



Multicom Corporate Performance Management (CPM)

Strateški pokazatelji, gdje smo ?

Što je KPI?

Key Performance Indicators (KPI) are financial and non-financial metrics used to help an organization define and measure progress toward organizational goals.

[Wikipedia]



"Sorry for calling them 'graphics',
Mr Burke. I meant the
'coloured pictures'."

Multicom Corporate Performance Management (CPM)

MAUS KPIDashboard Software
Monitor, analyse, and report on important business strategies



Why KPI Software is so impo

Visual KPI Feature List

Here are some of the top features of Visual KPI as highlighted by our customers and engineers. For an in-depth overview of the features, please see our [release notes](#) and [documentation](#).



KPI Dashboard – Reconstructed in Excel 2007

ists to track performance agains

KPI Dashboard – Snapshot

First, take a look at the dashboard I have constructed. This u dashboard, but adds a lot of new features etc.



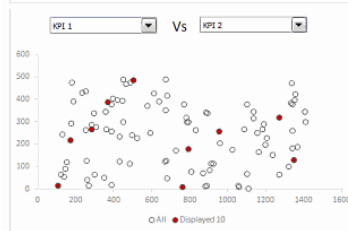
KPI DASHBOARD

Top 3 Products by KPI

KPI 1	KPI 2	KPI 3
Product Name 16 [1,407]	Product Name 13 [489]	Product Name 69 [98]
Product Name 39 [1,403]	Product Name 61 [488]	Product Name 25 [98]
Product Name 65 [1,368]	Product Name 9 [486]	Product Name 6 [97]

	KPI 1	KPI 2	KPI 3
1 Product Name 1	284	267	28%
2 Product Name 2	170	218	86%
3 Product Name 3	760	9	55%
4 Product Name 4	366	388	35%
5 Product Name 5	1345	130	58%
6 Product Name 6	790	181	97%
7 Product Name 7	1269	319	78%
8 Product Name 8	107	16	59%
9 Product Name 9	501	486	56%
10 Product Name 10	953	259	5%

Legend Target <=10 percentile >=90 percentile



Web Slike Videozapisi Knjige

Oko 29.100.000 rezultata (0,28 sek)

	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11 Mortgage rent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12 Utilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13 Home telephone	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14 Cellular telephone	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15 Home repairs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16 Home improvement	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17 Home security	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18 Garden supplies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19 Home totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20										
21 Daily living										
22 Groceries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23 Child care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24 Dry cleaning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25 Dining out	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26 Housecleaning service	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27 Dog walker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28 Daily living totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29										
30 Transportation										
31 Gas/fuel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32 Insurance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33 Repairs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34 Car wash/detailing services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35 Parking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36 Public transportation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37 Transportation totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38										
39 Entertainment										
40 Cable TV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41 Video/DVD rentals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Projekt EU IPA2008

- energetika

Details

Name ASRI03 Power System infrastructure

Description

Capacity of power infrastructure relative to electricity peak demand.

Capacity of entry points and capacity of domestic power production must be able to supply the market for protected customers in 7 days with extreme temperatures ix 30 days with average winter temperature. The most critical will prevail.

Base Indicator

Data Unit No Unit (#)

Formula

$$\frac{([ELIN01 \text{ Installed Generation Capacity}] + [ELIN14 \text{ Capacity of Cross Border Transmission}])}{([ELIN02 \text{ Maximum Daily Electricity Consumption}] / 24)} * [ASRI03 \text{ Power System infrastructure Normalisation factor}]$$

