

## Materijali

### kolegiji:

Mini kolegij o OLAPu

<https://lagunita.stanford.edu/courses/DB/OLAP/SelfPaced/about>

Drugi tjedan, 'Architecture of BI systems'

[http://platform.europeanmoocs.eu/course\\_business\\_intelligence](http://platform.europeanmoocs.eu/course_business_intelligence)

Prvi (uvod) i dio četvrtog tjedna (ER dijagrami)

<https://www.coursera.org/learn/database-management>

### Par važnijih linkova:

O dobroj praksi i performansama

<http://www.vikramtakkar.com/2014/10/talend-data-integration-development.html>

<http://www.vikramtakkar.com/2014/05/talend-job-design-performance-tuning.html>

## Izvori podataka

Neki podaci su generirani kroz Talend, neki su fajlovi

### Fajlovi

shops.csv

popis shopova, grupacija kojoj pripadaju, država, valuta

amazon.co.uk, amazon, United Kingdom, GBP

amazon.com, amazon, USA, USD

amazon.de, amazon, Germany, EUR

...

Calendar.xlsx

prilagođen onaj iz knjige: <http://www.kimballgroup.com/wp-content/uploads/2014/03/Ch3-SampleDateDim.xls>

exchangeRate2015-2016.xlsx

<http://www.hnb.hr/temeljne-funkcije/monetarna-politika/tečajna-lista/tečajna-lista>

