



MIMACOM

Digital.

Innovation.

Engineers.



Elasticsearch in Finance Processing – Lessons Learned with Big Data

Open Business Lunch, Zürich, 1st March 2019

WHO WE ARE

mimacom at a glance

mimacom develops agile and on target highly qualitative individual software solutions for your complex digitalization projects.

NUMBERS AND FACTS

GLOBAL AND NEAR YOU

13 Locations worldwide
North-America, Europe & Asia
Headquarters in Bern (CH)

CROSS-INDUSTRY AND FOCUSED

255 Corporations, SMBs
and Authorities as
customers

EXPERIENCED AND INNOVATIVE

19 Years of most innovative
methods and Open-Source
technologies

COMPETENT AND ADAPTABLE

300 Consultants, Software-
Architects, Developers
and Specialists

CORE COMPETENCIES



Digital-Strategy
Consulting



Solution Conception
and Design



Software Development
and Implementation



Operations,
Maintenance and
Services

INNOVATIVE TECHNOLOGIES

Cloud Foundry
elasticsearch
Spring IO
Java
Java Script, and more...

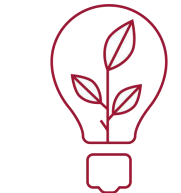
OUR DNA



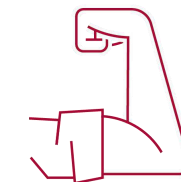
Highest Quality due to
mimacom path™



Our Passion is
Open Source



Latest Innovations
From Silicon Valley



We are Doers, we
Create Solutions

OPEN SOURCE

Technologies

For your individual project, we select the most innovative open-source technologies together with you. Because we have been passionate frontrunners in leading edge open-source innovations for almost 20 years.

