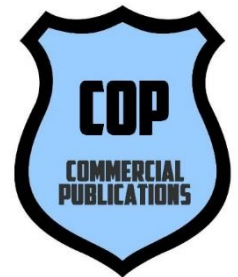


IS DRUPAL FAST ENOUGH FOR THE BIG COMMERCE?

– BUILDING SINGLE PAGE APP ON DRUPAL'S BACKOFFICE
(ANGULARJS, PHANTOMJS, SOLR, REDIS)

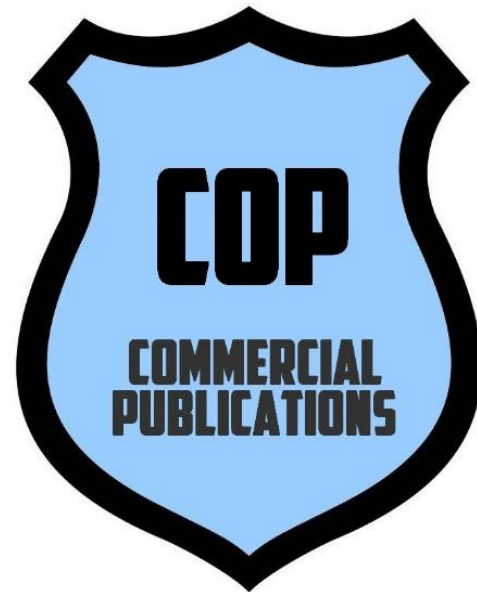
BY

PIOTR KNAPIK / COP TEAM / SCHIBSTED TECH POLSKA



WHO AM I?

- **TEAM LEADER & END-TO-END WEB DEVELOPER IN THE COP TEAM**
- **OUR TEAM IS TAKING CARE OF ~20 PUBLICATIONS ON DRUPAL & WP**



WHO ARE WE ?

- STP STANDS FOR **SCHIBSTED TECH POLSKA**
- WE'RE WORKING MAINLY FOR **SCANDINAVIAN MEDIA HOUSES**
- **JAVA, FRONTEND, PHP**



- **KRAKÓW** (120 AND GROWING)
- **GDAŃSK** (LAUNCHING NOW)
- [SCHIBSTED.PL](https://schibsted.pl)



THE PROJECT: GODE TILBUD



- **"GODE TILBUD" MEANS "GOOD OFFER"**
- **OFFER PORTAL FOR SMALL/MEDIUM LOCAL BUSINESS IN NORWAY / SWEDEN**
- **BUILD ON DRUPAL 7 IN LATE 2011 BY A NORWEGIAN CONSULTANT COMPANY**

GODE TILBUD: PUBLICATIONS



Aftenposten



Bergens  Tidende



Fædrelandsvennen



Stavanger Aftenblad



Adresseavisen



NYA
WERMLANDS-TIDNINGEN

Motor

Reise

Fritid

Bolig

Torget

Event

Osloby



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Motor

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Osloby

Hjem » Nostalgisk Musikkcenter

VIS OPPFØRING

ENDRE

ADMINISTRER VISNING

MODERER

STATISTIKK

PASS GUI

Nostalgisk Musikkcenter



Nå **2.999** Kr

Platespiller + CD-spiller + Kassettpiller + Radio med to innebygde 50W stereohøytalere + Encoder

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innebygde 50W stereohøytalere
+ Encoder

POWERMAXX

f Like 0



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Powermaxx

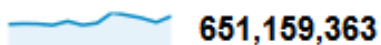
STATS OVERVIEW – AP' GODETILBUD

3,214,806 people visited this site

761,057 people visited this site

Aftenposten

Visits



Unique Visitors



Pageviews



Pages / Visit



Ads
/ Site



Visits



Unique Visitors



Pageviews



Pages / Visit



● Pageviews

3,000,000,000

1,500,000,000

October 2012

January 2013

April 2013

July 2013

KEY DRUPAL TECHNOLOGIES

- **DOMAIN ACCESS**



- **DRUSH – DRUPAL SHELL**



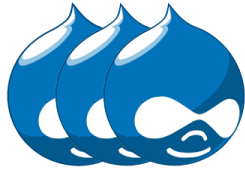
- **COMMERCE – STORE, OFFER...**



**drupal
commerce**

KEY DRUPAL TECHNOLOGIES

- DOMAIN ACCESS



- DRUSH – DRUPAL SHELL



- COMMERCE – STORE, OFFER...



drupal
commerce




Google Analytics




JCAROUSEL WIDGETS

- MAIN ENTRY POINT FOR THE WHOLE PORTAL
- HEAVY TRAFFIC
- SEPARATE PROJECT IN THE NEW VERSION







Spas inntil 75% på dine utskrifter. Norges største utvalg i blekkpatroner og toner.







