

# **bambooBSC 0.5**

bambooBSC Guide

Author: Chen Xin Nien

contact: [chen.xin.nien@gmail.com](mailto:chen.xin.nien@gmail.com)

Overview.....	3
Basic Operations.....	4
Step sourcecard established.....	5
1. Vision.....	6
2. Perspectives.....	8
3. Strategy objective.....	10
4. KPI.....	12
5. Measure-data.....	17
6. KPI Report.....	18
7. Personal Report.....	20
8. Department Report.....	22
9. Strategy Map.....	24
10. SWOT.....	26
11. Report signature.....	28
12. Query Charts.....	30
13. Analytics ( OLAP ).....	34

## Overview

bambooBSC is an opensource Balanced Scorecard (BSC) , It provides analysis of employee performance or department/organization performance.

### Core Features:

Sourcecard:

Establish and maintain scorecards information or maintenance KPI measure data . And Strategy Map

Report:

The report includes a KPI reports, department/Organization scorecard reports, personal scorecard reports, SWOT reports .

## Basic Operations

Please look figure-A .

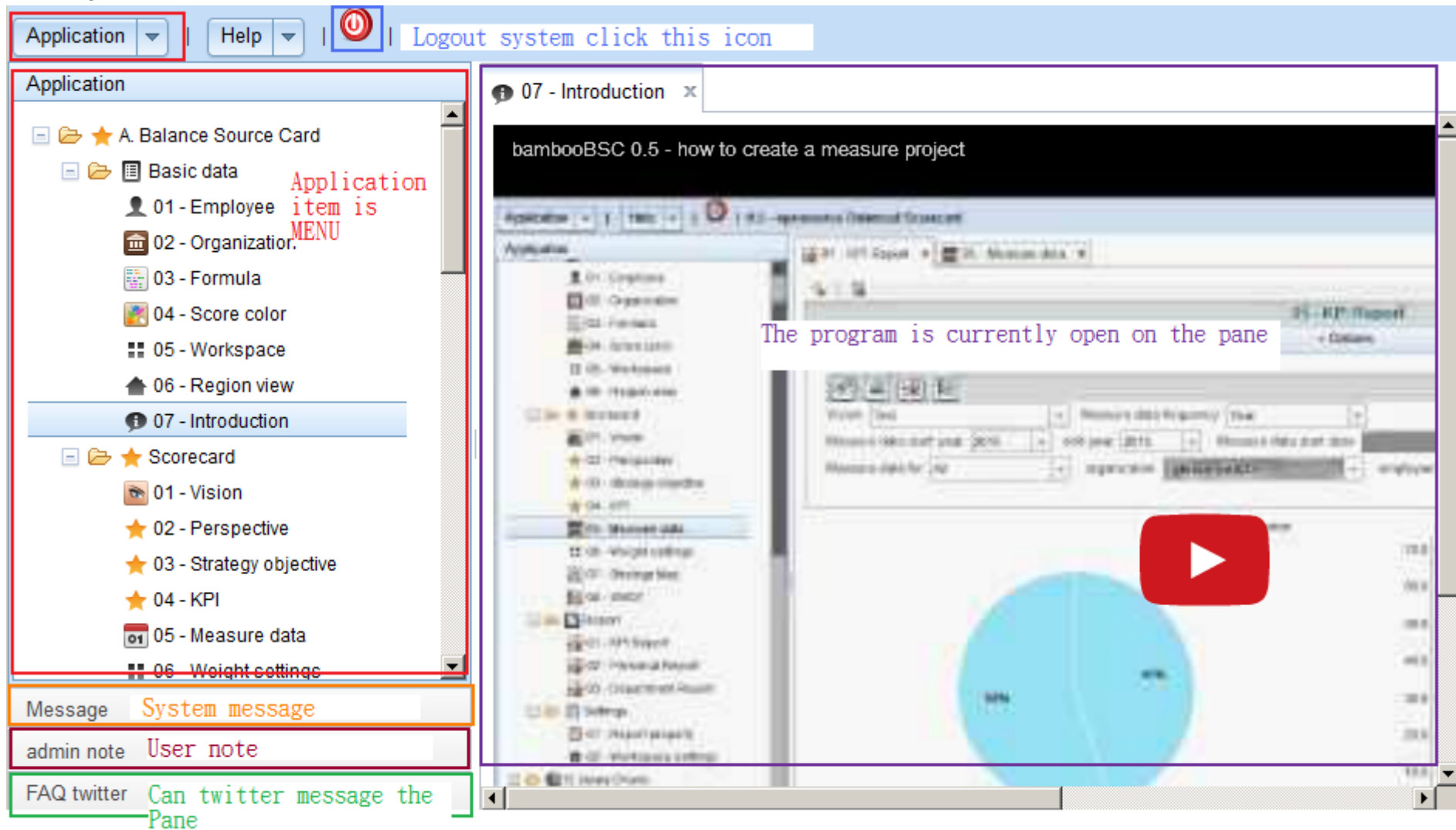


figure – A

## **Step sourcecard established**

How to build scorecard data , Reference Videos : <https://www.youtube.com/watch?v=A27wnMTtfOc>

### **1. establish a Vision**

Complete proposed goals and vision

### **2. establish Perspectives**

establish BSC four perspectives, about BSC perspectives please Reference : [http://en.wikipedia.org/wiki/Balanced\\_scorecard](http://en.wikipedia.org/wiki/Balanced_scorecard)

Established with the heads of each of the vision must have Perspective, otherwise this vision is invalid

### **3. establish Strategy Objectives**

Each set has established Objective item for a Perspective

The main goal of the strategic objectives narrative direction

### **4. establish KPI**

The establishment of key project of objectives can be measured create a KPI items.

### **5. maintain Measure-data**

Each KPIs item will need to maintain measure-data, no measure-data will not be calculated KPI performance scores .

## 1. Vision

First click “ 01 – Vision “ item on menu or tree menu. Look figure 1-01

The screenshot shows a web application window titled "01 - Vision". At the top, there is a header bar with the title "01 - Vision" and an ID "ID: BSC\_PROG002D0001Q". Below the header, there are two input fields labeled "Id:" and "Title:". To the right of these fields are two buttons: "Query" and "Clear". Below the buttons, there is a pagination bar showing "total: 1", "page 1", and "row size 10". At the bottom, there is a table with the following structure:








View / Edit	Id	Title
 	VIS20141114001	Example vision

figure 1-01

-  the icon to **create** page
-  the icon to **refresh** page
-  the icon to **close** page

Grid items:

-  the icon to **edit** current item data
-  the icon to **delete** current item data

