

# Program

## vjernosti/nagrađivanja kupaca putem mobilnih telefona: Lantea Grupa PremiumClub



LANTEA GRUPA

**PremiumClub** ☺

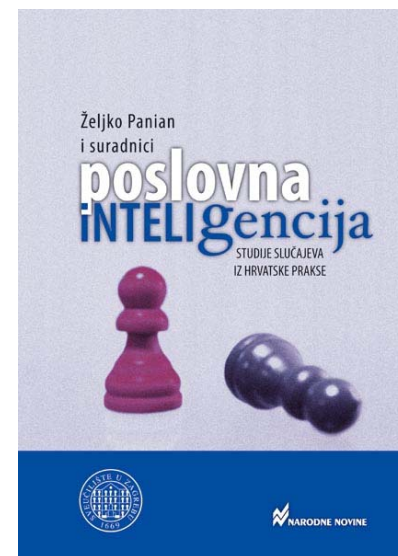
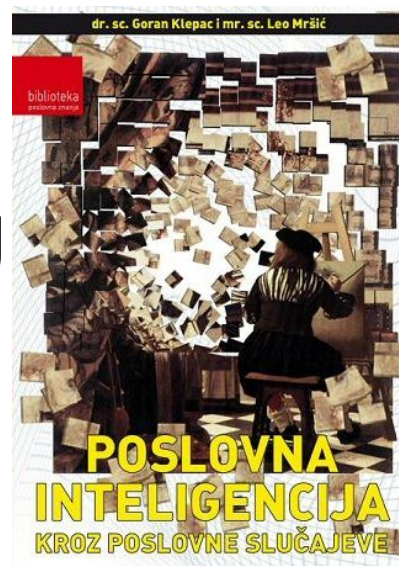
HrOUG 13. | Rovinj | 2008

Leo Mršić | Lantea Grupa  
Tibor Čaturilo | Tekstilpromet

Marin Maletić | Lamaro (gost)

# Leo Mrsic

- Lantea Group CEO (1000+ employees)
  - largest regional (Croatia, Slovenia, Bosnia, Serbia) textile retail company (170+ stores)
- M.Sc. in data mining
- co-author of two books in data mining (in Croatian)



# Tibor Cuturilo

- Tekstilpromet CIO (300+ employees)
  - largest regional (Croatia, Slovenia, Bosnia, Serbia) textile wholesale
- experience in business system development and implementation
  - largest regional textile wholesale

# Marin Maletic (guest)

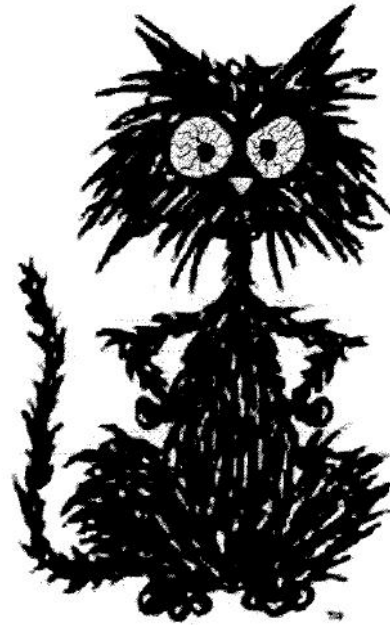
- Lamaro CEO
  - experience in marketing solutions and mobile marketing
- pioneer in mobile marketing in Croatia
- several successful projects in portfolio

# Presentation

- Introduction (Leo Mrsic)
  - loyalty programs (history, development)
  - Lantea Group ideas
- Lantea Group PremiumClub (Tibor Cuturilo)
  - technical aspect
  - real life experience
- Conclusion
  - Q&A

# Customer loyalty

I work for money,



If you want loyalty,  
get a dog.

# Can you see a problem?



# Loyalty = wisdom

- loyalty after loyalty
  - awariness about personal data
- bull weight case study
  - individual errors were bigger than results average
- lost submarine case study
  - different discipline experts give very precise average location

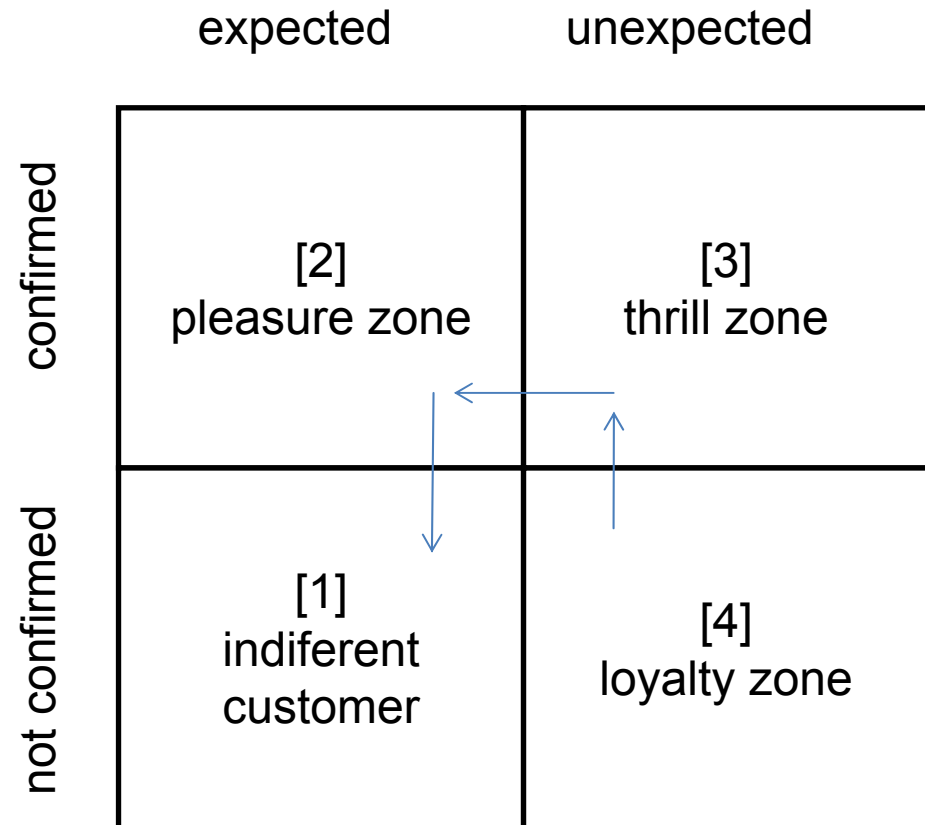


source: James Suroviwecki "Wisdom of masses"