 Null Values Treat Missing Value as 0

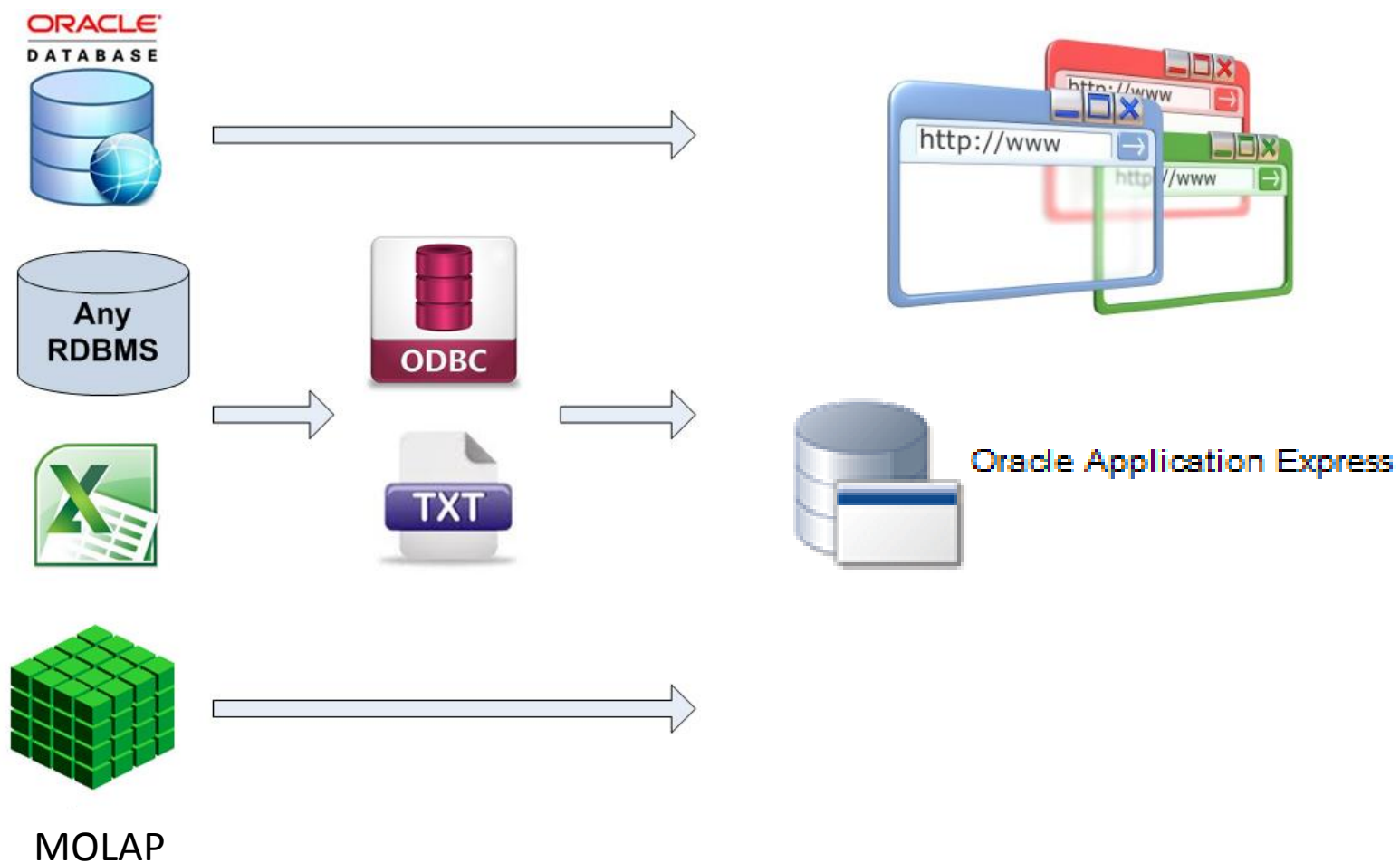
Formula

```

-(((COIND4 Azerbaijan)/[COIND4 Crude Oil Import per Supplier Country])*CASE [COIND4 Azerbaijan]
WHEN 0 THEN 0
ELSE LN([COIND4 Azerbaijan]/[COIND4 Crude Oil Import per Supplier Country])
END)
+(((COIND4 Hungary)/[COIND4 Crude Oil Import per Supplier Country])*CASE [COIND4 Hungary]
WHEN 0 THEN 0
ELSE LN([COIND4 Hungary]/[COIND4 Crude Oil Import per Supplier Country])
END)
+(((COIND4 Libyan Arab Jamahiriya)/[COIND4 Crude Oil Import per Supplier Country])*CASE [COIND4 Libyan Arab Jamahiriya]
WHEN 0 THEN 0
ELSE LN([COIND4 Libyan Arab Jamahiriya]/[COIND4 Crude Oil Import per Supplier Country])
END)
+(((COIND4 Russian Federation)/[COIND4 Crude Oil Import per Supplier Country])*CASE [COIND4 Russian Federation]
WHEN 0 THEN 0
ELSE LN([COIND4 Russian Federation]/[COIND4 Crude Oil Import per Supplier Country])
END)
  
```

 Null Values Treat Missing Value as 0

TOPOLOGIJA



Što je u paketu?

- Ekstrakcija
- Integracija
- Kalkulacije
- Ocjenjivanje



ŠTO MJERIMO I POKAZUJEMO?

Indikatori, mjere, dimenzija i ostalo



www.dilbert.com scottadams@aol.com



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ŠTO GLEDATI?

