



HOCHSCHULE RUHR WEST
UNIVERSITY OF APPLIED SCIENCES

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About the Necessity to Change the Perspective for Mobile Web Services

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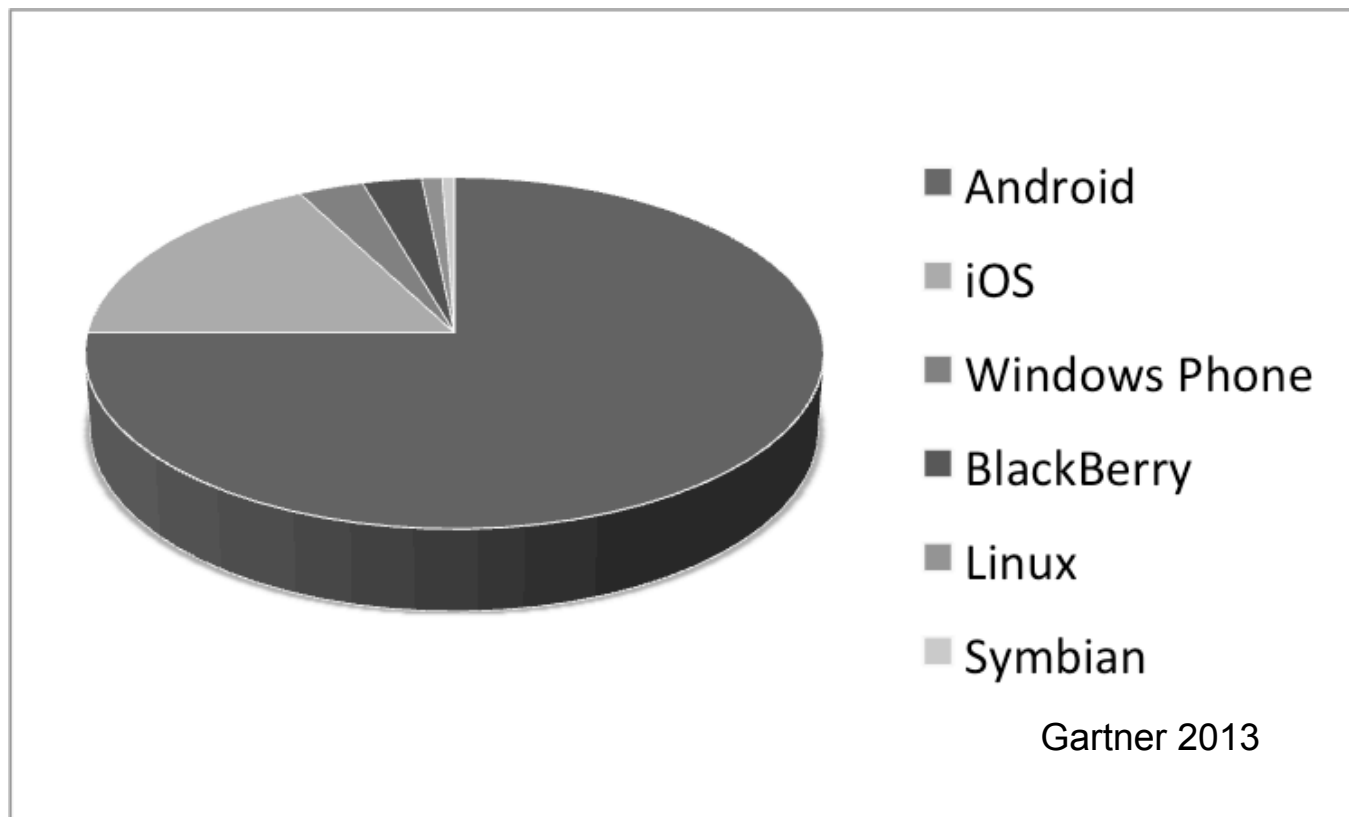
Computer Science Institute

Agenda

- **Problem Description**
- **Mobile Web Service provisioning**
- **Different perspective on mobile Web Services**
- **Resulting Architectures**
- **Future Work**