• Parterapi
• Psykologer
• Familierapi
• Samlivskurs
• Kommunikasjonskurs

For deg som vil leve livet levende!



Knalltilbud! -40% på alt av Triumph undertøy! Gratis frakt.





Mandag 8. september 2013 11:05

Verden Norge Datoy Økonomi Kultur Meninger TV Sport A/A

Bestill nytt Og verdens lykkeligste land er...





NORGES LEDENDE FOTBALL- EKSPERTER I STUDIO

RESTILL HER

TIPPE LIGAEN



Tolv ferskinger om hvorfor de stemmer



Og verdens lykkeligste land er...



Verdensrekorden i fritt fall er nok en gang norsk



Hvordan i landet fyrsten



Salg av ny Volkswagen og Skoda. Service og reparasjoner på VW, Skoda og Audi.



Velkommen til Dyrsku'n 13.-15. september 2013



Forskerfabrikkens forskerkurs for 4.-7. trinn - Påmelding nå!

Dagens anbefalinger

FTI Nord

Eng. utvalgte i et godt utvalg

De beste av de beste

Den beste av de beste

Den beste av de beste

TV-guiden

TV-guiden

TV-guiden

TV-guiden

TV-guiden

Bestill produkter

Kundeservice

Annonser i Aftenposten

JCAROUSEL WIDGETS

- **INCORPORATED INTO DRUPAL:**
 - **VIEW WITH NODE COLLECTION** IN THE CUSTOM **VIEW MODE**
 - **NODES** ENCAPSULATED INTO MANY `<script type="html">`
 - **JS RE-WRITES CONTENT** INTO THE JCAROUSEL
- **EFFECT ?**
 - **TERRIBLE PERFORMANCE**
 - **OFFER UPDATE TIME WAS TOO LONG**
 - **EXTREMELY COMPLICATED DEVELOPMENT**



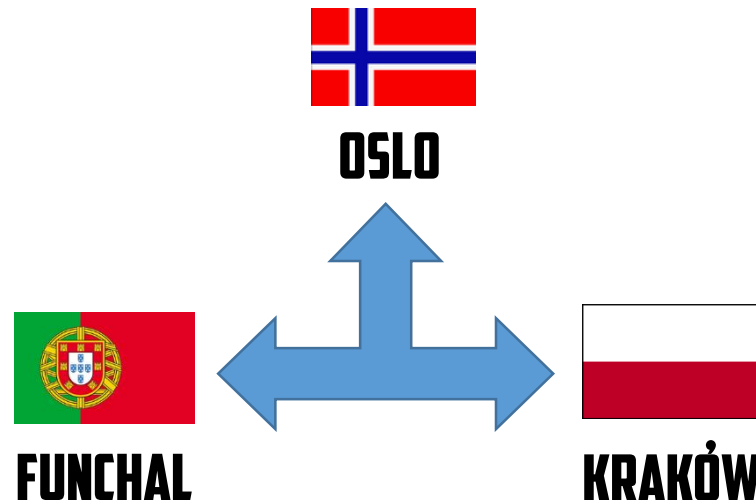


- **NEW CAROUSEL – UNIVERSAL CUBE**



"REDESIGN PROJECT"

- *Aftenposten* STARTED THE PROJECT WITH THE CONSULTANT COMPANY
- REFRESHED DESIGN
- PERFORMANCE IMPROVEMENT
- WORK SPLIT



DESIGN / UX

- **MODERN LOOKS**
- **RESPONSIVE**
- **LARGER, BETTER IMAGES** (NO TEXT ON IMAGE! ETC.)
- **SPEEDY USER EXPERIENCE**
- **SHORT UPDATE TIME FOR SMB CLIENTS**





Gode Tilbud

[Tilbud](#)[📍 Bedrifter](#)[i Om gode tilbud](#)[Søk](#)

Tilbud 990 kr

Vår på Finnskogtoppen!

Finnskogtoppen Velværehotell

Velkomment til Finnskogtoppen Velværehotell - Midt i hjertet av Finnskogen!

