DASHBOARDS: lab

Unit 3 – Query languages and visualization
S3-3 – DASHBOARDS
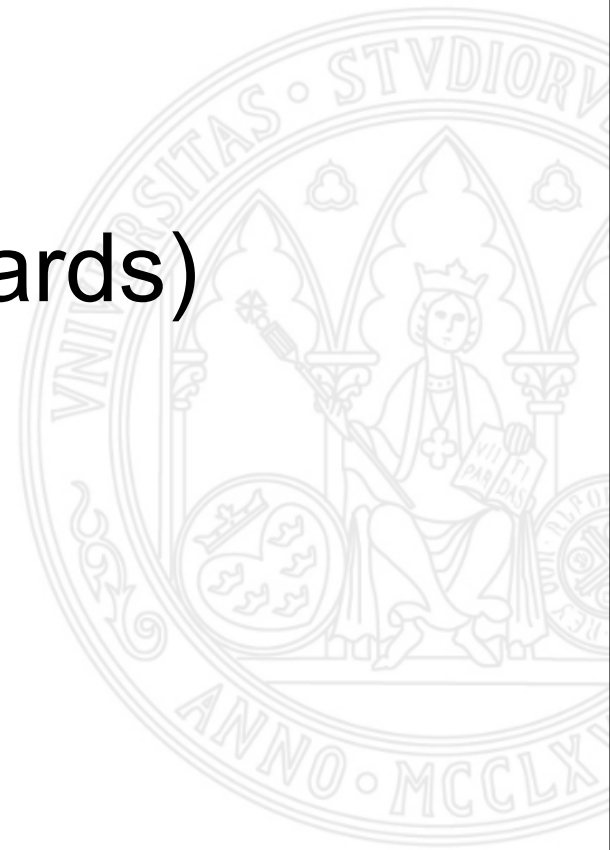
UNIVERSIDAD DE
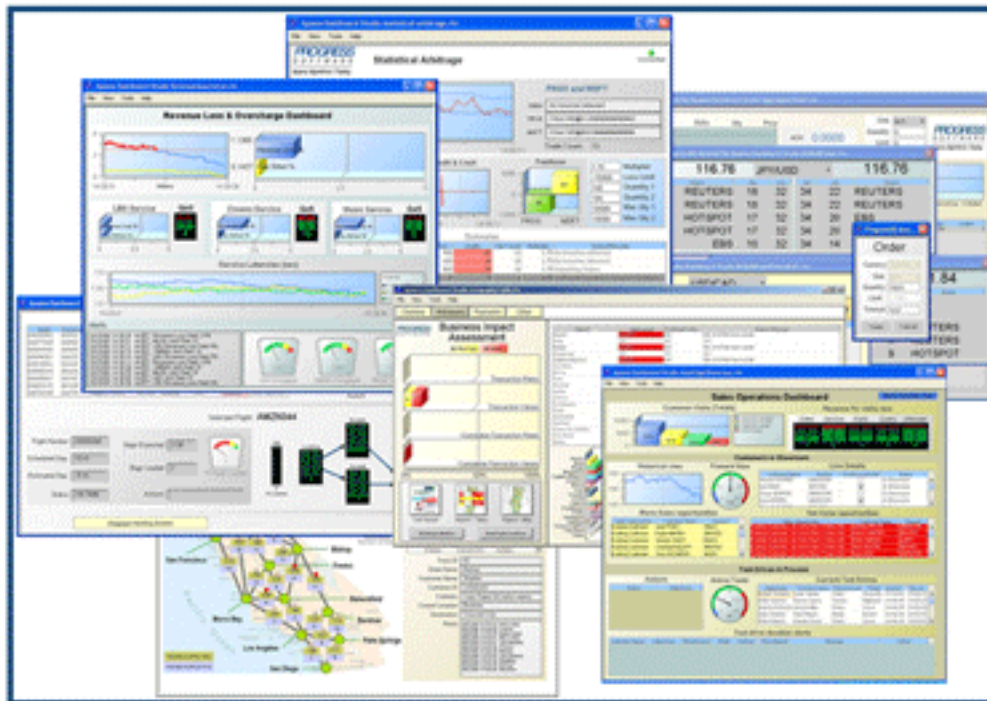**MURCIA**

OUTLINE

1. DASHBOARDS DESIGN
2. PENTAHO CDE

1. DASHBOARDS DESIGN

(Common mistakes in Dashboards)

- DASHBOARDS
  - Common Mistakes in Dashboard Design.

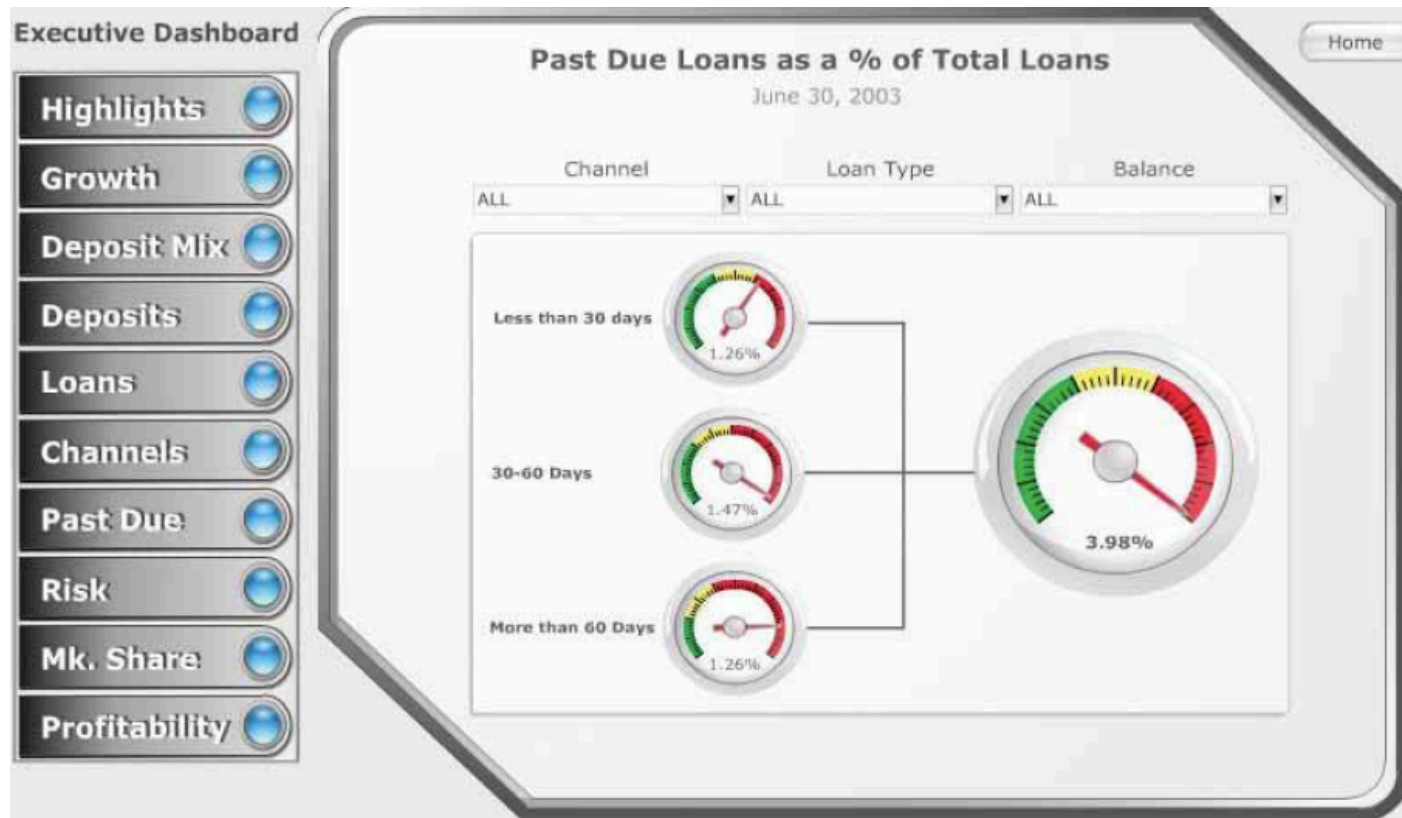- DASHBOARDS
  - Common Mistakes in Dashboard Design.

