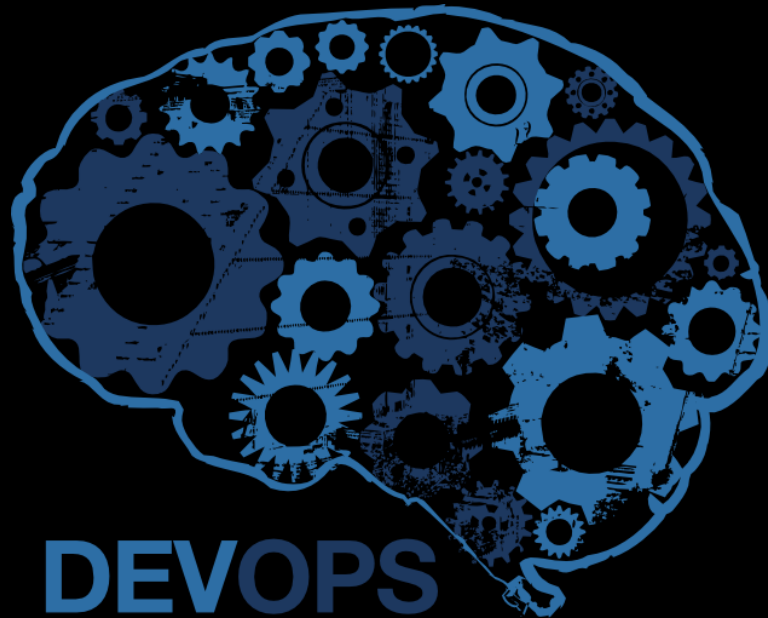


The
Devops
movement



DEVOPS

Gildas Le Nadan

10 years + ITOPS

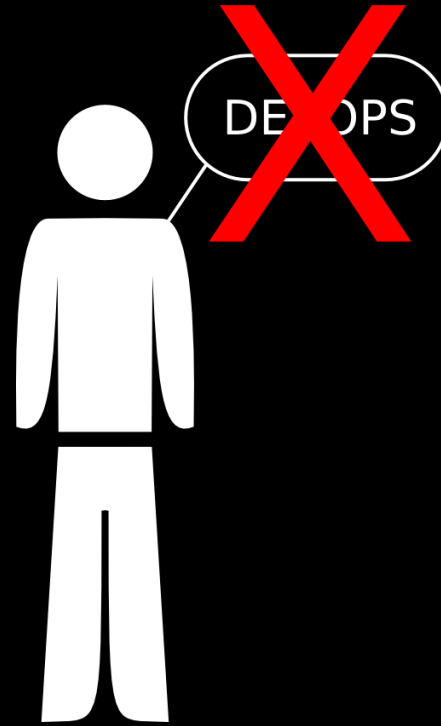
Freelance

From
building with lego®

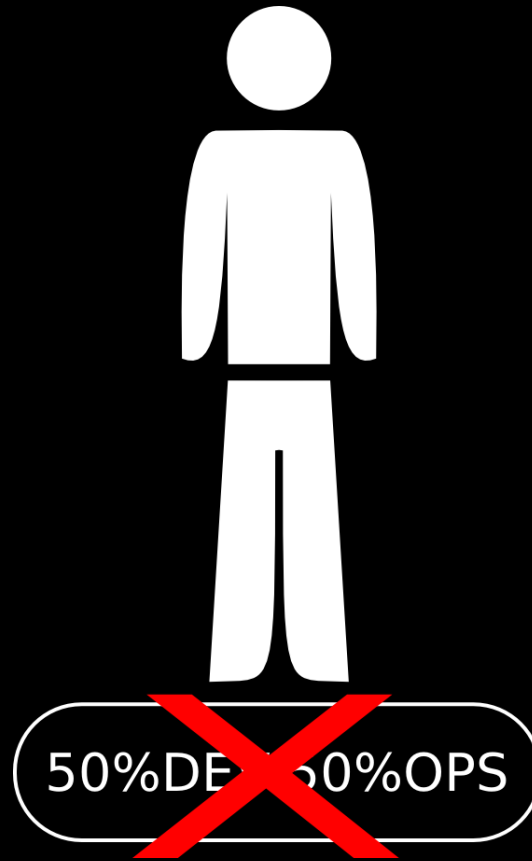
to
discussions around
the coffee machine