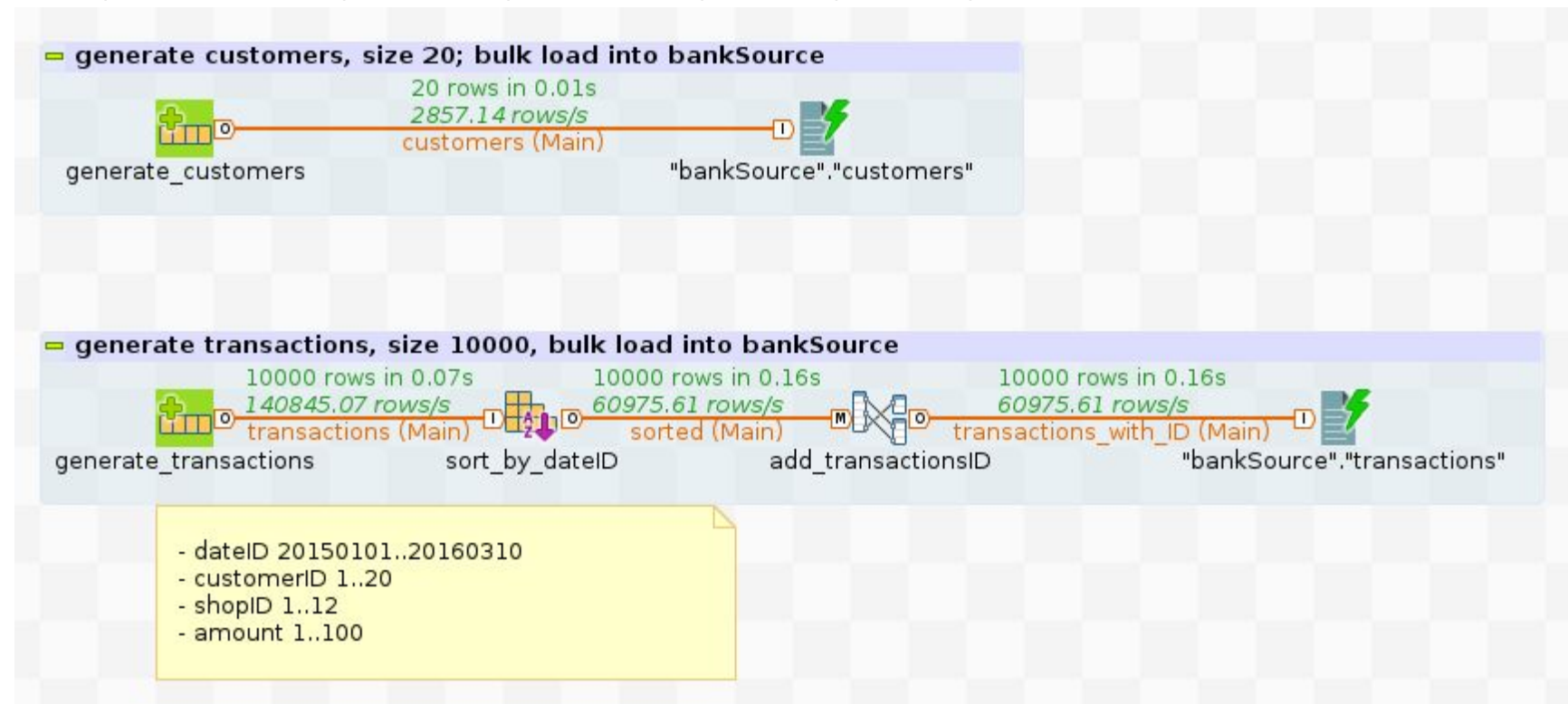
### Generirano u bazu bankSource

customers

customerID	name	surname
1	Abraham	Harrison
2	Franklin	Harrison
3	Jimmy	Quincy
4	Richard	Tyler

transactions

transactionID	dateID	customerID	shopID	amount
1	20150101	7	8	53.99
2	20150101	1	12	88.49
3	20150101	1	6	22.95