INNOVATIVE TECHNOLOGIES

CLOUD  FOUNDRY



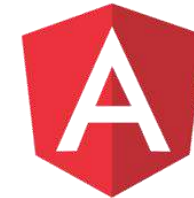
elastic



Flowable
making process personal



spring
by Pivotal™



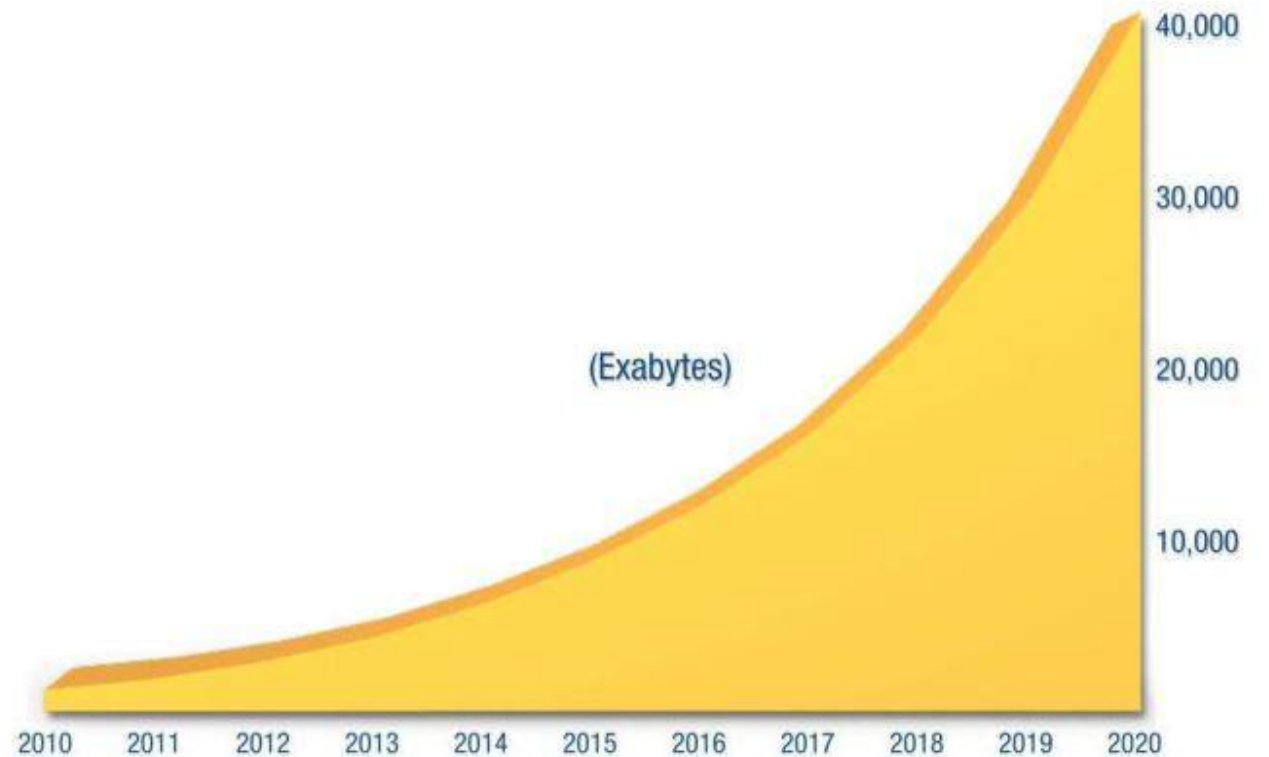
ANGULAR

The information age

data, data, data

Big data

- We all are part of a revolution – the oil of the 21st century
- data universe will more than double every two years
- from 2010 to 2020 we expect a rise of 5000% in data amount





Big Data

"Everyone loves collecting data, but nobody loves analyzing it later."

<https://apenwarr.ca/log/20190201>

Next disruption

Free the data

-
- Where does the data reside traditionally?
 - databases & logs – isolated, relational and unstructured
 - 3 P – products, processes and people
 - Information based on reports and statistics – delayed
 - Is the information now aggregated important for future needs?
 - What about transactions, events – structured data?
 - How do we get from 3 P to 3 V ?
 - volume, velocity and variety
 - Introduction of the elk stack (elastic search and its companions)
-

elastic benefits

-
- Elasticsearch
 - Logstash
 - Kibana
 - Beats
-

BENEFITS

- How the elastic stack can be set up next to existing processes, tools and data without endangering production
 - Ad-hoc installation, pure configuration, setup in two days
 - Can be used for search, monitoring (alerts), reporting, dashboard (management cockpits)
 - Gain quick insights, produce stunning real time outcome
-

APPLICATION FIELDS

Digital
and
Finance



1. Case: Payment Processing

- » Monitoring and Analysis
- » Decoupling Processing and Information Retrieval

2. Case: Fraud Prevention

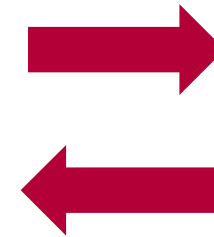
- » Assessment
- » Monitoring always comes with Alerting

START

In the beginning

.. there was a running system.
It gets payments from terminals and processes them.