# Customer loyalty network

- how customer expectation affect shopping pleasure, thrill and loyalty



# Loyalty <> profit

- "As a customer's relationship with the company lengthens, profits rise. And not just by a little. Companies can boost profits by almost 100 percent by retaining just 5 percent more of their customers"  
(F.P.Reichheld)

# History

- originally started in Germany in 1950s  
linked with governmental price restrictions  
in some industries
  - 1950 S&H Green Stamps give away shopping stamps in vegetables and fuel stores with possibility for trading stamps for goods
- first modern loyalty program was launched in 1981 by American Airlines
  - soon after it has been copied by many

# Loyalty program - advices

- be clear in defining value added by your program and communicate that value to customers
- use collected data for customized offers which can show you as a different competitor and can be highly accepted by customers
- be prepared to support project to the end (with careful adoptions to project only if necessary)

# Customer loyalty circle



# PremiumClub

- way to communicate to all customers in wide company
- way to reward loyal customers
- way to collect data about customers and their shopping behavior
- way to promote modern, technology oriented company values as service to customers

# PremiumClub

- in touch with technology even in most complicated (textile) retail
  - customer needs to see and feel clothes
- in touch with urban way of life
  - minimum boundaries
  - flexibility in signing in
  - flexibility in accumulation of points
  - flexibility in usage of points

# PremiumClub

- additional member benefits
  - on demand reward programs (seasonal)
- status symbol
  - unique club membership



# Lantea Group: PremiumClub :)

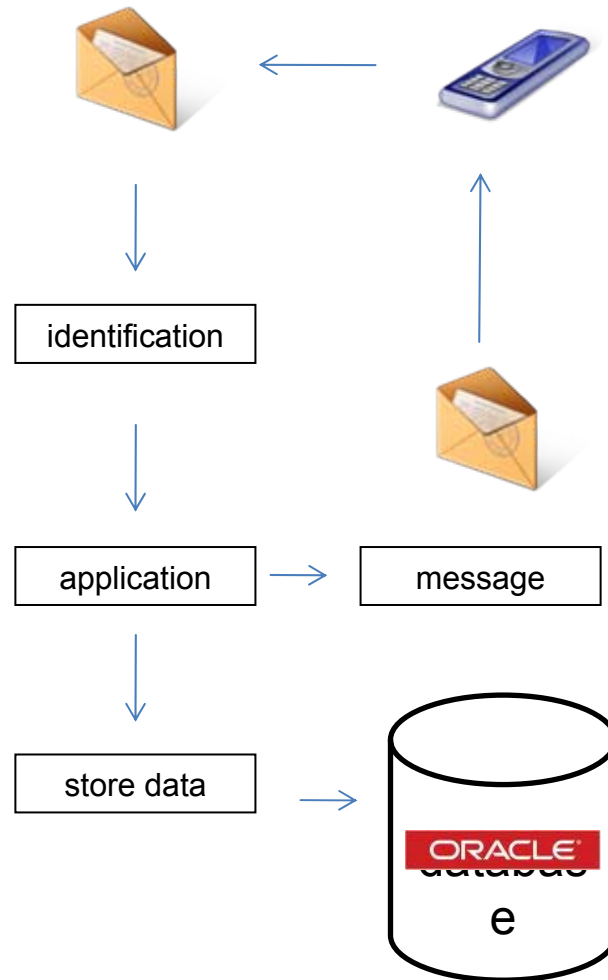
- “Lantea Group PremiumClub: club that fits you perfectly”