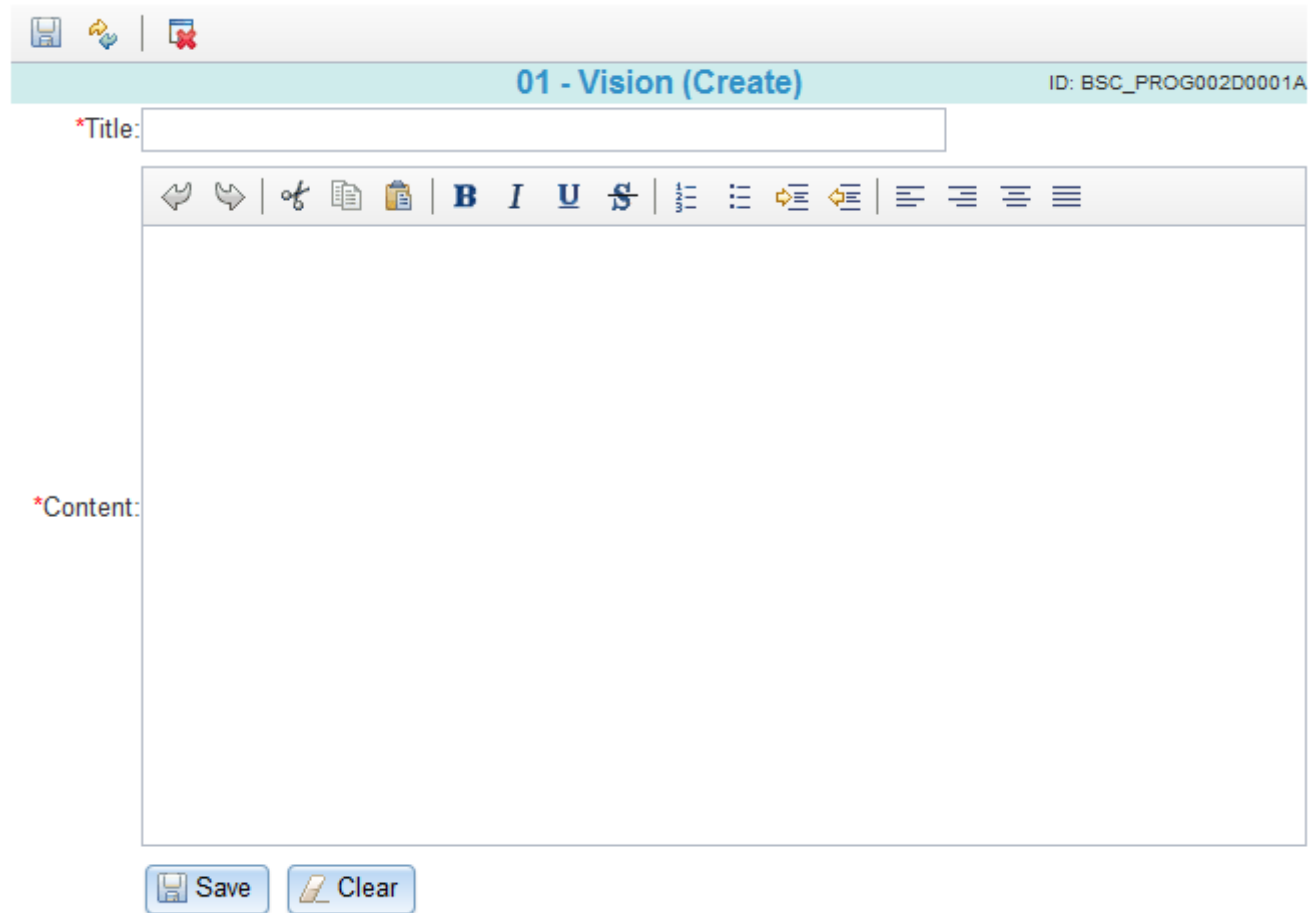
**Create Vision** first click 

will look figure 1-02 ,

**Title:** the item input title.

**Content:** the item input content data.

After the completion of data entry . Click “**Save**”

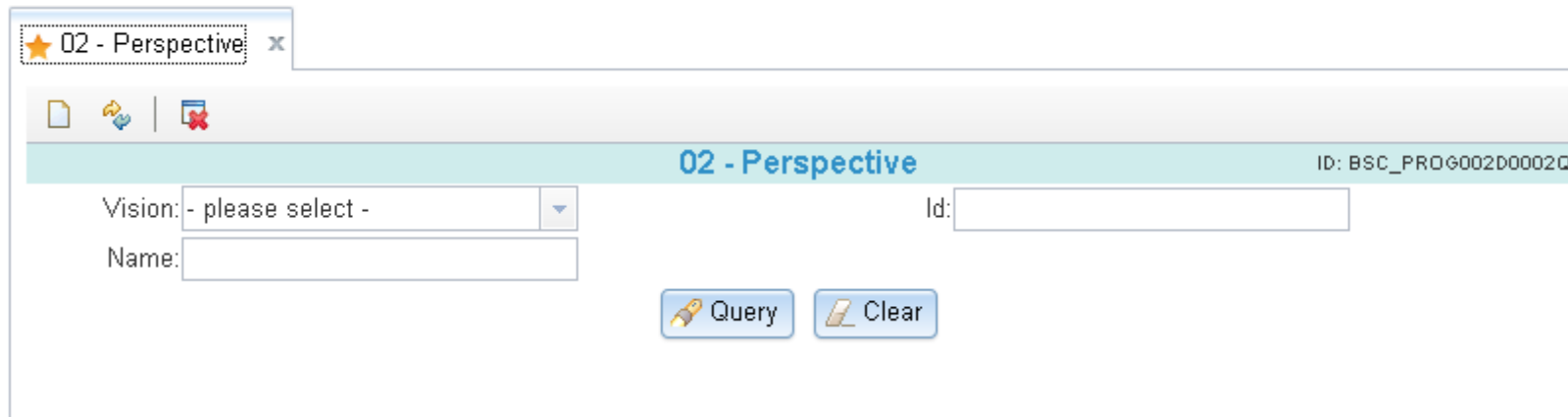


The screenshot shows a software interface for creating a vision. The window title is "01 - Vision (Create)" with a sub-ID "ID: BSC\_PROG002D0001A". The interface includes a "Title" input field and a "Content" text area with a rich text editor toolbar. The toolbar contains icons for undo, redo, cut, copy, paste, bold, italic, underline, strikethrough, bulleted list, numbered list, link, unlink, indent, and outdent. At the bottom, there are "Save" and "Clear" buttons.

figure 1-02

## 2. Perspectives

Click “ 02 – Perspective “ item on menu or tree menu. Look figure 2-01



02 - Perspective x

02 - Perspective ID: BSC\_PROG002D0002Q

Vision: - please select - Id:

Name:

Query Clear

figure 2-01

**Create Perspective** first click 

look figure 2-02

**Vision:** select Perspectiv's vision

**Name:** Perspective's name , Usually BSC four perspectives ( Financial, Customer, Internal business processes, Learning and growth)

**weight:** recommend value is 25 . (BSC typically there are four perspectives , so  $100/4$  is 25 )

**target:** Perspective's target value.

**Min:** Perspective's min value.




**Description:** memo or explain

Click “**Save**” to create perspective item data.



