



# Continuous Innovation — DevOps and agile Deployment with AWS

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**claranet**  
hosting | applications | networks

helping **our customers**  
do **amazing things**

# Claranet – About us

Claranet, one of the leading Managed Service Providers for integrated hosting and network solutions in Europe:

## Claranet Group

- **8** countries
- **+ 1,300** employees
- **+ 850** technicians
- **+ 5,800** customers
- **+ € 255 million** turnover
- **Owner Management** (CEO Charles Nasser)

## Claranet Cloud Practice

- Public Cloud expert
- **+ 100 customers** on AWS
- **+ 70 employees** AWS-trained and certified
- **Certified** AWS Managed Service Provider Partner



# Positioning & Certification (excerpt)

Figure 1. Magic Quadrant for Managed Hybrid Cloud Hosting, Europe



## Certification



Gartner Magic Quadrant - Leader 2013, 2014, 2015 and 2016

Managed Hybrid Cloud Hosting, Europe 2016



# Managed Services for AWS

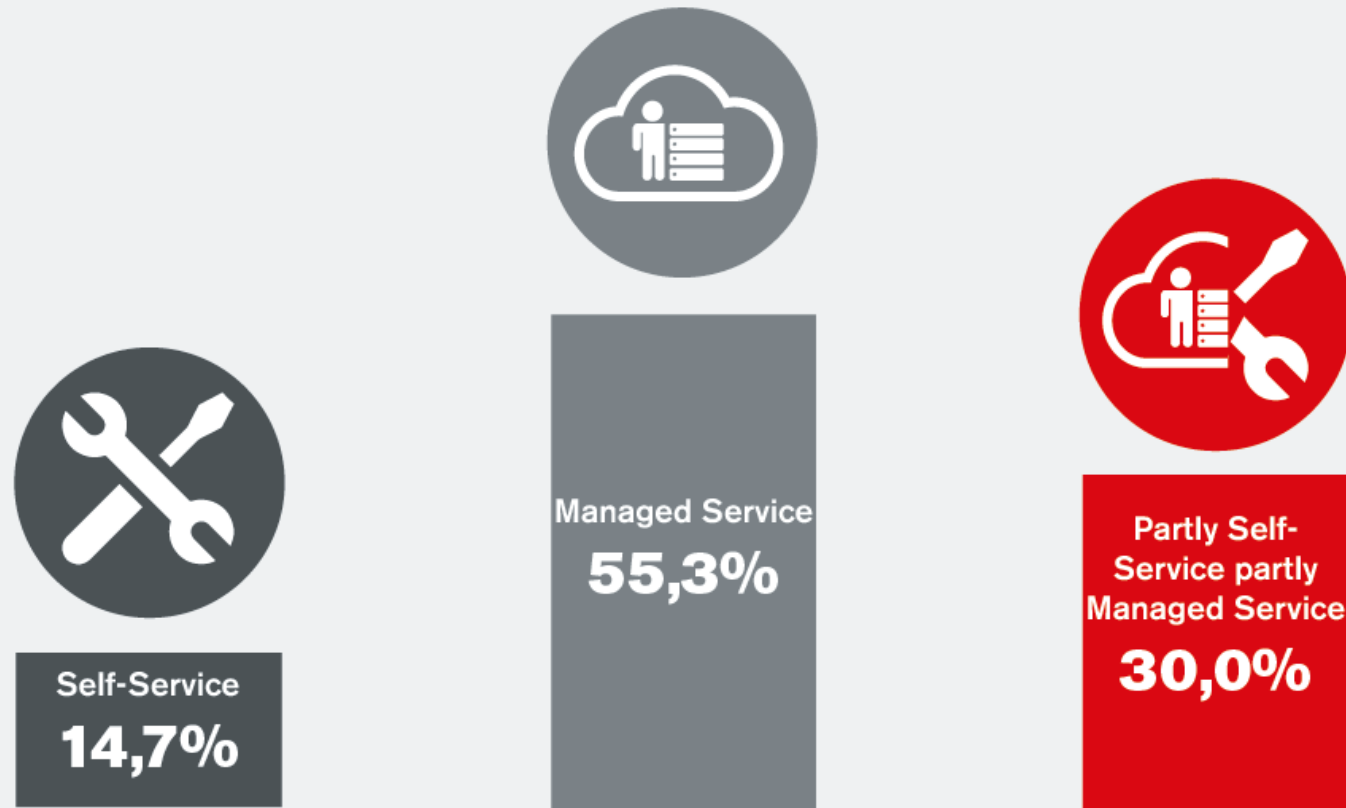
Managed Public Cloud – more than IT Infrastructure