INDIKATOR VS MJERA

Pojam “mjere i indikatori” se odnosi na numeričku informaciju koja kvantificira ulaz, izlaz, i dimenziju performansi procesa, proizvoda, program, projekta, i općenito organizacije.

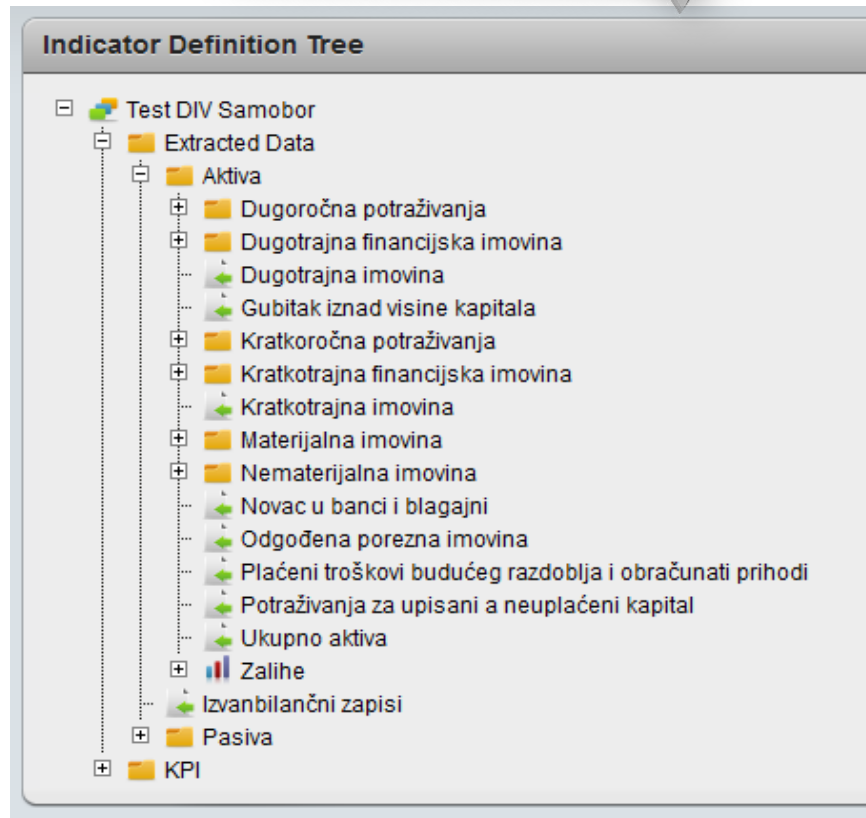
Korisnici najčešće smatraju ove pojmove sinonimima, iako se pojam mjera dovodi u odnos prema izvršenju, ali ne kao direktna mjera izvršenja (npr., broj pritužbi kao indikator nezadovoljstva, ali nije direktno njegova mjera)



PLAIN ENGLISH – FORGET THE JARGON...
– AN INDICATOR INDICATES SOMETHING.
– A MEASURE MEASURES SOMETHING.

Pojam 'Measures and Indicators se prvi put spominje u Baldrige Glossary, 1996.

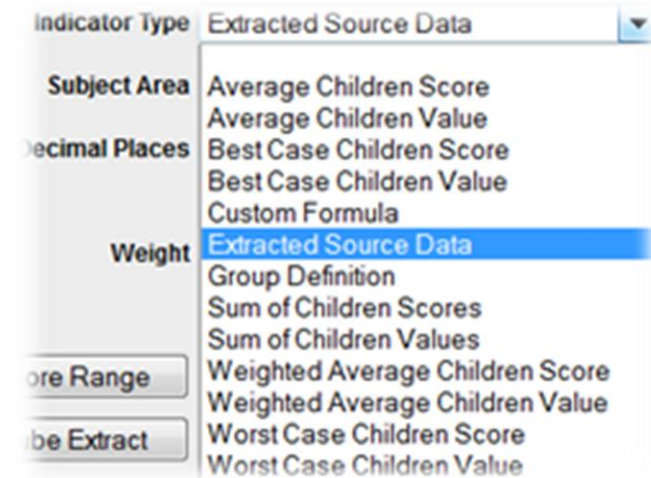
Definicija indikatora



- **Stablasta struktura**
= **Excel ulančane formule**
- **Maksimalna transparentnost**
 - **Analiza podrijetla**
 - **Analiza utjecaja**