SCORECARDS & DASHBOARDS

- DASHBOARDS
  - Common Mistakes in Dashboard Design.

Exceed boundaries of a single screen.

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- DASHBOARDS

  – Common Mistakes in Dashboard Design.

- DASHBOARDS
  - Common Mistakes in Dashboard Design.

Fragmenting data into separated screens.

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- DASHBOARDS
  - Common Mistakes in Dashboard Design.

- DASHBOARDS
  - Common Mistakes in Dashboard Design.

Requiring scrolling.

- DASHBOARDS
  - Common Mistakes in Dashboard Design.

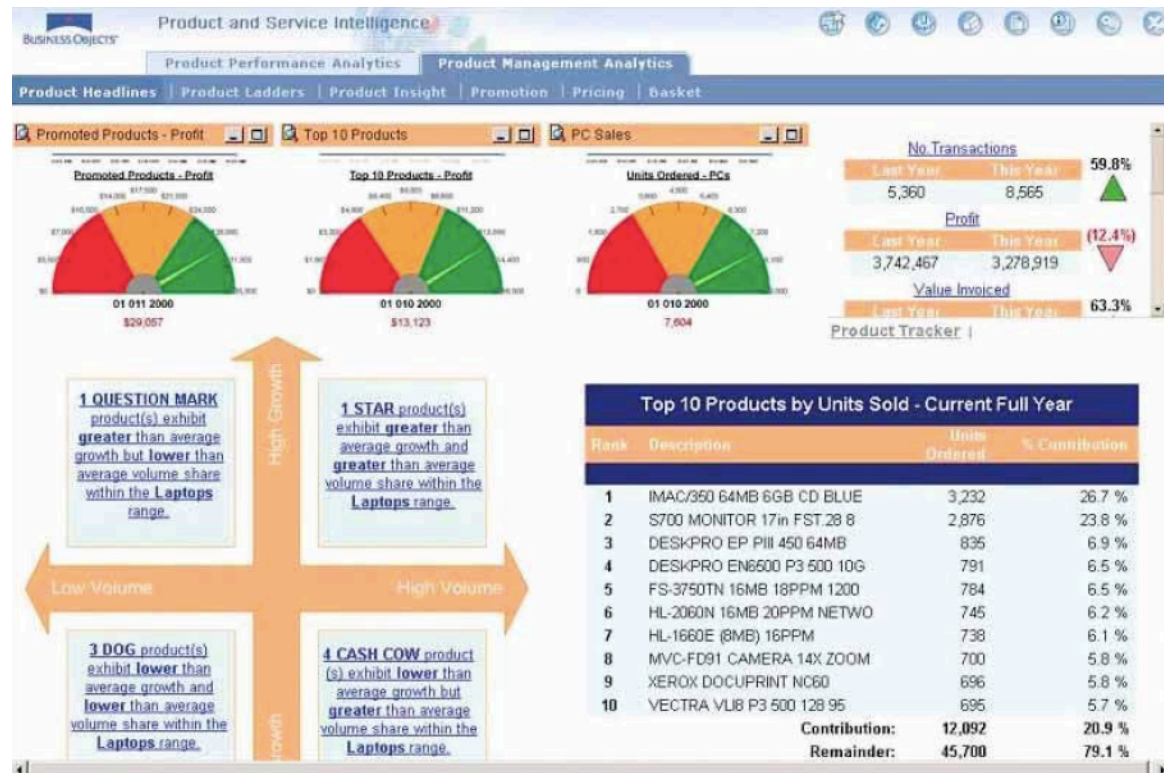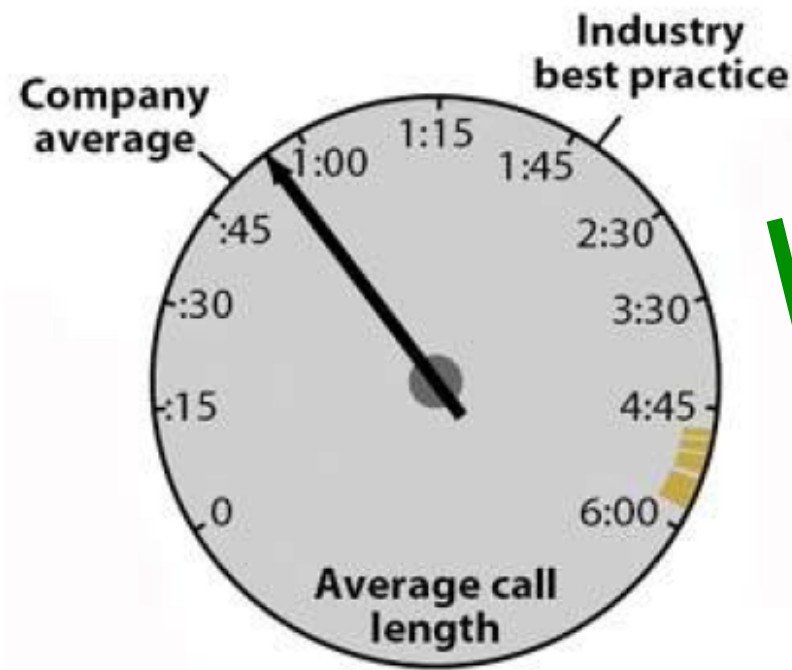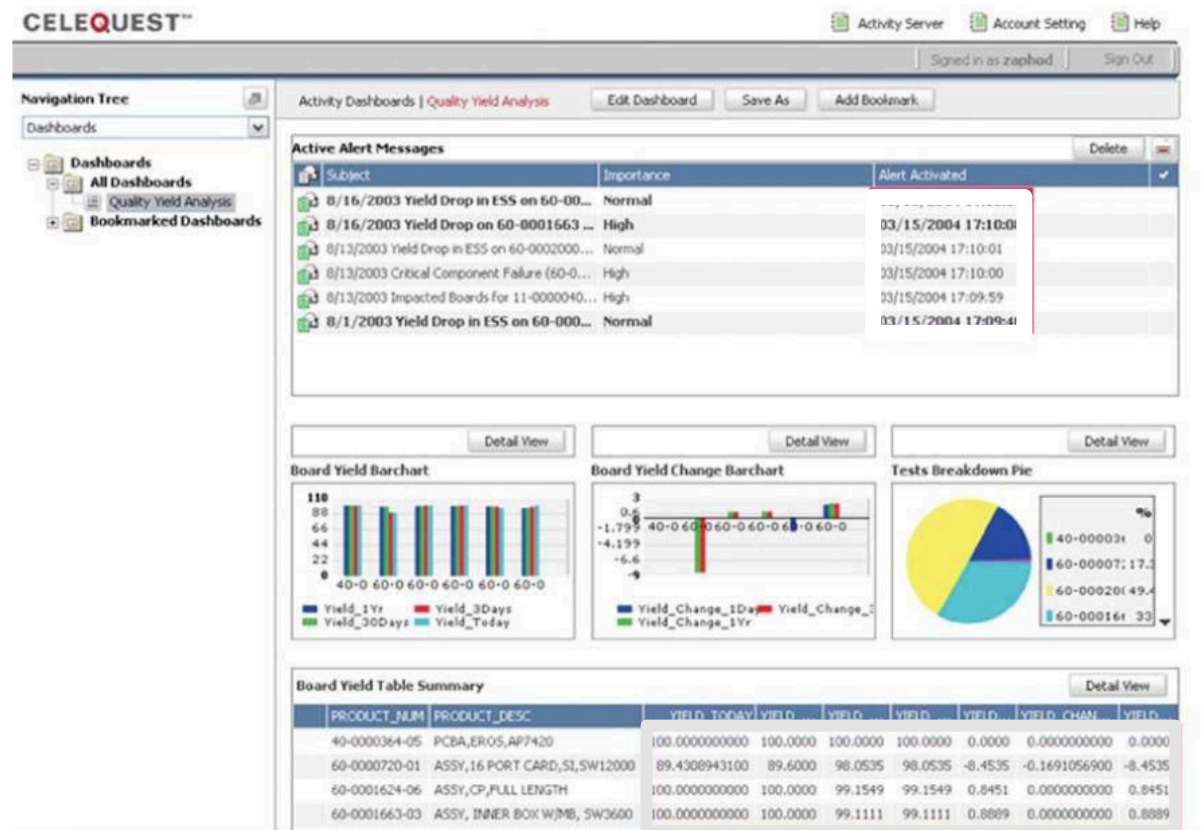YTD: years-to-date

- ## DASHBOARDS

  - ### Common Mistakes in Dashboard Design.