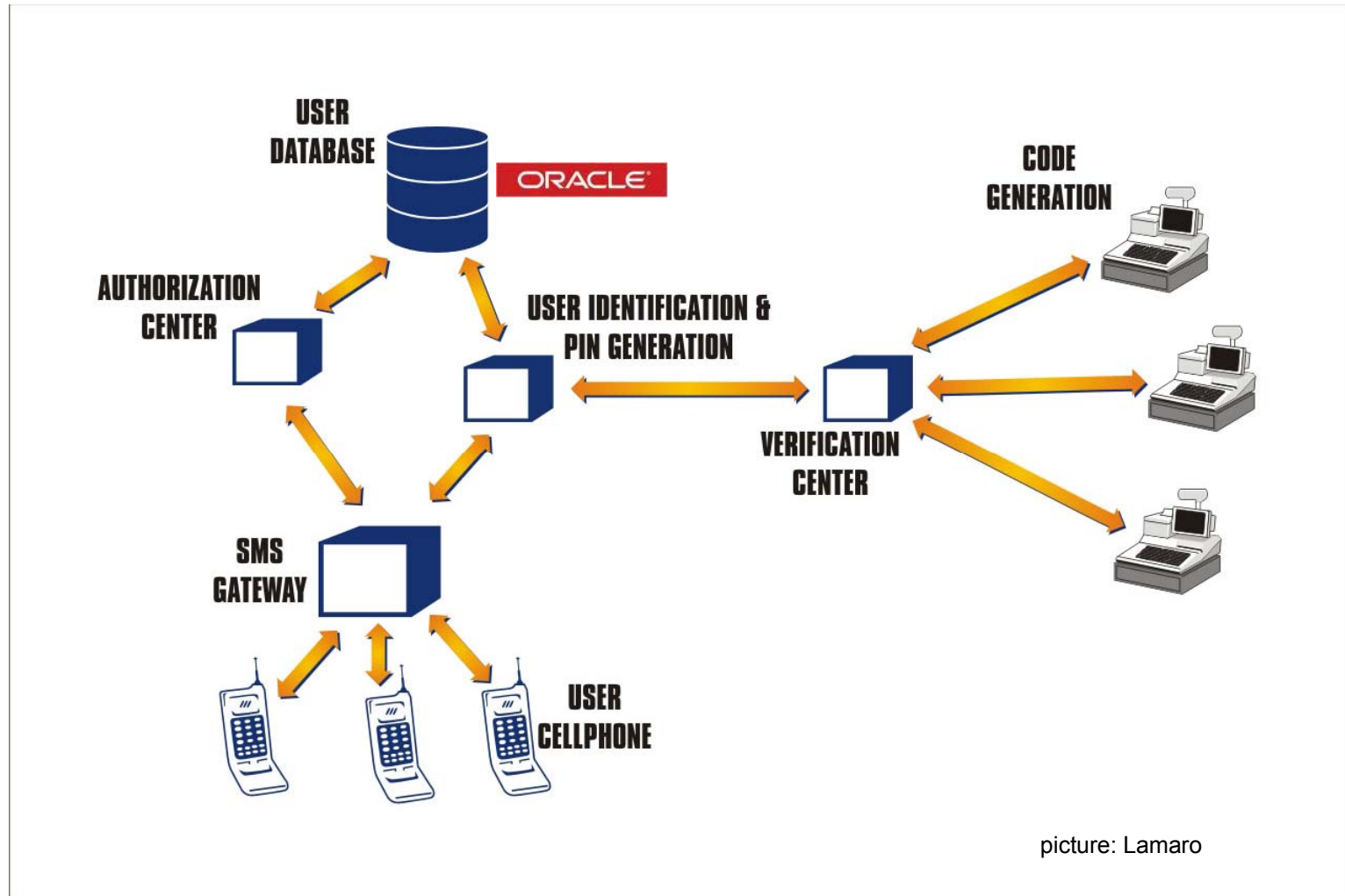
LANTEA GRUPA

**PremiumClub** ☺

# System in brief



# System in brief



picture: Lamaro

# Solution technical details

- GSM gateway
- mathematical model for coding and code supervision
- system for receiving, first level analysis and data storage
- system for second level analysis, confirmation and data storage
- system for third level data analysis and unique code
- error report system
- system for supervision and points usage
- analyst report warehouse with all kind of reports

