

Fakultät für Betriebswirtschaft  
Munich School of Management

## **Superdistribution revisited – empirical evidence from a music file-sharing network**

ODRL - Virtual Goods Conference

**wim**

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Koblenz, 13. Oktober 2007



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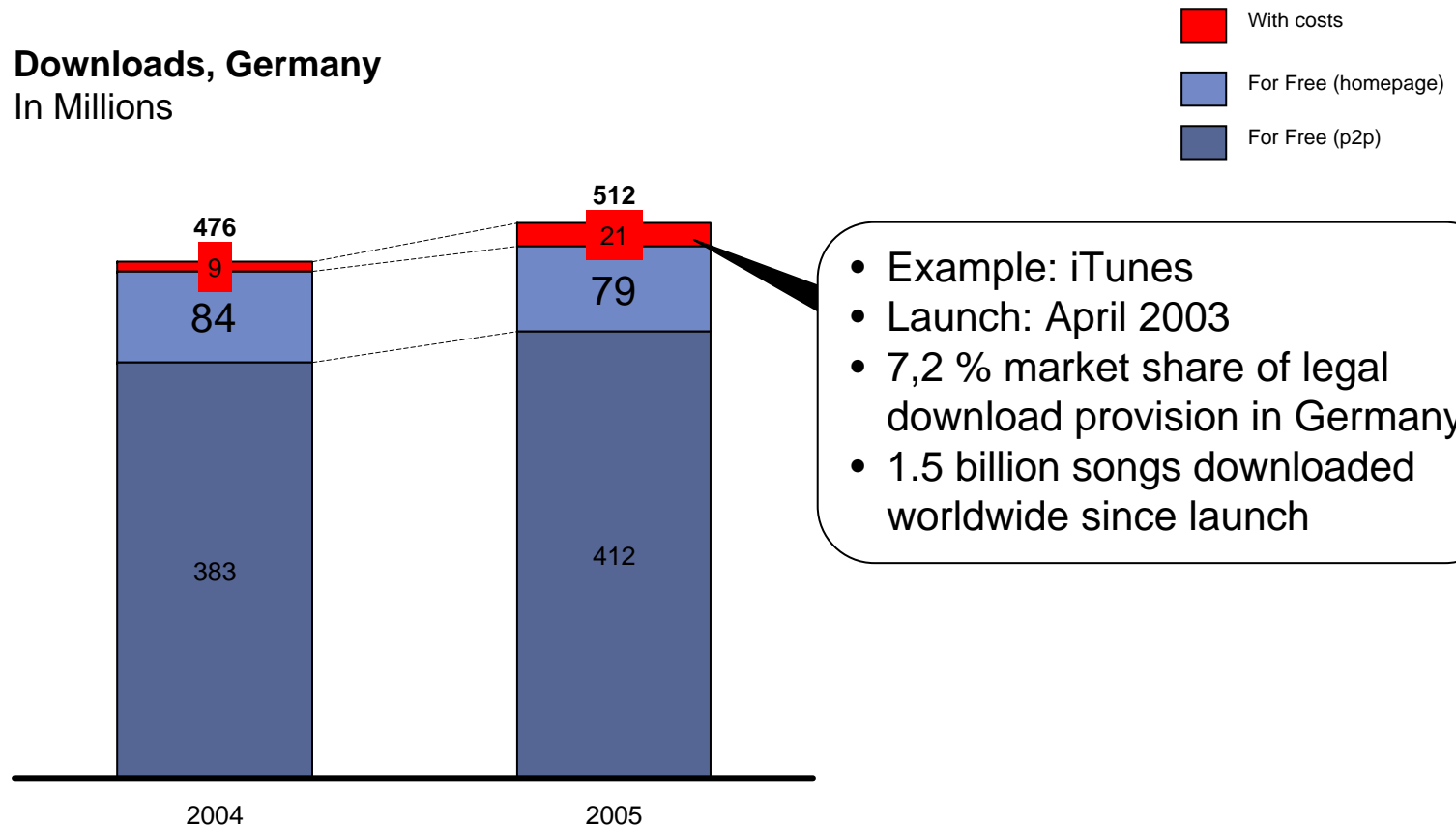
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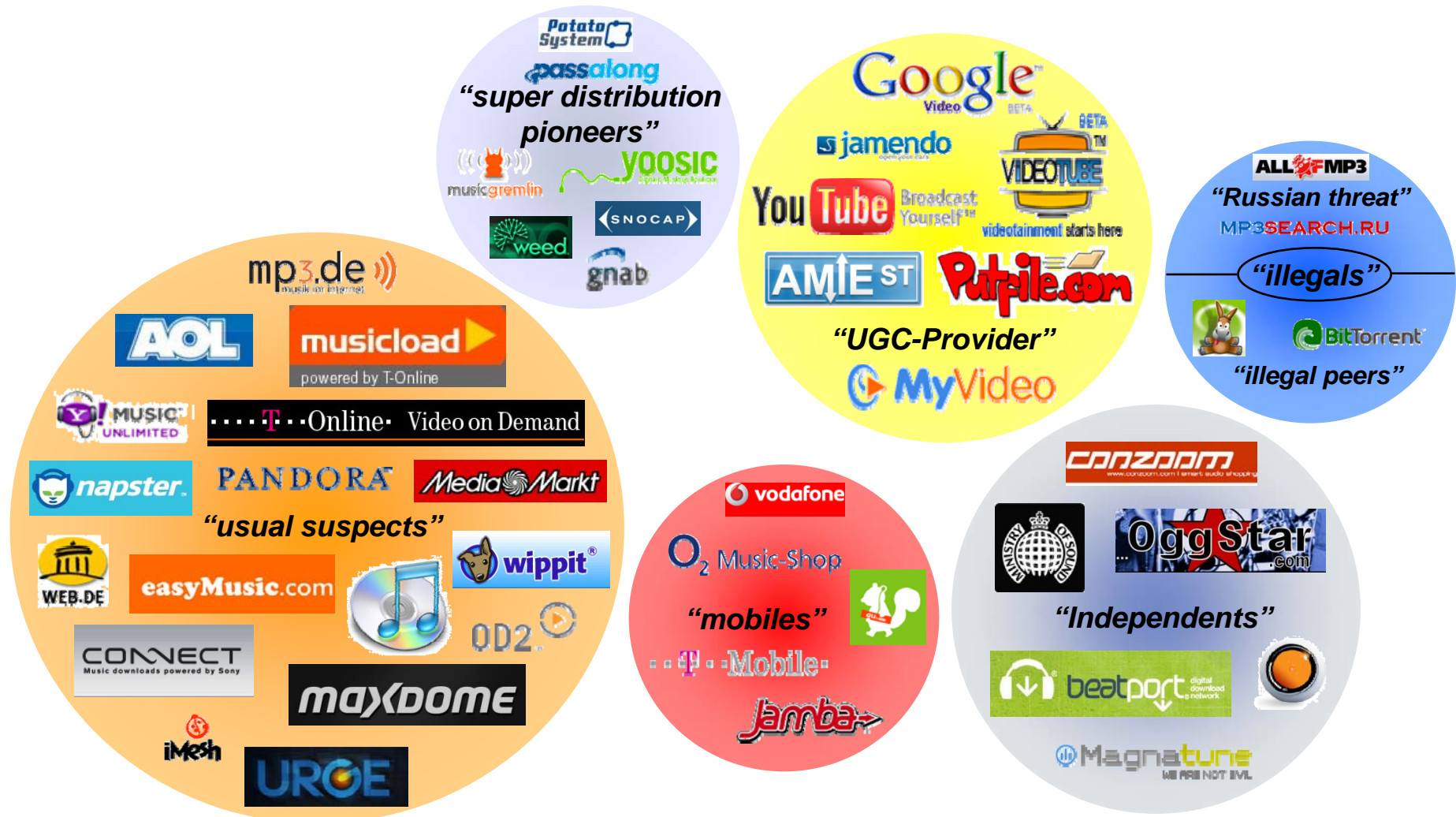
## Motivation: Market for legal downloads