★ 02 - Perspective x

★ 02 - Perspective (Create) x



02 - Perspective (Create)ID: BSC\_PROG002D0002A

\*Vision: - please select -


\*Name:

\*weight: +000.00

\*target: +000.00

\*min(alert): +000.00

description:

 Save



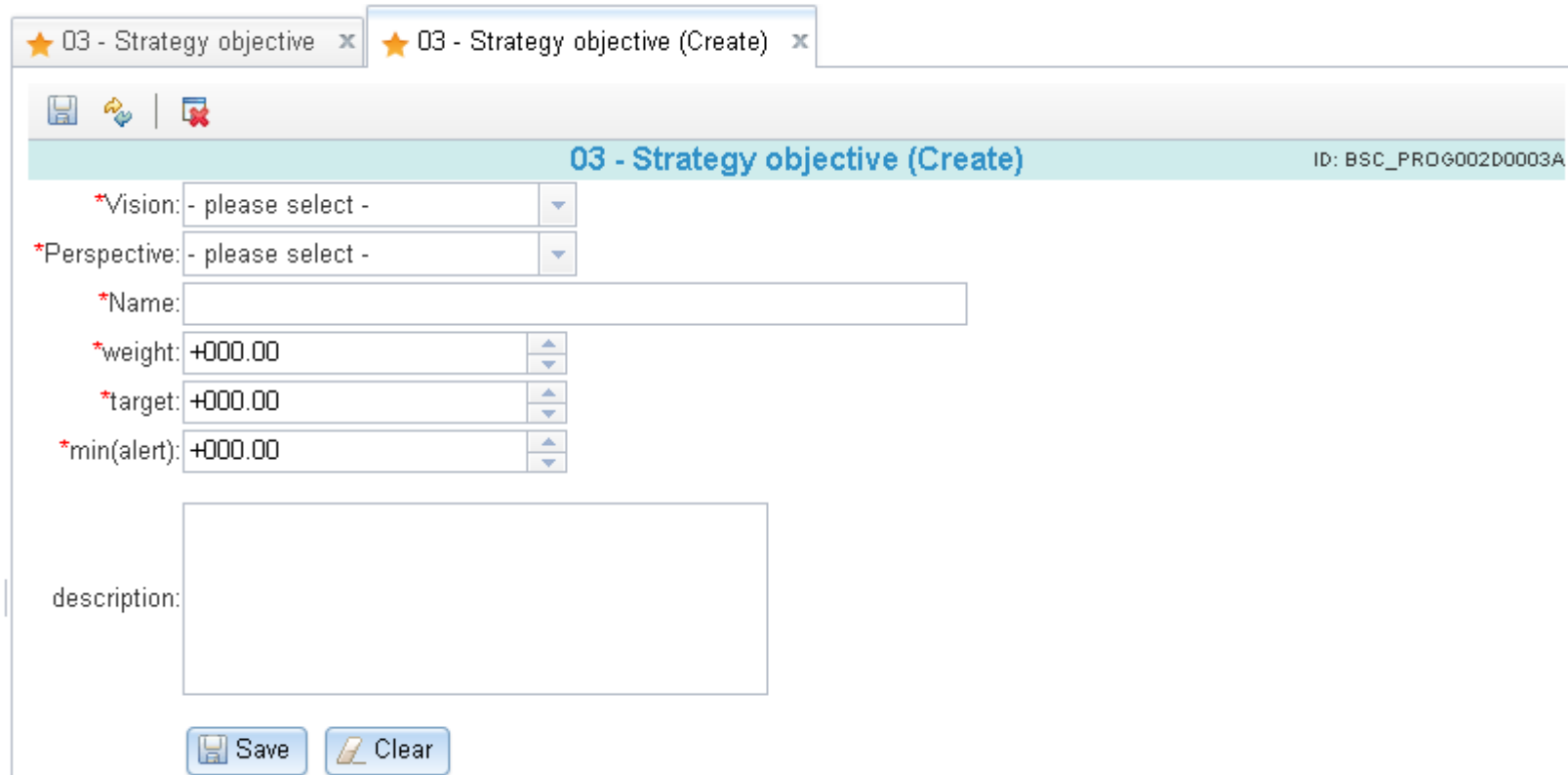
 Clear

figure 2-02

### 3. Strategy objective

Click “ 03 – Strategy objective “ item on menu or tree menu. After click   
look figure 3-01



★ 03 - Strategy objective x    ★ 03 - Strategy objective (Create) x

03 - Strategy objective (Create) ID: BSC\_PROG002D0003A

\*Vision: - please select -

\*Perspective: - please select -

\*Name:

\*weight: +000.00

\*target: +000.00

\*min(alert): +000.00

description:

Save Clear

figure 3-01

**Vision:** select objective's vision

**Perspective:** select objective's perspective

**Name:** objective's name

**weight:** Must be greater than ZERO. If set to ZERO does not make sense

**target:** target value.

**min:** min value.

**description:** memo or explain

#### 4. KPI

Click “ 04 – KPI “ item on menu or tree menu. After click  
look figure 4-01



figure 4-01

★ 04 - KPI x

★ 04 - KPI (Create) x

04 - KPI (Create)

\*Vision: - please select -

\*Perspective: - please select -

\*Objective: - please select -

\*Id:

\*Name:

\*Formula: - please select -

\*weight(%): +000.00

\*target: +000.00

\*min(alert): +000.00

\*Compare type: - please select -

\*Unit:

\*Management method: - please select -

\*Calculation: - please select -

\*Belong type: - please select -

Department:

Employee:

Organization measure-data separate: ☒

Personal measure-data separate: ☒

description:

for quasi is better: 0%

Save

Clear

**Vision:** select KPI's vision

**Perspective:** select KPI's perspective

**Objective:** select KPI's objective

**Id:** KPI's id

**Name:** KPI's name

**Formula:** KPI's formula , It will affect the calculation of scores, Formula create or edit/modify please try “Basic data / **03 - Formula**”

**weight:** Must be greater than ZERO. If set to ZERO does not make sense

**target:** target value.

**min:** min value.

**Compare type:** with target (the KPI scores compare target value) , with min (the KPI scores compare min value)

**Unit:** KPI's unit

**Management method:** Bigger ( score bigger is better) / Smaller ( score smaller is better) / Quasi ( score quasi is better)