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# Managed Service for Public Cloud

In an ideal case, how would you use public cloud?



Source: Crisp Research AG, 2015

# Shared Responsibility with AWS



Customer

Application Customising & Content

Platform, Applications, Identity & Access Management

Operating System, Network, & Firewall Configuration

Client-side Data Encryption

Server-side Data Encryption

Network Traffic Protection

**AWS Foundation Services**

Compute

Storage

Data base

Networking

**AWS Global Infrastructure**

Availability Zones

Regions

Edge

Locations



# Shared Responsibility with Claranet

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Platform, Applications, Identity & Access Management

Claranet

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# Continuous Innovation with AWS in Practice

DevOps and agile Deployment

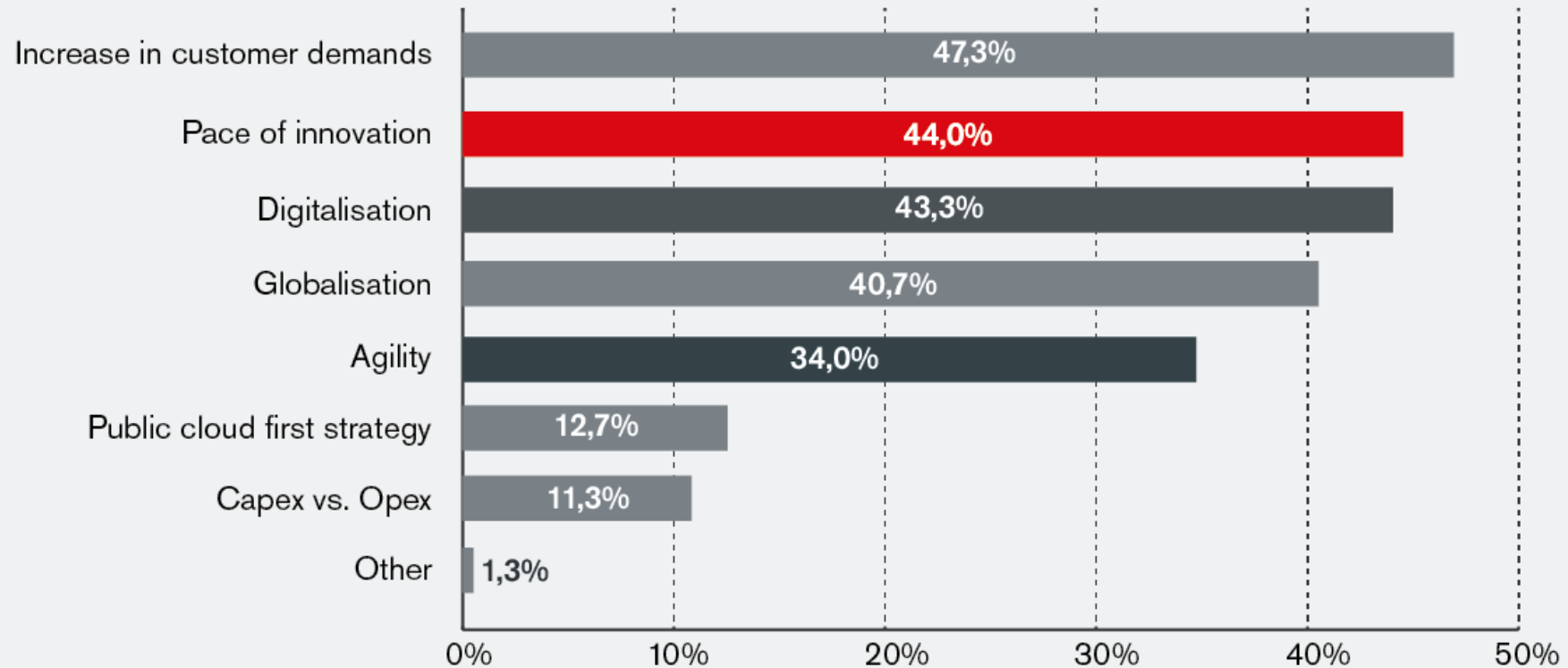
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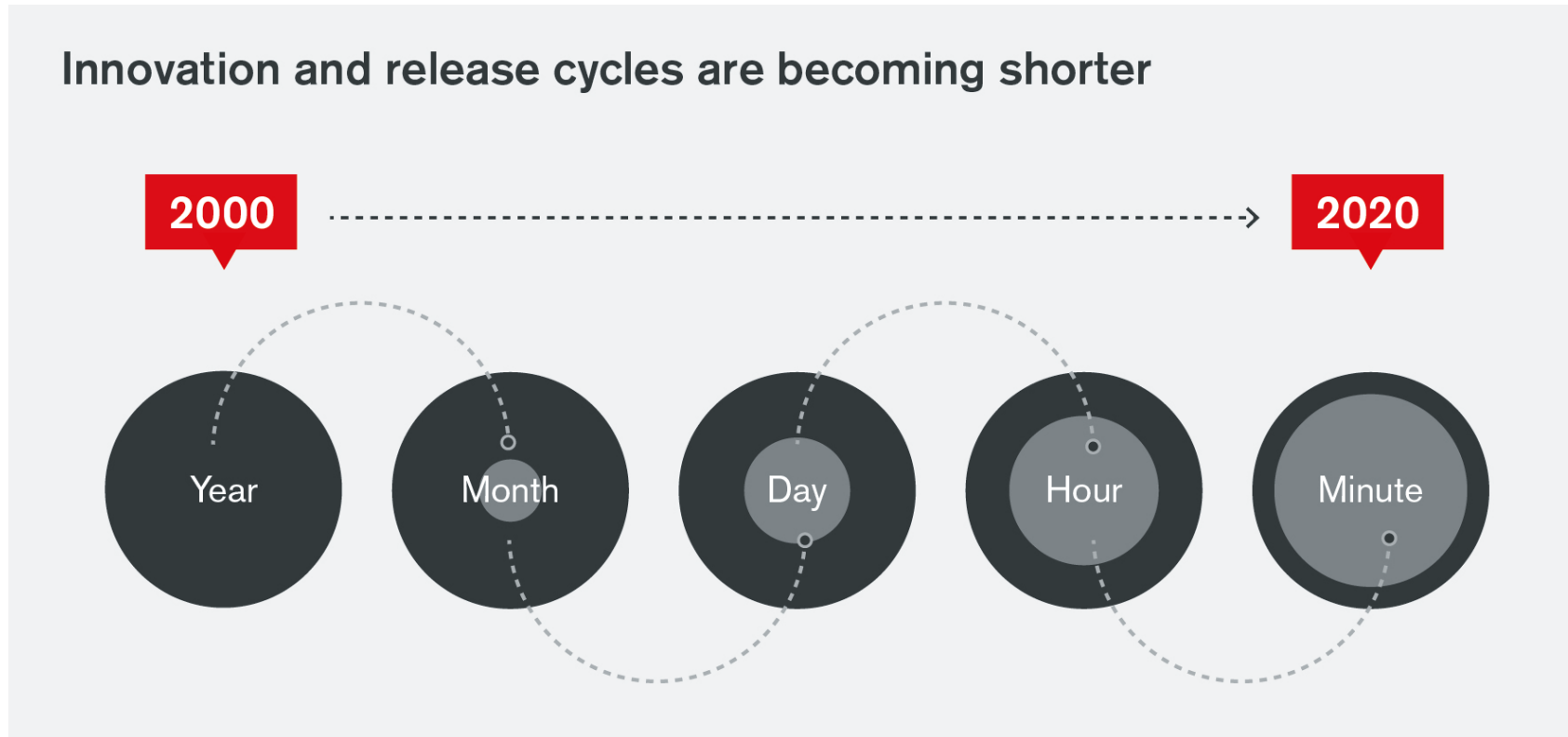