### Development of legal Downloads

**Downloads, Germany**  
In Millions



## Market overview of media distribution platforms



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## Research Interest and Research Questions

### Research Interest

- Identification of requirements for the development of a service
- that allows the controlled exchange of content between peers based on the idea of Superdistribution.
  - that is available for fixed and mobile line and for professional as well as user generated content.

### Research Questions

- the positive attitude to forwarding via Superdistribution and
- the positive impact of revenue splitting as an incentive among close groups of friends

**Test**

Domain Sharing

Superdistribution

Superdistribution  
& enforced  
monetary incentives

Hypothesis: Superdistribution is the preferred technology, especially when combined with economic benefits

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## Setup of academic research project

Our Focus

### Center for Internet Research & Media Integration (CIM)

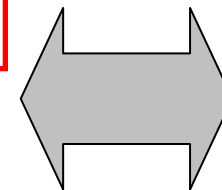
**Mission** transformation of the communication industry  
by digital media, especially by the Internet

**Management  
Science** analyses the advantages of new technologies  
and develops qualified business models

**Computer  
Science** deals with technological basics and the  
feasibility of new information and  
communication technologies

**Communication  
Science** addresses the social consequences of  
technological innovation and the user contact  
with these new technologies

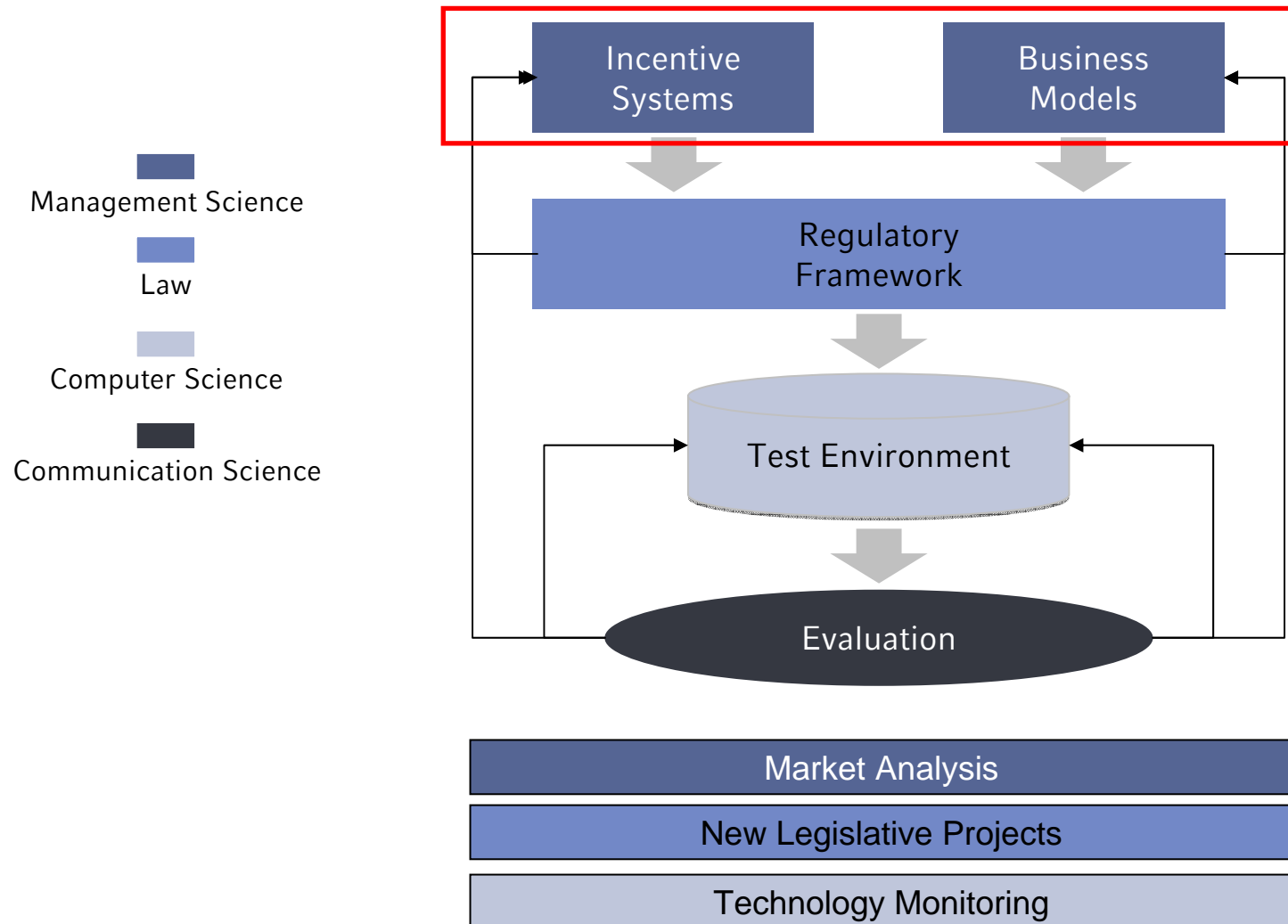
**Law** draws up current copyright, property right  
and liability laws as well as amendments