**Calculation:** Average , Total , Max , Min

Examples the KPI have TWO measure-data

A. 2014 measure-data score is 50

B. 2015 measure-data score is 80

range 2014 ~ 2015

Average score =  $(50 + 80) / 2 = 65$

Total score =  $50 + 80 = 130$

Max score = 80


Min score = 50

**Belong type:** recommend select “Both”

**Department:**  click open pop-window to select ( figure 4-02 )

 click clear select value

**Employee:**  click open pop-window to select ( figure 4-03 )

 click clear select value

**Organization measure-data separate:** recommend is checked / enable

**Personal measure-data separate:** recommend is checked / enable

**description:** memo or explain

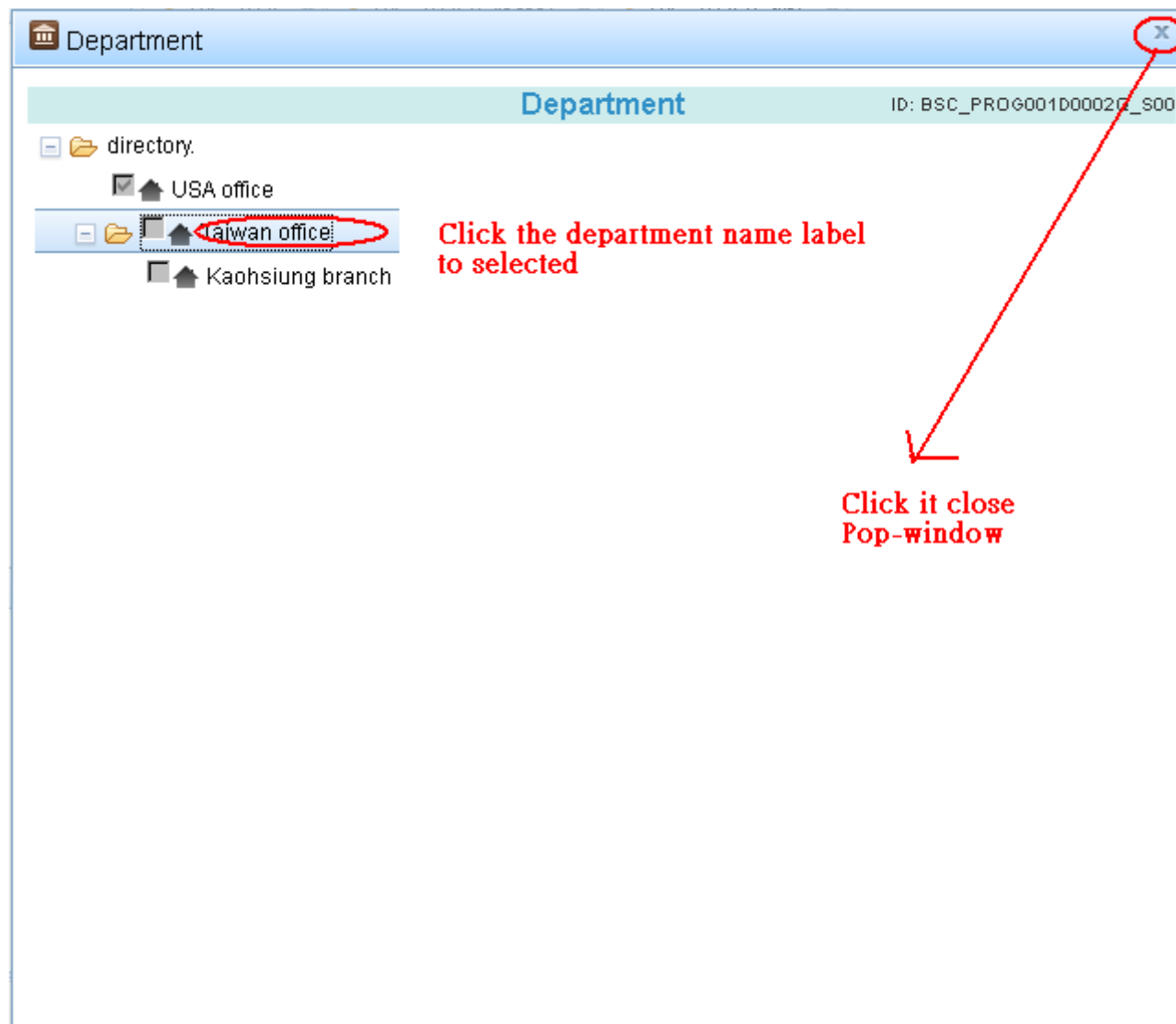


figure 4-02

Employee

EmployeeID: BSC\_PROG001D0001Q\_S00

No:

Name:

Query

Clear

total: 2

page 1

row size 10

*	Id	Account	Full name	Job title
<input type="checkbox"/>	0001	admin	administrator	MIS
<input checked="" type="checkbox"/>	0002	tester	Test user	Manager

click close icon to hidden Pop-window

figure 4-03



## 5. Measure-data

Data needs regular updates and maintenance , If you do not enter data for measurable KPI, the KPI on the report does not make sense  
click “ 05 – Measure data “ . look figure 5-01

1. select an KPI items 2. Settings options 3. Query 4. Save

05 - Measure data x

05 - Measure data ID: BSC\_PROG002D0005Q

KPIs menu

KPIs

1. first click an KPI item

Enhance turnover

**Sales**

Investment

Stock market investment fu

Investment projects in deve

Customer

Increase customer

Expanding Asia-Pacific mai

Internal business processes

Upgrade organization

Loss stronghold transform:

Learning and growth

Capacity building objectives

Education and Training

2. Settings options

Options

Measure data for: All Frequency: Month

Organization: - please select - Employee: - please select -

3. Query Query Clear Save 5. Save

Sales

Management:Bigger is better, Calculation:Average, Unit:%, Target:50, Min:10

Formula name:F001 actual + target

2015

January	February	March	April	May	June
T: 100 A: 60	T: A:	T: A:	T: A:	T: A:	T: A:
Juiy	August	September	October	November	December
T: A:			T: A:	T: A:	T: A:

T (Target value) , A (Actual value)

figure 5-01

6. KPI Report

Query organization/Department or Employee 's performance score . first click Report “ 01 – KPI Report ” look figure 6-01

01 - KPI ReportID: BSC\_PROG003D0001Q





▼ Options

Vision: - please select -Measure data frequency: Year

Measure data start year: end year: Measure data start date: end date:

Measure data for: Allorganization: - please select -employee: - please select -

figure 6-01

ICON	Description
	Query report content
	Export query report as PNG image, ( used IE browser the function failure )
	Export query report as PDF file, ( used IE browser the function failure )
	Export query report as Excel file, ( used IE browser the function failure )
Vision: - please select -	Select an Vision
Measure data frequency: Year	Select frequency
start year: end year:	If Frequency is “ Year” , “ Half of year ” , “ Quarter ” , must input start year and end year

start date: <input type="text"/>	If Frequency is “ Month” , “ Week ” , “ Day “ , must input start day and end day
end date: <input type="text"/>	
Measure data for: <input type="text"/>	<b>All:</b> Measure data type is non-departmental and non-employee class <b>Organization:</b> Measure data type only for an organization/Department <b>Employee:</b> Measure data type only for an employee
organization: <input type="text"/>	If measure data for organization type. Need select the option
employee: <input type="text"/>	If measure data for employee type. Need select the option

7. Personal Report

Query employee's BSC report. first click Report “ 02 – Personal Report ” look figure 7-01

02 - Personal ReportID: BSC\_PROG003D0002Q

▼ Options

Vision: - please select -





Measure data frequency: Half of year

employee: - please select -

201320142015

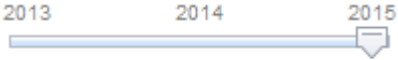
In the first half

figure 7-01

ICON	Description
	Query report content
	Export query report as PNG image, ( used IE browser the function failure )
	Export query report as PDF file, ( used IE browser the function failure )
	Export query report as Excel file, ( used IE browser the function failure )
<div>Vision: - please select -</div>	Select an Vision
<div>Measure data frequency: Half of year</div>	No need select, system auto settings.

employee:

Select an employee





Select report year.

**In the first half:** measure-data frequency basic of first half  
**In the second half:** measure-data frequency basic of second half  
**Year:** measure-data frequency basic of Year

8. Department Report





Query organization/Department BSC report. first click Report “ 03 – Department Report ” look figure 8-01

03 - Department Report x

03 - Department Report ID: BSC\_PROG003D0003Q





Options

Vision: - please select - Measure data frequency: Half of year department: - please select -

2013 2014 2015 In the first half

figure 8-01

ICON	Description
	Query report content
	Export query report as PNG image, ( used IE browser the function failure )
	Export query report as PDF file, ( used IE browser the function failure )
	Export query report as Excel file, ( used IE browser the function failure )
Vision: - please select -	Select an Vision
Measure data frequency: Half of year	No need select, system auto settings.
department: - please select -	Select an organization/Department

<div>201320142015</div> <div></div>	Select report year.
<div>In the first half</div>	<div>In the first half: measure-data frequency basic of first half</div> <div>In the second half: measure-data frequency basic of second half</div> <div>Year: measure-data frequency basic of Year</div>