INDIKATORI

- **Custom Formula**
- **Data File Manual Load**
- **Extracted Source Data**
- **Group Definition**
- **Agregatni indikatori**
 - **Average Children Score/Value**
 - **Best Case Children Score/Value**
 - **Sum of Children Scores/Values**
 - **Weighted Average Children Score/Value**
 - **Worst Case Children Score/Value**



Indicator Type: Extracted Source Data

Subject Area: Average Children Score
Average Children Value

Decimal Places: Best Case Children Score
Best Case Children Value
Custom Formula

Weight: **Extracted Source Data**
Group Definition
Sum of Children Scores
Sum of Children Values

Score Range: Weighted Average Children Score
Weighted Average Children Value

Be Extract: Worst Case Children Score
Worst Case Children Value

Dimension Name	Select Members
Time	Select Members
Poslovna jedinica	Select Members
Valuta	

Name	Description	Active	Dimensions	Purge Model Data
- Financijski model	-	✓	Dimensions	Purge Model Data
Financijski model	-	✓	Dimensions	Purge Model Data
Financijski model (Copy)	-	✓	Dimensions	Purge Model Data
Financijski model tree test	-	✓	Dimensions	Purge Model Data

Members	Display Order	Default Page Item
AUD	-	-
BAM	-	-
CAD	-	-
CHF	-	-
CZK	-	-
DKK	-	-
EUR	-	-
GBP	-	-
HRK	-	-
HUF	-	-
JPY	-	-
MKD	-	-
NOK	-	-
PLN	-	-
RSD	-	-
SEK	-	-

Name	Description	Active	Indicators
- Financijski model	-	✓	Indicators
Financijski model	-	✓	Indicators
Financijski model (Copy)	-	✓	Indicators
Financijski model tree test	-	✓	Indicators

Indicator Definition Tree

- Financijski model
 - DASHBOARD - BALANCE SHEET RATIOS
 - DASHBOARD - EKONOMIČNOST
 - KPI - EKONOMIČNOST - DETALJNI 1
 - KPI - EKONOMIČNOST - DETALJNI 2
 - Ekonomičnost gotovins/platn/prometa
 - Ekonomičnost kartičnog poslovanja
 - Prihodi od provizija kartičnog poslovanja (Shared)
 - Troškovi provizija kartičnog poslovanja (Shared)
 - Ekonomičnost prihoda od provizija i naknada (Shared)
 - KPI - EKONOMIČNOST - OSNOVNI
 - KPI - EKONOMIČNOST - POSEBNI
 - DASHBOARD - OPERATIVNA EFIKASNOST
 - DASHBOARD - POLIČKA KAPITALA I LEVERAGE

Kalkulacije

Data Unit:

Formula:
$$\frac{-(\text{Kamatni prihodi gospodarstva (RDG kumulativ)})}{(\text{Kamatni troškovi gospodarstva (RDG kumulativ)})}$$

Range Name	Upper Boundary	Status	Icon	Score
Less	.7	Nedovoljan	☆☆☆☆☆	10
Less	.8	Osrednji	☆☆☆☆☆	20
Less	.95	Dobar	☆☆☆☆☆	50
Less	1.05	Vrlo dobar	☆☆☆☆☆	75

Details

*Range Type:

Upper Boundary:

*Status:

Icon Code:

Score:

Icons

ICON	CODE
	0001
	0002
	0003
	0004
	0005
	0006
	0007

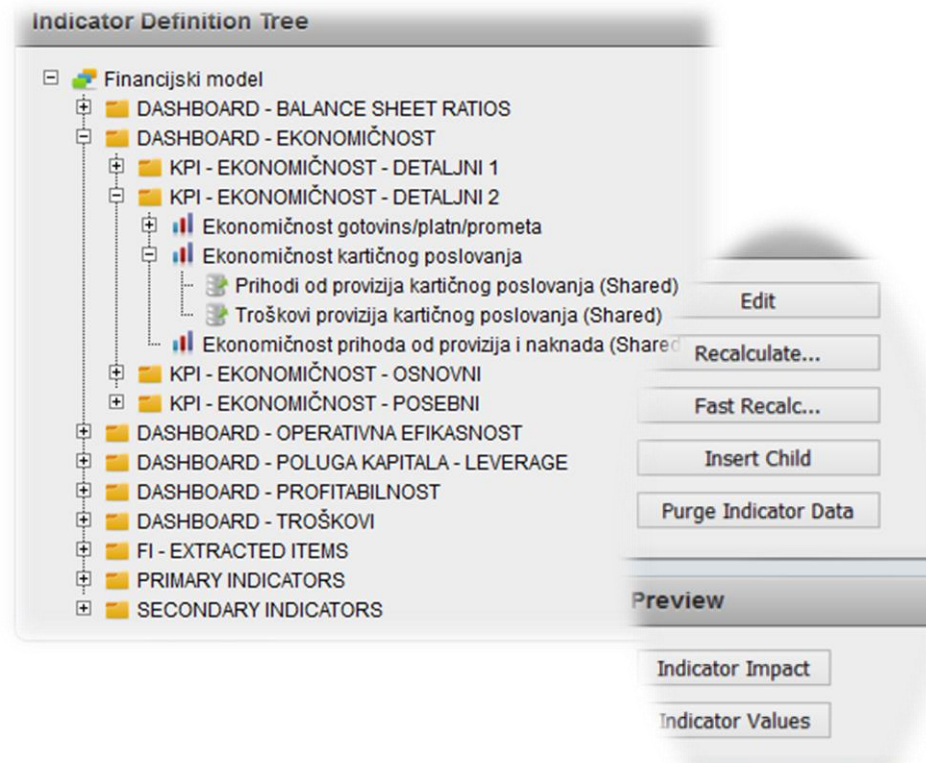
• Ulaz:

- Uvezeni podaci
- Druge formule
- Bodovi
- Težinski faktori

• Izlaz:

- Iznos
- Status
- Score

Osvježavanje podataka



- **Pokretanje:**
 - Automatsko
 - Ručno
- **Opseg:**
 - Svi aktivni pokazatelji
 - Parcijalno

Ocjenjivanje rezultata (Scoring)

- **Rezultati upadaju u skupine**
- **Skupina određuje:**
 - Izlazni status
 - Bodove (Score)
- **Bodovi su ulaz za izračun viših ciljeva (pokazatelja)**

Details Cancel Delete Apply Changes Icons











*Range Type

Upper Boundary .7

*Status

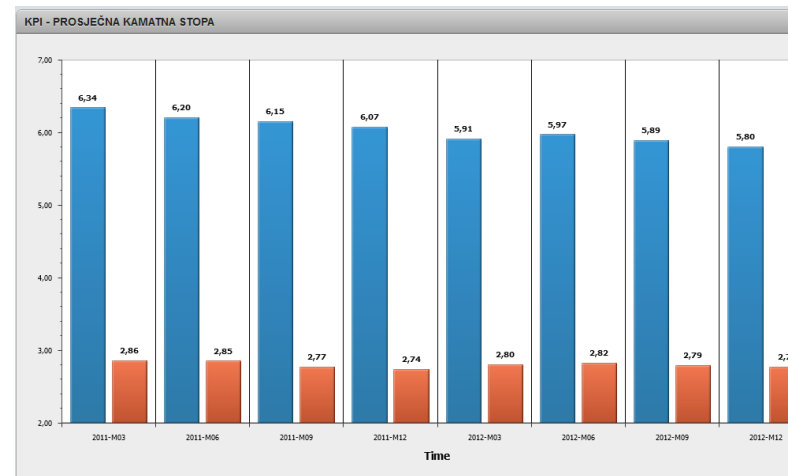
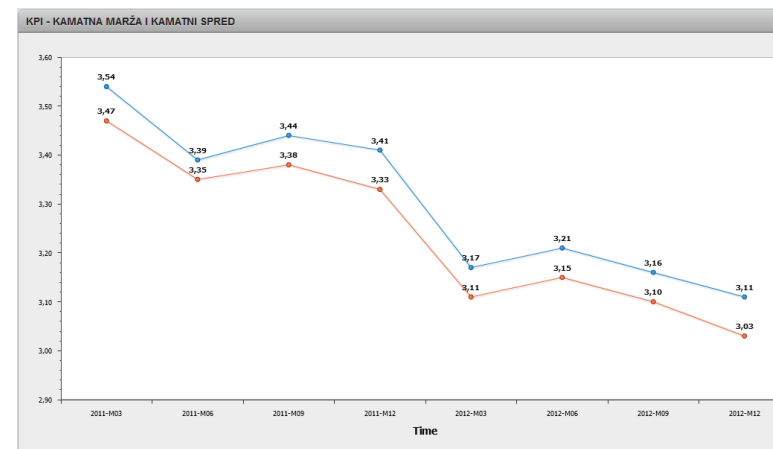
Icon Code