Problem Description

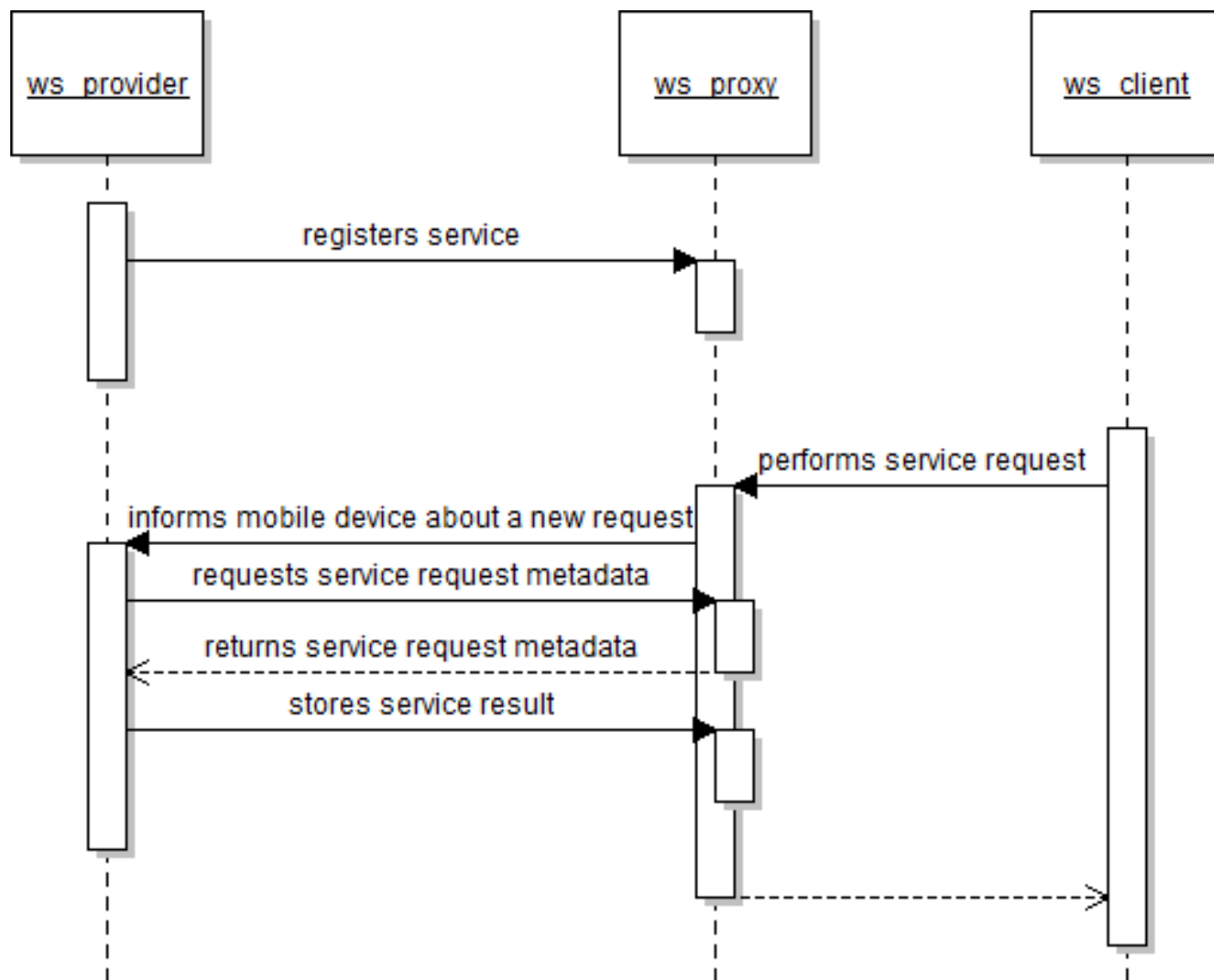
- **The number of reasonably powerful mobile devices is steadily increasing**
- **Strong heterogeneity among mobile devices:**
 - Operating system
 - Display size
 - ...