## 9. Strategy Map

Query or edit the strategy map. First click “ 07 – Strategy Map ” look figure 9-01

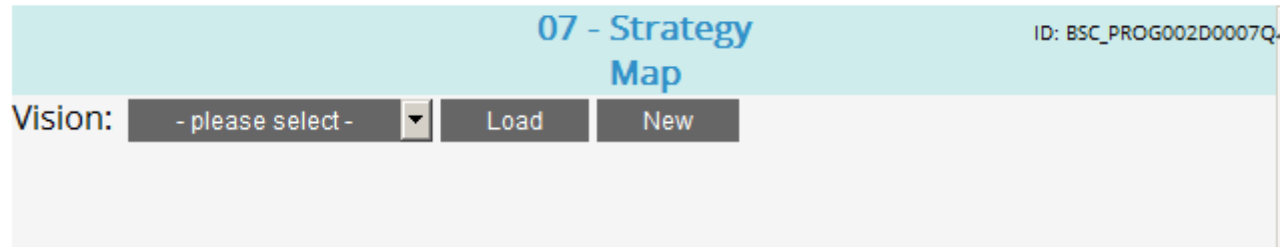


figure 9-01

### ***New strategy map:***

Vision: - please select - 1. select an Vision

New 2. click New

3. strategy-map will load the Vision's objectives on MAP. Look figure 9-02

Save 4. Save click

### ***Load history strategy map:***

Vision: - please select - 1. select an Vision

Load 2. click Load



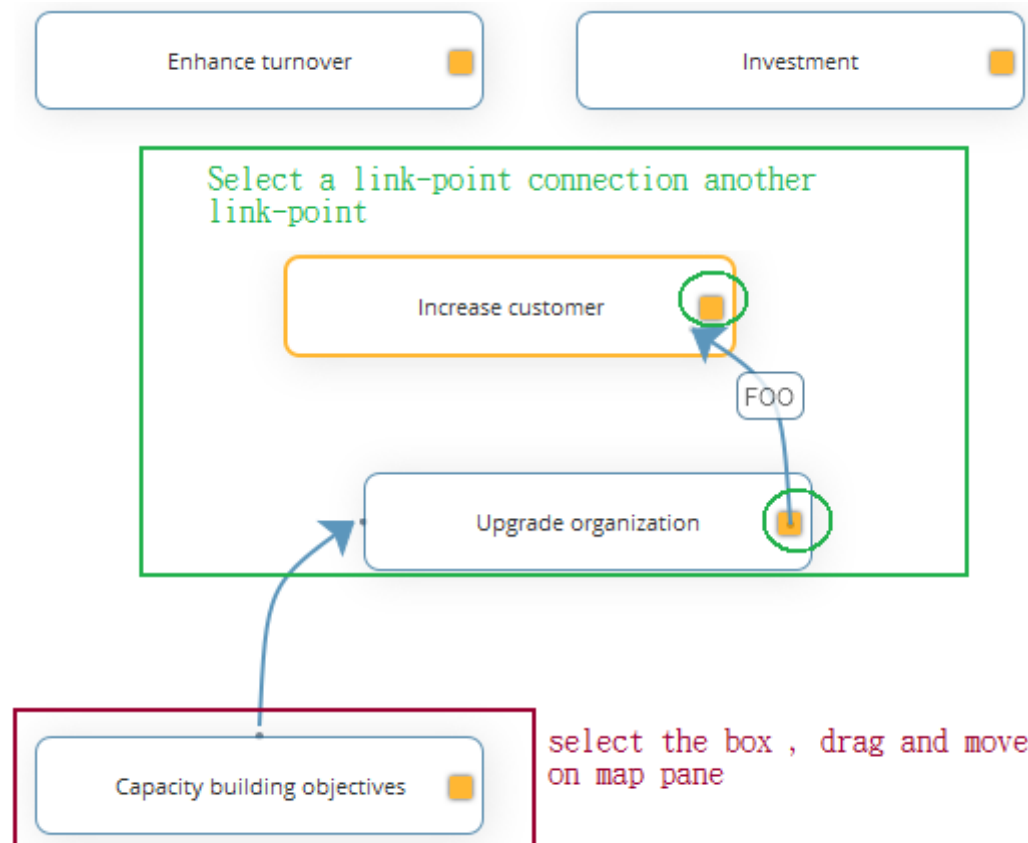


figure 9-02

10. SWOT

Query or edit BSC S.W.O.T. first click “ 08 – SWOT ” look figure 10-01

- 1. first select an Vision and department/Organization
- 2. Query
- 3. input content on text-box
- 4. click save

08 - SWOT

ID: BSC\_PROG002D0008Q

Options

Vision: 

Example vision

Organization: 

Taiwan office










	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Financial	新屋是一個靠海的鄉鎮，位處於桃園縣的西南邊。沿著縣道，走在新屋的路上，映入眼簾的盡是綠波蕩漾的稻田，辛勤的農家們，正在勤勞的耕種著，在現代的都會生活中，還保留著珍貴的農村風貌。而事實上，新屋鄉是全台最大的農業鄉鎮，所產的稻米，更是全國重要的供應來源。	<div>standard language!</div> <div>Click edit icon  on Text box to edit memo</div>	TEST	
Customer	der Großen Koalition	発達中の低気圧の影響で北日本を中心に風や雪が強まっています。	QQQ	

figure 10-01

ICON	Description
	Query content
	Save content
	Export query report as PNG image, ( used IE browser the function failure )
	Export query report as PDF file, ( used IE browser the function failure )
Vision: <input type="text" value="- please select -"/>	Select an Vision
Organization: <input type="text" value="Taiwan office"/>	Select an department/Organization

11. Report signature

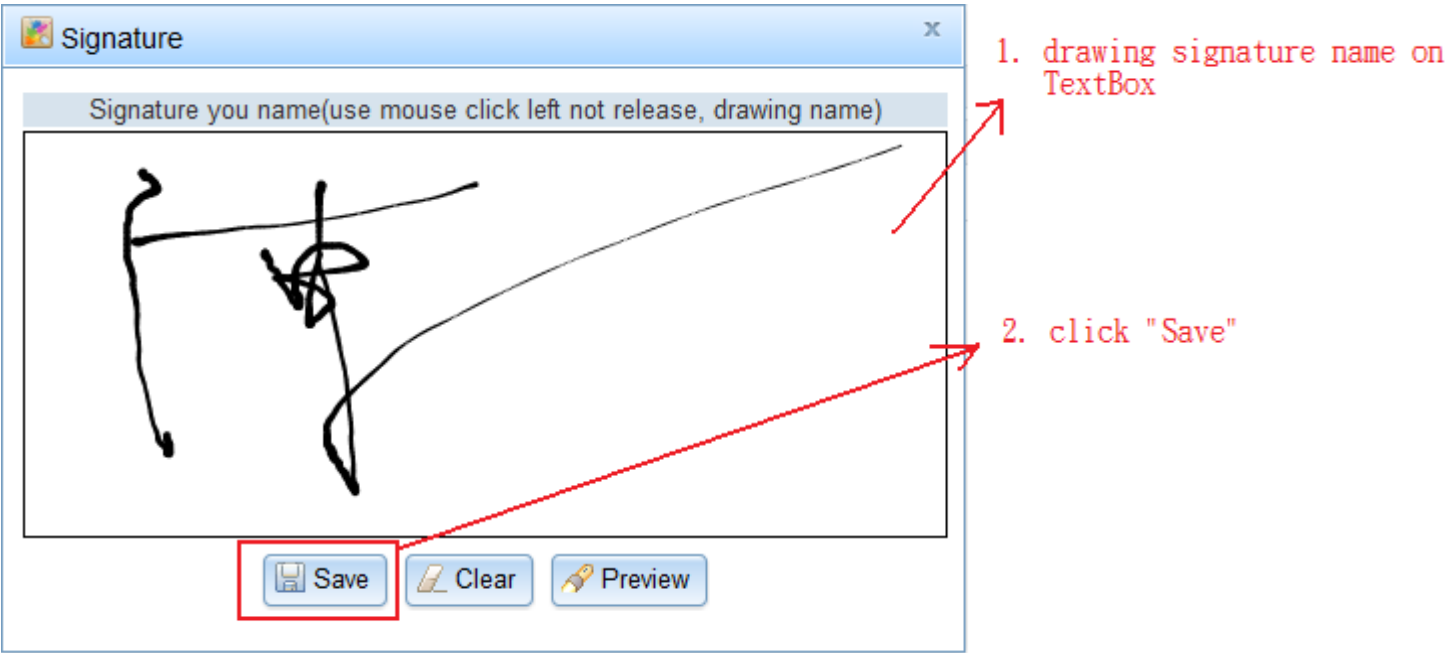
Managers signature on the report for “01 – KPI Report” / “02 – Personal Report” / “03 – Department Report” . Only export **Excel** or **PDF** found signature picture.