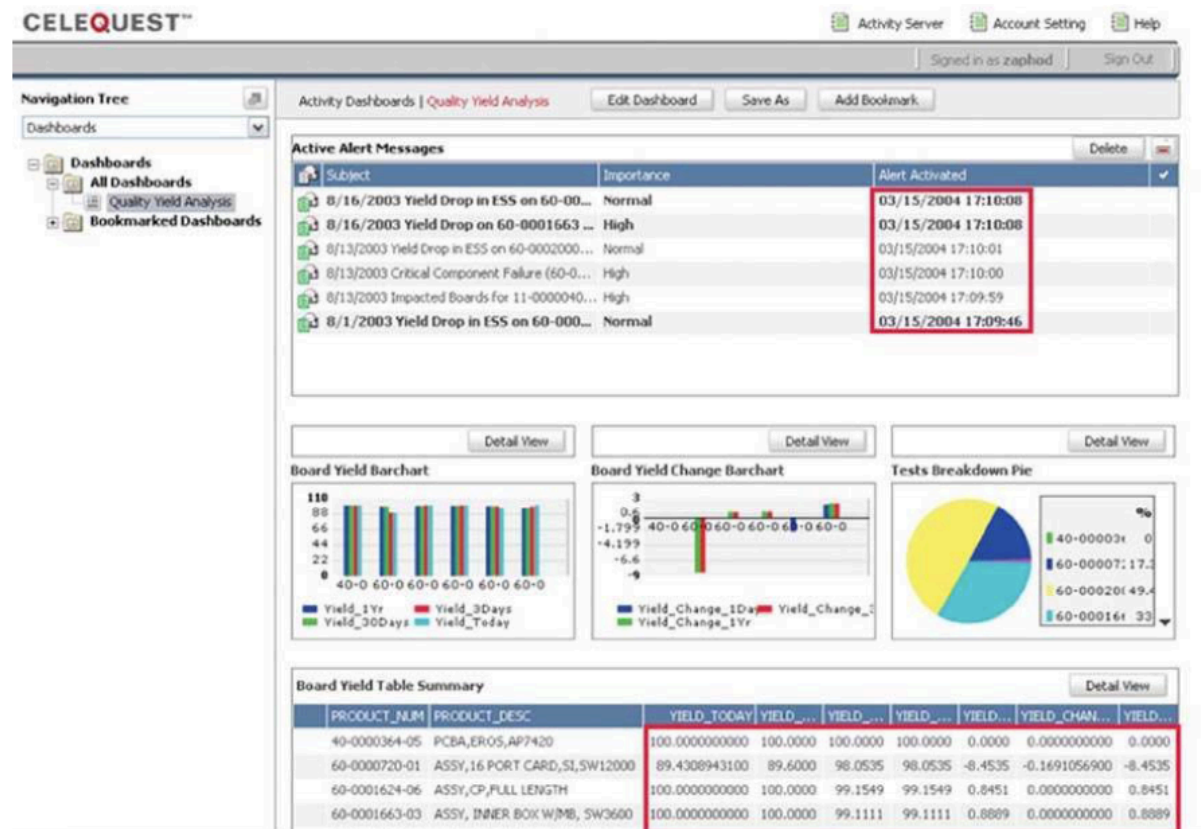Supply inadequate context for data

SCORECARDS & DASHBOARDS

- DASHBOARDS
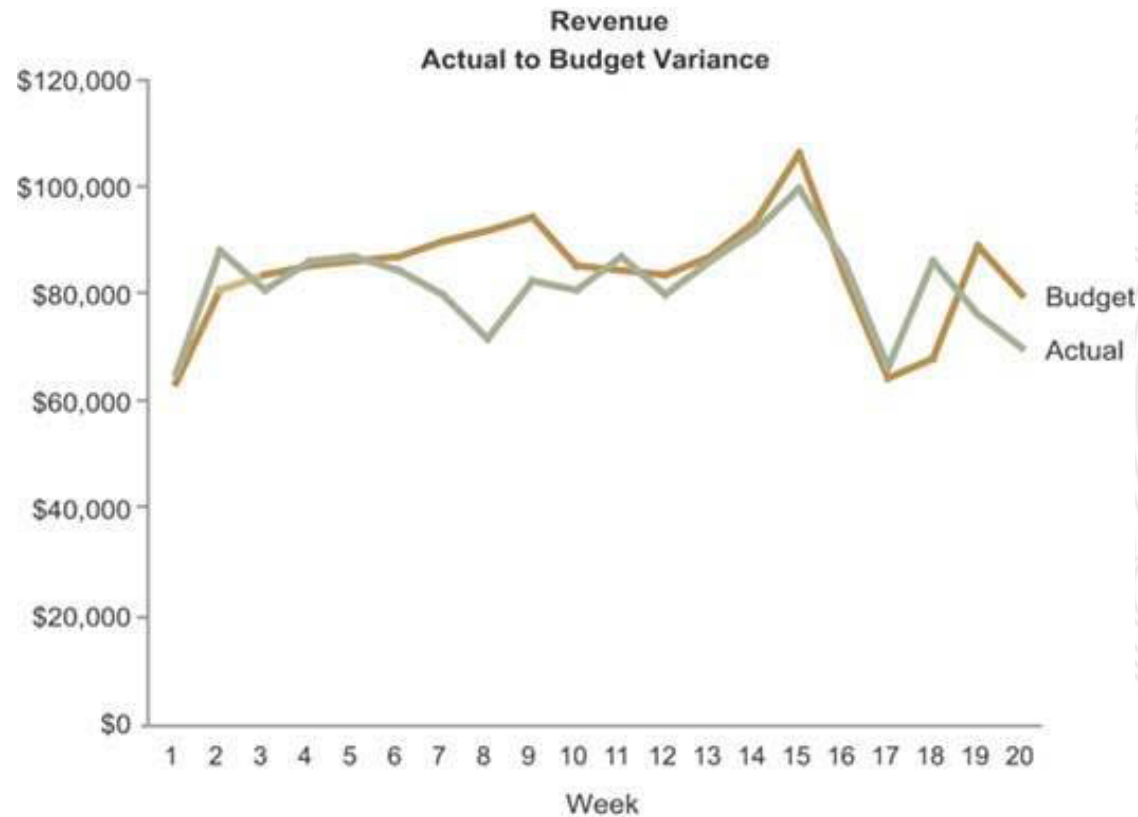 - Common Mistakes in Dashboard Design.

SCORECARDS & DASHBOARDS

- DASHBOARDS
  - Common Mistakes in Dashboard Design.

Excessive precision

- DASHBOARDS
  - Common Mistakes in Dashboard Design.

Revenue
Actual to Budget Variance

SCORECARDS & DASHBOARDS

- DASHBOARDS
  - Common Mistakes in Dashboard Design.