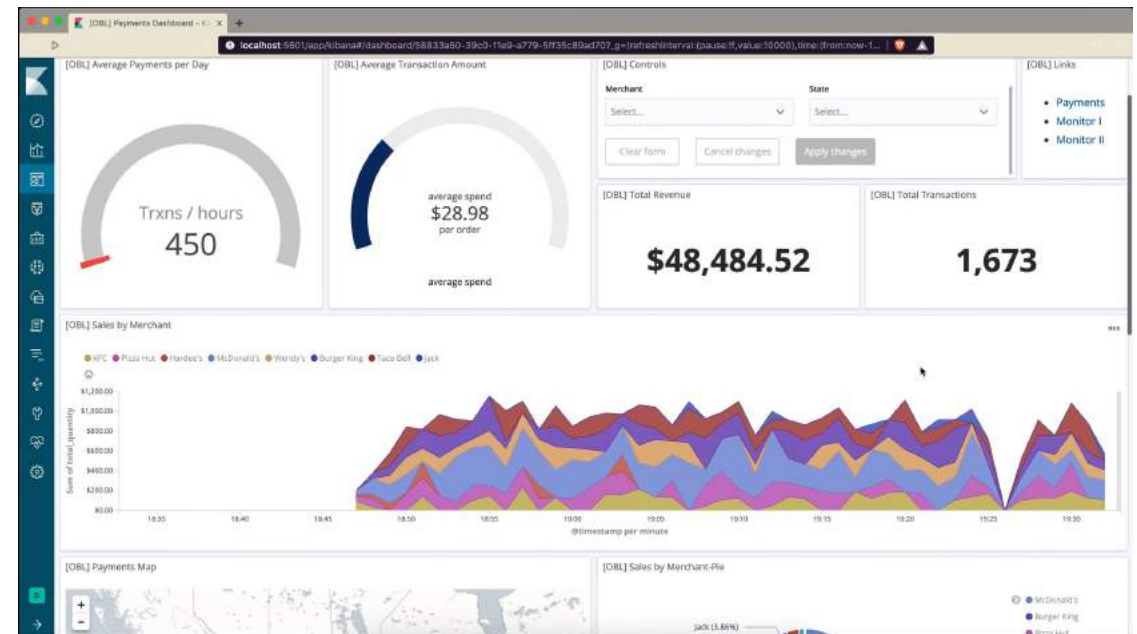
THE PARTICIPANTS



DEMO

Payment Processing

<https://vimeo.com/321302212>



FRAUD MONITORING

Fraud Prevention

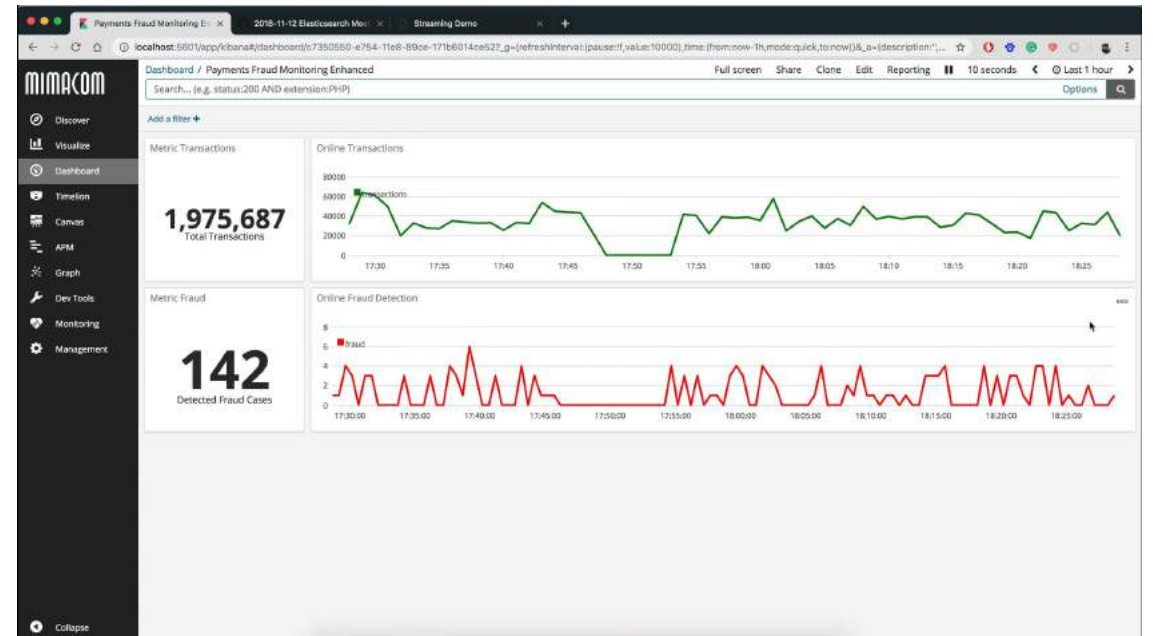
... there was a running system. It gets payments from terminals and check it for fraud.

THE PARTICIPANTS



DEMO

Fraud Prevention



Benefits

How Elasticsearch improved
the Monitoring.

ADVANTAGES

- Super fast
- Real Time and History Data
- Aggregations
- Roll-up and Drill-down
- Usability
- Transparency
- Comes for free
- Implementation < 1 week
- Happy Users
- Happy Developers
- Happy Customers

Big data

Lessons learned

Common pitfalls

-
- Naming convention for common fields
 - Less programming – more configuration
 - Data synchronisation – elastic und master
 - Data model
-



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