**

Result position:

Display columns hierarchically and...
... drilldown to:

Display rows hierarchically and...
... drilldown to:

The Axis properties enable formatting on row and column depending upon where the right click is done while accessing context menu options.

Row axis properties

Data Formatting | **Zero Suppression**

Result position:

Display axis hierarchically and...
... drilldown to:

Column axis properties

Data Formatting | **Zero Suppression**

Result position:

Display axis hierarchically and...
... drilldown to:

Web Item Properties enables you to override the parameter settings in the properties of a Web item at runtime. Eg. Scaling factors can be made visible in report, using colors, symbols etc for quick analysis.

Here, you can see color based exceptions

CURR MTH BUD vs ACT VAR	CURR MTH BUD vs ACT VAR %
CAD	
-15,901.00	-0.5
-15,901.00	-0.5
-15,901.00	-0.5
-15,901.00	-0.5

0	0	0	0
0	0	0	0
0	0	0	0
320	-25,440		
25,440	↓-14,640	↓-15,248	↓-15,564
	0	0	0
0	0		

Negative values are shown with downward arrows

Broadcasting Options:

On context menu you can find option to print the report output or save in a PDF; CSV or excel format; email or broadcast on portal.

- Back
- Change Drilldown
- Broadcast and Export**
 - Broadcast E-Mail
 - Broadcast to Portal
 - Broadcast to Printer
 - Export to CSV
- Save View
- Properties
- Calculations and Translations
- Documents
- Exceptions

Currency Conversion:

On context Menu there is option of currency conversion on runtime.

- Change Drilldown
- Broadcast and Export
- Save View
- Properties
- Calculations and Translations**
 - Global Currency Translation
- Documents
- Exceptions

CURR MTH BUDGET	CURR MTH ACTUAL	CURR MTH ACT vs. BUD VAR	CURR MTH ACT vs. BUD VAR %	YTD BUD	YTD ACTUAL	Y vs B
CAD	CAD	CAD		CAD	CAD	
151,107	168,245	-17,138	-11.3	151,107	168,245	
84,298	97,500	13,202	15.7	84,298	97,500	

Query view properties

Currency conversion

Currency: **MXN | Mexican Peso (new)**

Currency conversion: **G M - GSAP standard average (M)**

Original Values in CAD

Convert to MXN using chosen rate

Result is:

CURR MTH BUDGET	CURR MTH ACTUAL	CURR MTH ACT vs. BUD VAR	CURR MTH ACT vs. BUD VAR %
MXN	MXN	MXN	
1,748,069	1,946,330	-198,260	-11.3

Values are converted from CAD to MXN using rate 'STD Avg rate'

Exceptions:

Exceptions allow you to color-code cells that meet specified criteria; E.g., you can use an exception to alert you that a dollar figure has exceeded a certain amount.

You can choose to activate / de-activate existing exceptions or create anew one through the wizard help on runtime. This would not be save on the query permanently.

- Back
- Change Drilldown
- Broadcast and Export
- Save View
- Properties
- Calculations and Translations
- Documents
- Exceptions**
 - Create New Exception**
 - Highlight Negative Value Cells 1
 - Highlight Negative Value Cells 2
 - Highlight Negative Value Cells 3
 - Highlight Negative Value Cells 4

Define exception

1 **Set exception type** 2 Set threshold value 3 Set target 4 Set visualization 5 Set characteristic restriction 6 Set properties

In this step, you define the type of exception. The type affects, among other things, the visualization of your exceptions.

Creation steps for a new exception at runtime.

Conditions:

Conditions provide a way to change a report so that only the data that meets certain criteria, defined by the user, is selected and displayed.

The 'Define Condition' workflow consists of four steps: 1. Set condition type, 2. Set condition parameter, 3. Set characteristic assignment, and 4. Set properties. A callout box points to step 4, stating: 'Creation steps for a new condition at runtime.'

Additional Properties on Toolbar

The **Display As** drop down box has options of tabular, graphic and mix display of report output on runtime.

The toolbar includes buttons for 'Show Chars', 'Selection', 'Filter', 'Settings', 'Save View', 'Information', 'Send', 'Print', 'Bookmark', 'Excel', and 'Display As Table'. Below the toolbar are tabs for 'Exceptions', 'Conditions', 'Data Provider', 'Table', and 'Graphic'. The 'Settings' button and 'Display As Table' dropdown are circled in red.

With the Settings tab; we can also modify or create new settings for exception, conditions etc.

The **Table** tab option enables controlling on scrolling, number of rows and columns displayed etc.

The 'Paging' settings panel includes:

- Use Scrollbars: Enabled
- Paging Type for Rows: By Page
- Paging Type for Columns: By Page
- Paging Area Visible Below Table
- Paging Area Visible Above Table
- Number of Data Columns Displayed at Once: 20
- Columns Scrolled for Each Step: 0
- Number of Data Rows Displayed at Once: 10
- Rows Scrolled for Each Step: 0

While the **Graph** tab option provides facility to choose properties for a graphic representation.

The 'Graphic' settings panel is divided into three sections:

- Chart Settings:** Chart Type (Columns), Legend Type (Chart Legend Position), Chart Legend Position (South).
- Chart Texts:** Manual Axis Description, Axis Description (Language Dependent), Category Axis (X), Value Axis (Y).
- Data-Specific Settings:** Swap Display Axes, Result Visible, Show Expanded Hierarchy Nodes.

Documents:

Documents can be created, uploaded and displayed on reports.

This has a list of pre-requisites though:

- You are authorized to display and edit documents.
- While defining a characteristic in BW; *Characteristic Is Document Property* indicator is selected for the characteristic whose values are to be assigned to the documents.
- While configuring the BI system, you made the settings for the documents in the portal.

The image consists of three screenshots of the SAP 'New Document' interface, each with a callout box explaining a step:

- Top Screenshot:** Shows the 'General' tab with fields for 'Name' and 'Description'. A 'Browse...' button is visible. A callout box points to the 'Browse...' button with the text: "Uploading a file from local machine as document".
- Middle Screenshot:** Shows the 'General' tab with 'Name' set to 'New Formatted Text' and 'Description' set to 'Hello'. A rich text editor toolbar is visible above the text area. A callout box points to the text area with the text: "Create general formatted text on your own".
- Bottom Screenshot:** Shows the 'BI' tab with fields for 'Key Figures' (RN0000099), 'Query' (RNCO_M01_Q0001), 'InfoProvider' (RNCO_M01), and 'Document Type' (html). A callout box points to the 'Document Type' field with the text: "Create a field specific formatted text".

References

<http://help.sap.com>

For more information, visit the [Business Intelligence homepage](#).

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