

# Bjørn Aasebø

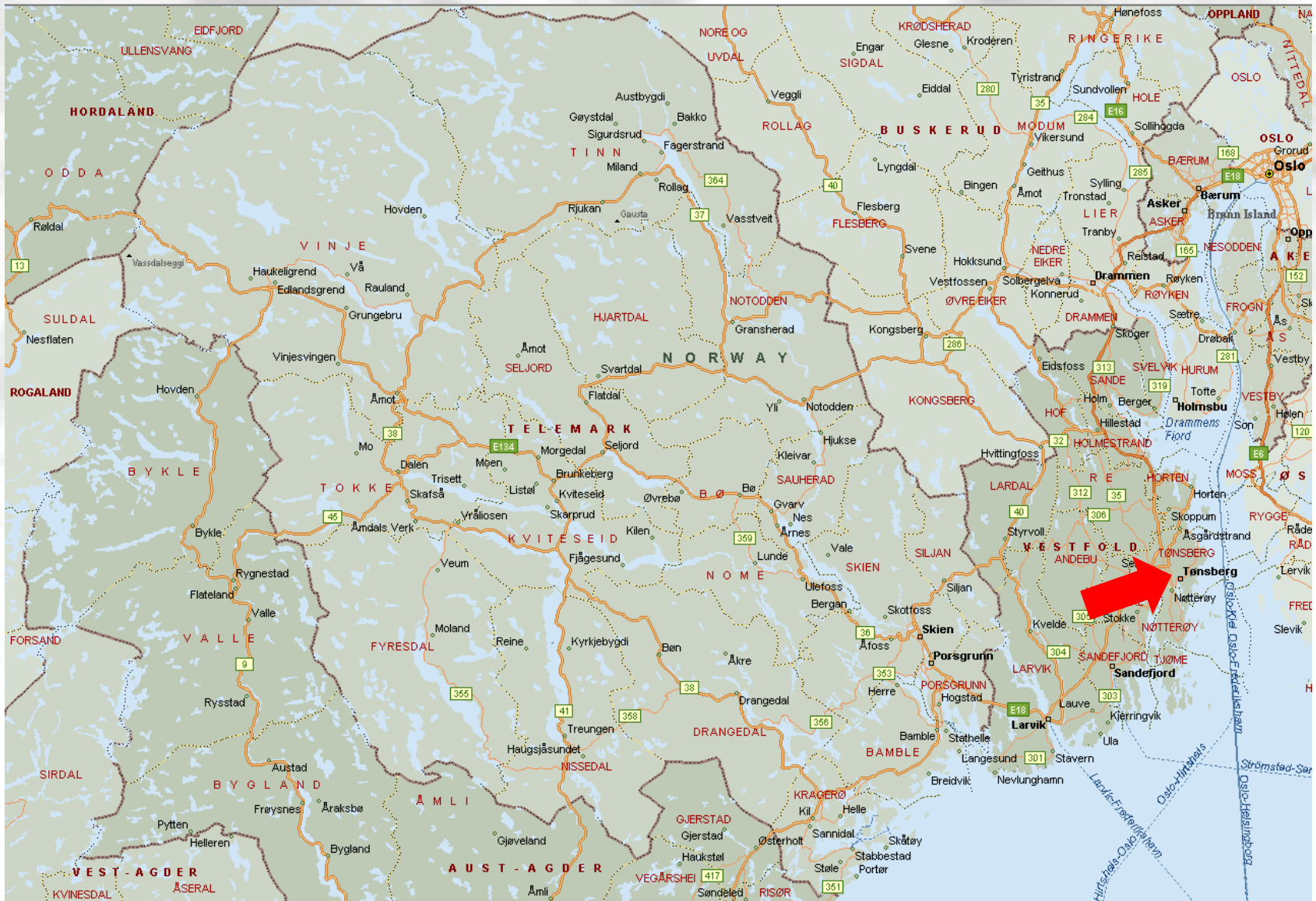
IT-manager/Project-leader

Vestviken Kollektivtrafikk AS, Norway

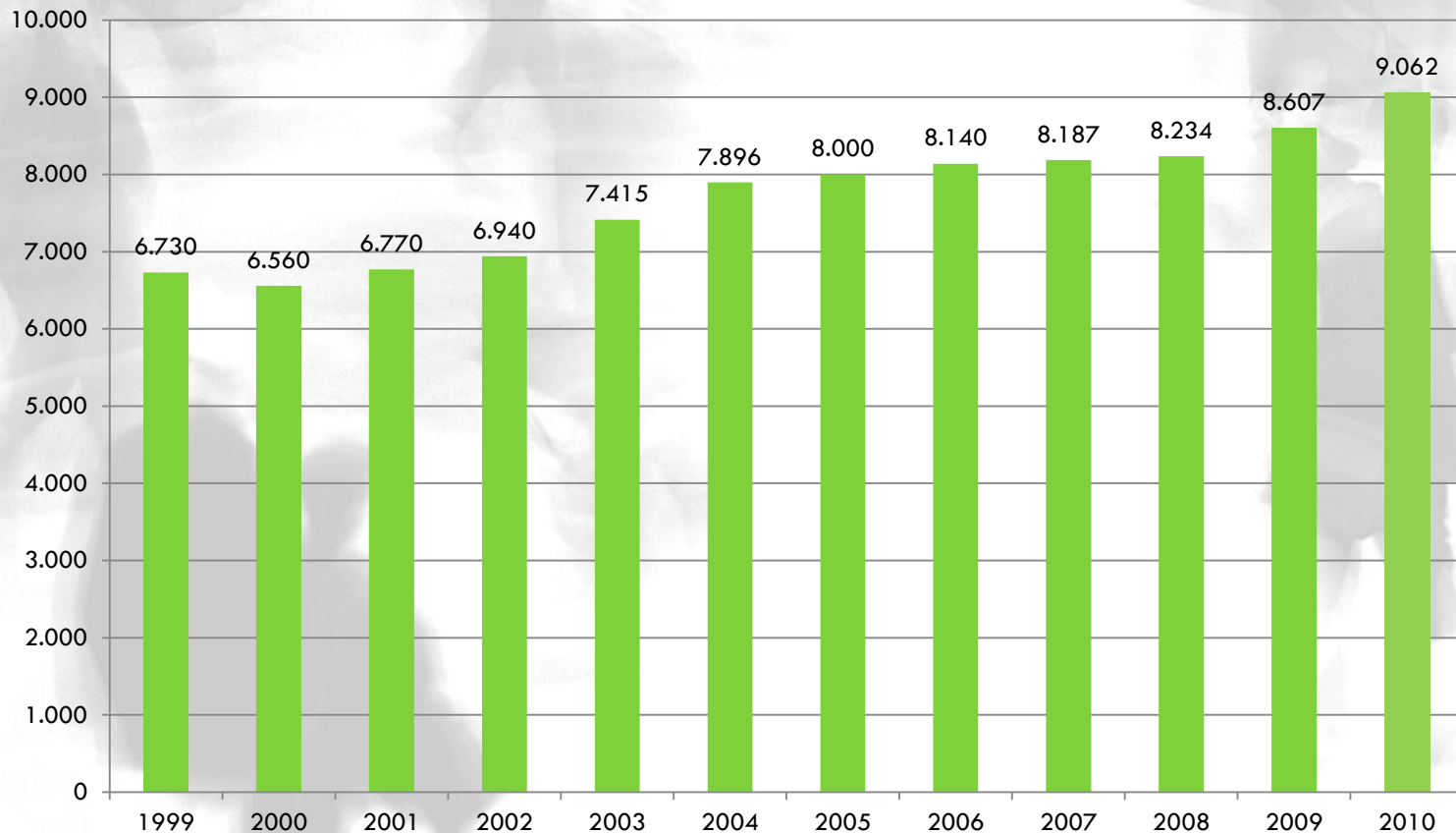


# Vestviken Kollektivtrafikk AS (VKT)

- Settled 1. january 2006,
  - Former Vestfold Kollektivtrafikk from 1999
- Financed mainly by substitution from the counties of Telemark and Vestfold
- Income in Vestfold, 90” NKR
- Purchases transport for approx. 500” NKR yearly
- VKT is a purchase- and procedural authority
  - Purchasing transport on bus- and taxi
  - Routeplanning, Schoolcards, Ticket-/Information system
  - Callcenter, information to travelling customers
  - Information system projects
- Approx. 30 employees, 5 related to IT/Information system



# Development in passangercount 1999 – 2010 Vestfold (in 1000's)



# Ticketssystem components



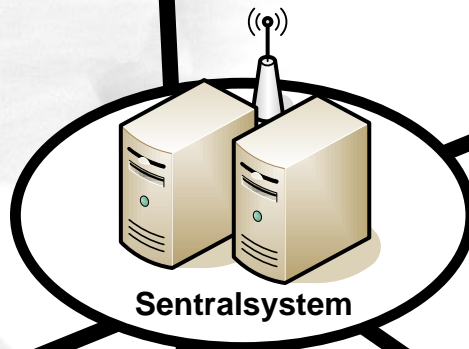