ICON	Description
	Open signature pop-window.
	Clear current signature picture.

1. first click 

2. drawing name on signature pop-window . Look figure 11-01

figure 11-01



3. click export PDF or Excel button , result look figure 11-02

4332bf59-016a-49aa-8005-19e0721ad520.xlsx - LibreOffice Calc

檔案(F) 編輯(E) 檢視(V) 插入(I) 格式(O) 工具(T) 資料(D) 視窗(W) 說明(H)

微軟正黑體 10

A47


	A	B	C	D	E	F	G
34	Frequency: Year Date range: 2013/01/01 ~ 2015/12/31						
35	Sales	2013		2014		2015	
36		↓0		↑64		↑55	
37	Stock market investment fund	2013		2014		2015	
38		↓0		↓75		↓63	
39	Investment projects in developing countries	2013		2014		2015	
40		↓0		↓71		↓48	
41	Expanding Asia-Pacific market	2013		2014		2015	
42		↓0		↓81		↓66	
43	Loss stronghold transformation	2013		2014		2015	
44		↓0		↓90		↓70	
45	Education and Training	2013		2014		2015	
46		↓0		↓97		↓81	
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							

figure 11-02

12. Query Charts




The main function is SQL query to chart .

12-1. Settings datasource

please use “01 – Data source config” to create or modify Datasource settings.  
If you want to provide other DB connection driver( SQL-Server or Oracle, pqSQL ... ), please put Driver LIB jar file to **WEB-INF/lib** and add config of table named **qc\_data\_source\_driver** . **Currently, the system only provides MySQL Driver** .

12-2. Settings data mapped

Settings Charts's Label and Value mapped. Click “02 – Data query mapper” on menu . Create new items please look ( figure 12-01 )



02 - Data query mapper (Edit)ID: QCHARTS\_PROG001D0002E

\*Name:

description:

for example!

Mapper Label:

Mapper Value:

add

#	Label Field	Value Field
✖	NAME	ACTUAL
✖	NAME	TARGET

Save

Clear

figure 12 - 01

**Name:** Please input mapped item name.

**Description:** memo or explain







**Mapper Label:** sql query's fields name

**Mapper Value:** sql query's fields name

### 12-3. Query expression to Charts

Charts have provided BAR, PIE, LINE, AREA and html table. Click "01 – Basic query" on menu tree. Look ( figure 12-02 ) , Example results Look ( figure 12-03 )

Options



Save query

Clear

Delete

History: KPIs 2015 year Actual value.

Datasource: BBCORE01 - datasource-01

Name: KPIs 2015 year Actual value.






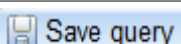
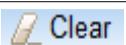
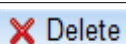




Mapper: KPIs actual mapper - 01

Mapper items(for Pie charts): - please select -

Query expression:

```
select K.NAME, MD.ACTUAL, MD.TARGET, MD.DATE from bb_measure_data MD, bb_KPI K
where K.ID=MD.KPI_ID and MD.FREQUENCY='6' and MD.ORG_ID='*' and MD.EMP_ID='*'
and MD.DATE LIKE '2015%'
```

figure – 12-02

ICON	Description
	Query results show as HTML table.
	Query results show as Pie charts
	Query results show as Bar charts
	As Line charts
	As Area charts
 Save query	Save query expression to history data.
 Clear	Clear
 Delete	Delete history data.
History: <input type="text" value="KPIs 2015 year Actual value."/> 	Select history data.
Datasource: <input type="text" value="BBCORE01 - datasource-01"/> 	Select datasource.
Name: <input type="text" value="KPIs 2015 year Actual value."/>	input query name when need Save query
Mapper: <input type="text" value="KPIs actual mapper - 01"/> 	Select mapped item for query Charts
Mapper items(for Pie charts): <input type="text" value="- please select -"/> 	Select mapped items for Pie charts
Query expression:	input SQL query expression



The is Area Charts example.