Score

ICON	CODE
	0001
	0002
	0003
	0004
	0005
	0006
	0007
	0008
	0009
	0010

Prezentacija rezultata

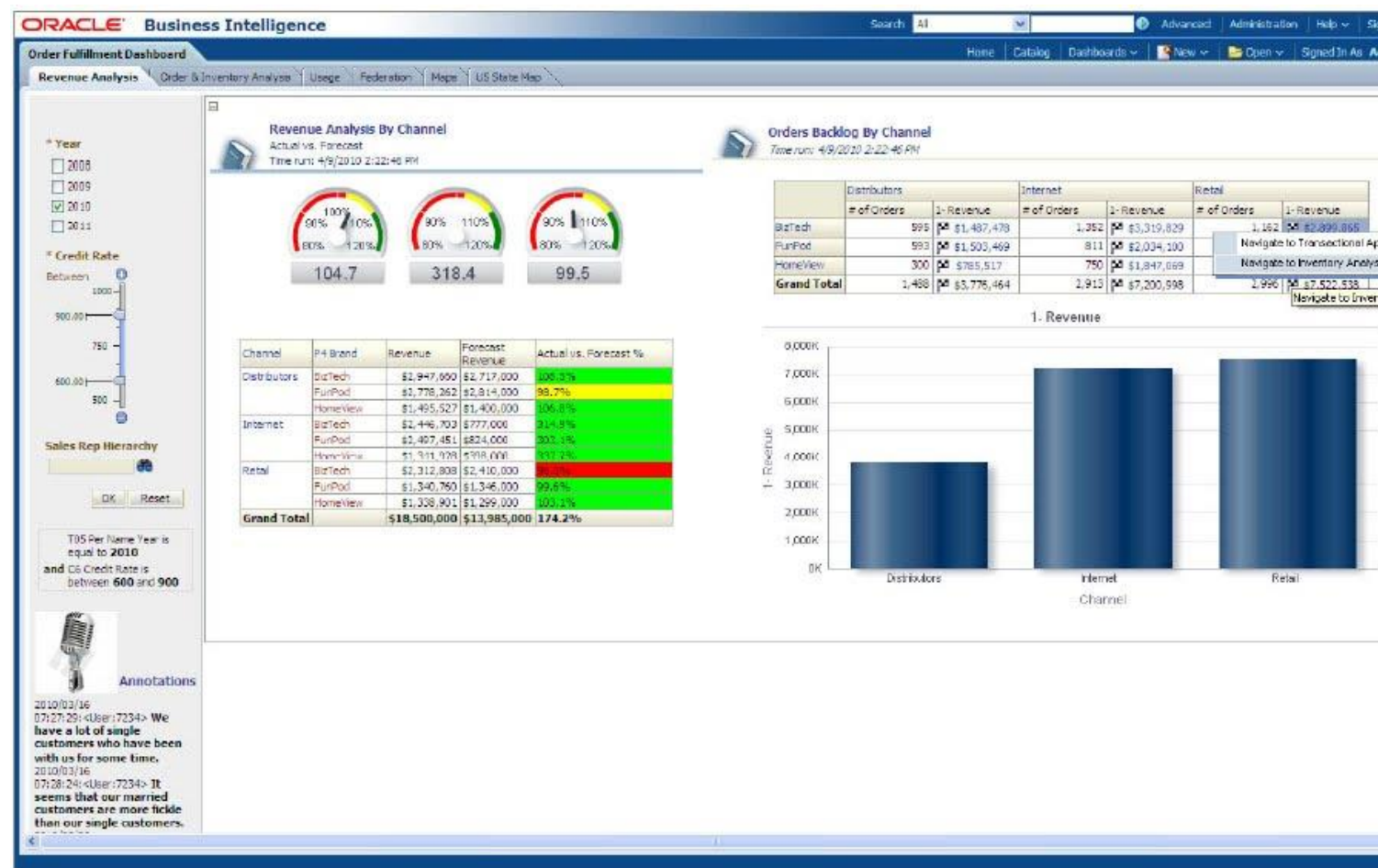
Name	Value	Unit	Status	Score	Comp Val	Comp Chg	Comp % Chg		
2011-M01	3,35	SCORE	Izvršno	★★★★☆	100	3,35	0,0	0,00	↔
2011-M02	3,17	SCORE	Vrlo dobro	★★★★☆	70	3,35	-0,18	-5,37	↓
2011-M03	3,48	SCORE	Izvršno	★★★★☆	100	3,35	0,13	3,88	↑
2011-M04	3,37	SCORE	Izvršno	★★★★☆	100	3,35	0,02	0,60	↑
2011-M05	3,35	SCORE	Izvršno	★★★★☆	100	3,35	0,0	0,00	↔
2011-M06	3,35	SCORE	Izvršno	★★★★☆	100	3,35	0,0	0,00	↔
2011-M07	3,31	SCORE	Izvršno	★★★★☆	100	3,35	-0,04	-1,19	↓
2011-M08	3,32	SCORE	Izvršno	★★★★☆	100	3,35	-0,03	-0,90	↓
2011-M09	3,38	SCORE	Izvršno	★★★★☆	100	3,35	0,03	0,90	↑
2011-M10	3,31	SCORE	Izvršno	★★★★☆	100	3,35	-0,04	-1,19	↓
2011-M11	3,22	SCORE	Vrlo dobro	★★★★☆	70	3,35	-0,13	-3,88	↓
2011-M12	3,33	SCORE	Izvršno	★★★★☆	100	3,35	-0,02	-0,60	↓
2012-M01	2,9	SCORE	Dobro	★★★★☆	30	3,35	-0,45	-13,43	↓
2012-M02	2,85	SCORE	Dobro	★★★★☆	30	3,35	-0,5	-14,93	↓
2012-M03	3,11	SCORE	Vrlo dobro	★★★★☆	70	3,35	-0,24	-7,16	↓