■ ■ ■ **T** Deutsche Telekom  
Laboratories

## Organization of Research project – Mode of Operation

  Our Focus



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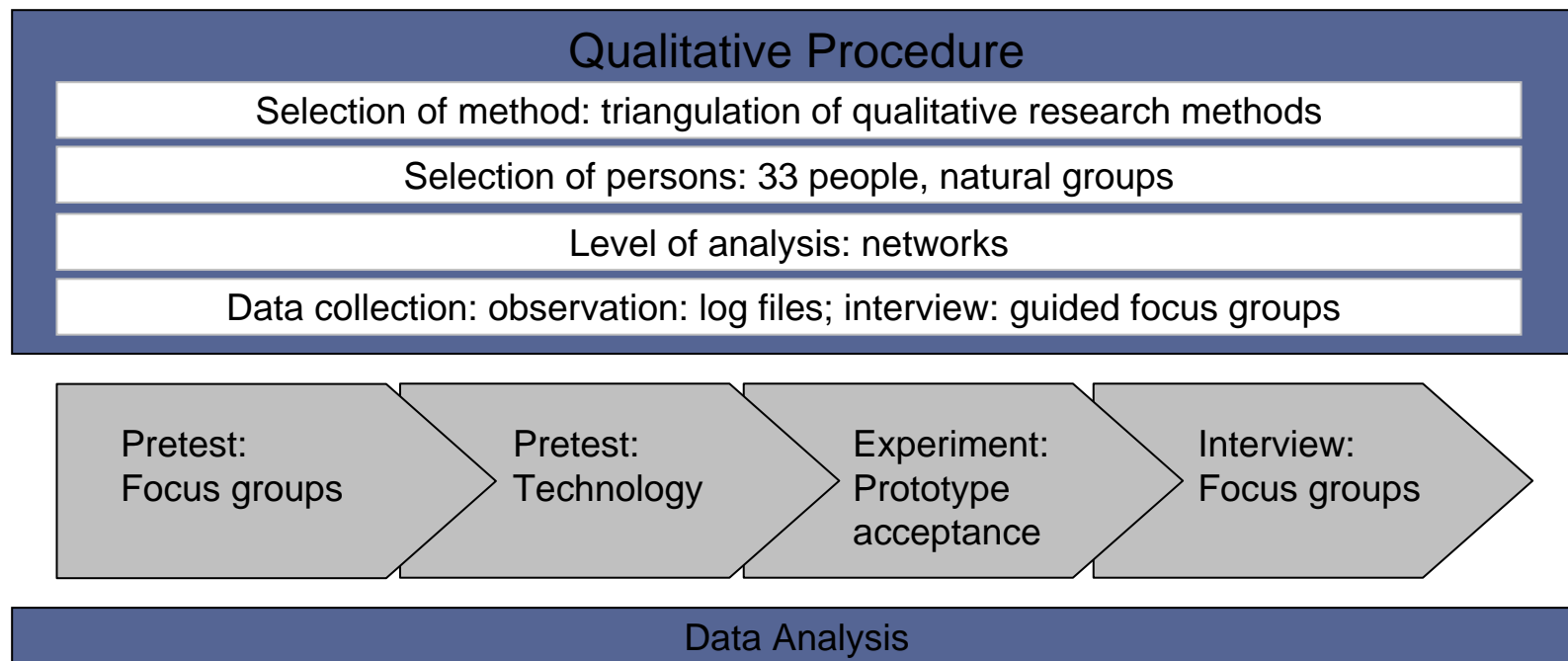