Deficient measure (see BSC)

- DASHBOARDS
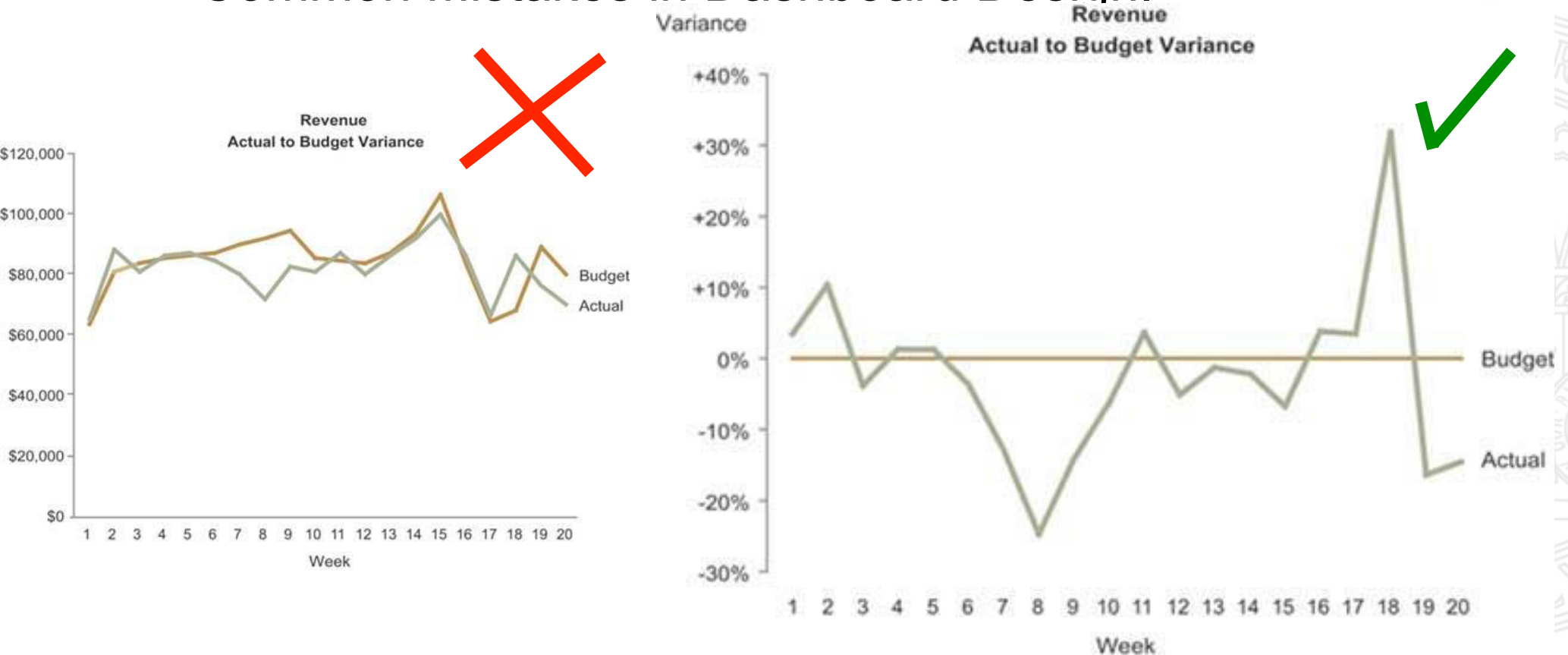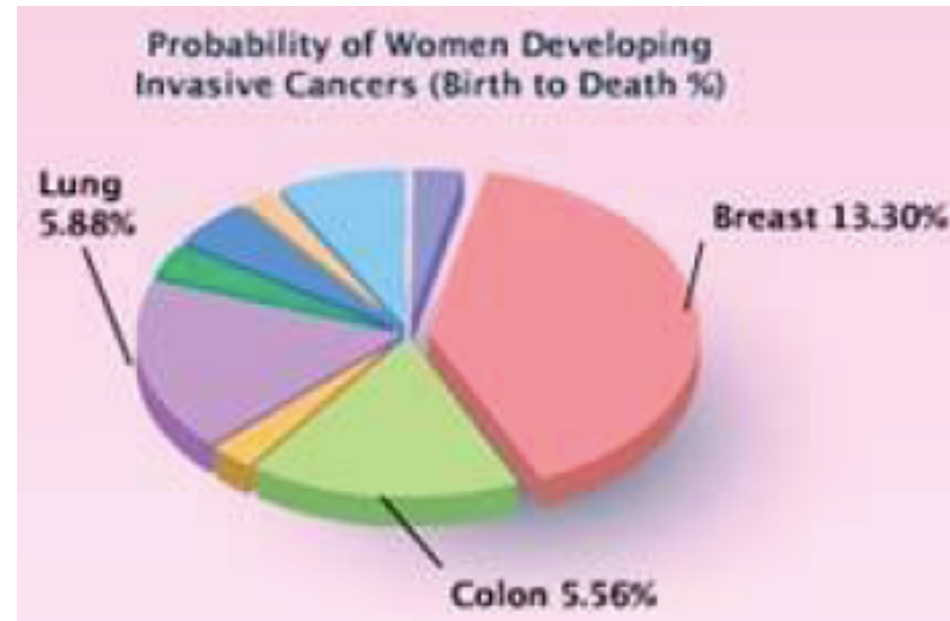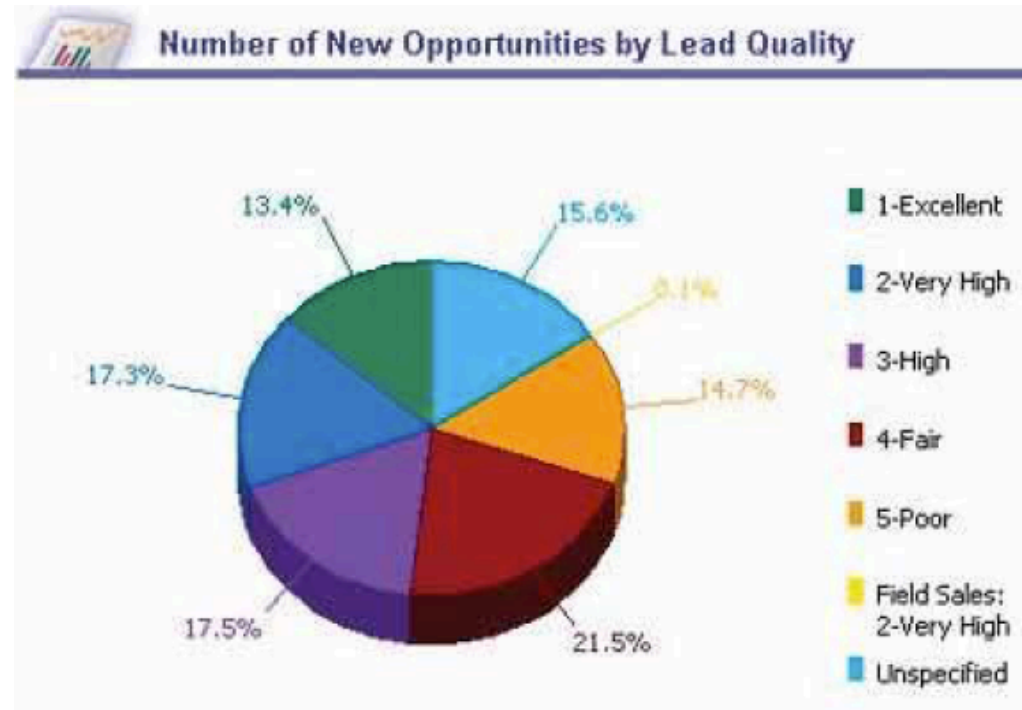   - Common Mistakes in Dashboard Design.

- DASHBOARDS

  - Common Mistakes in Dashboard Design.