Mifare Desfire (NSD)  
Mifare Ultralight



Sales Office

Salgskontor

GPRS  
Kommunikasjon



Sentralsystem



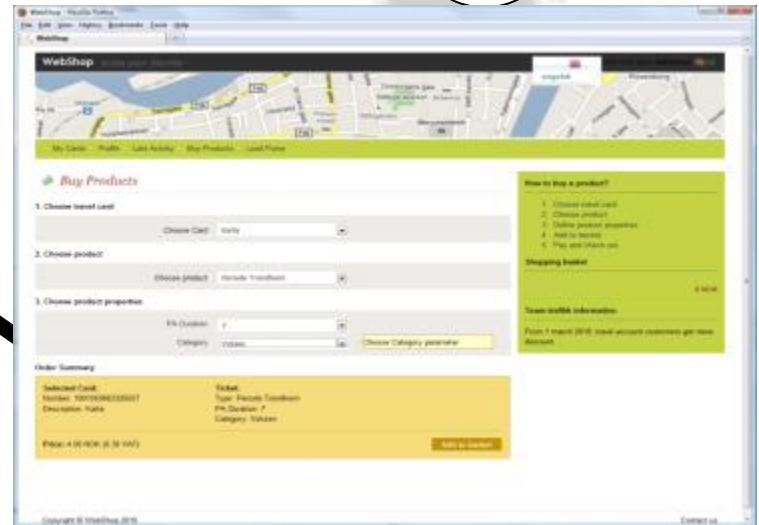
Mobile Ticketing  
NFC/APPS



Tickets on  
self-service



Validation, online sale  
EMV and RTI



Buy tickets via  
Webshop

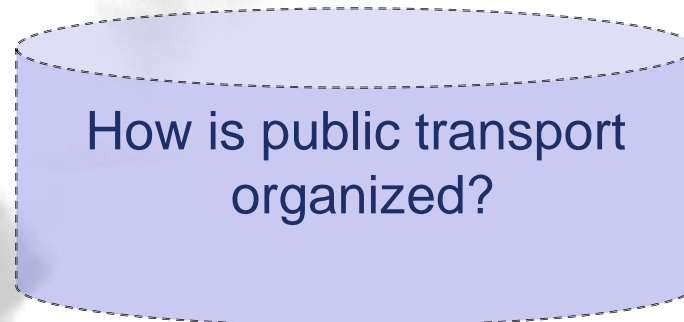
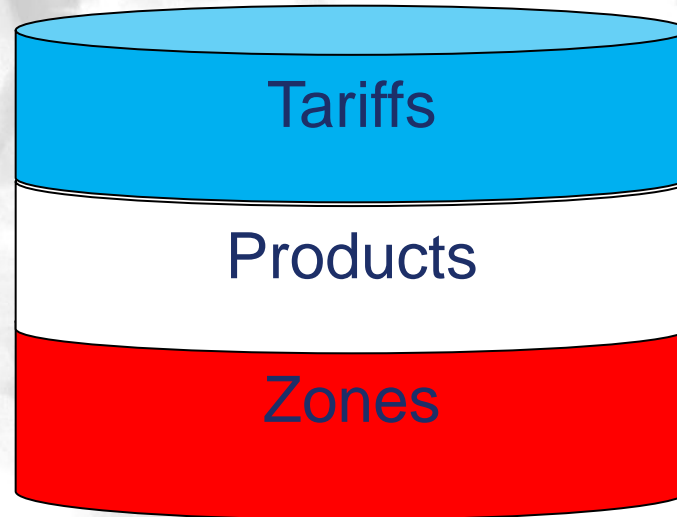
# VKT Projects experience - History

- Vestfold 2003, Q-free/Ascom (210 buses)
- Telemark 2005, Q-free/Ascom (110 buses)
- Buskerud 2006-2011, ERG (400 buses)
- Vestfold 2009, Fara (2005 buses)
- Telemark 2009, Boats Fara (18 portable units)
- Telemark 2010, Grenland & South, Fara (90 units)
- Telemark 2011, North & Middle, Fara (60 units)
- Vestfold 2011, Air Shuttle Boat
- Vestfold/Telemark 2011-2012, RTI