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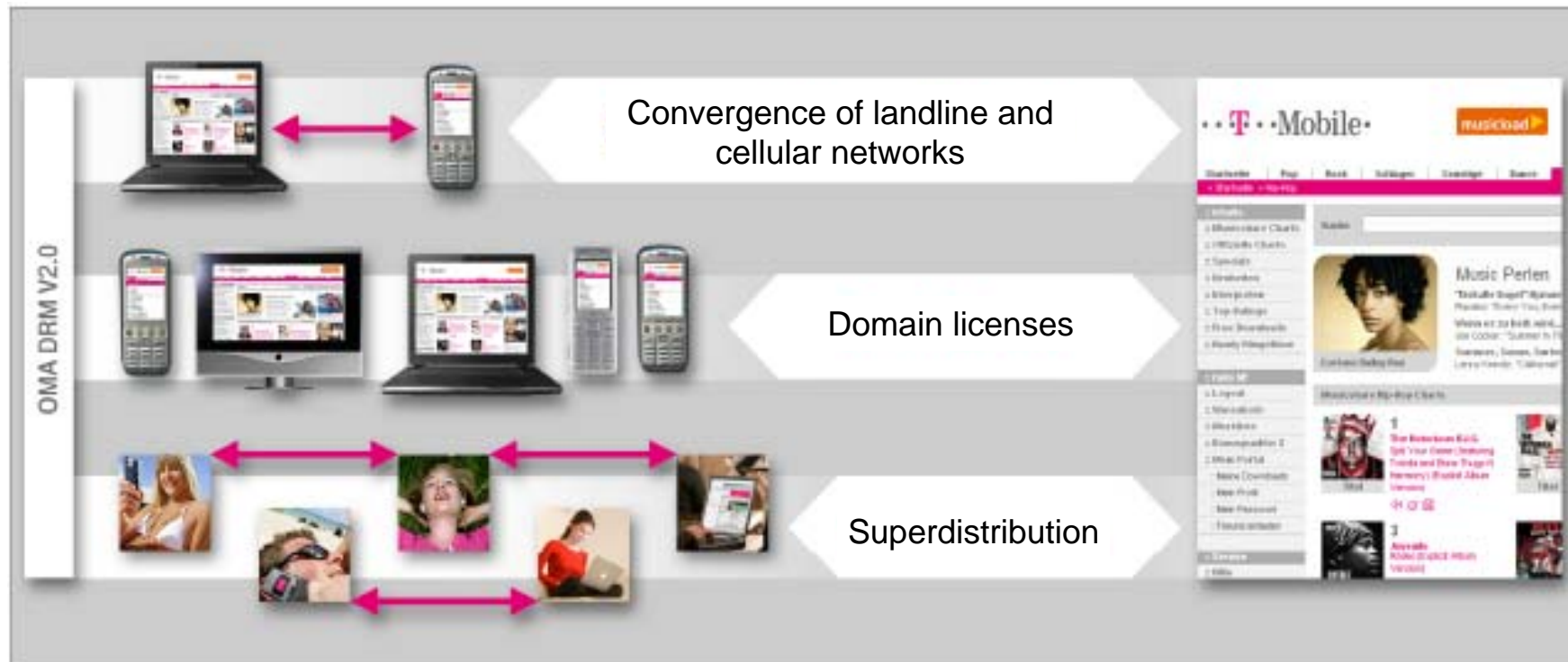
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## Research Design