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SISTE TILBUD



29 % rabatt



Spar **400 kr**



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PERFORMANCE

- **IDEA: DECOUPLING THE FRONTEND FROM THE BACKEND**
- **DIVIDE PROJECT INTO COUPLE OF SMALLER PARTS**
- **FRONTPAGE:**
 - **SIGNLE PAGE APP ON ANGULARJS!**
- **DATA MIDDLEMAN**
 - **APACHE SOLR 4**
- **BACKEND:**
 - **DRUPAL 7 AS A BACKOFFICE**



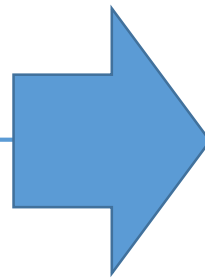
PAST:



PRESENT:



FRONTEND
BACKEND



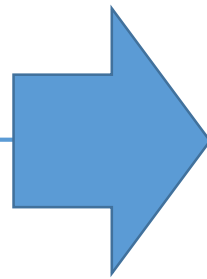
PAST:



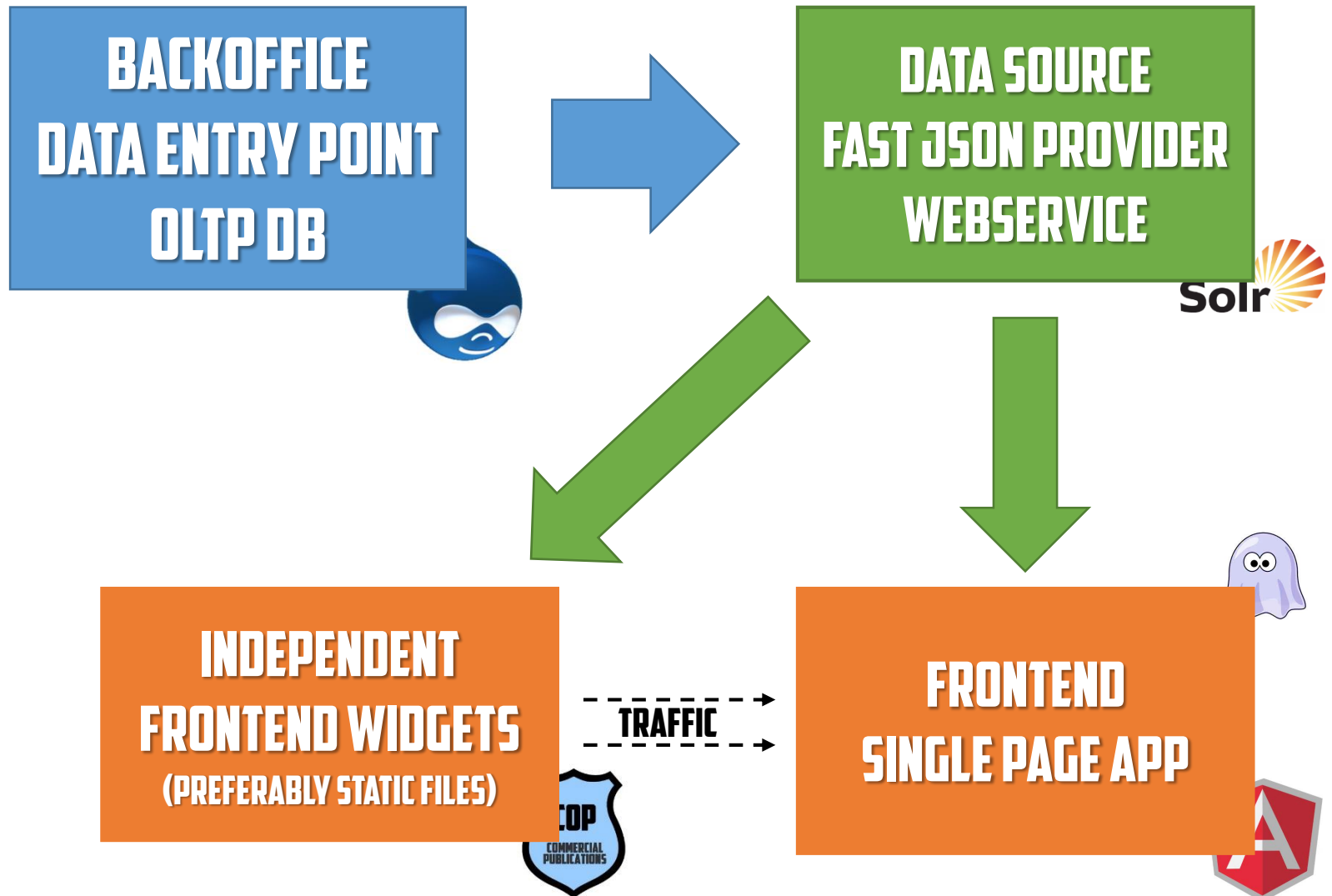
PRESENT:



**FRONTEND
BACKEND**



FUNCTIONAL DIAGRAM





BACKEND



- **APACHE SOLR SEARCH**
- **INDEXING TO THE SOLR**
- **DRUSH CRON JOB**

[Home](#) » [Administration](#) » [Configuration](#) » [Search and metadata](#) » [Apache Solr search](#)

Apache Solr search 

 Apachesolr cron succesfully executed

smb2: Search Index Content

TYPE	VALUE
Indexed	1428 Items
Remaining	0 items (100% has been sent to the server)
Schema	
Delay	before updates are processed.
Pending Deletions	

[View more details on the search index contents](#)

▼ ACTIONS

- [Index queued content \(50\)](#) Indexes just as many items as 1 cron run would do.
- [Index all queued content](#) Could take time and could put an increased load on your server.
- [Queue all content for reindexing](#)
- [Delete the Search & Solr index](#) Useful with a corrupt index or a new schema.xml.

▼ CONFIGURATION

Select the entity types and bundles that should be indexed.

DATA MIDDLE MAN



- **SIMPLIFIED DATA MODEL** TAILORED FOR THE **FRONTEND**
- **FULL-TEXT SEARCH, FAST JSON WEBSERVICE**
- **WORKS FINE WITHOUT VARNISH CACHING** (A BIT SLOWER WITH HEAVY TRAFFIC)
- **LIMIT PUBLIC ACCESS TO THE** `/select` **URLS ONLY**


```
<?xml version="1.0" encoding="UTF-8" ?>

<schema name="ads" version="1.3">
  <types>
    (...)
  </types>

  <fields>
    <field name="_version_" type="long" indexed="true" stored="true" multiValued="false" />
    <field name="id" type="long" indexed="true" stored="true" multiValued="false" />
    <dynamicField name="random_*" type="random" indexed="true" stored="false" />
    (...)
    <field name="address" type="text" indexed="true" stored="true" multiValued="false" />
    <field name="category" type="string" indexed="true" stored="true" multiValued="true" />
    <field name="company" type="string" indexed="true" stored="true" multiValued="false" />
    <field name="company_desc" type="text" indexed="true" stored="true" multiValued="false" />
    (...)
    <field name="v2" type="boolean" indexed="true" stored="true" multiValued="false" />

    <field name="all_text" type="text" indexed="true" stored="false" multiValued="true" />

    <copyField source="title" dest="all_text" />
    <copyField source="body" dest="all_text" />
    <copyField source="description" dest="all_text" />

    (...)
    <dynamicField name="*" type="ignored" multiValued="true" />

  </fields>

  <uniqueKey>id</uniqueKey>
  <defaultSearchField>all_text</defaultSearchField>
  <solrQueryParser defaultOperator="OR"/>
</schema>
```



FRONTEND



- **PHANTOMJS FOR STATIC FILE GENERATION**
- **ALWAYS USE STATIC FILE IF PRESENT**
- **SEARCH ENGINE ROBOTS ACT LIKE THE NON-JS BROWSERS**
- **NGINX WOULD BE FASTER THEN APACHE**

STATS COUNTER



- USE THE FASTEST DB **NoSQL** ENGINE THAT WE KNOW – **REDIS**
- REPLACE GOOGLE ANALYTICS ON WIDGET STATISTIC COUNT
- RESULTS
 - 40 000 HITS PER MINUTE AND REDIS WAS OK WITH THAT
 - BUT OUR VPS WENT DOWN...
 - TRIED WITH OTHER INTERNAL STATS ENGINE – PUT SOME BASIC FUNCTIONALITIES DOWN FOR COUPLE OF SITES FOR ~40 MIN

POST-LAUNCH STORIES

- **CAROUSEL WIDGETS ON ANGULARJS ?!**
- **CALL-TO-ACTION – A/B TESTED!**
- **TOO SMOOTH CAROUSELS' LOOK**



© THE FLOATING FROG WEB AGENCY

CAROUSEL WIDGETS



- **THROW OUT:**
 - **ANGULARJS**
 - **JQUERY**
 - **PHANTOMJS FAILED AS A SOLUTION HERE**
- **IMPROVED SWIPE.JS –LESS THAN 10 AD ELEMENTS INFINITELY**
- **LAZY LOAD IMAGES**
- **GRUNT MAKES A SINGLE index.html 18.1KB (6.7KB GZIPPED)**

SINGLE PAGE APPLICATION? NO.