# The first ticketing project advice:

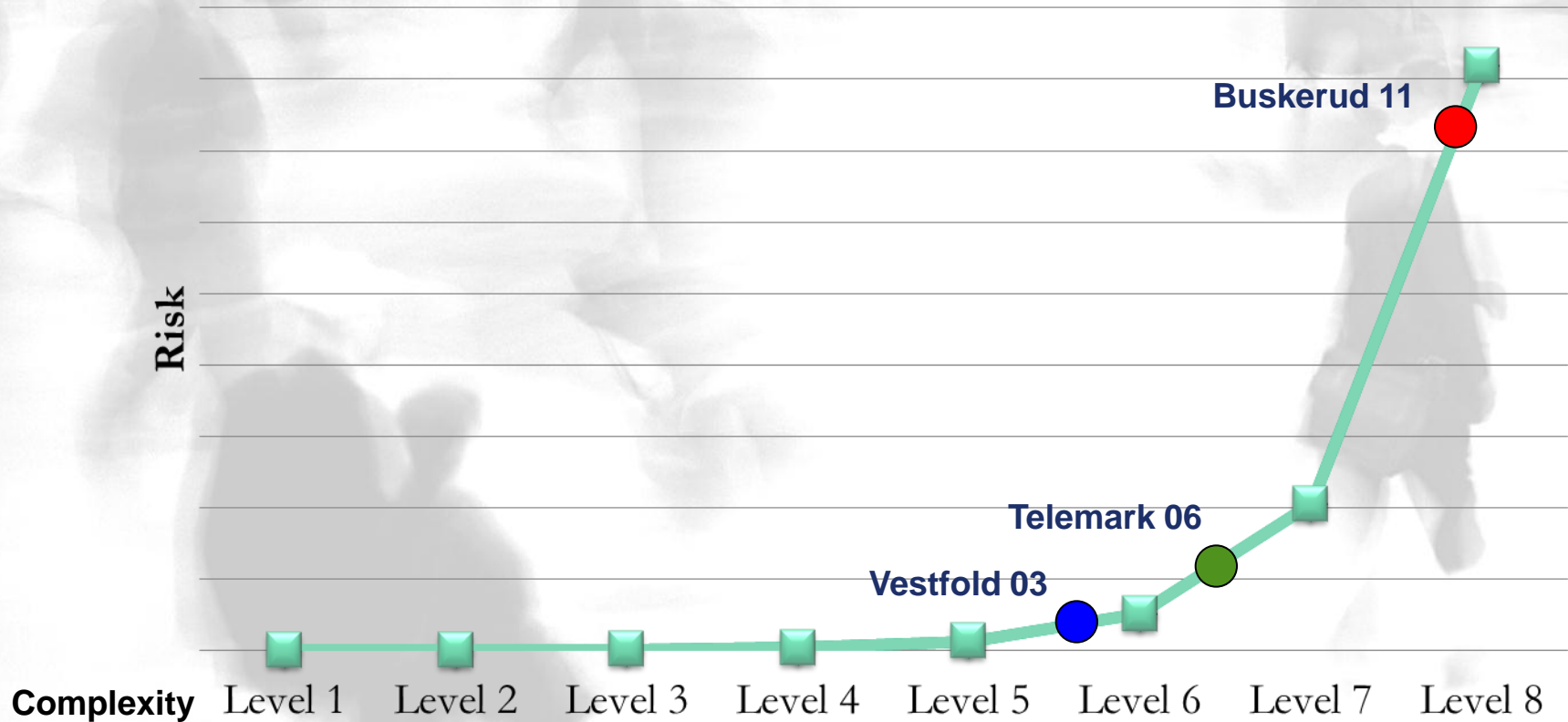
## Sign the contract and **run!**

# SIMPLIFY!



# Risk on increasing complexity

Organizational/Structural/Technical





**Nyhet!**

UngVoksen-kort til kun **350,-** pr. måned

Nor PR

**VKT marketing slogan :**  
**Smart people uses  
the bus!**



**Smarteringer  
bruker buss**

Har du tenkt over at du fort sparer flere tusen kroner i måneden på å bruke buss i stedet for bil? Fra nyttår lanserer VKT et råbillig månedskort for deg mellom 20 og 30 år. Med UngVoksen-kortet kan du reise så mye du vil med buss i hele Vestfold for bare 350 kroner i måneden. Og du kommer raskt og enkelt fram dit du skal på en miljøvennlig måte. UngVoksen-kortet får du kjøpt på bussterminalen, og du kan senere fornye det på bussen.

På [vkt.no](http://vkt.no) kan du sjekk busstilbudet der du bor. God tur!