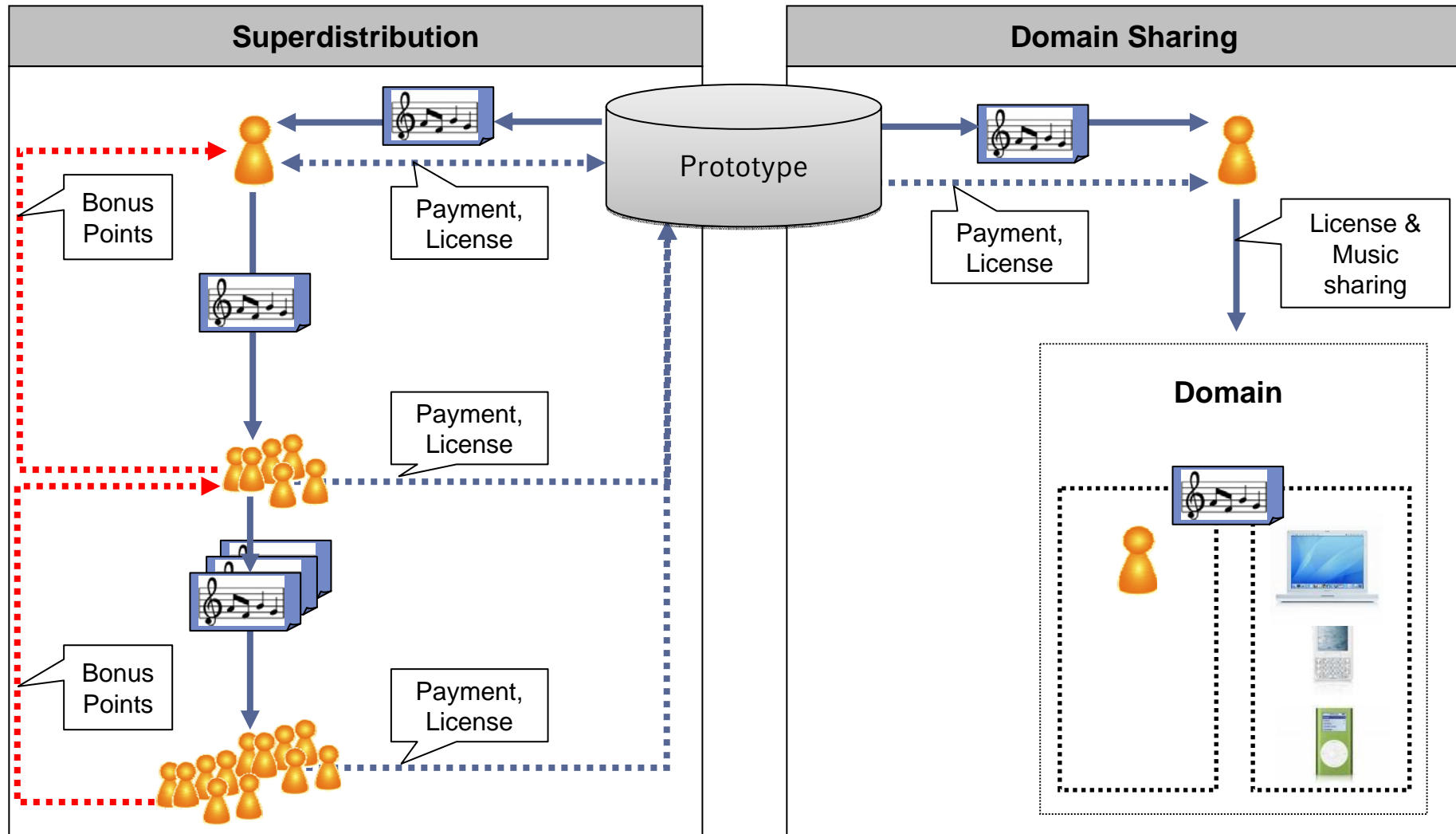


For the experiment every participant was equipped with a laptop and a cell phone with SIM card running the prototype software.