SINGLE STATIC PAGE





Flytt mindre essensiell informasjon vekk fra "call to action" - f.eks. hit - slik at den skiller seg mer ut. →



Link dette bildet til samme landingsside som "Se tilbud"



25% rabatt

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41d 14h48:43

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LED belysning ute og inne

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Tilbud

Bedrifter

i Om gode tilbud

Søketekst

Søk



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14300 kr

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OLD DESIGN

 Gode Tilbud



Tilbud 31640 kr

Sol og varme i Florida
Nordmanns-Reiser

NEW DESIGN

 Gode Tilbud 



Tilbud 74000 kr

Supertilbud på massasjebad
Hotspring Massasjebad

[Se tilbud](#)

OLD



Gode Tilbud



Superpriser på kajakk
Kajakk & Fritid

Se tilbud



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Tyrolerhus

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Nordic Dent

70% til 80%

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NEW




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Se tilbud



Bryllup på Oslos's tak
Voksenåsen Kultur og Konf

10% rabatt

Se tilbud



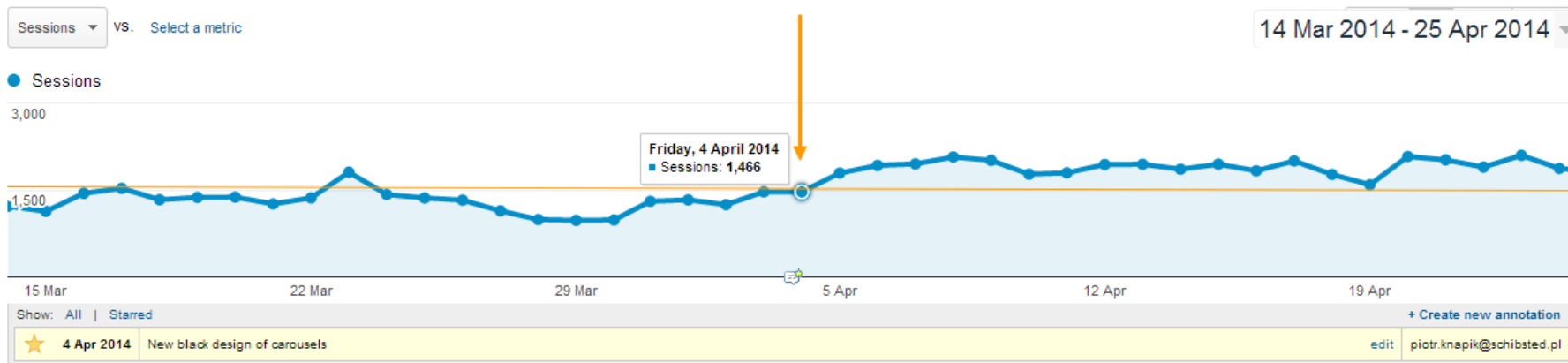
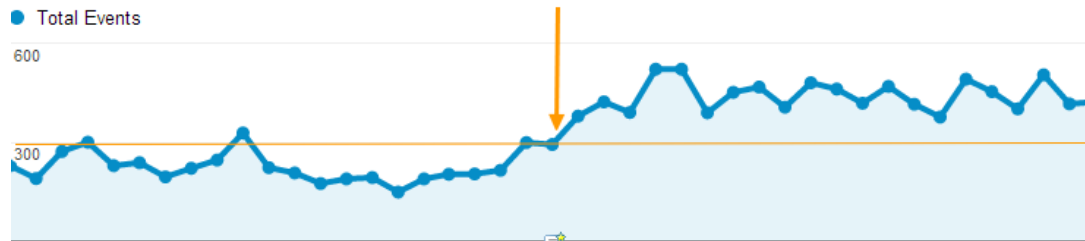
Eventyrlig tematur!
Fotefar Temareiser

8995 kr

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NEW DESIGN

- **+40% VISITS**
- **+90% CLICKS TO CLIENT PAGES**



CONCLUSIONS

- **WE NEED TO KNOW HOW TO PICK OUR BATTLES**
- **DRUPAL SPA MODULES**
- **USE REDIS INSTEAD OF MEMCACHE – 10X FASTER!**
- **THERE'S NO ULTIMATE ANSWER TO THE QUESTION OF THE WEB ARCHITECTURE**
- <https://sourcegraph.com/blog/switching-from-angularjs-to-server-side-html>
- **DESIGN THE PROJECTS FOR A CHANGE. CHANGE IS THE ONLY SURE THING IN THE IT.**

THANK YOU FOR YOUR ATTENTION

PIOTR.KNAPIK @ SCHIBSTED.PL

COP TEAM / SCHIBSTED TECH POLSKA