Devops

**mistakes, rumors and other
wrong beliefs**



Devops is
not a job title
nor a label



**No need to be
both dev and ops**

Devops

A portemanteau word

Not only a tech problem
(devs, ops)

**Which
definition
for
Devops?**

Devops

**is a movement willing to help
aligning IT with company
needs**

(starting by aligning devs and ops)

Why

devops ?

**At first IT was seen by
companies as**

a differentiator

**↳ deployed whatever the
cost**

**Nowadays it is mostly
perceived as**

a cost center

↳ mitigation through ITIL, etc

**The huge success of the web
companies shows that**

**IT can still make a hell of a
difference, business-wise**

↳ emergence of devops!

Devops enablers

Web

OpenSource

Agile

!

Web

**Had a revelation. A reason
#devops has risen to attention:
People that had to just make the
web work 10+ yrs ago are now the
senior staff.**

@brianlmoon

~~Servers~~

Services

MTBF

Mean Time Between Failure

MTTD

Mean Time To Diagnose

MTTR

Mean Time To Repair

swap: for times when you want massive performance degradation to happen somewhat silently rather than fast failure and recovery.

@jordansissel

MTTC

Mean Time To Communicate

webmetrics

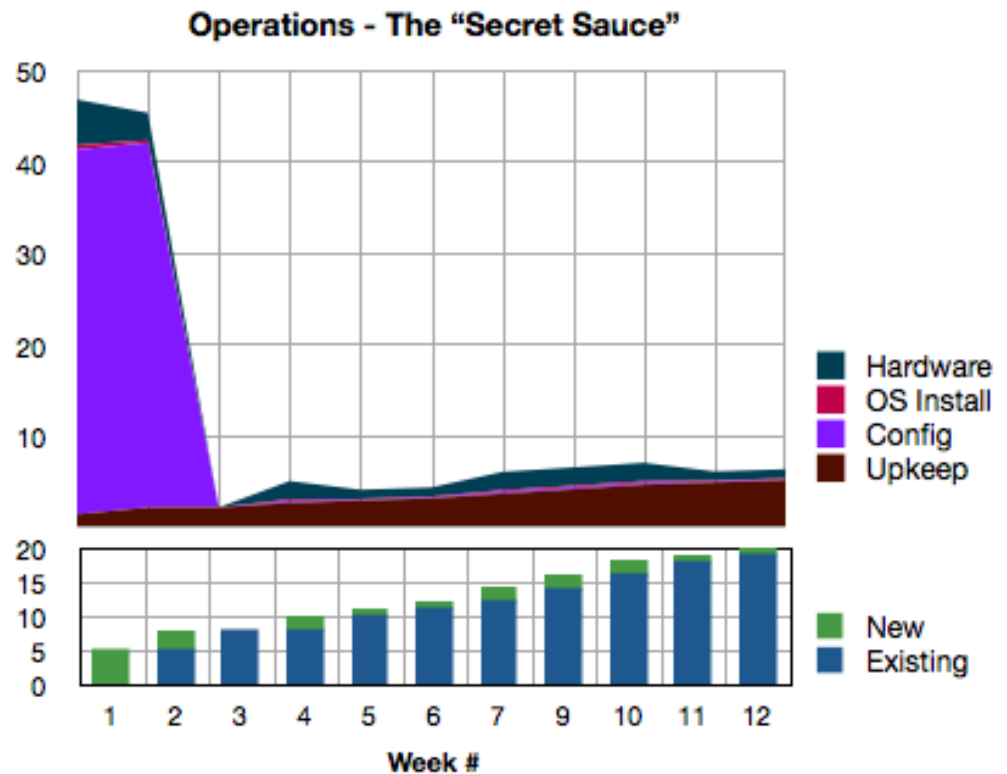
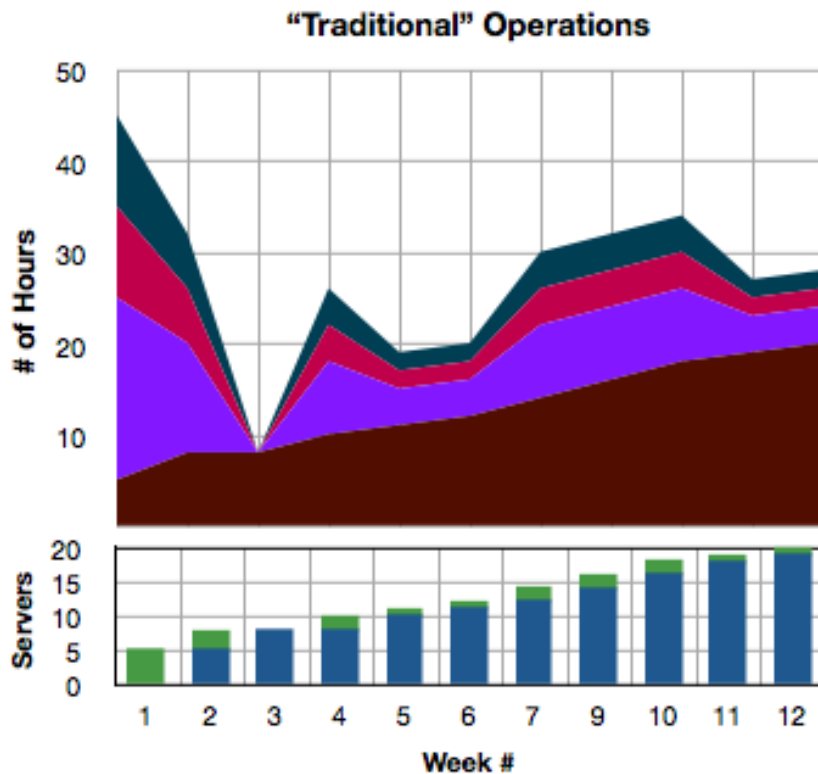
Lessons learned from the Web