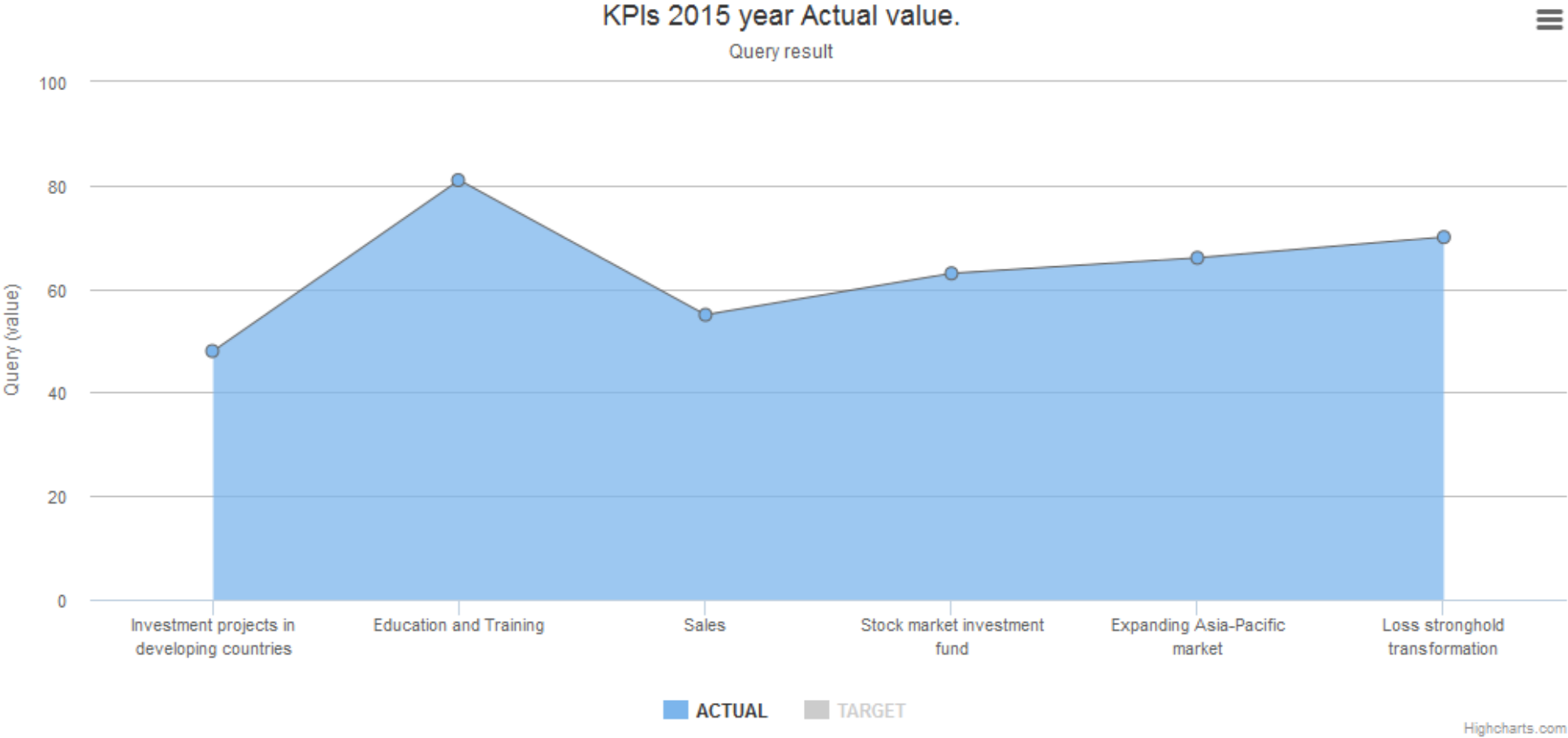


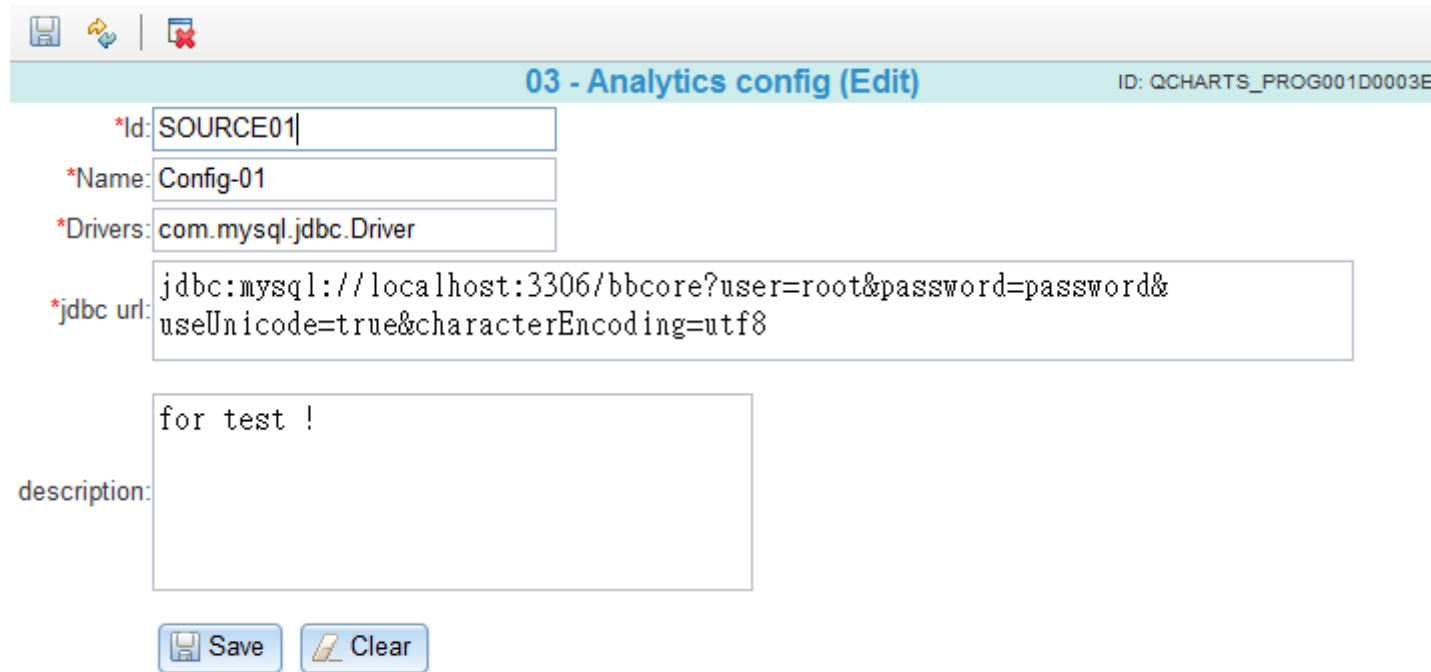
Figure 12-03

## 13. Analytics ( OLAP )

This feature is to provide a simple OLAP . MDX Query results can be exported into HTML file or EXCEL file .

### 13-1. Settings datasource

click “03 - Analytics config” on menu tree. And to create mode look ( figure 13 – 01 ) .



The screenshot shows a web-based configuration window titled "03 - Analytics config (Edit)" with a sub-header "ID: QCHARTS\_PROG001D0003E". The window contains several input fields and a description area:

- \*Id:** A text input field containing "SOURCE01".
- \*Name:** A text input field containing "Config-01".
- \*Drivers:** A text input field containing "com.mysql.jdbc.Driver".
- \*jdbc url:** A text input field containing "jdbc:mysql://localhost:3306/bbcore?user=root&password=password&useUnicode=true&characterEncoding=utf8".
- description:** A large text area containing "for test !".

At the bottom of the window, there are two buttons: "Save" and "Clear".

figure 13 - 01

**Id:** input config Id.

**Name:** input config name.

**Drivers:** input jdbc driver class name. ( If you want to provide other DB connection driver( SQL-Server or Oracle, pqSQL ... ), please put Driver LIB jar file to **WEB-INF/lib** )

**Jdbc url:** jdbc url. ( url string parameter must include the **account** and **password** )

**Description:** memo or explain

### 13-2. Upload Mondrian Catalog file

Upload Mondrian catalog file and management. How to build catalog xml file please download [mondrian schema workbench](http://sourceforge.net/projects/mondrian/files/schema%20workbench/) (

<http://sourceforge.net/projects/mondrian/files/schema%20workbench/> ) now vision is 3.9.0 , use workbench create catalog example ( figure 13-02 )