4	20150101	13	9	89.49
5	20150101	6	7	81.69



ETL

dates

uzima neke podatke iz Calendar.xlsx fajla, dateID, full\_date, i još neke za lakše grupiranje kasnije (tipa kvartal i slično)

conversions

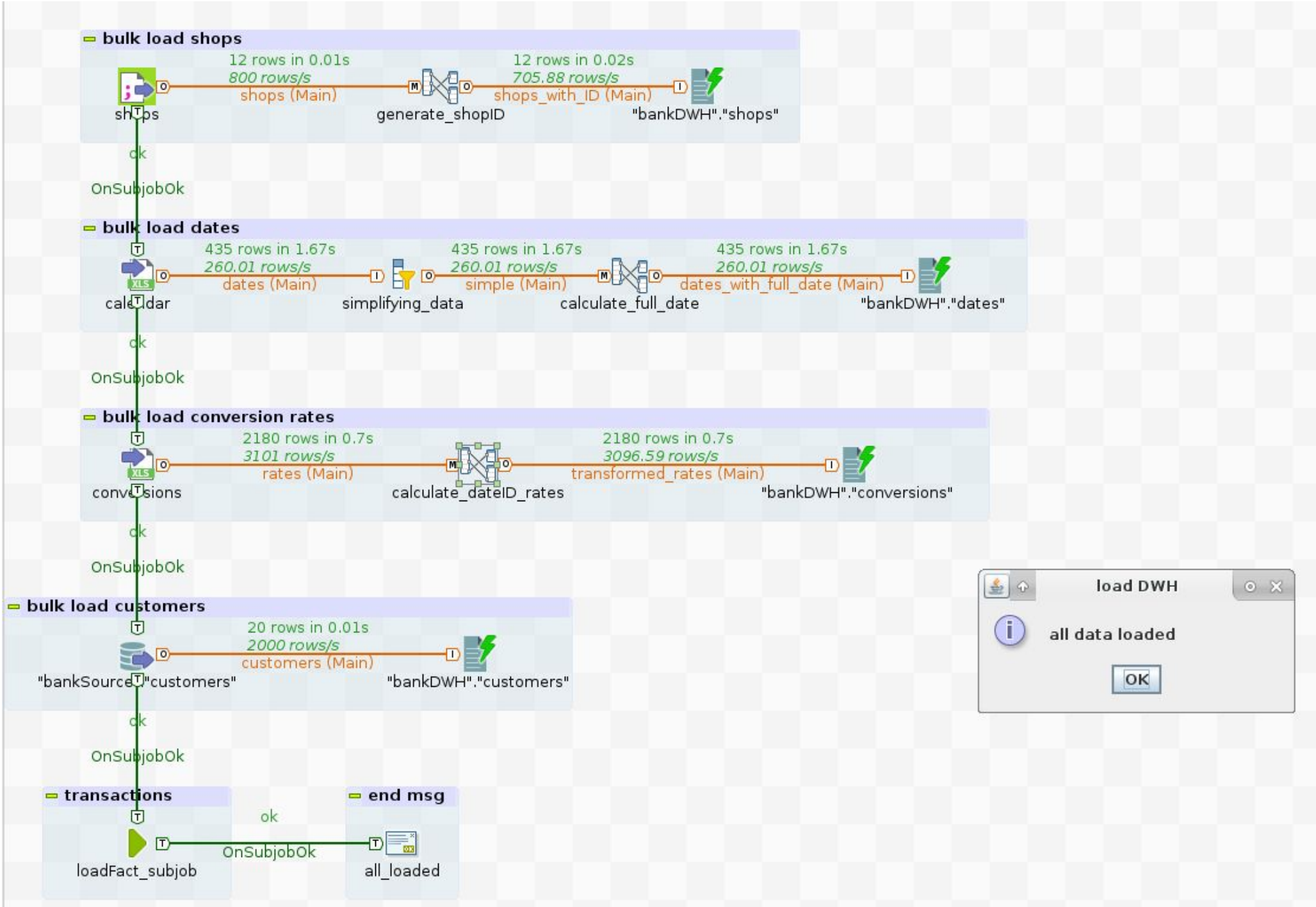
averageRate računa prema jedinici i srednjem tečaju iz exchangeRate2015-2016.xlsx