- ↳ Servers = **silos**
- ↳ Service oriented
- ↳ **Keep It Simple Stupid**
- ↳ Loose coupling
- ↳ Self Service

OpenSource

Infrastructure Debt

Opscode, Andrew Shafer, Israel Gat



workaround_in_production

=

infrastructure_debt++

Stack

Application

Framework

Operating System

Hardware

**Push_complexity_down_the_
stack**

=

infrastructure_debt++

Opensource?

Needed

easier to diagnose,
easier to adapt,
long lasting investment,
lower infrastructure debt

Not enough

doesn't necessarily equals quality

Agile

[Agile manifesto]

Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

**Agile System Administration
or the limits of the
Agile Manifesto**

Dev. vs Prod.

-ilities and shipping

**Just heard of a place that ties
bonuses for ops staff to availability
and bonuses for devs for
milestones #payingpeopletofight
#notdevops :)**

@allspaw

developped functionalities

vs.

application availability

creating value source

VS.

**creating value by offering a
service**

**Value only exist if the service
is provided !**

**↳ Importance of Non
Functional Requirements
(NFR)**

Non Functional Requirements

Diagnostic

Packaging

Scalability

Stability

Versionning

Updates

Security/traceability/auditability

Access control

Managing shared ressources

...

One application
=
2 types of users

↳ **IT Ops**

↳ **End user**

To a sysadmin your config files and logs are often their only UI. Think of the UX of XML and exceptions.

#devop

@ripienaar

Solutions to the deployment problem

- ↳ **communication**
- ↳ **automation**
- ↳ **continuous integration**
- ↳ **information radiators**
- ↳ **and so on...**

Devops

No dogma

No manifesto

Values

4 axis

Culture

Automation

Measure

Sharing

John Willis & Damon Edwards

Sharing

Common vision

Common problems

Common vocabulary

Common knowledge

Common tools

Importance of feedback

(Eat your own dogfood!)