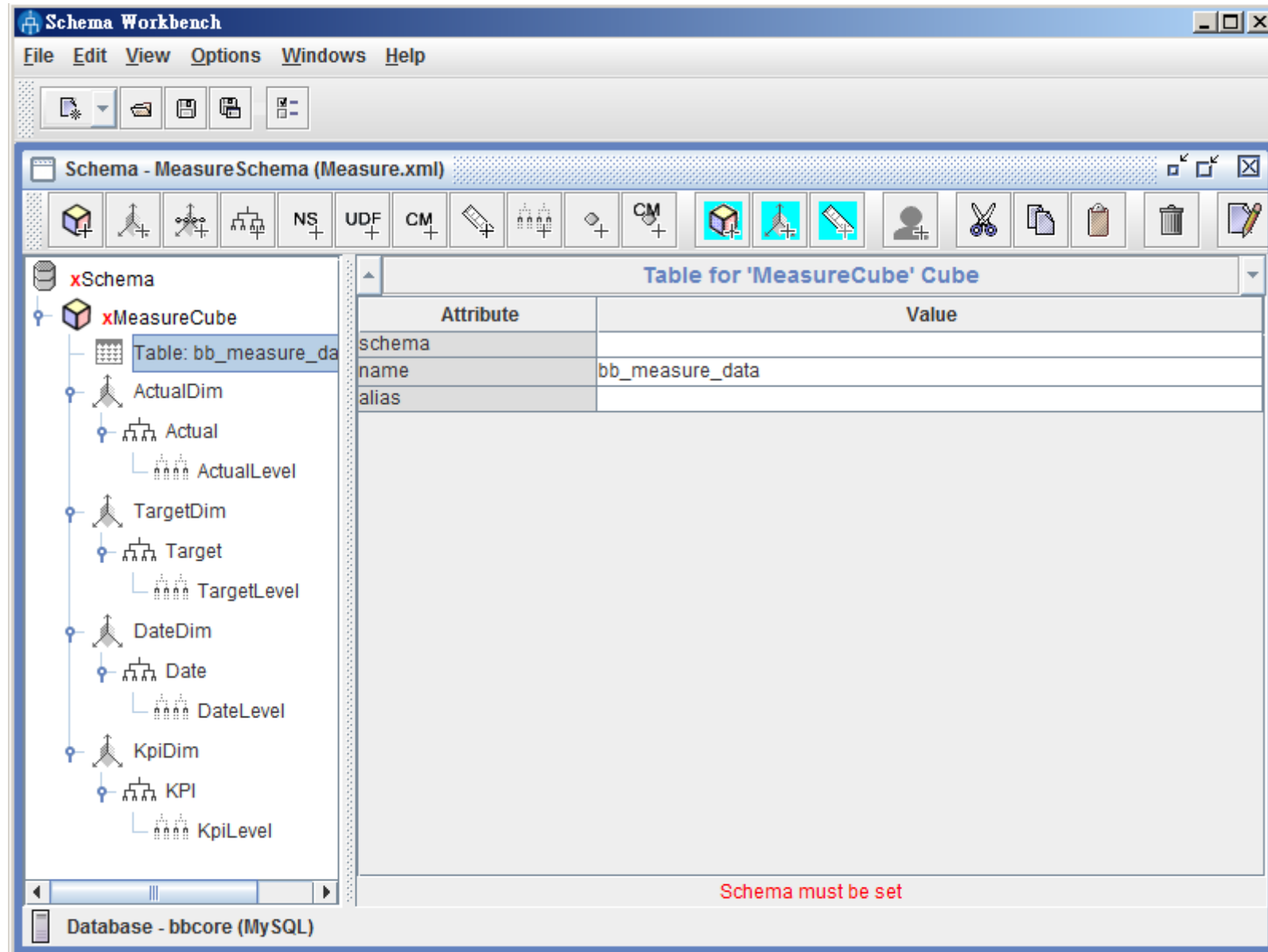



figure 13 - 02

After the **schema workbench** output of the **catalog xml file** using the " 04 - Analytics Catalog " to upload it . Look ( figure 13 – 03 )

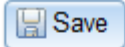
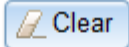
04 - Analytics Catalog (Create) ID: QCHARTS\_PROG001D0004A

\*Id:

\*Name:

\*Mondrian Catalog:  not Yet upload files!

description:

 Save  Clear

Click the button to upload an catalog xml file

figure 13 – 03

**Id:** input catalog Id.

**Name:** input catalog name.

**Mondrian Catalog:** select an catalog xml file to upload.

**Description:** memo or explain

13-3. Analytics MDX query

Execute MDX query and display or output results. Click “02 - Analytics ” on menu tree. Look ( figure 13 – 04 )

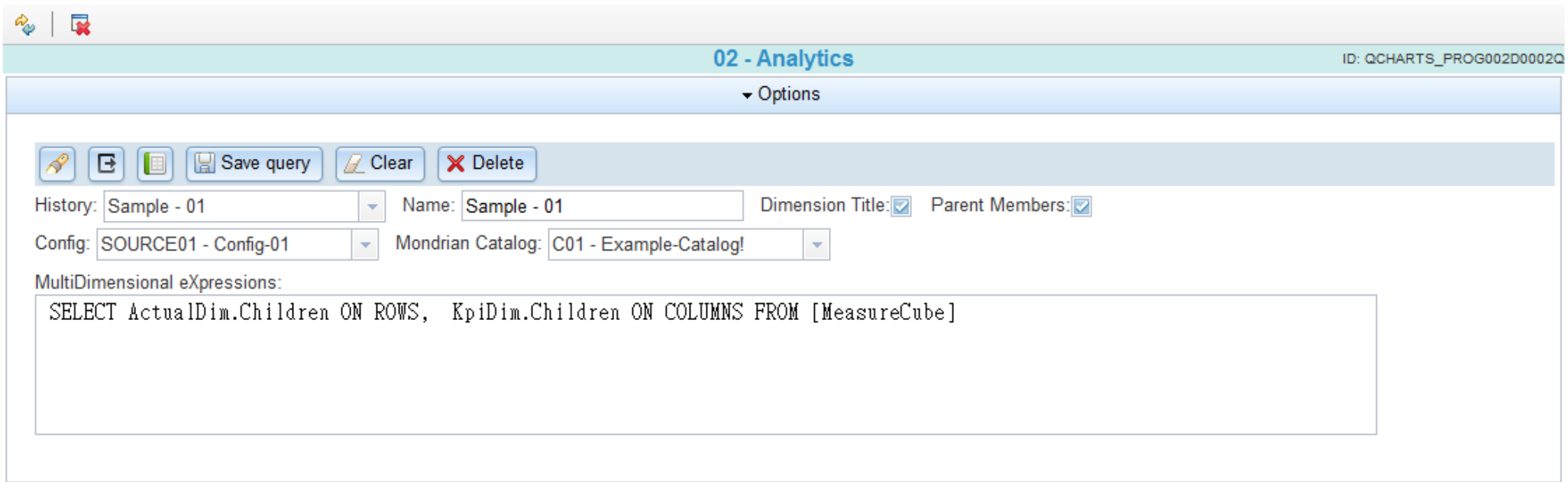


figure 13 – 04

ICON	Description
	Query results show as HTML results.
	Export HTML results as a file.
	Export results as a Excel file.
	Save MDX to history data.
	Clear

<div> <div>✖ Delete</div> </div>	Delete current select history data.
History: <div> <div>Sample - 01</div> <div>▼</div> </div>	Select history data.
Name: <div> <div>Sample - 01</div> </div>	Query name.
Dimension Title: <div> <div><input checked="" type="checkbox"/></div> </div>	Check show Title.
Parent Members: <div> <div><input checked="" type="checkbox"/></div> </div>	Check show members.
Config: <div> <div>SOURCE01 - Config-01</div> <div>▼</div> </div>	Select OLAP datasource config.
Mondrian Catalog: <div> <div>C01 - Example-Catalog!</div> <div>▼</div> </div>	Select OLAP catalog config.
<div> <div>MultiDimensional eXpressions:</div> <div> <div>SELECT ActualDim.Children ON</div> </div> </div>	input MDX query string.