# Solution - partners



LANTEA GRUPA



Tekstilpromet



**Lamaro**

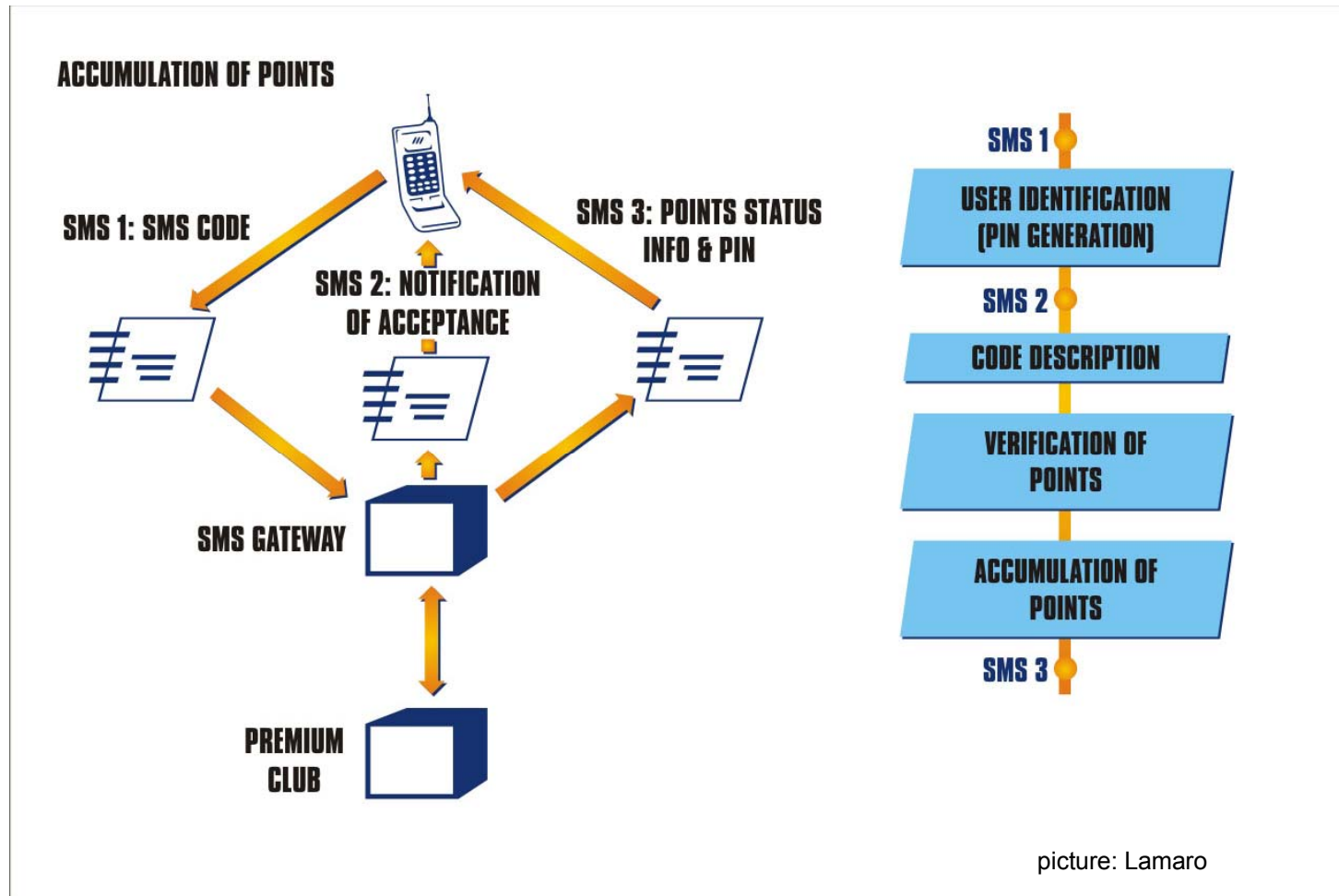
kreativne komunikacije

**INFOMARE**

# Proces

- Registration
- Accumulation of points
- Points usage
- System supervision

# Registration



# Accumulation of points

- Point of sale (POS) – code generation
- Sending code through SMS
- Analysis and storage center
- Confirmation and notification



# POS code generation

- Unique identifier of the POS receipt
- String length
- 36 character code, later modified
- 4 character sets, control character, total of 13 characters

# SMS sending

- Sending to GSM providers
- Forwarding to call center

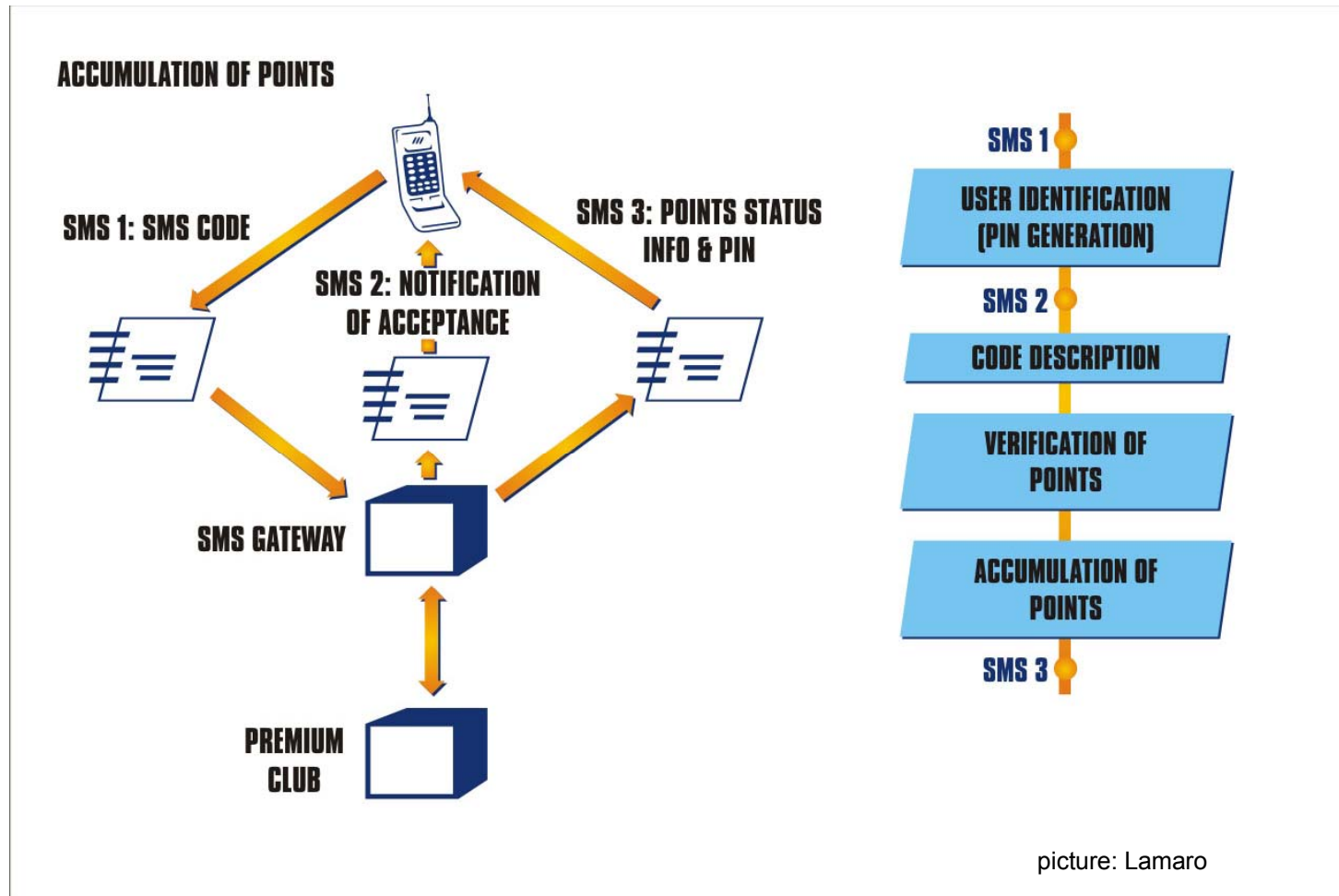
# Call center - registration and processing

- Formal validity
- Initial confirmation
- Forwarding to central system for final check
- Update of points

# Final control – central system

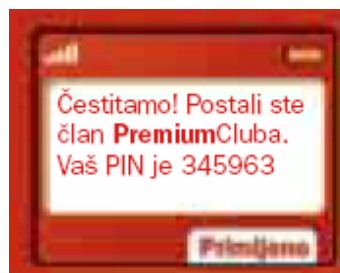
- Formal validity
- Content validity
- Final confirmation

