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# HCU Research Group “DigitalCity”: Developing and evaluating tools for urban research

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## Agenda

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- HafenCity Hamburg
- HafenCity Hamburg University
- Research Group „DigitalCity“







HCU building



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Prof. Jochen Schiewe

## HCU building



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## HCU building



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## HCU profile

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- **Young university**                      founded in 2006
  
- **Specialized university**              Architecture  
Civil Engineering  
Geomatics  
Urban Planning
  
- **Interdisciplinary university**      in education and research

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## HCU profile

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- Education: Bachelor School | Master School | Research School
  
- Research: Interdisciplinary Groups
  - ◆ Metropolitan regions in change
  - ◆ Ressource efficiency in archtiecture and planning (REAP)
  - ◆ Building activities between design, society, engineering and economy
  - ◆ Real estate and City
  - ◆ City at the Water
  - ◆ **DigitalCity**

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## What is a „DigitalCity“?

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- no unique definition
- 1994: Amsterdam: “De Digitale Stad”
- 2008: Salzburg: “Digital City” (City, University, Autodesk)

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## Our view on „Digital City“ (1)

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- **Not** a replacement of real city life by virtual life
- **But** an improvement of selected processes in city life by integrating effective and efficient digital information and services

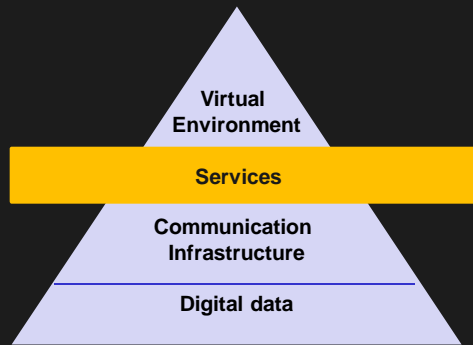
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## Our view on „Digital City“ (2)

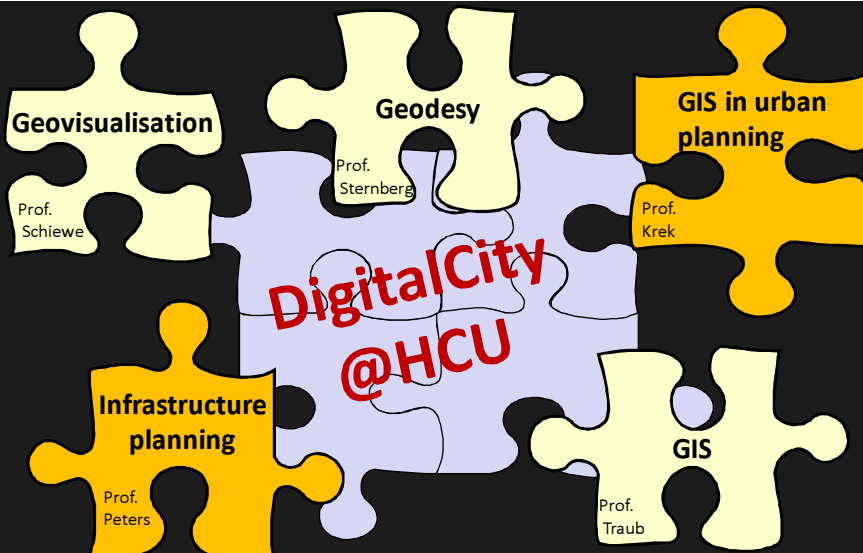


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## Our view on „Digital City“ (3)



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## DigitalCity @ HCU: Topics

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- Playful public participation
- Visualization of dynamic process in cities
- Routing in cities using PDAs or mobile phones
- Uncertainties in modelling and analyzing changes in cities
- Spatial analysis of technical infrastructure systems
- (...)



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## DigitalCity: Playful Public Participation

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- Key idea: generate pleasure and joy for the citizens involved in **public participatory processes**, in particular for the **interaction between citizens and planning experts**
- Some R&D questions:
  - ◆ How to design serious games?
  - ◆ How to create an environment which induces a pleasure of coming to the planning participatory web space?
  - ◆ What is the role of open source software?



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## DigitalCity: Visualization of dynamic processes

- Key idea: most special property of cities against other regions: dynamic characteristic
  - on long, medium, short time scales
- Some R&D topics
  - ♦ developing a comprehensive and **systematic, descriptive scheme of dynamic processes in cities** and the related spatio-temporal questions related to them
  - ♦ **developing alternative concepts** based on approaches know from other disciplines
  - ♦ implementing selected concepts and evaluating the resulting **usability** with respect to efficiency, effectiveness and user satisfaction



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## DigitalCity: Our goals

- to perform smaller prototype projects
- to apply for research projects that shall keep the research group alive after the period of internal funding
- to transfer knowledge into education, mainly on Master course level
- to initialize **national and international co-operation**

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Meeting in a  
tent!

Hamburg 2009  
**GeoViz**

Contribution of Geovisualization to the concept of the Digital City

March 3-5, 2009

[www.geovisualisierung.net/geoviz\\_hamburg](http://www.geovisualisierung.net/geoviz_hamburg)

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