Smarteringer bruker buss  
**vkt.no**



vestviken  
kollektivtrafikk

**Strategical:**

**....and a lot of  
others too....**

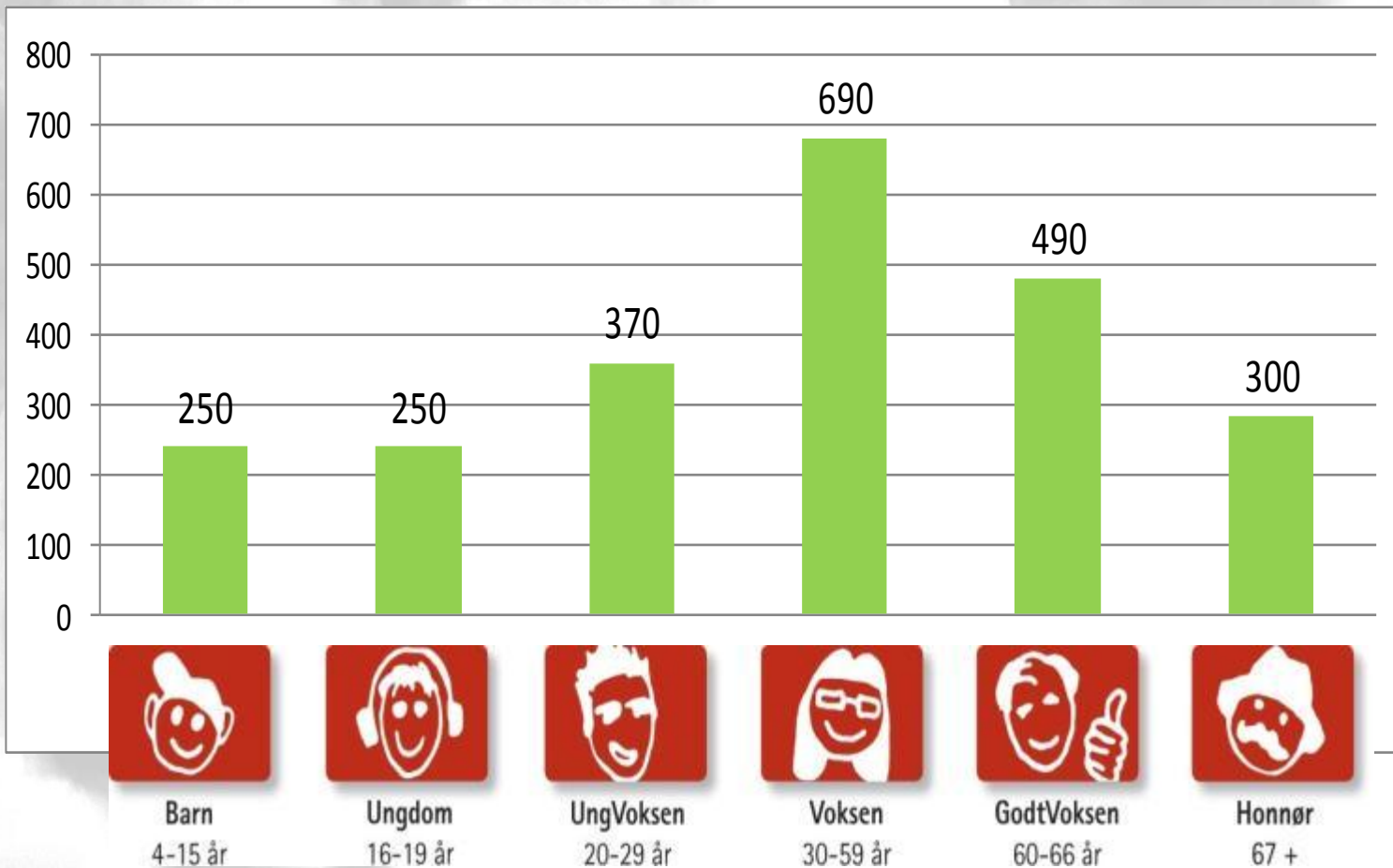


vestviken  
kollektivtrafikk

# Singel Tickets – Vestfold 2011

<b>Tariff/ Zones</b>	<b>Adult</b>	<b>Child/ Bike</b>	<b>Senior (+67)</b>
<b>1</b>	<b>28</b>	<b>14</b>	<b>14</b>
<b>2</b>	<b>34</b>	<b>17</b>	<b>17</b>
<b>3</b>	<b>40</b>	<b>20</b>	<b>20</b>
<b>4</b>	<b>46</b>	<b>23</b>	<b>23</b>

# Vestfoldkort – one price, use it everywhere!



# Ticket Projects Experience - advice

- Involvement from as few as possible provides effective decision making
- Keep it simple by limiting the project, start with basics
- Focus on competence building in our own organization throughout the project
- Diplomatic and problemsolving relations with the supplier
- Logging, Controlling and monitoring all events
  - Measures project and contractual performance
  - SQL-dive through all kinds of data

**Selskap**     **BM**     **Avdeling**     **Årsmodell**   
**Selskapsnavn.**     **GSM**     **Bilmerke**     **Område**   
**Intern NR.**     **Reg.nr.**     **Type**     **UAD**

Avbrudd

GSM-feil

	ID	Selskap	Buss	Maskin	Byttet	Dato	Problembeskrivelse	Kategori	Type	Status	Operatør
▶	1661	204	264	158	<input checked="" type="checkbox"/>	23.08.2004	Buss vasket i vaskemaskin med vindu åpent (ikke nå igjen!!!!)	Annet	Drift	OK	SA
	1565	204	264	158	<input type="checkbox"/>	21.06.2004	Takstfil mangler	Driftsdata	Feil	OK	SA
*	(Autonummer)	204	264		<input type="checkbox"/>	07.10.2004					

Post:  av 2

Selskap   
 Service Skjema   
 Oppgjør mangler   
 Ordre på ID   
 Ordre Alle   
 Åpne   
 Periode Rapport   
 Buss Rapport   
 Maskin Rapport   
 Except   
 Logget Byttet   
 Kategori Byttet   
 Rep. Leverand