# Accumulation of points



# Accumulation of points

- Club membership confirmation



- Receipt, code and confirmation message

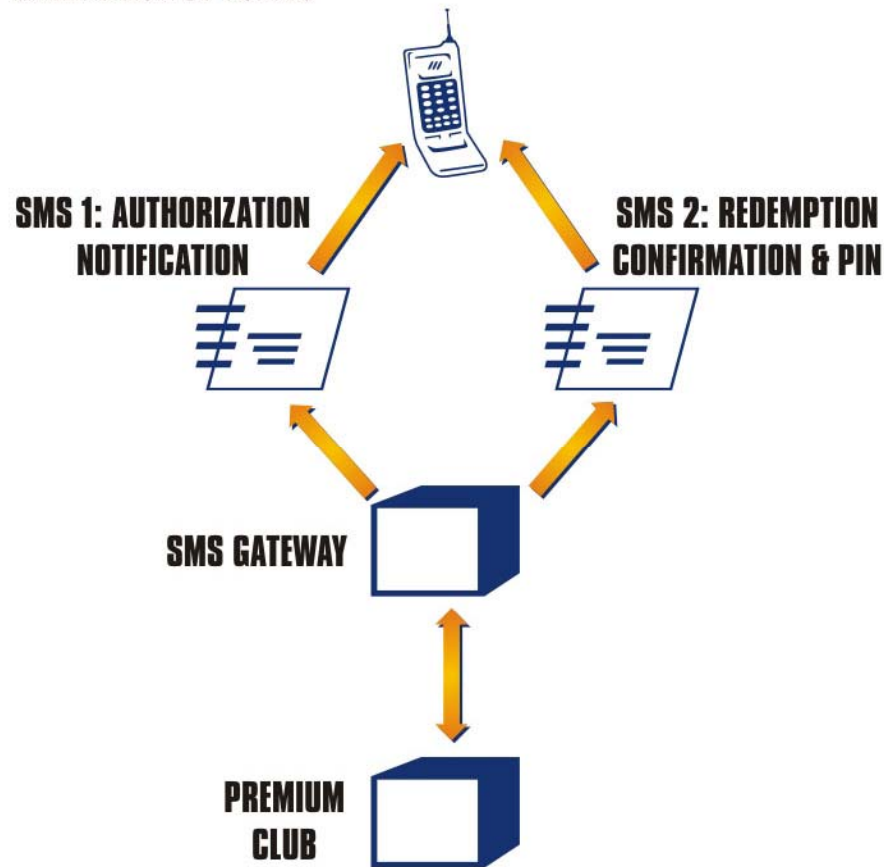


# Points usage (redemption)

- POS – cashier initiate process
- Call center – sending PIN code to confirmation center and waiting for activation code
- POS – cashier enters activation code in POS
- Server – transaction details storage

# Points usage

## REDEMPTION OF POINTS



**CUSTOMER IDENTIFICATION  
BY PIN AT CASH REGISTER**

**USER IDENTIFICATION**

**INITIALIZATION OF  
AUTHORIZATION**

**SMS 1**

**AUTHORIZATION  
CONFIRMATION**

**REDEMPTION OF  
POINTS**

**NEW PIN  
GENERATION**

**SMS 2**

picture: Lamaro



# System supervision

- Formal supervision – code structure, special signs (0,o,8,g,L,1)
- Content supervision
  - comparing data from SMS to actual data in system
  - fraud analysis (heavy or abnormal usage)
  - other