Measure

[here be graphs]

Business alignment

**↳ KPI, risk measurement,
support decision-making**

Automation

**Managing 1000+ servers in a
datacentre should be as easy as
putting together an Ikea cupboard
#devops**

@geogdog

Infrastructure as Code

Andrew Shafer

We need APIs!

Adapting development tools

**Source code management,
unit tests, continuous
integration, ...**

Adapting envelopment techniques

**scrum, scrumban, kanban,
lean, standup meeting,
retrospectives, pairing, ...**

Culture

Cooperation

vs.

Silos

Automation

vs.

Procedures

**Creating multi-skilled teams
dedicated to projects**

Empowerment

Innovation
Creativity
Pride
Fun
Attribution
Recognition

Devops

actual challenges

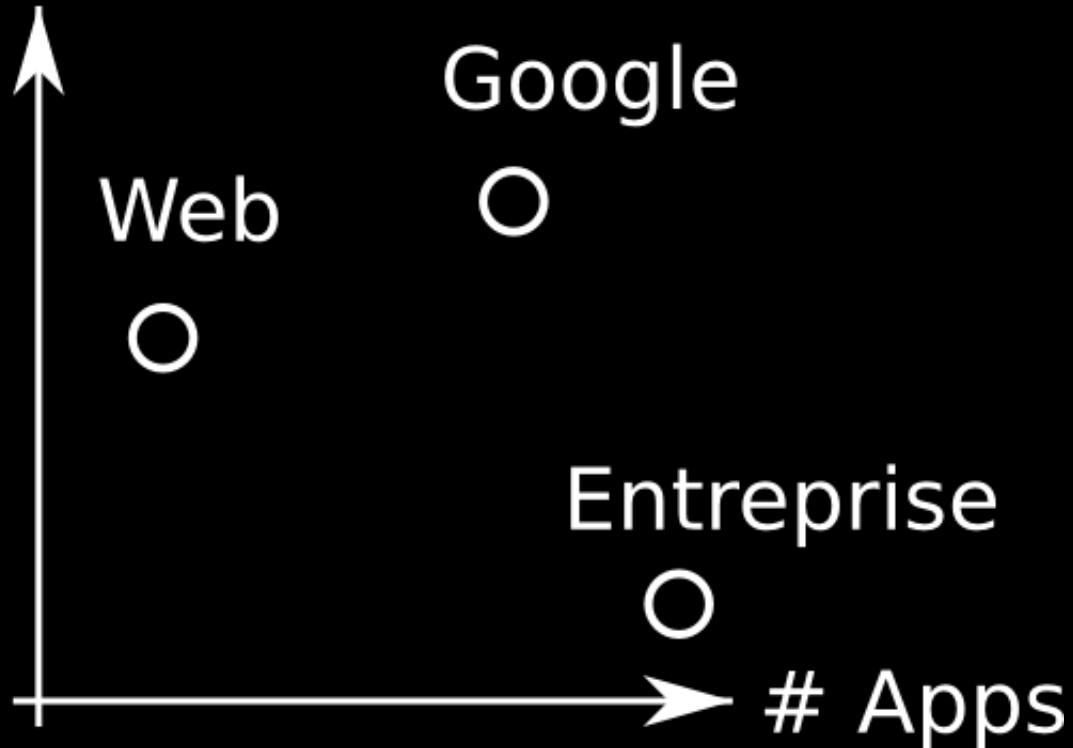
**How to brings devops to more
“traditional” companies ?**

Web companies

VS.

Traditional companies

Users/App



Monitoring!

Service oriented

Adaptable

Scalable

Packaging

**(distributions vs. non-
packaged applications)**

Load testing in continuous integration

**“OS Bloat” and framework
that sucks !**

Questions?

Links

<http://www.devopsdays.org/>

<http://www.devopscafe.org/>

<http://www.planetdevops.net/>

http://devops/mixit/slides_en.pdf