Balanced Scorecard



Integracija s BI portalom



PL/SQL back end – izazovi

```
SELECT SUBSTR(country, 1, 20) country,  
       SUBSTR(product, 1, 15) product, year, sales  
FROM sales_view  
WHERE country IN ('Italy', 'Japan')  
MODEL  
  PARTITION BY (country) DIMENSION BY (product, year)  
  MEASURES (sales sales)  
  RULES  
    (sales['Bounce', 2002] = sales['Bounce', 2001] + sales['Bounce', 2000],  
     sales['Y Box', 2002] = sales['Y Box', 2001],  
     sales['All_Products', 2002] = sales['Bounce', 2002] + sales['Y Box', 2002])  
ORDER BY country, product, year;
```

- **Kompleksan relacijski model**
- **Programska logika u PL/SQL paketu, uz minimum logike u Apexu**
- **Dinamički SQL**
- **SQL Model Clause za izračun vrijednosti**

Sučelje – Apex 4.2, izazovi

Indicator Definition Tree

- Financijski model
 - DASHBOARD - BALANCE SHEET RATIOS
 - DASHBOARD - EKONOMIČNOST
 - KPI - EKONOMIČNOST - DETALJNI 1
 - Ekonomičnost kam/prih/gospodarstva
 - Kamatni prihodi gospodarstva (RDG kumulativ) (Shared)
 - Karr
 - Ekonorr
 - Ekonorr
 - Ekonorr
 - Ekonorr
 - KPI - EKON
 - KPI - EKON
 - KPI - EKON
 - DASHBOARD -
 - DASHBOARD -
 - DASHBOARD -
 - DASHBOARD -
 - FI - EXTRACTE
 - PRIMARY INDIC
 - SECONDARY II