# System screenshots

- Python environment
- PL/SQL environment
- Oracle Discoverer / OBI EE Reporting

# ASCII data collection

```
batch-lamaro-2007_11_06-21_00_01
1 6c1b5f006u00Q2;+3859947148;228;26;061107;318;6c1b5f006u00Q2
2 3Q1B5F007R0095;+385991205145;134;9;061107;279;CLUB LINDICA BARTI3,FERDE BOCRA 2,SEPVETE-3Q1B5F007R0095
3 6a1b5f00y4003n;+38599090717;226;3;061107;1228;CLUB, Dana Erikaija, Detalizate Iznosa Brucanica 64., 23210 Biograd na Moru, Galb
4 121b5f028j0022;+385991302484;38;2;061107;2899;Ana skrtic vionogradski oostak 57 , 121b5f028j0022
5 331b5f007r00mm;+385915418793;111;22;061107;279;CLUB, 331b5f007r00mm
6 341b5f009o00dt;+385915418793;112;13;061107;348;CLUB, Jurca Trkovic, Zagreb Siget 18 a 341b5f009o00dt
7 761b5f004z017r;+385915430483;258;43;061107;179;CLUB Jura Valman S.Radica 31 Dapet Vraucija 761b5f004z017r
8 111b5f01e01rb;+385915375332;54;63;061107;1958;CLUB,BOBINKA TUDINA,SIPROVICA 28 ZAGREB,111b5f01e01rb
9 5n1b5f009p0066;+385991979945;203;6;061107;349;Prizma 6001 CLUB,Ivna Sokolovic,Detus 7 4600 Slank,5n1b5f009p0066
10 261b5f002800fz;+38599198057;78;15;061107;80;261b5f002800fz
11 031b5f008100jb;+385915831331;3;19;061107;289;CLUB Jadranska Kolarije, Seavete, Kralji 17 031b5f008100jb
12 3r1b5f009f005h;+385915831331;135;5;061107;339;CLUB Jadranska Kolarije, Seavete, Kralji 17 3r1b5f009f005h
13 6a1b5f001100em;+385915339984;226;14;061107;649;CLUB Vjeko Bacio Brvataki ostava 41 Dr.Kajo Solin Galb5f001100em
14 331b5f02e202ac;+385917470092;111;100;061107;3098;331b5f02e202ac
15 331b5f003h02ow;+385917470092;111;96;061107;125;CLUB, Simona Budak, Balokovicova 19, zagreb, 331b5f003h02ow
16 1r1b5f008v00ia;+385915404257;63;18;061107;319;CLUB, MARIJA CRNIC, ILIRSKA 17A ZAGREB 1r1b5f008v00ia
17 701b5f00dh01yu;+385999141097;252;70;061107;485;CLUB, Ijaska Viskovic,vljenko Ivana Maturovic 50 osijek,701b5f00dh01yu
18 391b5f004p00jn;+385915177550;117;19;061107;169;CLUB, Ana Arnan,Koledizacka 1,zagreb, 391b5f004p00jn
19 431b5f00310091;+38599941522;147;9;061107;109;CLUB, Jelena Benc,Valmerac 21,Zagreb,431b5f00310091
20 331b5f01u900ee;+385918917997;111;14;061107;2385;CLUB, ZORANO BALENOVIC,SENVA 1, 331b5f01u900ee
21 211b5f0011006e;+38599974854;73;6;061107;649;CLUB,Valentina Bobek,Jamice 17, 211b5f0011006e
22 76165f005001u6;+385919278497;258;66;051030;180;76165f005001u6
23 761b5f006y00ph;+385919278497;258;25;061107;250;CLUB, GORANA JEREBAC, ENILA TRPIKISA I ZEMO, TRGIC, 761b5f006y00ph
24 1r1b5f0081018o;+385914935783;63;31148;061107;115137;Club ,Ijaska Tomasec, ZAGREB,Ruzicek 14, 1r1b5f0081018o
25 091b5f006902vj;+38599517458;9;103;061107;225;CLUB,Tanja Jadrisko Corak,Varadinaska 45,10340 Seavete 091b5f006902vj
26 2t1b5f001a00bb;+385991488845;101;11;061107;46;CLUB,LJILJANA SPOLJARIC, ISTADRA 61A, ZAGREB, 2t1b5f001a00bb
27 271b5f009400s0;+38599194707;79;28;061107;328;CLUB, Tajana Suk, Jablanovac 10, Zagreb, 271b5f009400s0
28 6c1b5f001901bb;+385915141445;228;47;061107;45;CLUB, Petra Farac, Bartola Kasic 5 - Dubrovnik, 6c1b5f001901bb
29 1w1b5f015n003j;+385991040451;68;3;061107;1499;CLUB,Ivna Valjoc,I. GREGORICA 49,1w1b5f015n003j
30 711b5f01sd00dx;+385991904415;253;13;061107;2317;CLUB Ksenija Kraljic, Triskajetci 107 katar, 711b5f01sd00dx
31 1h1b5f020700s4;+385999407318;53;28;061107;2599;1h1b5f020700s4
32 1h1b5f01dz00os;+385999407318;53;24;061107;1799;1h1b5f01dz00os
33 3t1b5f00x202nf;+385999407318;137;95;061107;1190;3t1b5f00x202nf
34 4i1b5f006s017n;+385917930084;162;43;061107;244;CLUB, Marijana Pavlovic Bebek, B. Bagnova 31., Zagreb, 4i1b5f006s017n
35 0v1b5f008b009L;+385915449300;31;9;061107;299;CLUB, Brankica Tomasevic, 3500 Slavinski Brod, Mikrozakljn 49, 0v1b5f008b009L
36 2t1b5f00hh00fv;+385994105344;101;15;061107;629;CLUB, Vinka Podgoracki, Brumecak putak 5, 10040 Zagreb, 2t1b5f00hh00fv
37 6a1b5f00ch00c0;+38599773018;226;12;061107;449;CLUB, TUNCI BILIC, VELERITSKA 71,SPLET, 6a1b5f00ch00c0
38 5w1b5f00ep0066;+385919141057;212;6;061107;529;CLUB,Marija Rukjatic,wl.BRYATIKIRI SPARKITELJA 37y,5w1b5f00ep0066
```

# Python source

```

Notepad++ - C:\simplaWork\Loyalty_Lantea\loyalty.py
File Edit Search View Format Language Settings Macro Run Plugins Window ?
loyalty.py
169 class Database:
170     # Standard
171     def __init__(self,username,password,database):
172         self.username = username
173         self.password = password
174         self.database = database
175     def open(self):
176         self.conn = cx_Oracle.connect(self.username,self.password,self.database)
177         self.cur = self.conn.cursor()
178     def close(self):
179         self.cur.close()
180         self.conn.close()
181     def commit(self):
182         self.conn.commit()
183     def rollback(self):
184         self.conn.rollback()
185     def nextval(self,seqname):
186         self.cur.execute('select %s.nextval from dual'%seqname)
187         return self.cur.fetchall()[0][0]
188     # Additional
189     def insertiraj_slogove(self,datoteka):
190         for dict in datoteka.parsed_data:
191             id = self.nextval('LY_SEQ')
192             dict['id']=id
193             self.cur.execute("""
194                 INSERT INTO LOGIRAJE_SLOGOVANI(LY_ID, LY_TELEFON, LY_TIP,
195                 LY_ORGJED, LY_BR_RAC, LY_DATUM_RAC,
196                 LY_IZNOS_RAC, LY_KODISNIK, LY_STANJE, LY_KOD_STANJE)
197                 VALUES
198                 (:id, :telefon, 'U',
199                 :orgjed, :br_rac, TO_DATE(:datum_rac,'DDMMYY'),
200                 :iznos_rac, :korisnik, SYSDATE, :kod)
201             """,**dict)
202             #Azuriranje begin i end id-a
203             if datoteka.ly_id_begin is None or datoteka.ly_id_begin>id:
204                 datoteka.ly_id_begin = id
205             if datoteka.ly_id_end is None or datoteka.ly_id_end<id:
206                 datoteka.ly_id_end = id
Python file                               nb char : 19531   Ln : 21   Col : 4   Sel : 0   Dos{Windows   ANSI   INS