customers

samo prebacuje iz source baze u DWH

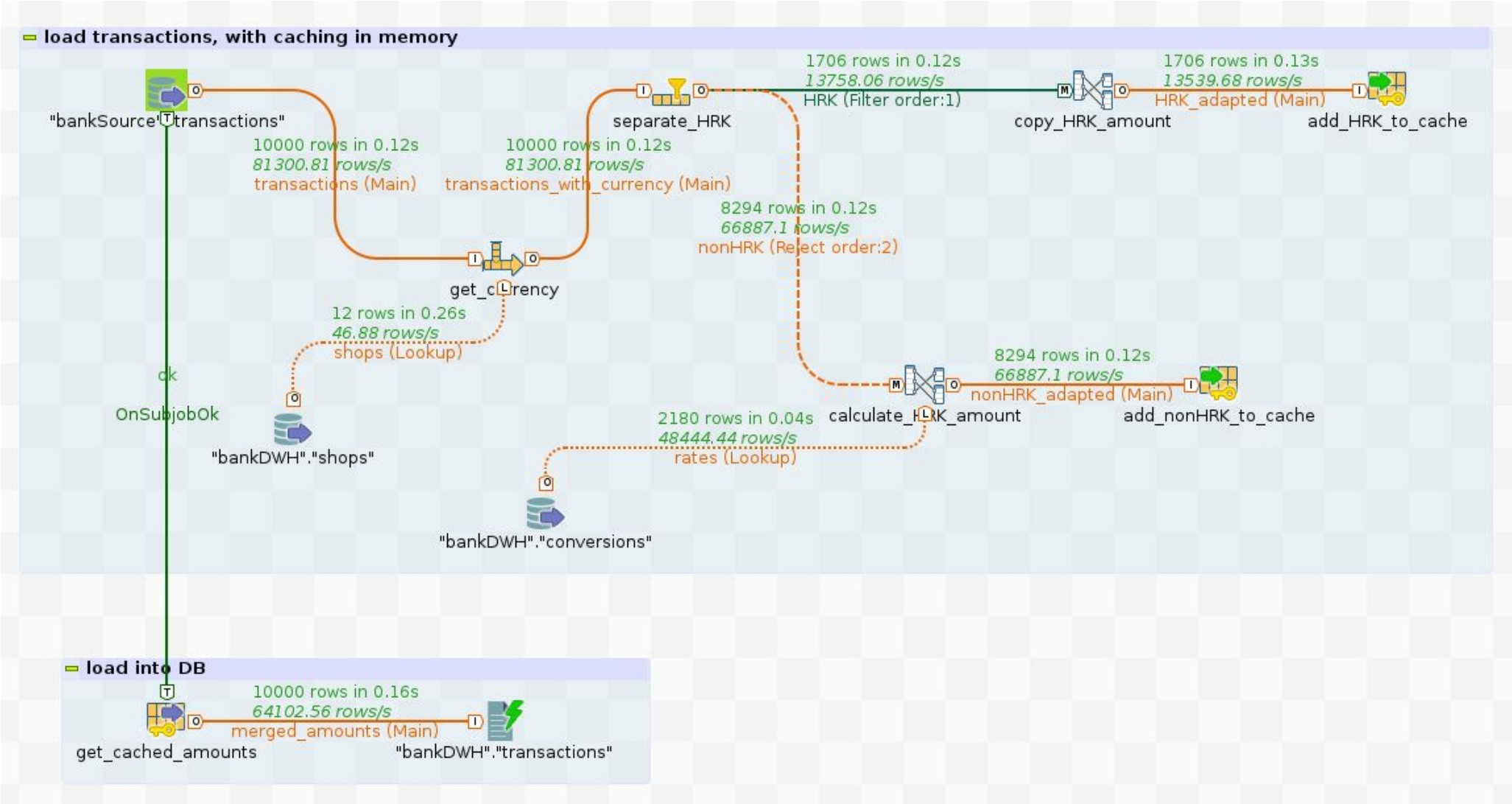
shops

dodaje shopID prije punjenja u DWH