Mobile Web Service provisioning

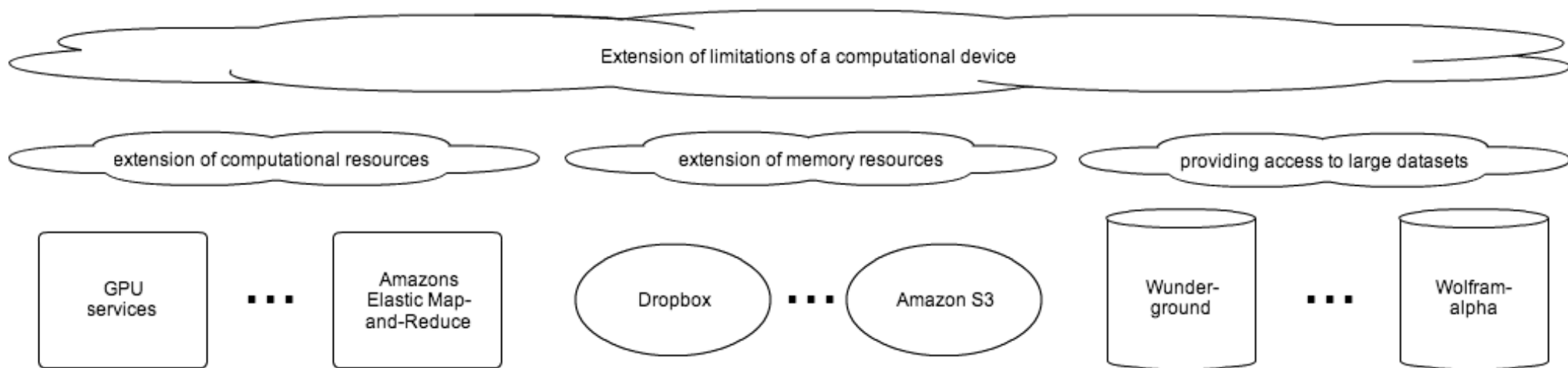
- **Mobile devices established as Web Service clients**
- **Provisioning of Web Service problematic for mobile devices:**
 - Usually IP addresses of mobile devices are not public
 - Frequently changing IP addresses
 - Devices might temporarily not be connected to the internet and/or switched off at all.
- **Idea: implementation of a proxy that automatically generates a Web Service facade for a Web Service running on a mobile device**

Mobile Web Service provisioning



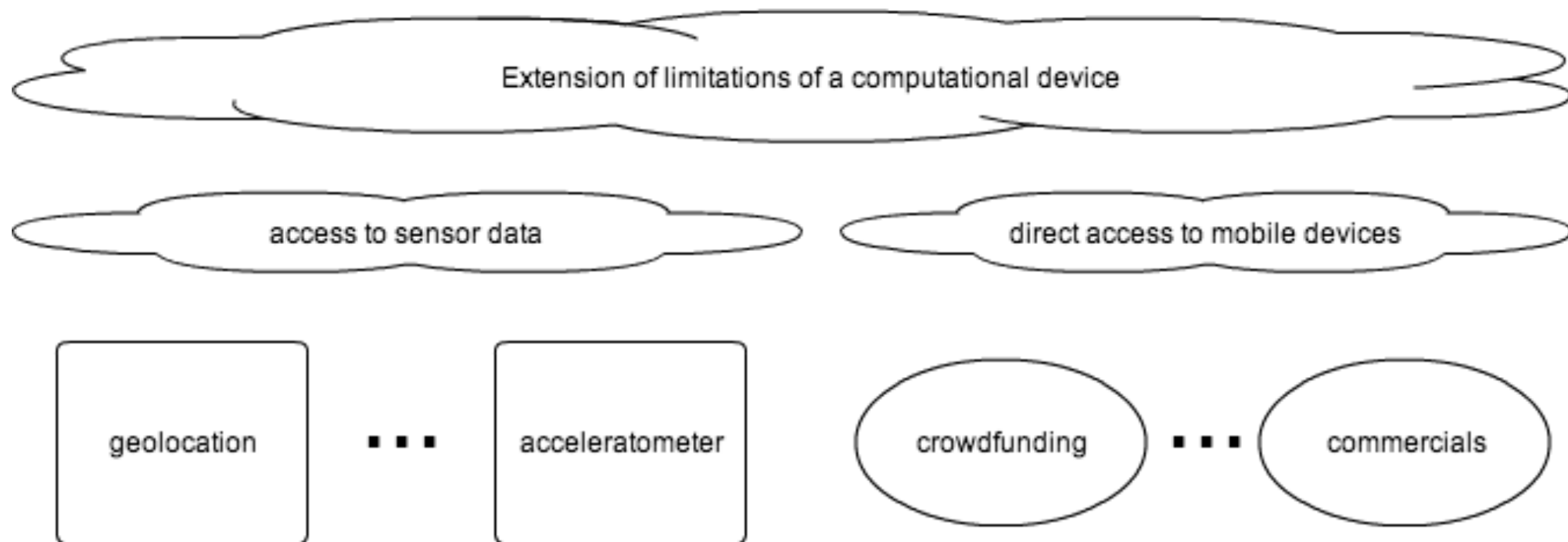
Different perspective of mobile Web Services