Inappropriate Display Media

• DASHBOARDS

– Common Mistakes in Dashboard Design.
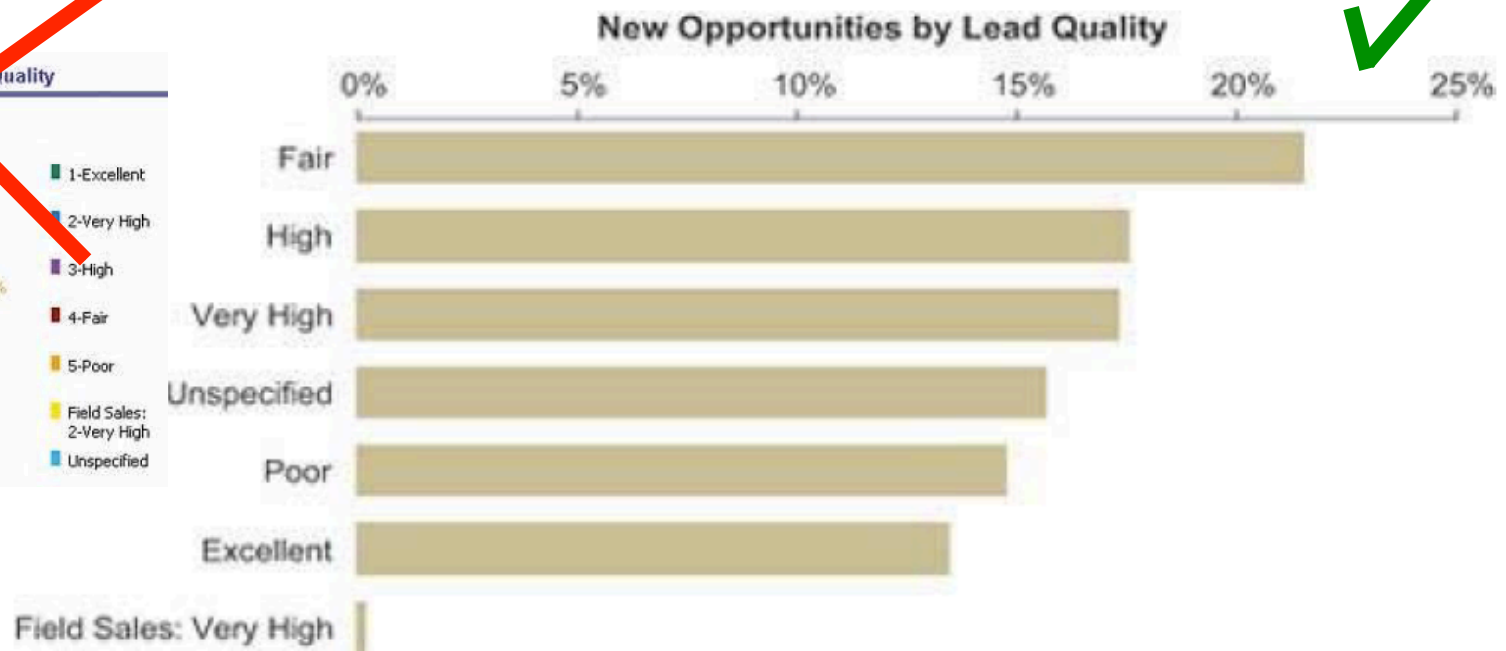
Inappropriate Display Media

2. PENTAHO CDE

COMMUNITY DASHBOARD EDITOR

- PENTAHO COMMUNITY DASHBOARD EDITOR

- Layout:
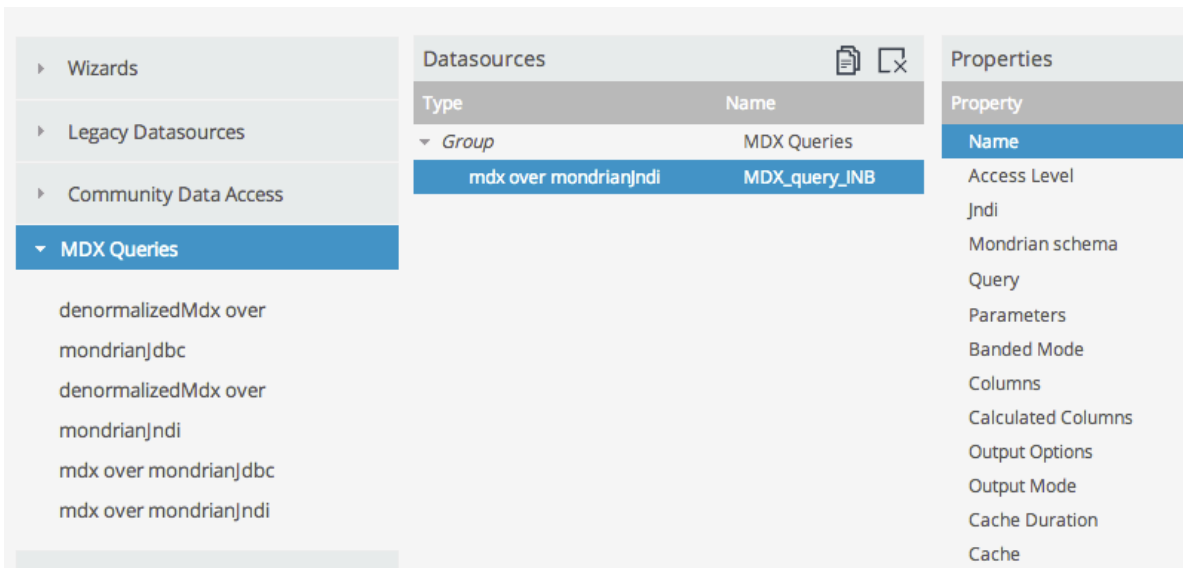
- Components:

- Data sources:

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- DATASOURCES:

  – MDX Queries.

    - Name: **MDX_queryN_INB**
    - Mondrian schema: **inXX** …
    - Jndi: probably **in00**…
    - Query: paste MDX SELECT.

DASHBOARD: lab

- LAYOUTS:

  – Apply template

    - 2 columns, header and footer.

    - Rows/Columns

      – Name: id of the row

      – BackgroundColor (press checkbox to choose)

      – …

    - Html : html code you can edit

HEADER	
spacer	
PANEL 1	PANEL 2
Small space	
FOOT	FOOT IMAGE

DASHBOARD: lab

- COMPONENTS:

  - Charts.

    - Name: Id of your chart component
    - Datasource: MDXqueryN
    - Title: "CAPTION"
    - HTML Object: id of column/row of the layout (html tag)

      - Example: CCCBar (datasource in columns)

    - Preview (save first)

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- COMPONENTS:
  - Simple Example
    - Template layout
    - Source: MDX
    - Chart: pie/bar

DASHBOARDO OF STAY DURATION IN INB-HOSPITALS

2003

PIE Procedencia

BAR procedencia

INB dashboard example webdetails
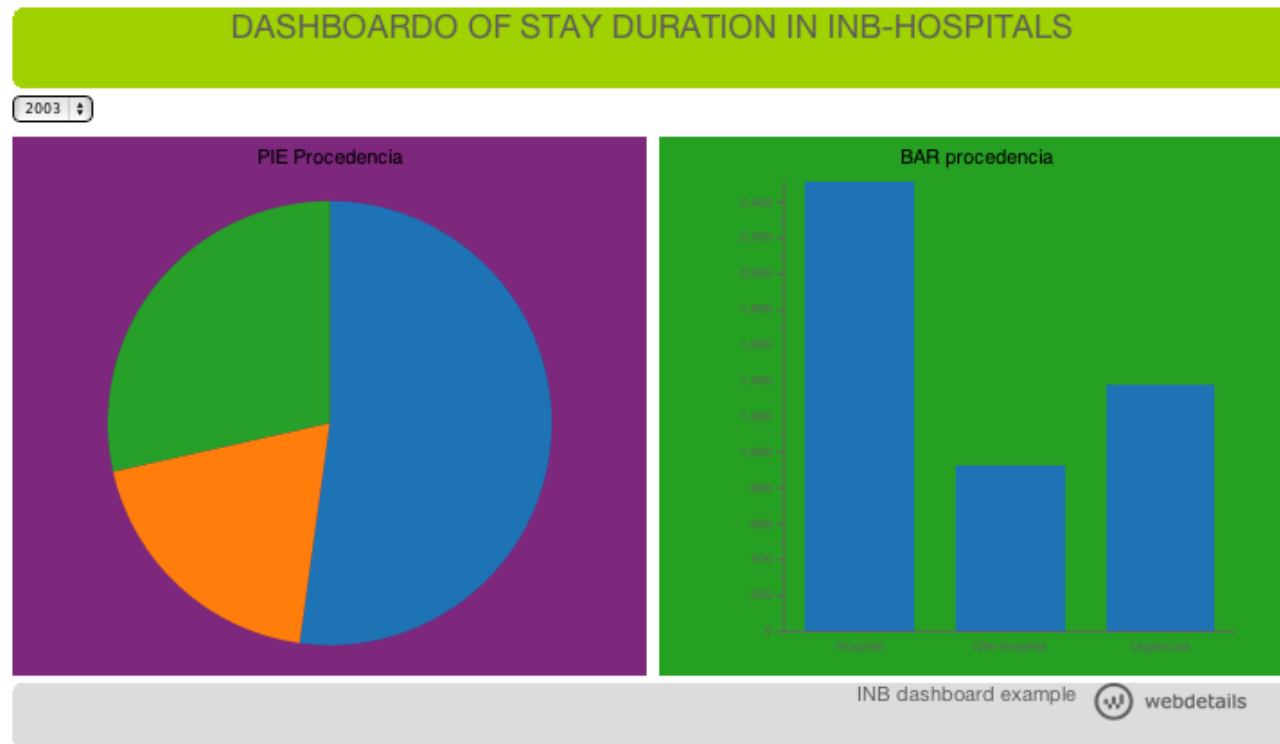
```
SELECT
NON EMPTY {Hierarchize({[Measures].
[duracion]})} ON COLUMNS,
NON EMPTY {Hierarchize({[procedencia].
[procedencia].Members})} ON ROWS
FROM [inb_student]
```