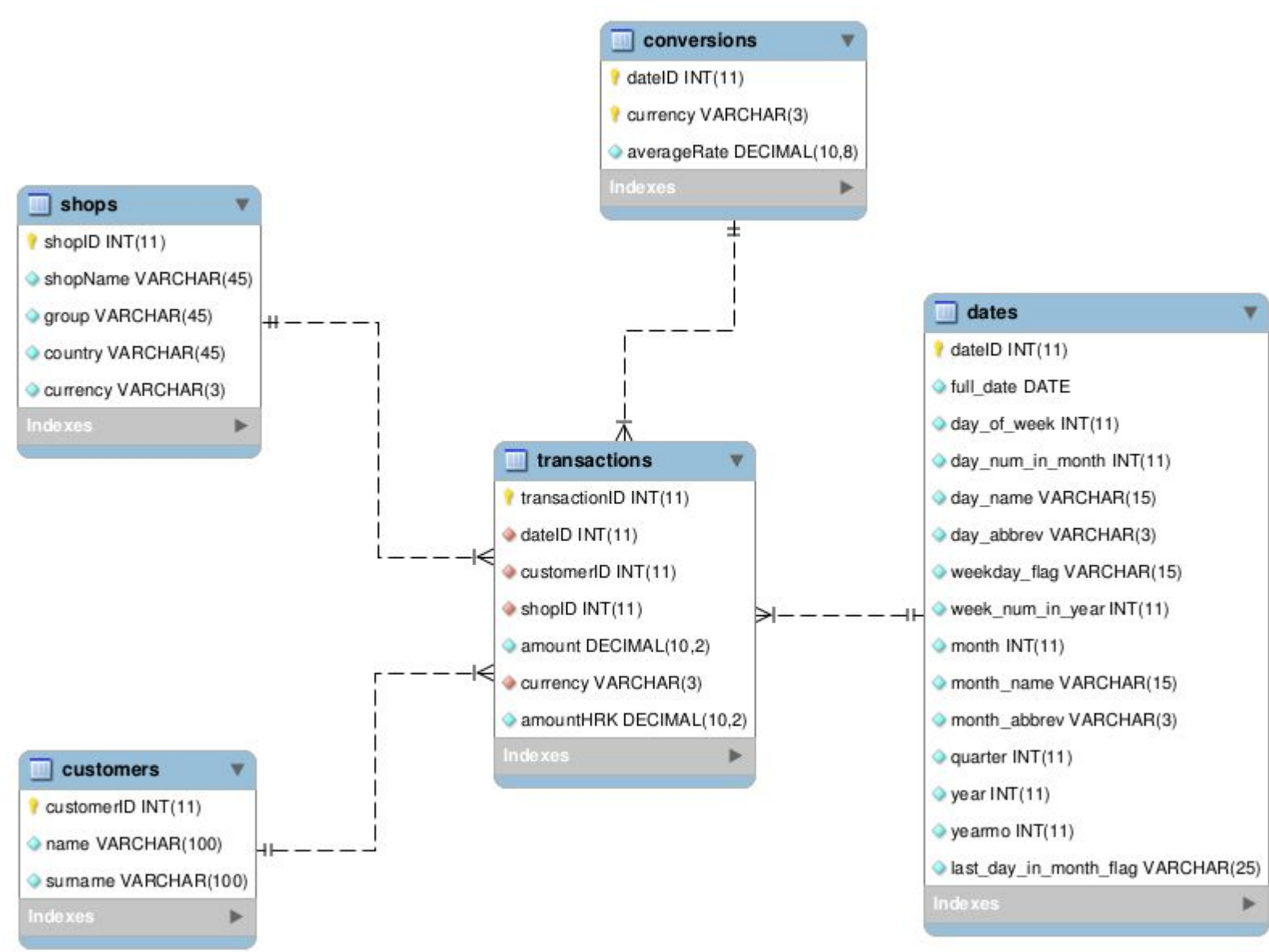
transactions

fact tablica, iz source baze uzima, radi konverziju u HRK na dan transakcije i potom puni DWH