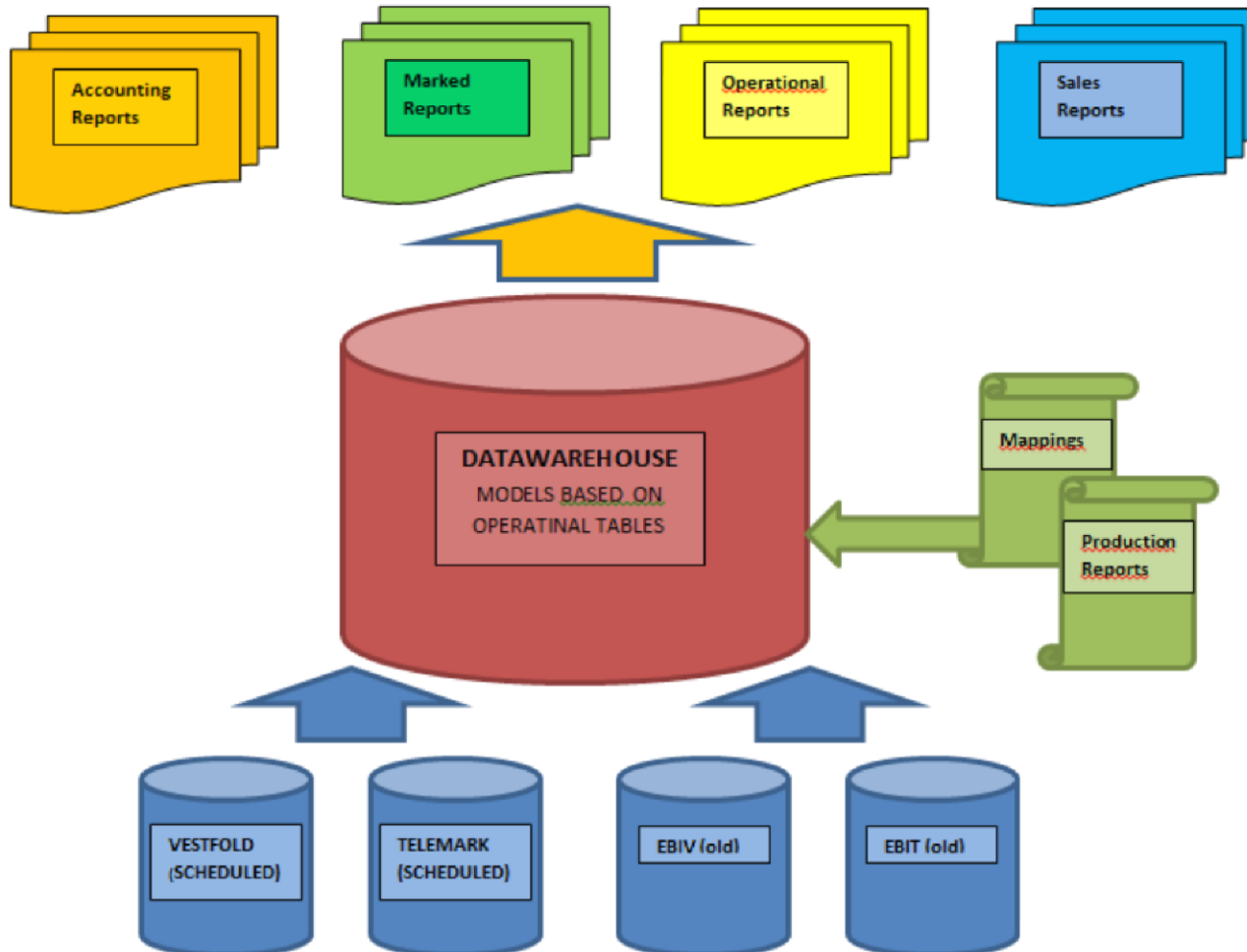
# Datawarehouse



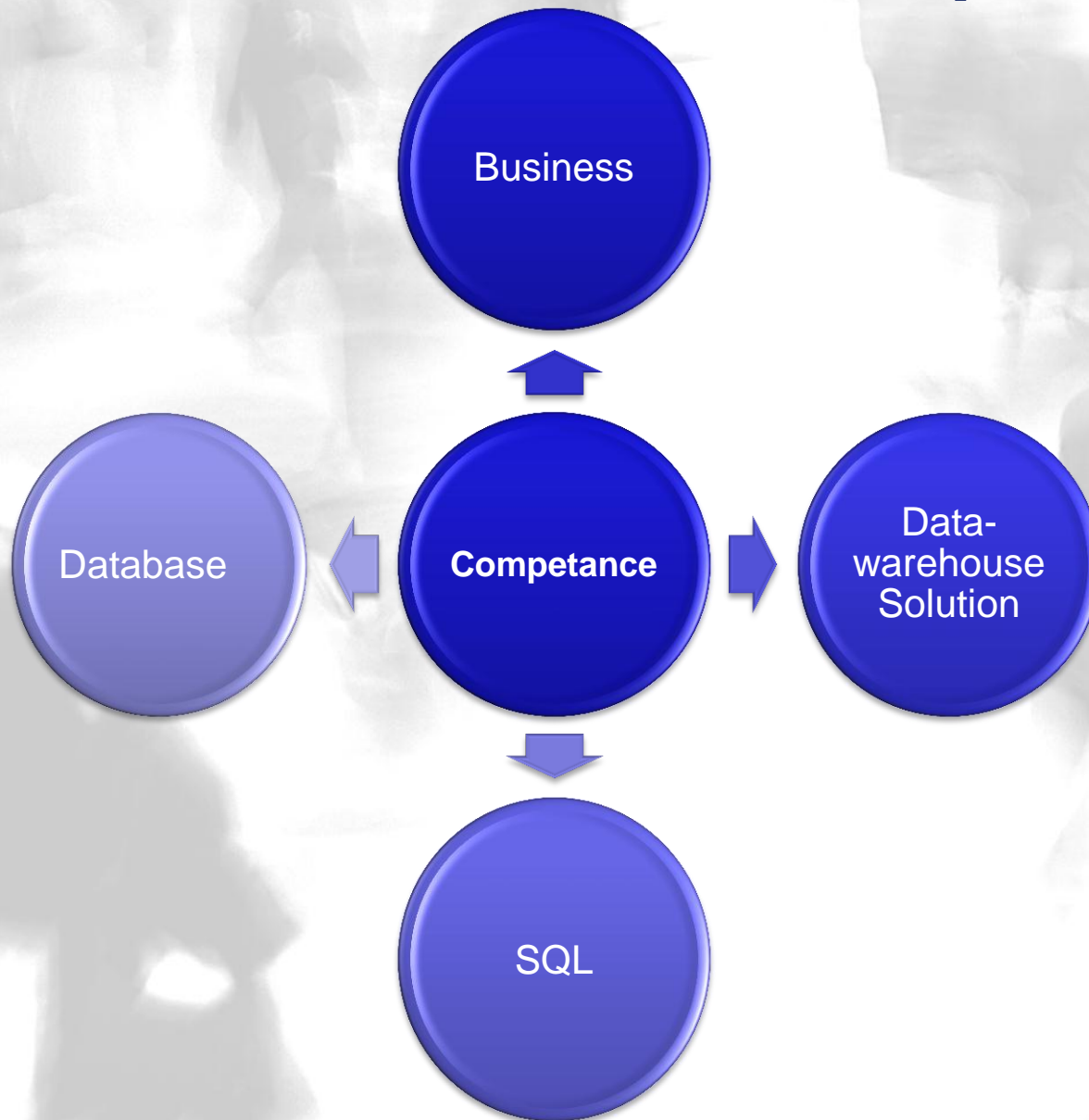
- Datawarehouse introduced december 2008
- First Fara Customer to implement Datawarehouse
  - Lack of focus towards output/reporting
- A unique solution delivered by Infotool for reporting and monitoring on all kind of datasources
- Increased control in terms of operating the ticketing system
- VKT have organized over 150 different reports with drilldown functionality
  - Transporters has access to their specific company data

# VKT DATAWAREHOUSE MODEL

CITRIX  
<https://>



# Needed Datawarehouse Competence



# Why control a reportsolution in your own house ?

- You know the business!
- Cost saving – no calculation or extra fee when making a new report
- Every report-idea often results in several reports
- Easy to adjust/improve existing reports when you got resources in own house to do it

# Passengers pr. Region

CustProfileDesc All Values (26) LineNumber All Values (568) Go

Month *PS! Kjøres søndager*

- All Values (12)
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Month: Group (1, 2, 3, 4, 5)