Tipo Ingreso en 2003
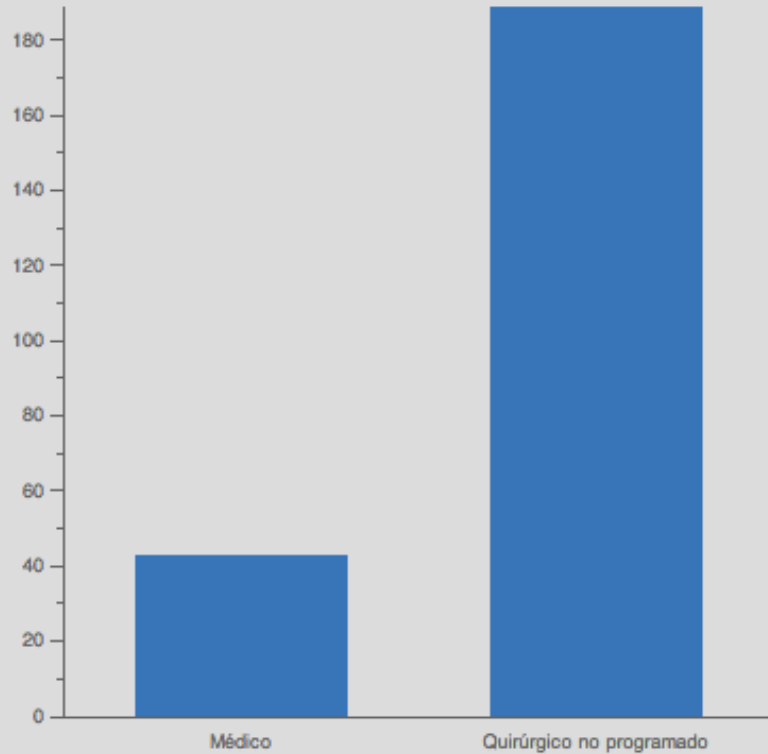
Waterfall

Author: John Smith · webdetails

SELECT
NON EMPTY {Hierarchize({[time.anno].[2003]})}
ON COLUMNS,
NON EMPTY {Hierarchize({[tipoingreso].
[tipoingreso].Members})} ON ROWS
FROM [inb_manolo]
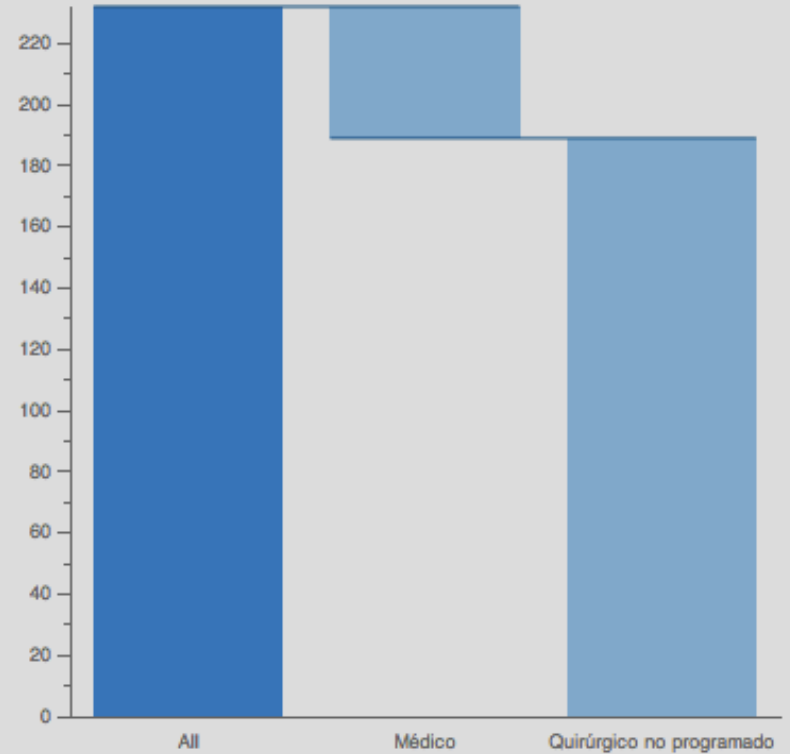
- COMPONENTS:

  - Simple Example

    - Template layout

    - Source: MDX

    - Chart: bar/waterfall

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3. MY FIRST DASHBOARD IN CDE

DASHBOARD: lab

- # LAYOUTS:

  - ~~Apply template~~

    - 2 columns, header and footer.
    - Html : html code you can edit

HEADER	
spacer	
PANEL 1	PANEL 2
Small space	
FOOT	FOOT IMAGE


```
<a style="position:relative;top:12;" border="0" title="WebDetails" href="http://www.webdetails.pt">
<img src="PASTE URL OF A SMALL ICON  USC/UMU "/>
</a>
```

28

- ## DATASOURCES:

  - MDX Queries: "Número de pacientes en urgencias por meses"

  - Open SAIKU Analytics and Copy/Paste MDX query

1

Información: 10:39 / 11 x 2 / 0.0'

Procedencia	January	February	March	April	May	June	July	August	September	October
Urgencias	9,667	13,75	7,727	6	6,333	7,758	7,227	6,667	4,846	3,091

2

Columnas

TiempoIngreso.Tiempo
Month

COLUMNS

Filas

Procedencia
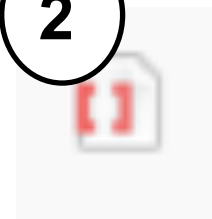
Procedencia

1

  - Or design your own MDX query:

```
SELECT
      NON EMPTY  {[TiempoIngreso.Tiempo].[Month].Members} ON COLUMNS,
      NON EMPTY {[Procedencia].[Urgencias]} ON ROWS
FROM [CuboTutorial]
```

DASHBOARD: lab

- ## DATASOURCES:

  - MDX Queries: mdx over mondrianJndi

  - MDX Queries:"Número de pacientes en urgencias por meses"

    - Name: query1

    - Mondrian schema: in_student …

    - Jndi: press "i" (probably "'in00con" or "inc1")

DASHBOARD: lab

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MURCIA

- ## LAYOUTS:
  - ### 2 columns, header and footer.
  - ### Check the HTML ID of panels

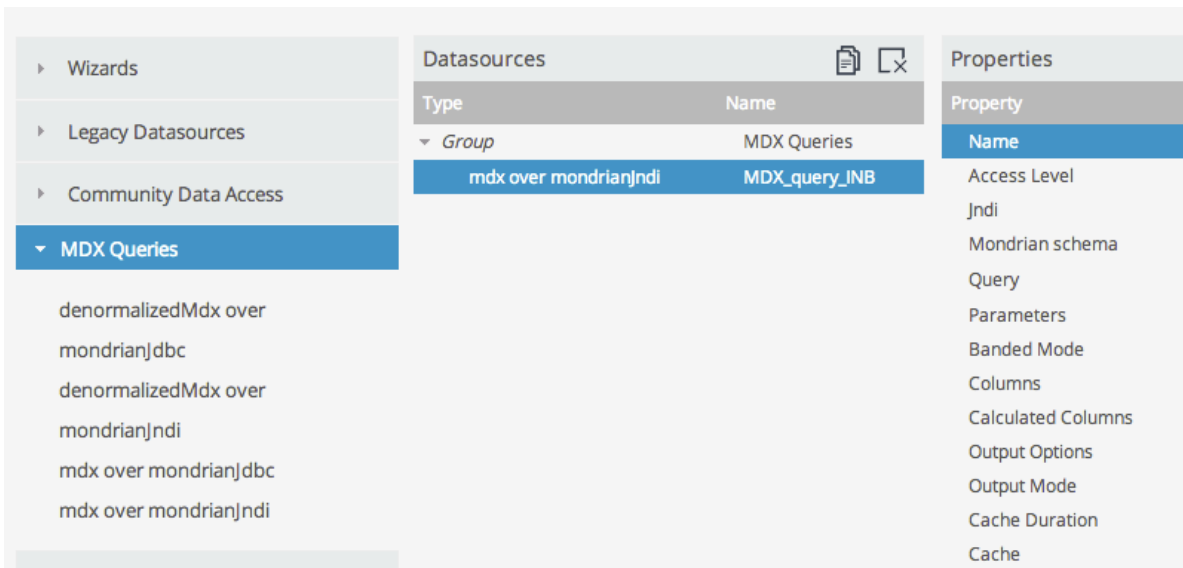| HEADER	
spacer	
PANEL 1	PANEL 2
Small space	
FOOT	FOOT IMAGE