DWH

ER shema

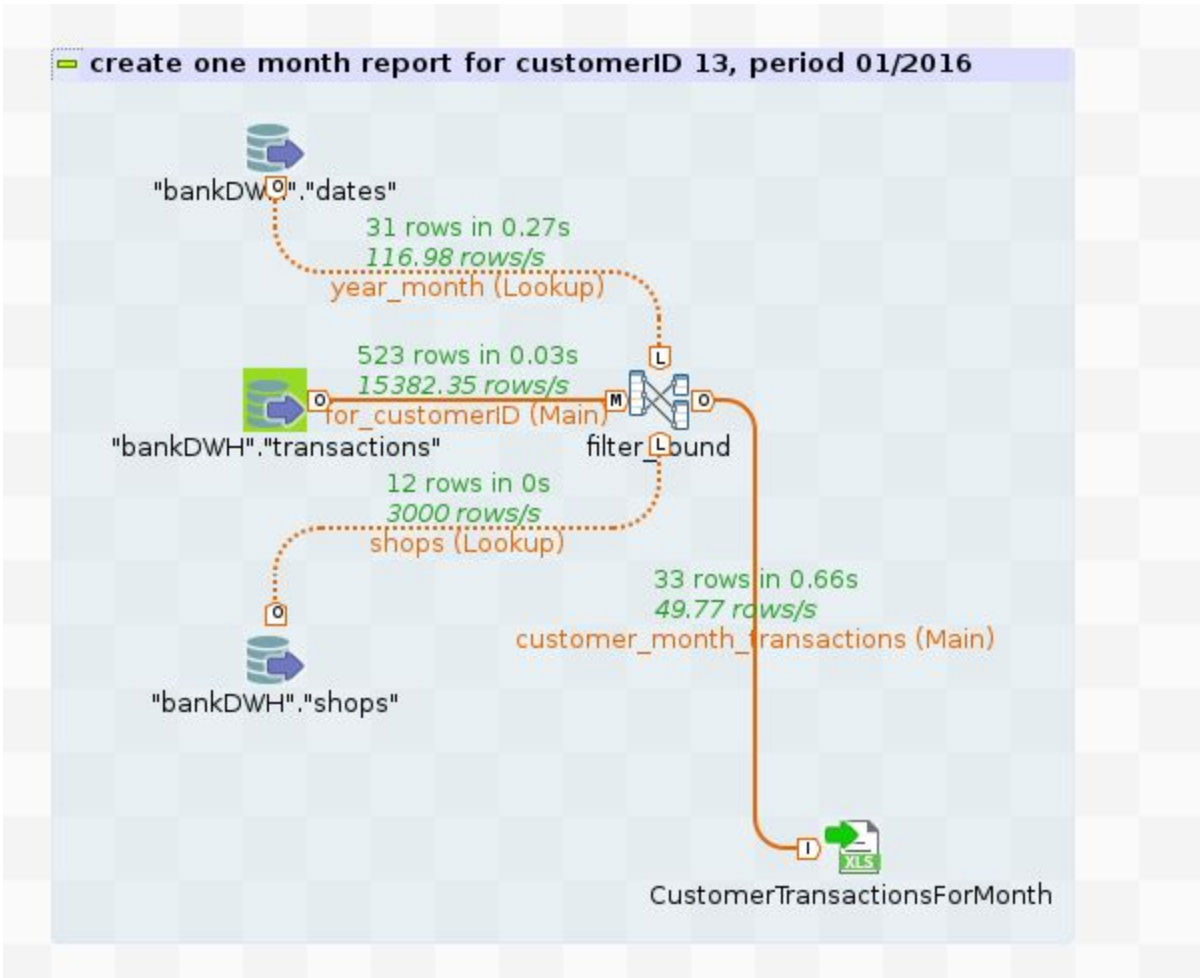




Reporti

Mjesečni izvadak prometa po računu za klijenta, odabire se mjesec i klijent

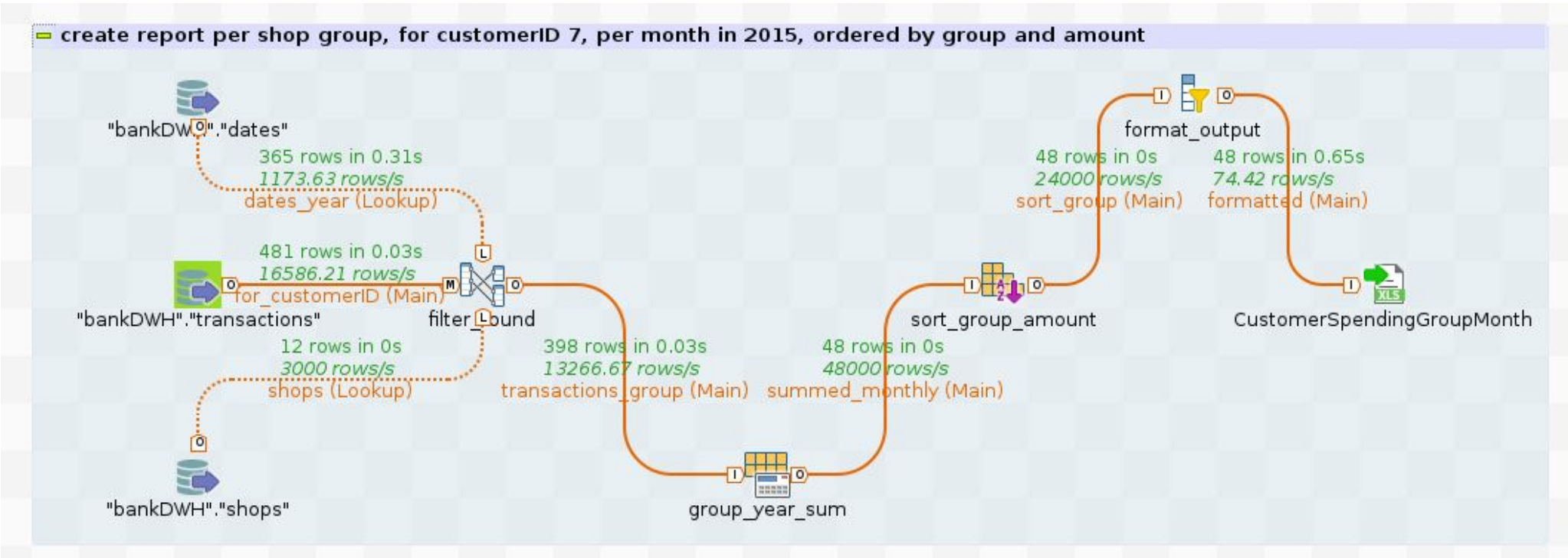
Mjesec i godina te klijent direktno kroz inicijalni query