## Antall passasjerer pr. Region mot forrige år

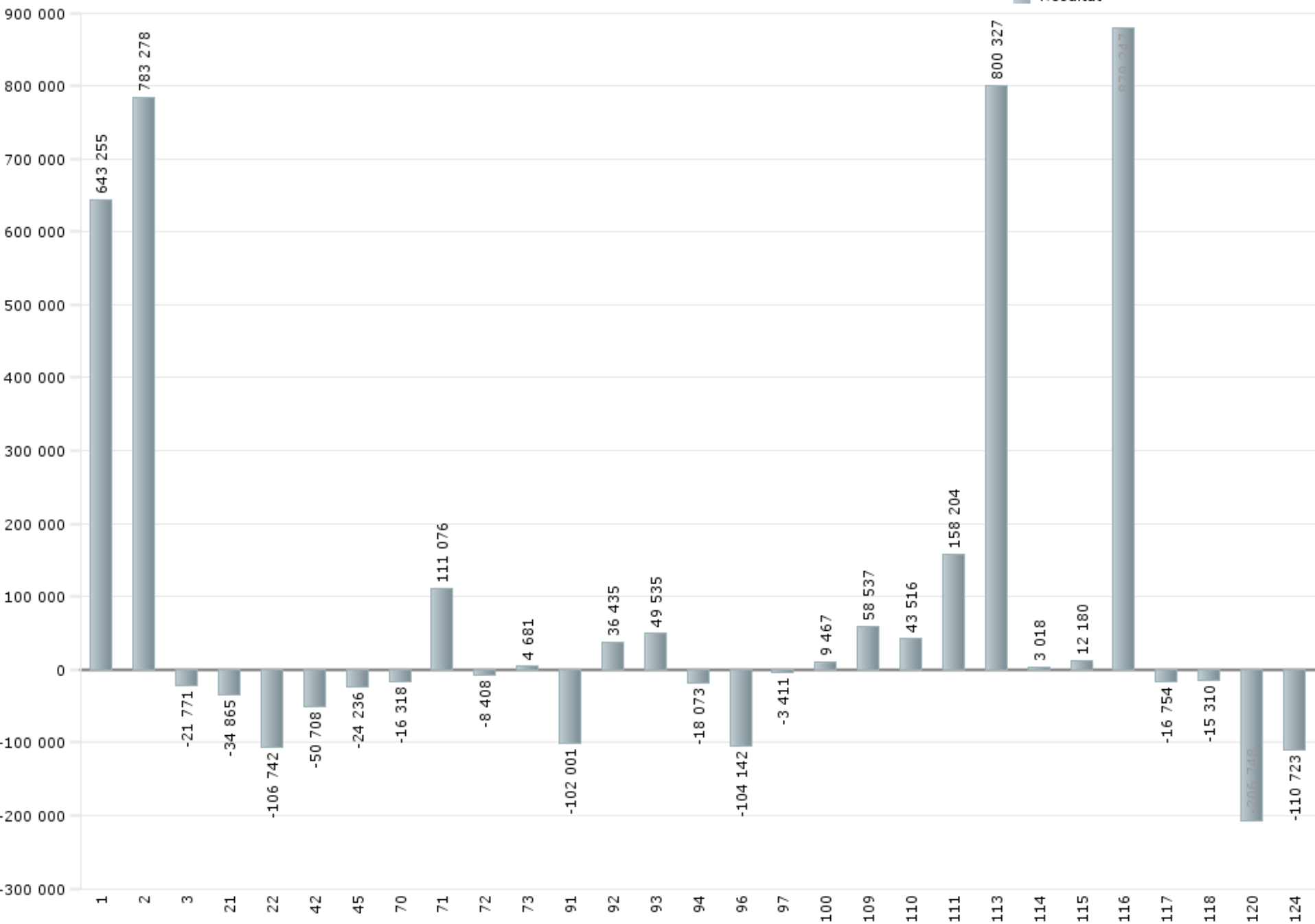
Current: January, 2011 to June, 2011

Prior: January, 2010 to June, 2010

REGION ZoneGroupName	Antall YTD	Antall Last YTD	Antall Delta YTD vs. Last YTD	Antall % Change YTD vs. Last YTD
Holmestrand	169121	161733	7388	4,57
Horten	442871	403865	39006	9,66
Larvik	498197	465841	32356	6,95
Oslofjorden - Båt	387	387	387	
Sande/Drammen	374777	353462	21315	6,03
Sandefjord	595044	575362	19682	3,42
Tønsberg	2095572	2005918	89654	4,47
<b>Total</b>	<b>4175969</b>	<b>3966181</b>	<b>209788</b>	<b>5,29</b>

