

# Critical view on cloud computing

Nils Döring   Michael Mardaus   Julian F. Rost  
Sebastian Müller

December 12, 2013

## Gain

Cloud-Owners

Cloud-Users

Governments

## Challenges

Performance

Accessibility

Strategic

Modifiability

Customer-  
Relationship

# Structure

What you are up to

## 1 Gain

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## 2 Challenges

Performance

Accessibility

Strategic

Modifiability

Customer-Relationship

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# Gains for different groups

## Winner and Prices

Who is gaining and how?

# Gains for different groups

## Cloud-Owners

- Higher utilisation of the existing computing power
- Lower average costs for bigger systems
- Additional income for companies from other sectors

# Gains for different groups

Cloud-Users

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**Cloud-Users**

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- easier access to computing resources
- "scalable" resources

# Gains for different groups

## Governments

- means for censorship and prosecution (Youtube and Pakistan, USA-Patriot-Act, "Great Firewall of China", BKA-"Stop-Signs")

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# Challenges of using clouds

## Obstacles and hurdles

What are we up to, if we consider to use a cloud-service?

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# Performance challenges

- varying performance in especially smaller and medium sized clouds load-changes have higher impact
- latency might cause trouble with timeouts



# Accessibility/dependence challenges

- as data and service is outsourced, connection has to be high-available
- need for outage prevention and mitigation

# Strategic challenges

- low-cost solution vs. better or more secure solutions (aka. Finance Dept. vs. IT Dept.)
- outsourcing of know-how
- lock-in might be more expensive in the long run (raising prices)
- need for strict auditing
- more complex communication between cloud-provider and cloud-users

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# Modifiability challenges

- given standardised protocols and software-versions
- monopolisation of standards
- scalability is limited by the architecture of the cloud
- long-term SLAs might slow down developement

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# Customer-Relationship challenges

- is the company allowed to store customers data in the cloud?
- are customers expecting the data to be stored inhouse?