	A	B	C	D	E
1	full_date	shopName	amountHRK	transactionID	
2	01.01.2016	ebay.com	168,02	8299	
3	01.01.2016	ikea/hu	1,99	8317	
4	02.01.2016	ekupi.si	106,82	8341	
5	04.01.2016	amazon.de	328,31	8378	
6	04.01.2016	ikea/se	77,78	8380	
7	04.01.2016	ikea/hu	0,33	8385	
8	06.01.2016	ebay.de	110,69	8425	
9	07.01.2016	ikea/us	425,4	8435	
10	07.01.2016	amazon.co.uk	853,26	8450	
11	08.01.2016	ikea/se	58,13	8475	
12	10.01.2016	amazon.co.uk	962,03	8525	
13	10.01.2016	amazon.co.uk	715,59	8528	
14	13.01.2016	ikea/hu	1,88	8609	
15	13.01.2016	ikea/se	20,88	8610	
16	14.01.2016	amazon.com	183,77	8614	
17	14.01.2016	ebay.de	124,73	8618	
18	14.01.2016	ebay.com	601,86	8619	
19	15.01.2016	ikea/se	82,05	8642	
20	15.01.2016	ebay.de	645,77	8661	
21	16.01.2016	ekupi.hr	10,95	8671	
22	16.01.2016	ikea/hr	70	8676	
23	17.01.2016	ebay.de	344,94	8685	
24	17.01.2016	ikea/se	26,54	8699	
25	21.01.2016	ikea/se	59,89	8763	
26	23.01.2016	ekupi.hr	49,99	8822	
27	23.01.2016	ekupi.hr	11,99	8833	
28	25.01.2016	ikea/hr	28,69	8882	
29	25.01.2016	ikea/hr	14,95	8891	
30	26.01.2016	ekupi.si	482,8	8915	
31	27.01.2016	amazon.de	738,11	8921	
32	28.01.2016	ebay.de	486,13	8965	
33	29.01.2016	ikea/us	274,2	8975	
34	29.01.2016	amazon.com	686,85	8976	
35					
36					

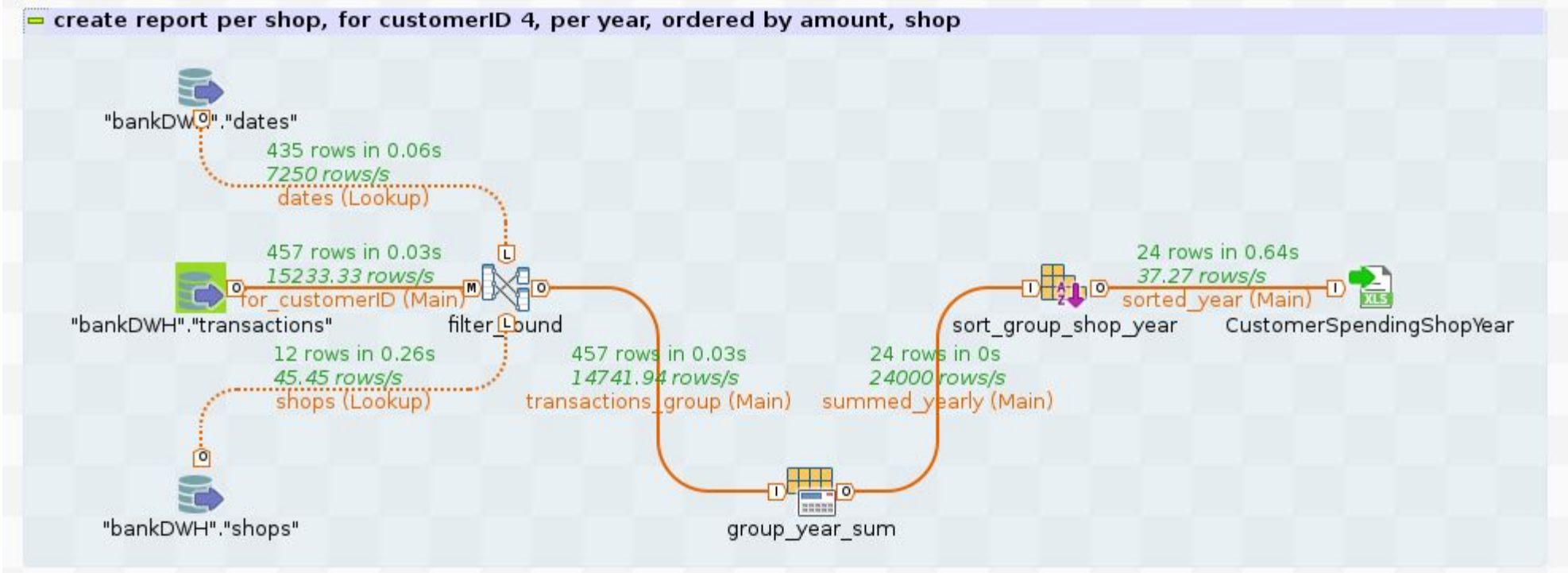
Izveštaj na kojem se vide navike trošenja klijenta (na što klijent troši najviše novaca, npr u kojim dućanima, po mjesecima)