# Innovations are Cloud Driver

Strategic reason for the current or future use of cloud solutions in your company



# Short Release Cycles - Speed is critical for Success



Source: Crisp Research AG, 2015

# Project Example: Instant e-Commerce Microsite



Launch of a campaign microsite for the 2016 European Football Championships



Claranet implements a public cloud solution on AWS in a very short time

**HERRMANN  
KAECHERLE**

# Customer Requirements



▶ Automated Tests



▶ Reproducibility



▶ Short Release Cycle

# Implementation: Auto Scaling Groups

## ➔ Automatic compensation for peaks

## ➔ Bootstrapping instances (at runtime)

- User data loads bash scripts, config files and current application of S3 buckets

## ➔ Stateless setup

- PHP sessions in ElastiCache cluster (memcached, dual data centre)
- Managed Amazon RDS database cluster (mySQL, dual data centre)
- Central logging according to CloudWatch Logs

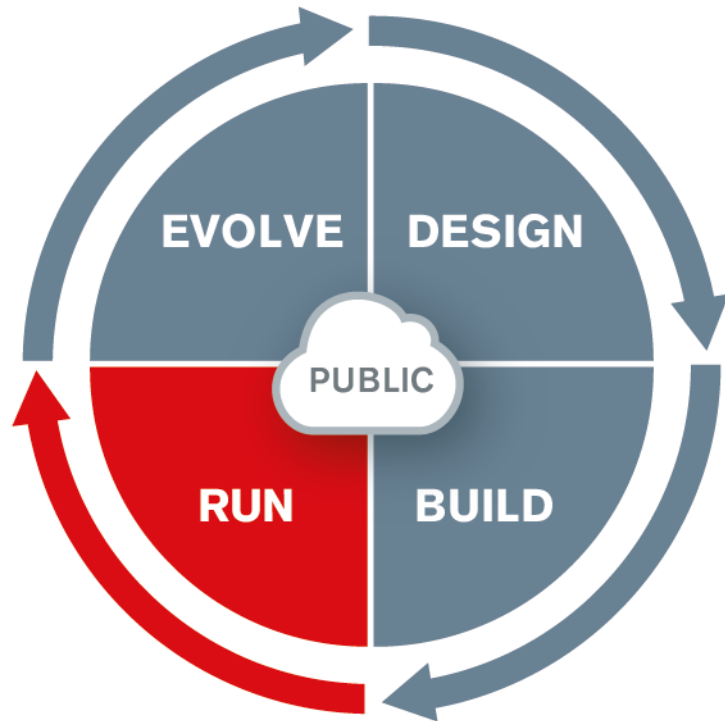
# Implementation: Infrastructure as Code



## Advantages

- All changes are traceable at all times
- Very fast provision of resources
- Can be repeated any number of times

# Continuous Innovation



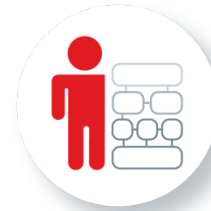
## •• EVOLVE

Identification of potential for improvement, alignment with new services and options