## Prototype incorporates three basic technical concepts using OMA DRM V.2



## Concepts of Superdistribution and Domain Sharing



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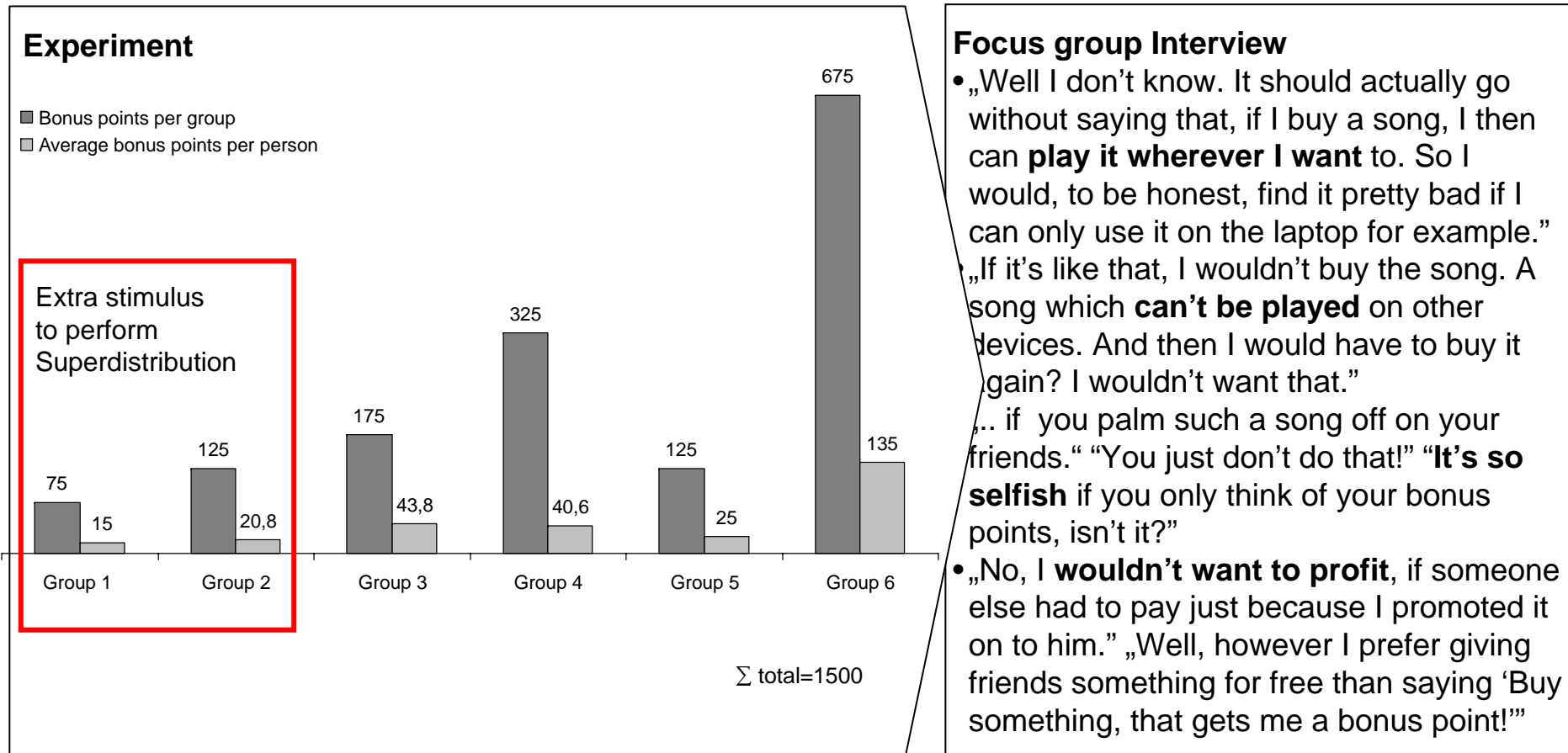
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## Results of experiment and focus group interviews



- Domain Sharing is favored over Superdistribution
- Monetary incentives do not work as an incentive among private social networks



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## Related Research

### Technical Superdistribution

- **Superdistribution (Mori / Kawahara)**  
allows for decentral exchange of content combined with a usage based charge mechanism and a defence mechanism against interference
- **Potato System (Nützel / Grimm)**  
Controlled distribution of music through a link system including a remuneration system with fixed commissions for users who actively redistribute music

### „Economic“ Superdistribution

- **Economic peer-to-peer concept (Gehrke/ Anding)**  
Research of revenue sharing business models in peer-to-peer file sharing systems → supersedes illegal file-sharing systems
- **Revenue splitting (Quiring / v. Walter / Atterer)**  
Investigation of the effects of splitting ratios on download behaviour when splitting revenues among the members of a supply chain

### Monetary Incentives

- **Cognitive Dissonance (Festinger)**  
Notion of friendship conflicts with monetary incentives
- **Intrinsic motivation crowding out (Titmuss; Frey / Oberholzer-Gee)**  
Intrinsic motivation is depleted by extrinsic motivation, e.g. monetary incentives. Only significant amounts of money outweigh the loss of intrinsic motivation

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