- **Usually Web Services are developed to:**
 - extend the computational power, and/or
 - extend the memory, and/or
 - provide access to large datasets
 - ... in general: to extend limitations of a lokal machine/device.

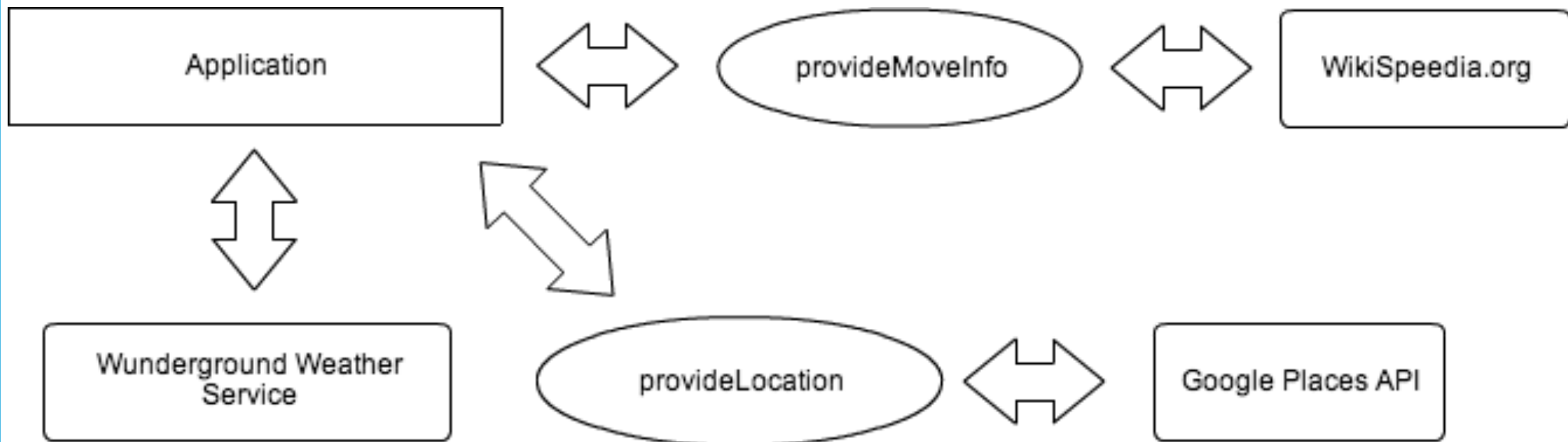


Different perspective of mobile Web Services

- **Web Service running on mobile devices are obviously not well suited for extend limitations of other devices, but can provide access to contextualized data of the current user.**



Resulting Architectures



Future Work

- **Development of more detailed example scenarios**
 - Online voting/marketing systems
 - Mobile Learning Scenarios
 - Contextualization of the user

Thanks a lot...

... for your attention!

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