## Estimert resultat pr. linje

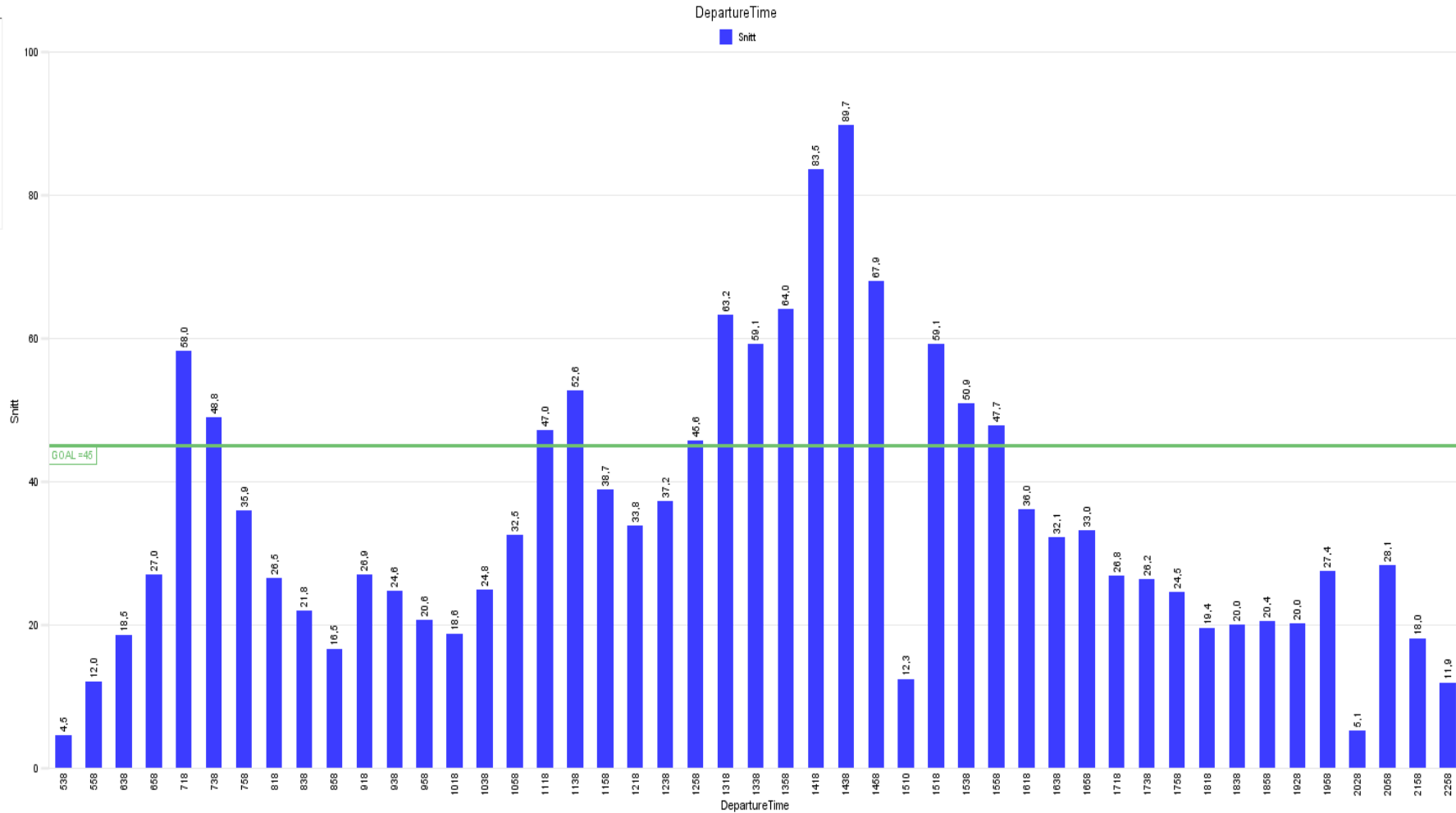
Resultat



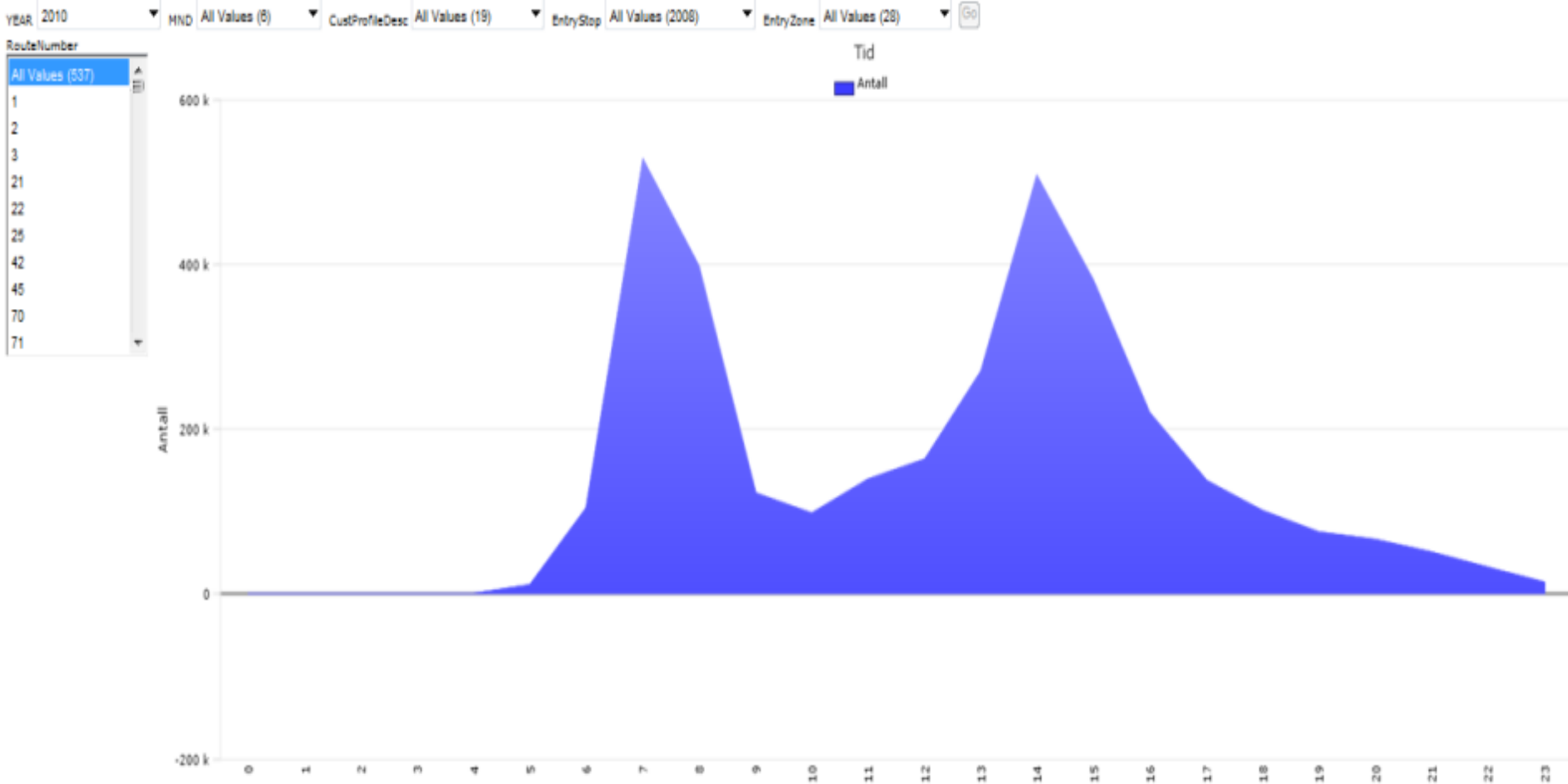
# Average passengers pr. departure

Year 2010 Month 11 Dat All Values (30) LineNumber 113 Direction 0 Go

- Dag
- All Values (7)
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7



# Card - use time



# Passangers on stops

RouteNumber  JourneyRun  Year  Month  Dag  EntryStop

24. juni 2011

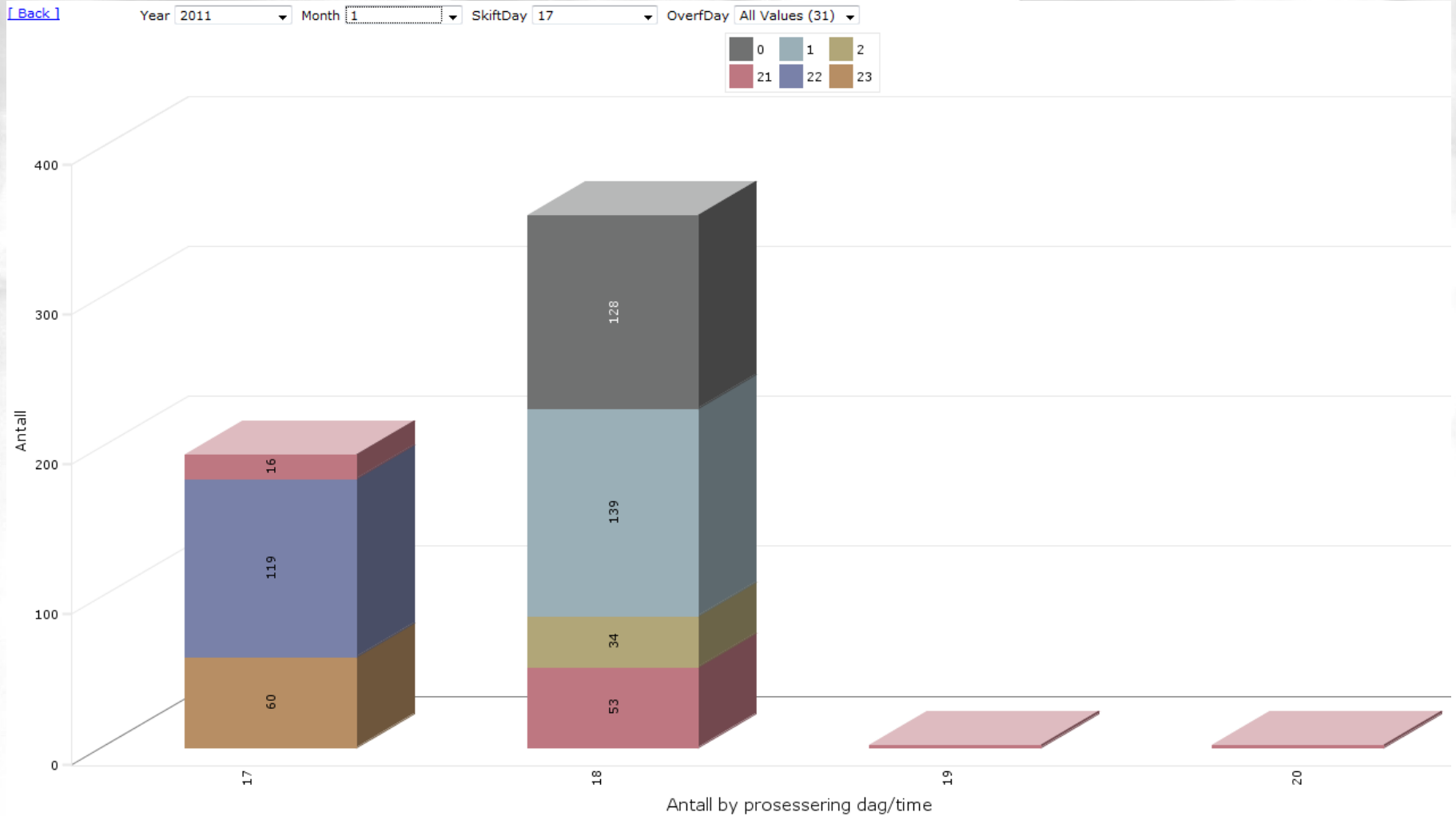


RouteNumber: 113  
JourneyRun: 1682  
Year: 2011  
Month: 6  
Dag: 16

## Påstigning Linje/avgang start/stopp, (kortbillettering, tid i sekunder)

RouteNumber	JourneyRun	EntryStop	StopName	Start	Stopp	Tid	Antall
<a href="#">113</a>	<a href="#">1682</a>	7040218	<b>Roberrønningen</b>	2011-06-16 15:41:24.000	2011-06-16 15:42:18.000	54	3
		7040487	<b>Sidsels vei</b>	2011-06-16 15:45:32.000	2011-06-16 15:45:34.000	2	2
		7040486	<b>Alveveien</b>	2011-06-16 15:47:26.000	2011-06-16 15:47:26.000	0	2
