Why Onet has just started migration from private cloud to AWS?

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DreamLab Overview

Company

- **20+ years** Experience in online publishing and media market
- **300+** Digital media experts & software engineers
- **7+ countries** Providing media technologies across Europe

Background

- Joint venture of Ringier and Axel Springer

Value Proposition

**Digital Publishing Solutions**

- Market proven.
- Easy to use.
- Affordable.

Facts & Figures

- **#1** Provider for digital media solutions in Poland

Customer Base

- **30 million** People use our solutions
- **800** Editors work with our solutions

Locations

- Krakow, Warsaw, Wroclaw, Belgrade, Budapest

Digital Publishing Solutions

- Value Proposition
- Company
- Background
- Facts & Figures
- Customer Base
- Locations
Who we are?

Onet is not Onet only

& more than 100 other brands and services

& more than 50 other brands and services

& more than 20 other brands and services

RASM AG years:

2013

#5 x Data Centers
#1 x Private Cloud
#4 x Legacy Infrastructure
#7 x CMS
#6 x AdServer
#More than 3,4k servers
#Development: Cracow, Warsaw, Wrocław, Belgrade, Budapest
Who we are?

Complexity started to grow fast

- Decision to implement one publishing solution throughout the whole group
- Centralization of IT decisions – one CTO
- Convergence directive for technology
- Content brand migration roadmap to unified publishing platform
Onet’s architecture history

Shortest possible version
Private cloud

Architecture overview

SaaS

- CDN Accelerator
- CMS publishing platform
- Video platform
- Ad Server
- Web & native app templates
- Analytics & BI monitoring

PaaS

<table>
<thead>
<tr>
<th>Service</th>
<th>API SDKs</th>
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<tbody>
<tr>
<td>Obj Storage (Ceph)</td>
<td>JavaScript SDK (node.js)</td>
</tr>
<tr>
<td>Queue svc (Rabbit)</td>
<td>Python SDK (tornado)</td>
</tr>
<tr>
<td>CFG svc (Zookeeper)</td>
<td>Java SDK (jetty)</td>
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<tr>
<td>RDB svc (Postgre)</td>
<td>PHP SDK (nginx)</td>
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<td>NoSQL (Cassandra)</td>
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<td>Mem DB (Redis)</td>
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<td>FTS (SOLR)</td>
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S3 compatible API

- API gateway, service discovery, application load balancer

PaaS

- Application automation, service usage accounting & provisioning

IaaS

- VM Automation
- Chaos Monkey
- OS Configuration (SALT)
- Package repositories
- Weak apps isolation (Cgroups)
- Monitoring

EC2 IaaS compatible API

- Common network management

IaaS

- Virtualization Management – Open Nebula

- JavaScript SDK (node.js)
- Python SDK (tornado)
- Java SDK (jetty)
- PHP SDK (nginx)
Onet’s architecture history

Shortest possible version

Before 2010
LAMP architecture

2010
Private Cloud Start

2011
Pulse CMS start

2012
Onet was acquired by RAS

2013
DRP site based on AWS Dublin

2014
Group technology rollout start

2015
Maturity issues begin
Private cloud

Group wide technology rollout …

One CMS, One publishing process

Done

Planned for 2019

Accelerated Mobile Pages
Facebook Instant Articles
General Data Protection Regulation
https:// on every of 200 websites
Private cloud
... and a challenge built in

Yeah, IT, you are great, but it’s not enough

We need some Big Data online data processing &
Much more insights

Personalisation  User clustering
Processes automation  Recommendation engine
Machine Learning Insights  Pay Wall
Publish everywhere - multichannel  Push platform
Increase advertisement value

And add some blockchain, connect to voice assistant and make it fly, cheaply 😊
Trapped in our own success

Sustainability of platform efficiency

Total costs


Functionalities

Serious dilemma

- Sell our cloud tech services on open market?
- Migrate everything to reliable vendor?
- Defined explicit security policies?
- Our DRP relies on AWS, on IaaS
- 1st party
- 2nd party
- 3rd party
- This is not our core business
- Expect switching roles in teams
- What will your developers say?
- We need some overlapping budget

This is not our core business
But we can offer content publishing systems as SaaS

THIS IS A REVOLUTION!
CFO Perspective

How to convince sponsor to spend some money

- Revenue?
- Savings?
- Don’t touch our EBIT!

Is this decision a strategic OR financial one?
How to convince sponsor to spend some money

- Build a migration model
- Calculate TCO for next 3 years
- Calculate target yearly spending
- Show positive impact on EBIT

Tech platform devops

Capex vs Opex

Fast growth or maintenance

Depreciation cycle

Software licenses

Salary rise, price drop

Architecture mapping!

General migration order

Calculate monthly spending

Look for optimizations

CPU overbooking

SPOT instances

Managed services

Rationalize spendings

Cloud is a challenge for capex driven IT

Crossing point on a budget timeline

TCO improvement

Investment return in 5 years

3 years of migration

SIMPLE? It took us 9 months to convince our SVB
Why AWS?

Key ingredients

We migrate our private cloud and big data stack

DRP based on AWS

Compatibility with IaaS & S3 API

Open Source is in our DNA

Lift & Shift is not enough

Strong support from AWS: EDP, MAP, DBF

AWS fits this project the best

Migration readiness assessment
Thank you