Function and Global Variable Declaration

```

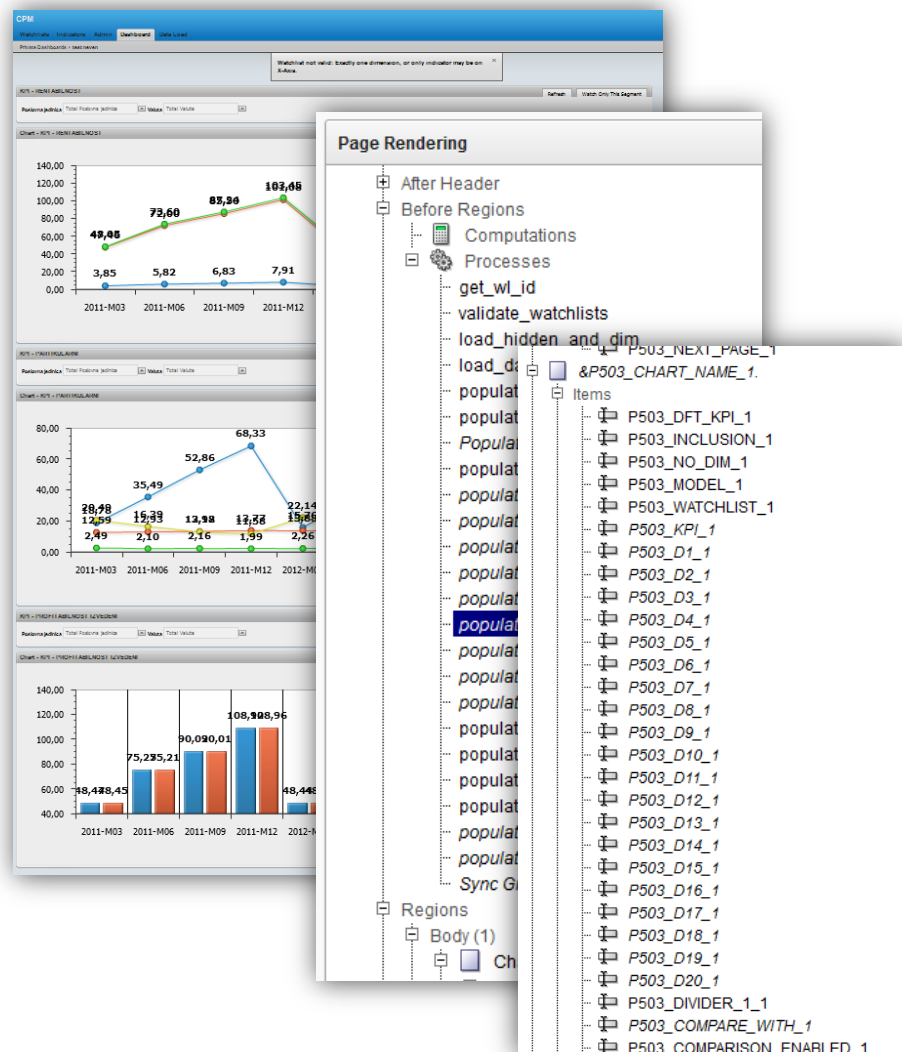
return $(elem).text().toUpperCase().indexOf(match[1].toUpperCase()) >=
0;
});
});
$.tree.reference(!$tree).settings.data.async = false;
$.tree.reference(!$tree).settings.callback.onselect = function(NODE, TREE_OBJ){
  addFeedback("Selected node: " + $(NODE).attr("id") + $("a:first",
  NODE).text());
  $("WP148_TREE_SELECT").val($(NODE).attr("id"));
  $("WP148_TREE_SELECT").trigger("apexrefresh");
};
$.tree.reference(!$tree).settings.callback.onopen = function(NODE, TREE_OBJ) {
  addFeedback("Opened node: " + $(NODE).attr("id") + $("a:first", NODE).text());
  $("WP148_TREE_SELECT").val($(NODE).attr("id"));
};
$.tree.reference(!$tree).settings.callback.onclose = function(NODE, TREE_OBJ) {
  addFeedback("Closed node: " + $(NODE).attr("id") + $("a:first", NODE).text());
  $("WP148_TREE_SELECT").val($(NODE).attr("id"));
};
};
};
function resetAndOpenToLevel ( ptree, pmaxLevel ) {
  apex.$query.tree.reference(ptree).close_all();

  $("ul", ptree).each(function ( index ) {
    if ( $(this).parents("ul").length <= pmaxLevel ) {
      apex.$query.tree.reference(ptree).open_branch(this);
    }
  });
  ...

```

- Standardna funkcionalnost za veći dio aplikacije
- Nadopuna funkcionalnosti pisanjem java koda (posebno kod tree kontrole)
- Izbjegavanje gotovih plugin-a

Sučelje – Apex 4.2, izazovi



- Izazov kreiranja dashboarda kao kombinacije grafikona/tablica
- Ograničenje broja item-a na stranici
- Korištenje application itema i Breadcrumb-ova za navigaciju
- Pozivanje vanjske autentifikacije

Usporedba s BI alatima

- **Specijalizirano KPI rješenje, za razliku od univerzalnih BI alata...**
...ali zato **univerzalno upotrebljivo** za svaku industriju
- **Centralizirani repozitorij** podataka
- **Integracija** iz raznih izvora uz **automatsko osvježavanje**
- **Napredne analize** (porijeklo, utjecaj, dinamičke usporedbe)
- **Ocjenjivanje učinka** i podrška za **Balanced Scorecard**
- **Mogućnost prilagodbe i proširenja**

Unaprijed pripremljeni pokazatelji

- **70 pokazatelja (Bank-Specific Variables, BSV)**
- **21 grafički prikaz**
- **6 upravljačkih ploča (Dashboard)**
- **Zasnovano na standardnim izvješćima (Bilanca i RDG)**



Pitanja?



Telco

...

Finance

...

Public/Utility



Hvala!