		7040485	<b>Eiktoppen</b>	2011-06-16 15:48:50.000	2011-06-16 15:48:58.000	8	2
		7042506	<b>Tønsberg Rutebilstasjon</b>	2011-06-16 15:57:54.000	2011-06-16 16:02:10.000	256	29
		7220067	<b>Teie torv</b>	2011-06-16 16:16:18.000	2011-06-16 16:16:22.000	4	2
		7220546	<b>Movikfsen</b>	2011-06-16 16:46:54.000	2011-06-16 16:46:54.000	0	1

# Downloaded files – date/hour

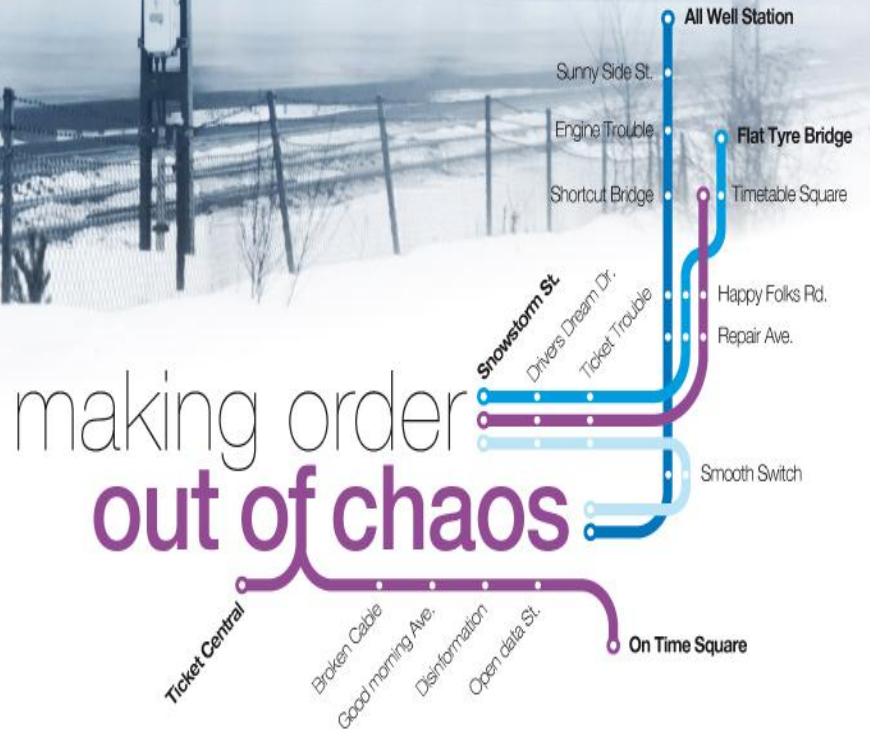


# Conclusions



- Simplify zonal system, products and tariffs before implementing a new ticket system
- Build competence in your own house during the project
- Logg every event concerning the ticketing system when implementing the system
- Implementing a flexibel datawarehouse solution gives your organization:
  - A reporting tool for all departments
  - Solid basis for business decisions
  - Operational control on all kinds of information systems

# THANK YOU FOR YOUR ATTENTION!



InformNorden  
SwedenMalmö  
7-9thSep2011