## •• DESIGN

Creation of a new platform design in line with the state of the art



## •• BUILD

Implementation with tools that guarantee modular re-usability



## •• RUN

Ensuring smooth operation, findings are implemented in the next round



# Follow-up Order: Another Instant e-Commerce Microsite



Launch of a campaign microsite  
for **Christmas business**



Claranet revises the design  
with the **experience** from the  
previous project

**HERRMANN  
KAECHERLE**

# New Customer Enquiry: Lottery 2.0

- ➔ **The same project structure (Lottery for Christmas 2016)**
- ➔ **Additional challenges**
  - A number of unplanned updates of the customer's application
  - Optimisation of operating costs (cost reduction)

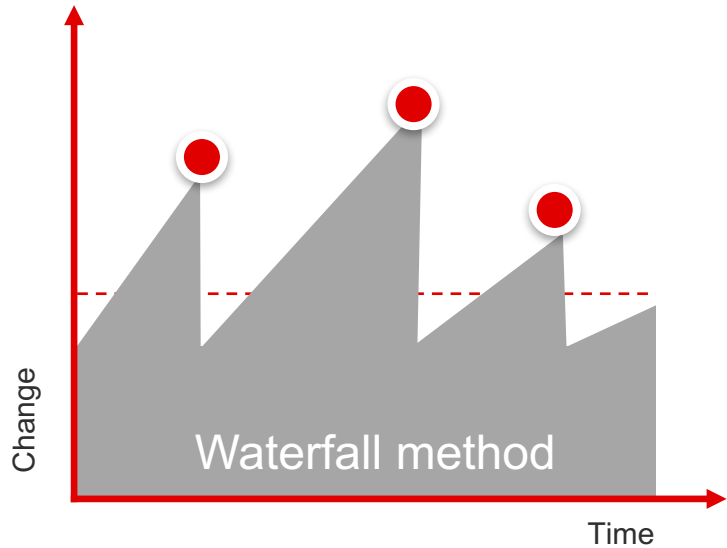
# Continuous Innovation



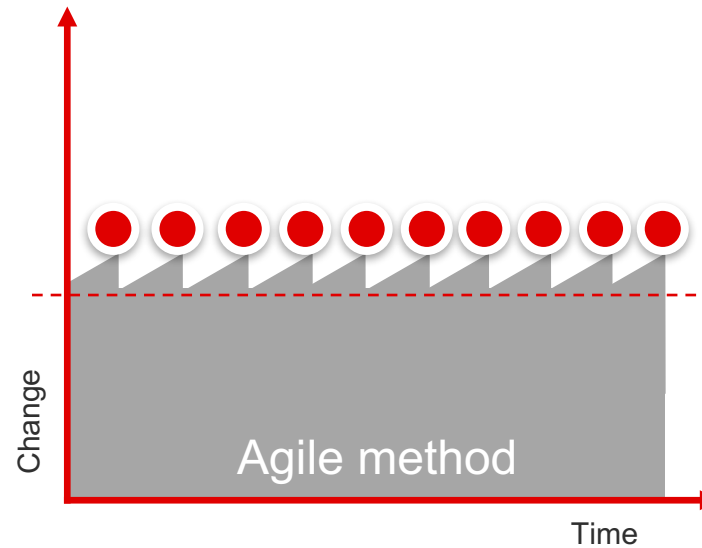
## Advantages

- Operations cooperates closely with Development
- Operations understands the application details, more stable operation, improved performance
- **Developers roll out the new versions themselves**

# Deployment 2.0



- Low release frequency
- High outlay per release
- Few releases, high risk



- ✓ High release frequency
- ✓ Less outlay per release
- ✓ Large number of releases, lower risk