```

# Python source

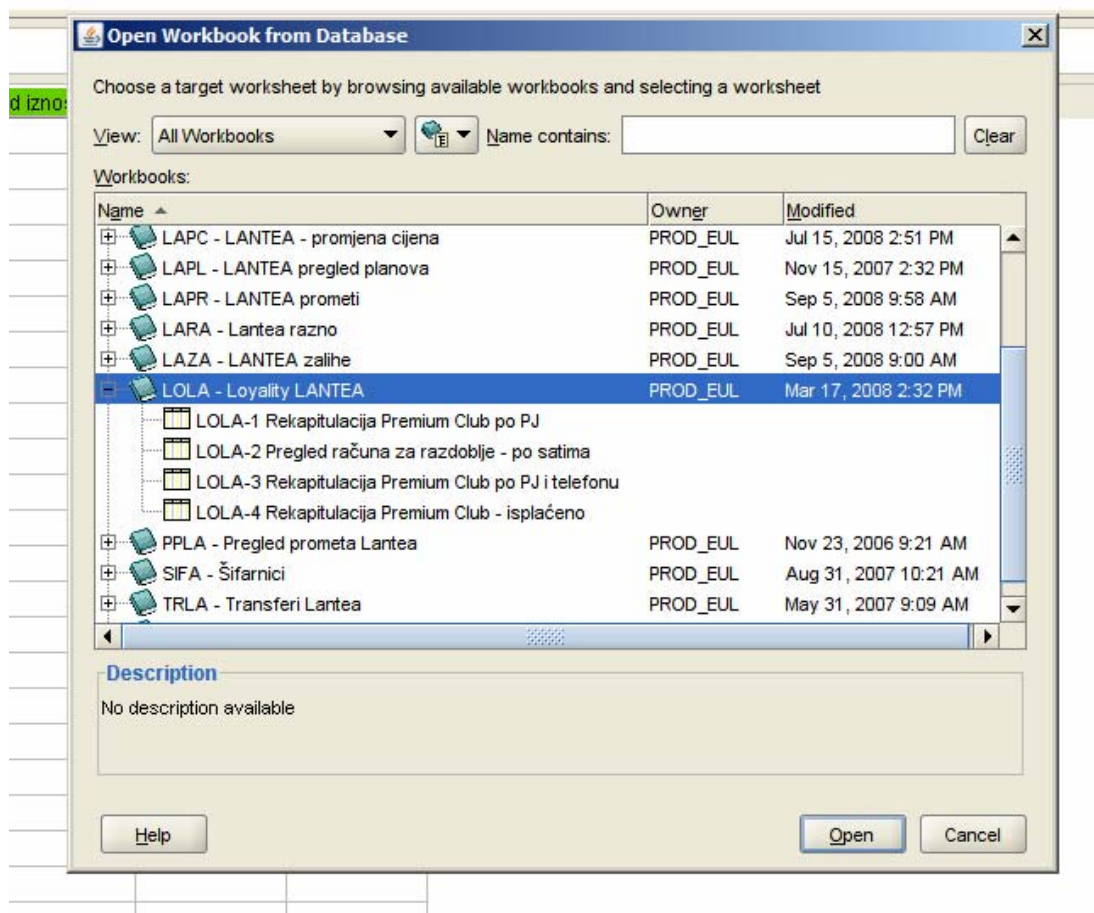
```

Notepad++ - C:\smpaWork\Loyalty_Lanteal\loyalty.py
File Edit Search View Format Language Settings Macro Run Plugins Window ?
loyalty.py
1  import cx_Oracle
2  import os
3  import time
4  import random
5  import shutil
6
7  from config import *
8
9  """
10 # Defaulti - iz config.py
11 DB_USERNAME = 'projekt'
12 DB_PASSWORD = 'projekt'
13 DB_DATABASE = 'Irobb9.world'
14
15 PATH_ZA_PROVJERU = 'C:\\transfer\\za_provjeru'
16 PATH_PROVJERENI = 'C:\\transfer\\provjereni'
17 PATH_ARHIVA = 'C:\\transfer\\arhiva'
18
19 PATH_ISPLATA = 'C:\\transfer\\isplata'
20 PATH_ARHIVA_ISPLATA = 'C:\\transfer\\arhiva_isplata'
21 """
22
23 # PUTANJE:
24 # Datoteke za provjeriti
25 # Provjerene Datoteke
26 # Arhiva.
27
28 #Struktura filea:
29 # KOD - izvorni kod
30 # TELEFON -broj mobitela
31 # ORGJED -sifra org. jedinice (ducana)
32 # BR_RAC -broj racuna
33 # DATUM_RAC - datum racuna u formatu DD.MM.YYYY
34 # IZNOS_RAC - zaokruzeni iznos racuna
35 # KORISNIK - ako raspolazete podatkom o imenu i prezimenu osobe.
36
37 def nvl(value,default):
38     if value is not None:

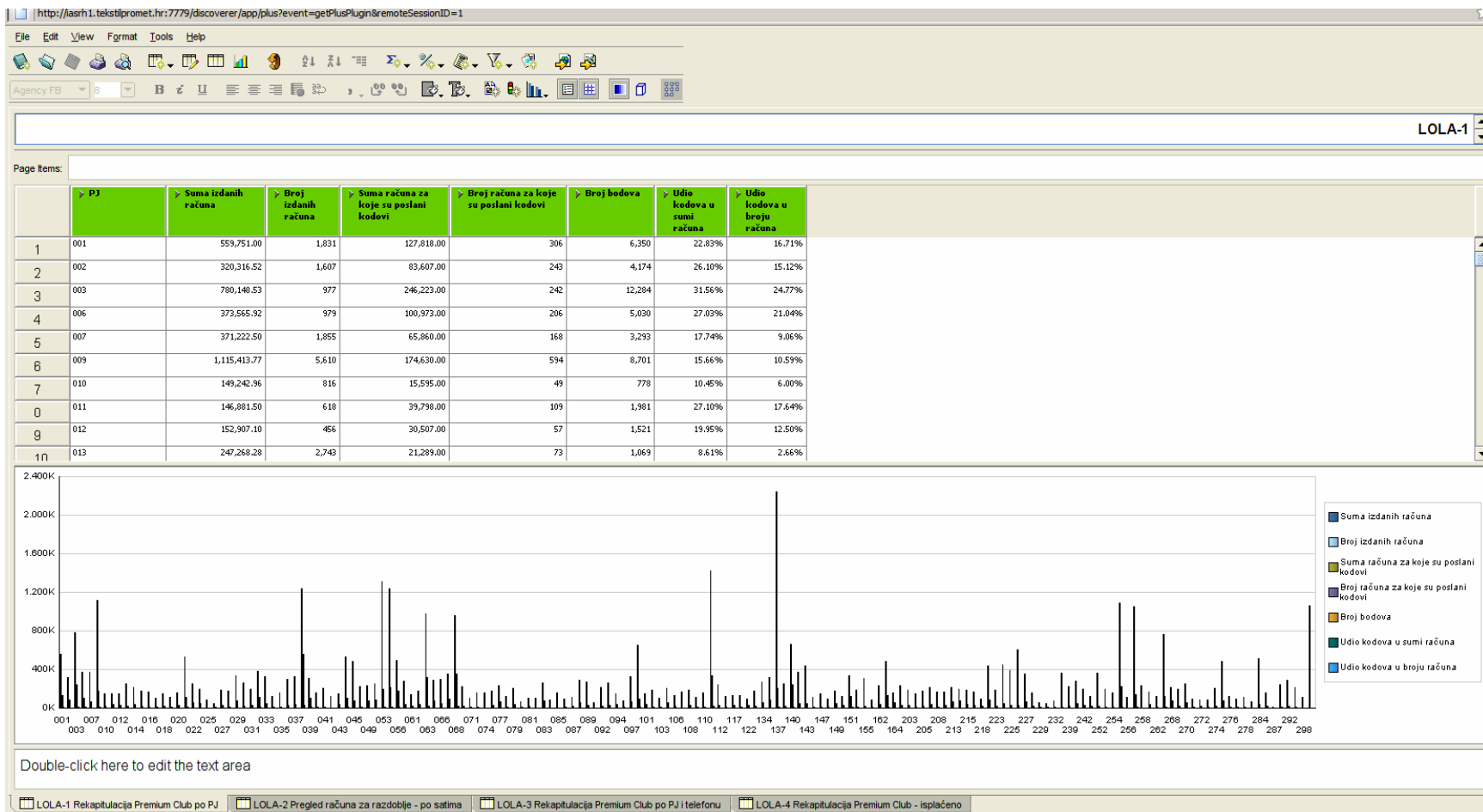
```