Type	Name
▸ Row	Header
Row	Spacer
▾ Row	Body
Column	**Panel_1**
Column	Panel_2
Row	Small_Space
▸ Row	Footer

Property	Value
Name	Panel_1
Span size	10
Prepend size	1
Append size	1
Prepend gutter to top	False
Prepend gutter to bottom	False
Right border	False
Big right border	False
Height	400
BackgroundColor	✔ #e0e0e0
Corners	Round
Text Align	-
Css Class	-

2

1

- COL{1}COMPONENTS:

  - Choose CHARTS>CCC Chart
  - Name: "barchart"
  - Title: "Pacienteas urgencias por meses"
  - Datasource: "query1" →the one created in DataSources
  - HtmlObject: "PANEL_1"→ componet of Layout

Charts		
Protovis Component		
CCC Area Chart		
CCC Bar Chart		
CCC Boxplot Chart		
CCC Bullet Chart		
CCC Dot Chart		
CCC Heat Grid		
CCC Line Chart		
CCC Metric Dot Chart		
CCC Metric Line Chart		
CCC 100% Stacked Bar Chart		
CCC Pie Chart		
CCC Stacked Area Chart		

Components		Name
Type		Name
Group		Charts
CCC Bar Chart		barchart

Properties / Advanced Properties	
Property	Value
Name	barchart
Title	Pacientes urgencias por meses
Listeners	[]
Parameters	[]
Datasource	query1
Height	-
Width	-
HtmlObject	Panel_1
clickable	False
clickAction	
compatVersion	2
crosstabMode	True
legend	True
seriesInRows	False
timeSeries	False
timeSeriesFormat	%Y-%m-%d

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- Overview:

DASHBOARD: lab
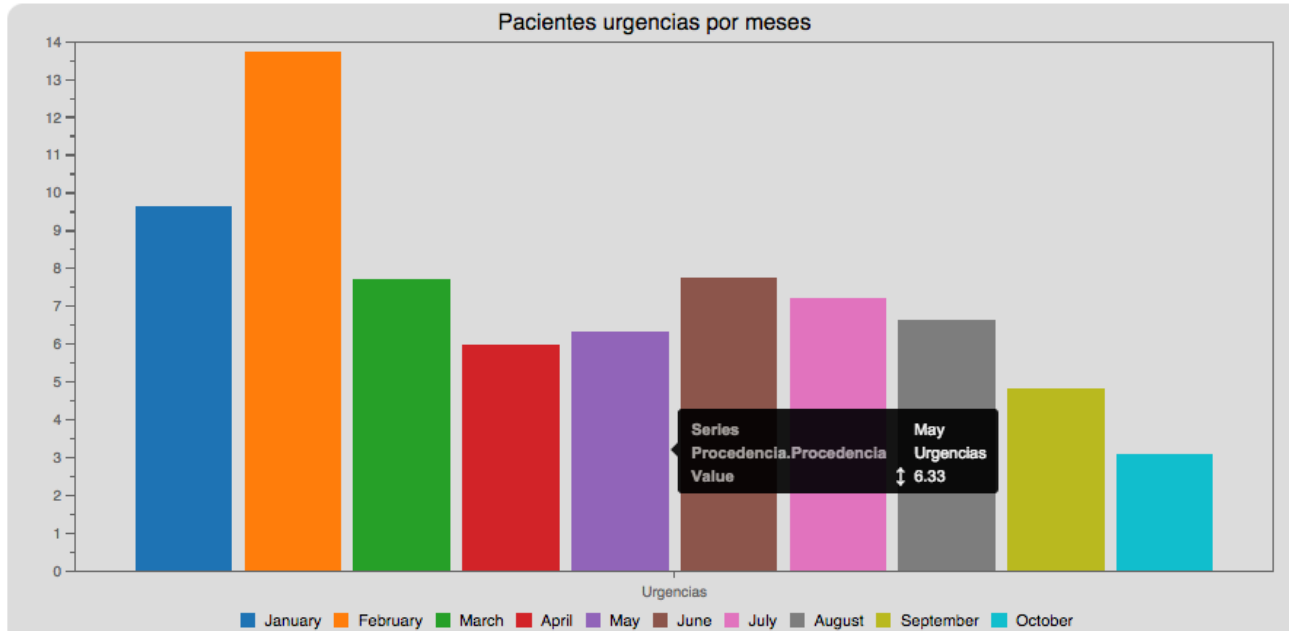
- ## LAYOUTS:

  - ### HEADER>COLUMN>HTML
  - ### Html : html code you can edit

HEADER	
spacer	
PANEL 1	PANEL 2
Small space	
FOOT	FOOT IMAGE

Type	Name
▾ Row	Header
▾ Column	
Html	**title**
Row	Spacer
▸ Row	Body
Row	Small_Space
▸ Row	Footer

Property	Value
Name	title
HTML	**<h2 style="color:#60 (...)**
Font Size	-
Color	
Css Class	-

1

2

<h2 style="color:#606060;">*DASHBOARD FOR MY MASTER COURSE*</h2>

3

DASHBOARD: lab

- Overview:
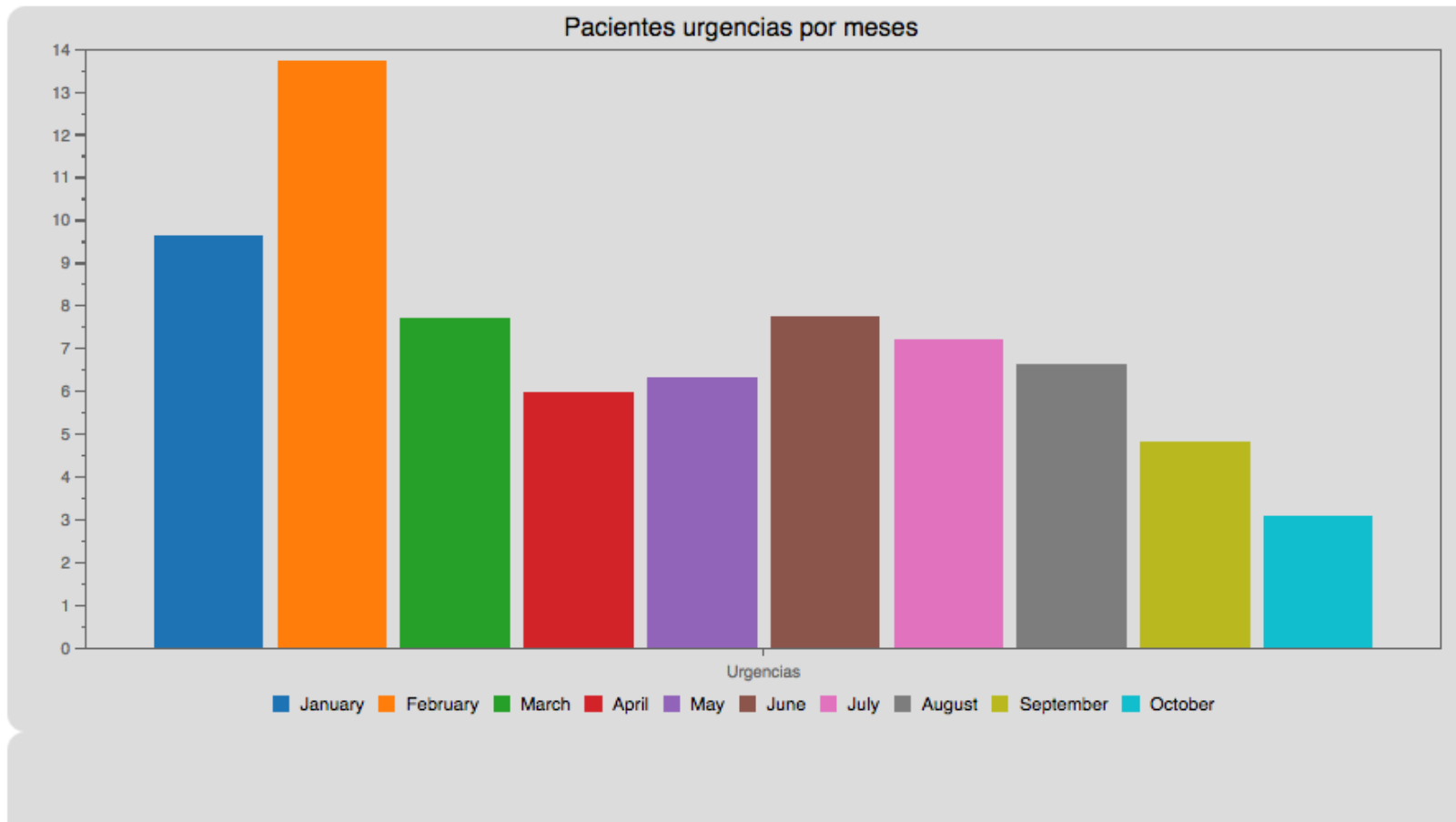
- SAVING CDE PROJECT:

- 3 FILES
  – CDE ProjectFile

  – File.cda: Community Data Access: stores the queries
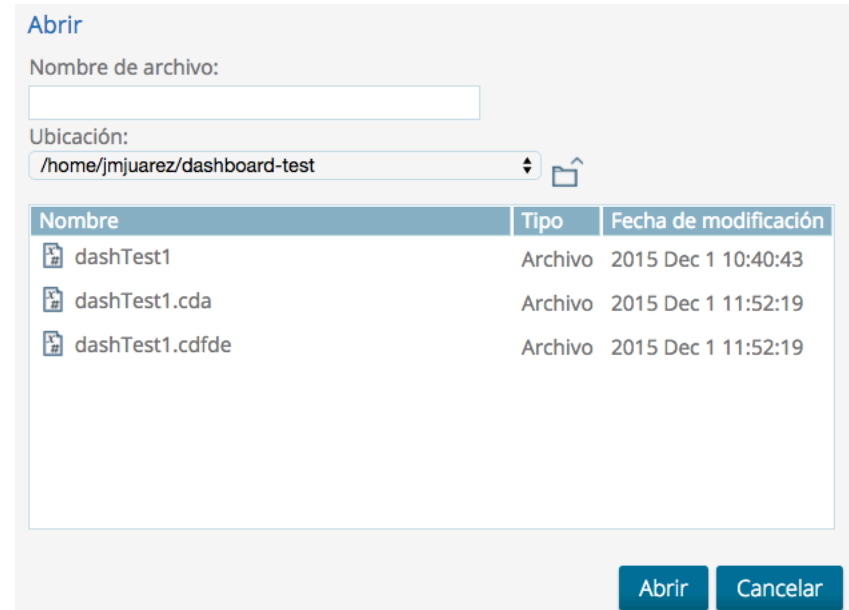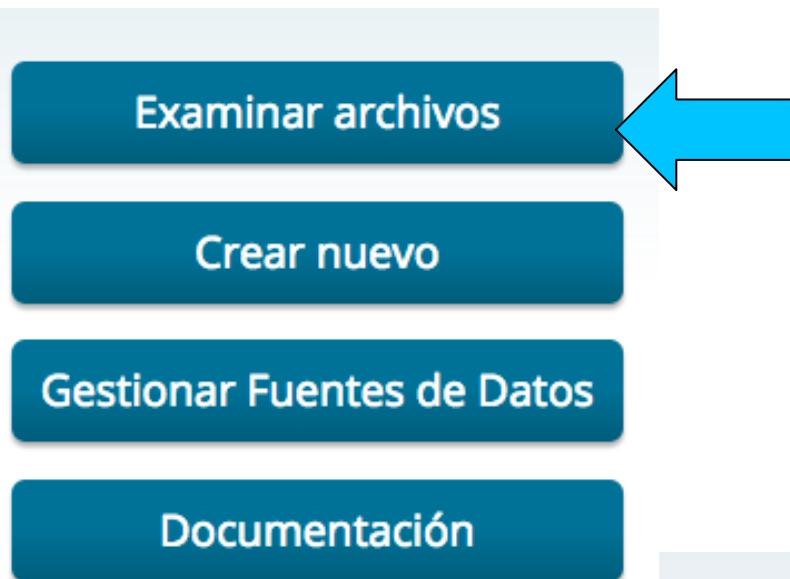
  – File.cdfde: sort of jsom file with dashboard template info.

- OPEN EXISTING CDE PROJECT:

Examinar archivos

Crear nuevo

Gestionar Fuentes de Datos

Documentación

CHOOSE CDE FILE →EDIT

	Archivos	Archivo de Acciones
▼ 🗁 Home	CDE dashTest1	Abrir
🗁 admin	CDA dashTest1.cda	Abrir en una nueva ventana
🗁 in00	🗋 dashTest1.cdfde	Editar
🗁 in01	CDE dashTest2-4panels	
🗁 in02	CDA dashTest2-4panels.cda	Cortar
🗁 in03	🗋 dashTest2-4panels.cdfde	Copiar
🗁 in04	CDE dashtest3-3panels	Mover a la papelera
🗁 in05	CDA dashtest3-3panels.cda	Renombrar...
🗁 in06	🗋 dashtest3-3panels.cdfde	Descargar...

- CREATE 2ND DISPLAY

  1. New MDX Query: <u>NxM table</u>

  2. Create Datasource: MDX mondrian over jndi → "query2"
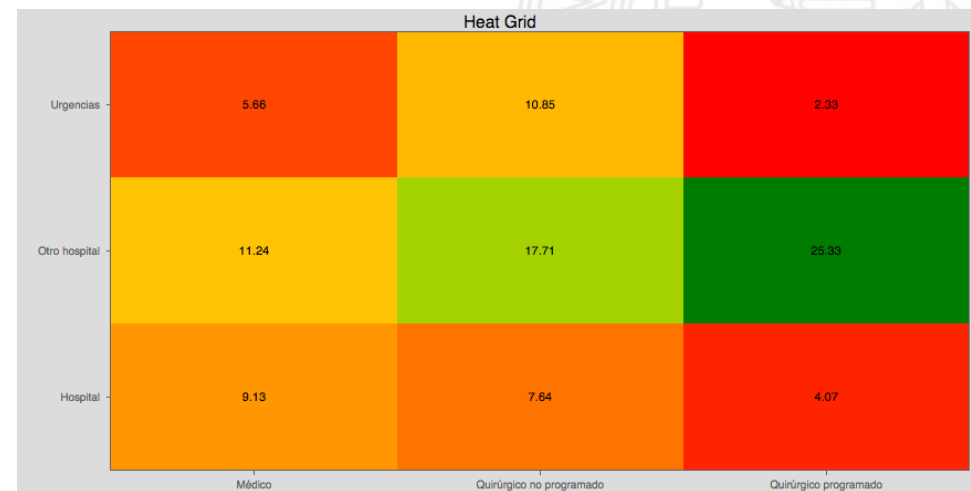
  3. Create Component:

     - CCC Chart : Heat Grid
     - Title: "Heat Grid"
     - Datasource: "query2"
     - HtmlObject: "Panel_2"

Procedencia	Médico	Quirúrgico no programado	Quirúrgico programado
Hospital	9,125	7,636	4,074
Otro hospital	11,238	17,714	25,333
Urgencias	5,664	10,846	2,333

- EXERCISE: TYPE A (To Hand In)

  - CREATE NEW DASHBOARD TO..

  - Visualize **cost in €** of patients according to:

    - Year **2004**.

    - Type of **Admission** & **Sex**.

    - **1 day of stay costs 250€**

  - Create the dashboard according to:

    - MDX query

    - Choose a Dashboard Format (columns/rows/pictures/etc.)

    - Choose the Components (charts)

MDX: lab

- REFERENCES & RESOURCES:

- Canal YouTube IN UMU

https://www.youtube.com/channel/UCvRWqdkGhX57ddLNVeUC7Qw

- Video Example:

http://www.youtube.com/watch?v=cW8YzwC2uNU