Za grupacije, za jednu godinu po mjesecima, sortirano po grupacijama i iznosu unutar svake  
ima dosta dućana pa ispada preveliko za ilustraciju, zato grupacije; klijent te dani za godinu direktno kroz inicijalni query



	A	B	C	D
1	group	month_name	amountHRK	
2	amazon	January	5443,2	
3	amazon	October	5142,9	
4	amazon	November	4452,99	
5	amazon	March	4239,39	
6	amazon	February	3999,69	
7	amazon	June	3850,9	
8	amazon	December	3149,42	
9	amazon	September	2834,19	
10	amazon	August	2600,51	
11	amazon	May	2418,11	
12	amazon	July	2187,99	
13	amazon	April	1160,57	
14	ebay	February	5303,09	
15	ebay	January	5096,34	
16	ebay	August	4651,92	
17	ebay	July	4518,81	
18	ebay	September	4026,49	
19	ebay	December	4004,48	
20	ebay	April	3941,21	
21	ebay	June	3926,41	
22	ebay	November	3400,76	
23	ebay	October	2549,68	
24	ebay	March	2456,71	
25	ebay	May	1994,16	
26	ekupi	September	2339,7	
27	ekupi	April	2172,55	
28	ekupi	November	1845,74	
29	ekupi	August	1739,28	
30	ekupi	January	1159,99	
31	ekupi	February	1099,98	
32	ekupi	March	987,11	
33	ekupi	July	966,68	
34	ekupi	December	776,33	
35	ekupi	May	744,61	
36	ekupi	October	503,48	
37	ekupi	June	246,23	
38	ikea	June	2099,31	
39	ikea	July	1915,72	
40	ikea	March	1767,79	
41	ikea	November	1646,92	
42	ikea	September	1598,6	
43	ikea	December	1224,39	
44	ikea	February	1182,21	
45	ikea	April	1133,17	
46	ikea	January	1111,21	
47	ikea	May	957,13	
48	ikea	October	825,09	
49	ikea	August	532,32	
50				
51				

Za dućane, po godinama, sortirano po iznosu da se vidi gdje je najviše kupovao i koje godine  
Klijent direktno kroz inicijalni query



	A	B	C	D
1	shopName	year	amountHRK	
2	ebay.co.uk	2015	20497,89	
3	amazon.co.uk	2015	16020,7	
4	ebay.de	2015	15457,78	
5	amazon.de	2015	15398,99	
6	ikea/us	2015	13108	
7	amazon.com	2015	12189,61	
8	ekupi.si	2015	11617,86	
9	ebay.com	2015	9801,79	
10	ebay.com	2016	4135,91	
11	ebay.co.uk	2016	2985,61	
12	amazon.co.uk	2016	2912,13	
13	amazon.com	2016	2787,75	
14	ekupi.si	2016	2492,45	
15	amazon.de	2016	2414,96	
16	ebay.de	2016	1580,81	
17	ekupi.hr	2015	1326,85	
18	ikea/hr	2015	1299,75	
19	ikea/se	2015	1120,14	
20	ikea/hr	2016	649,42	
21	ekupi.hr	2016	271,36	
22	ikea/se	2016	226,41	
23	ikea/us	2016	181,74	
24	ikea/hu	2015	35,52	
25	ikea/hu	2016	5,43	
26				