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# Oracle Discoverer 10g



# Reports

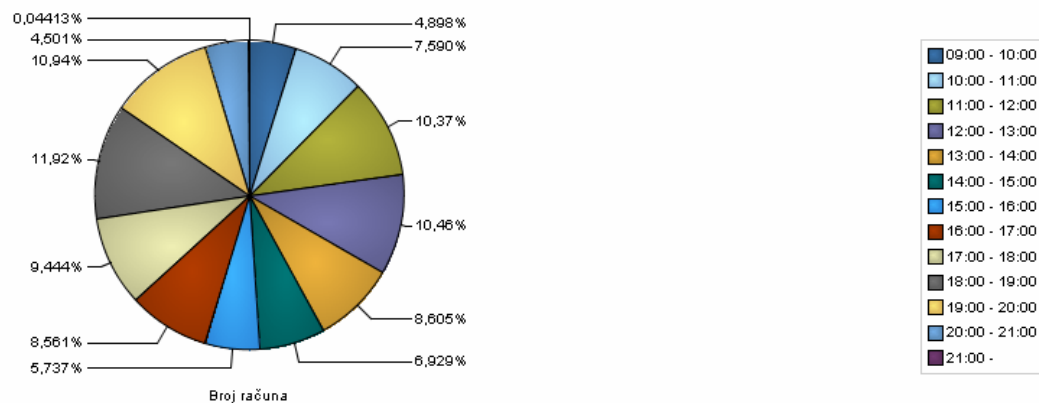


# Reports

LVL12

Page Items: **Ducan: 10226**

	Vremensko razdoblje	Broj računa	Udio u broju računa	Suma računa	Udio u sumi računa
1	09:00 - 10:00	111	5%	30,769.00	3%
2	10:00 - 11:00	172	8%	73,688.00	8%
3	11:00 - 12:00	235	10%	98,411.00	10%
4	12:00 - 13:00	237	10%	95,895.00	10%
5	13:00 - 14:00	195	9%	84,843.00	9%
6	14:00 - 15:00	157	7%	66,707.00	7%
7	15:00 - 16:00	130	6%	51,311.00	5%
8	16:00 - 17:00	194	9%	70,160.00	7%
9	17:00 - 18:00	214	9%	86,671.00	9%
10	18:00 - 19:00	270	12%	145,436.00	15%
...	19:00 - 20:00	248	11%	117,590.00	12%





# Experience, further reference

- code structure problem (14 digits)
- time segmentation (15 days from date of purchase)
- “points on points” situation
- fraud analysis
- technological reorganisation (problems with two or more data sites)
- personalisation

# Conclusion

- commercial value
- technology
  - aiming for simple architecture
  - partner support quality

# Thank you!

- [leo.mrsic@lantea-grupa.hr](mailto:leo.mrsic@lantea-grupa.hr)
- [tibor.cuturilo@tekstilpromet.hr](mailto:tibor.cuturilo@tekstilpromet.hr)
- [marin.maletic@lamaro.hr](mailto:marin.maletic@lamaro.hr)
  
- [www.lanteagrupa.hr](http://www.lanteagrupa.hr)
- [www.tekstilpromet.hr](http://www.tekstilpromet.hr)
- [www.lamaro.hr](http://www.lamaro.hr)

# Q&A

- Discussion



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Tekstilpromet