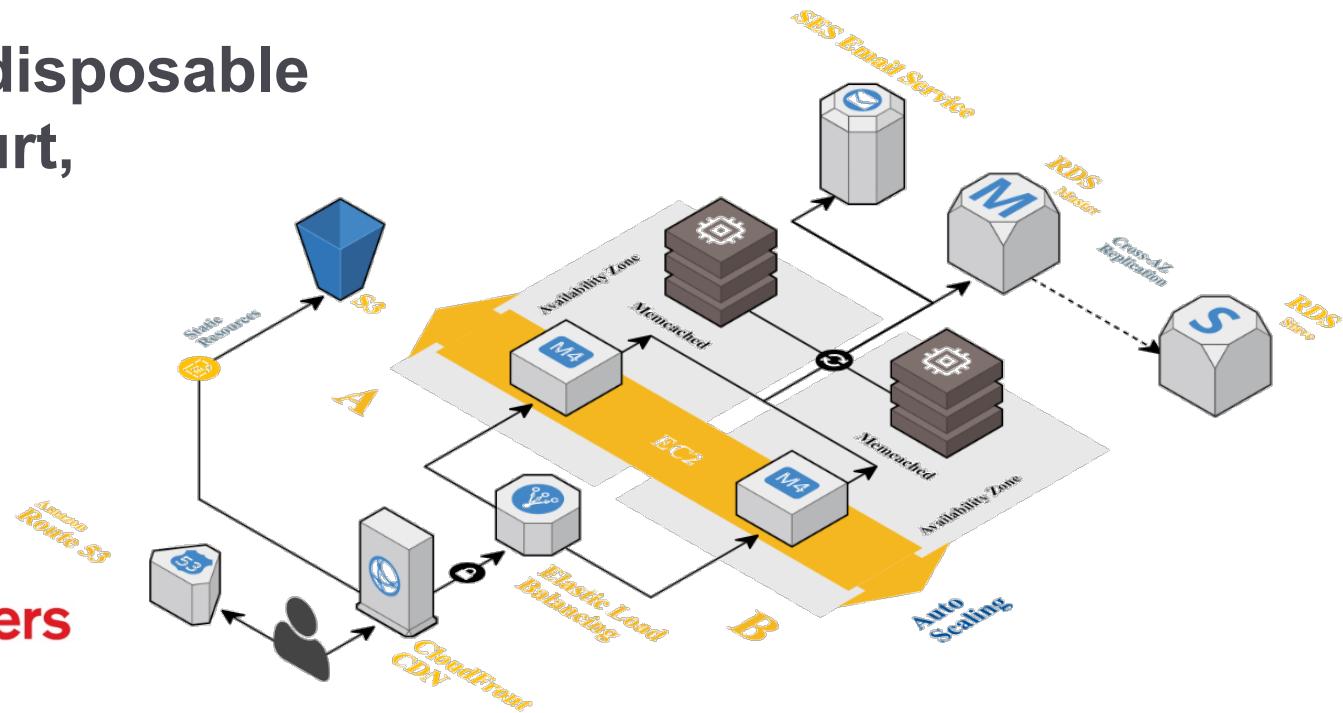
# Solution Approach 2.0

## ➔ Agile deployment with AWS Elastic Beanstalk

- Faster deployment cycle (CI/CD)
- Less operating outlay (lower costs)
- Blue / Green deployments

## ➔ Autoscaling web servers, disposable Dual data centre in Frankfurt, active/active

- Some services still in Ireland
  - Elastic Load Balancing**
  - CloudFront as CDN**
  - Route53 (DNS)**



# Claranet Managed Services for AWS

## The Best of both Worlds



Cloud  
Assessment



Continuous  
Innovation



Continuous  
Compliance



Bespoke  
SLA



24/7  
Support



Service  
Management



Pay  
per Use



Cost  
Reduction



Auto-scaling in  
Minutes



Agility & speed of  
innovation



No more  
Provisioning



Deploy  
worldwide

# Questions & answers

