



## M2M business opportunities beyond connectivity. Example T-City Friedrichshafen.

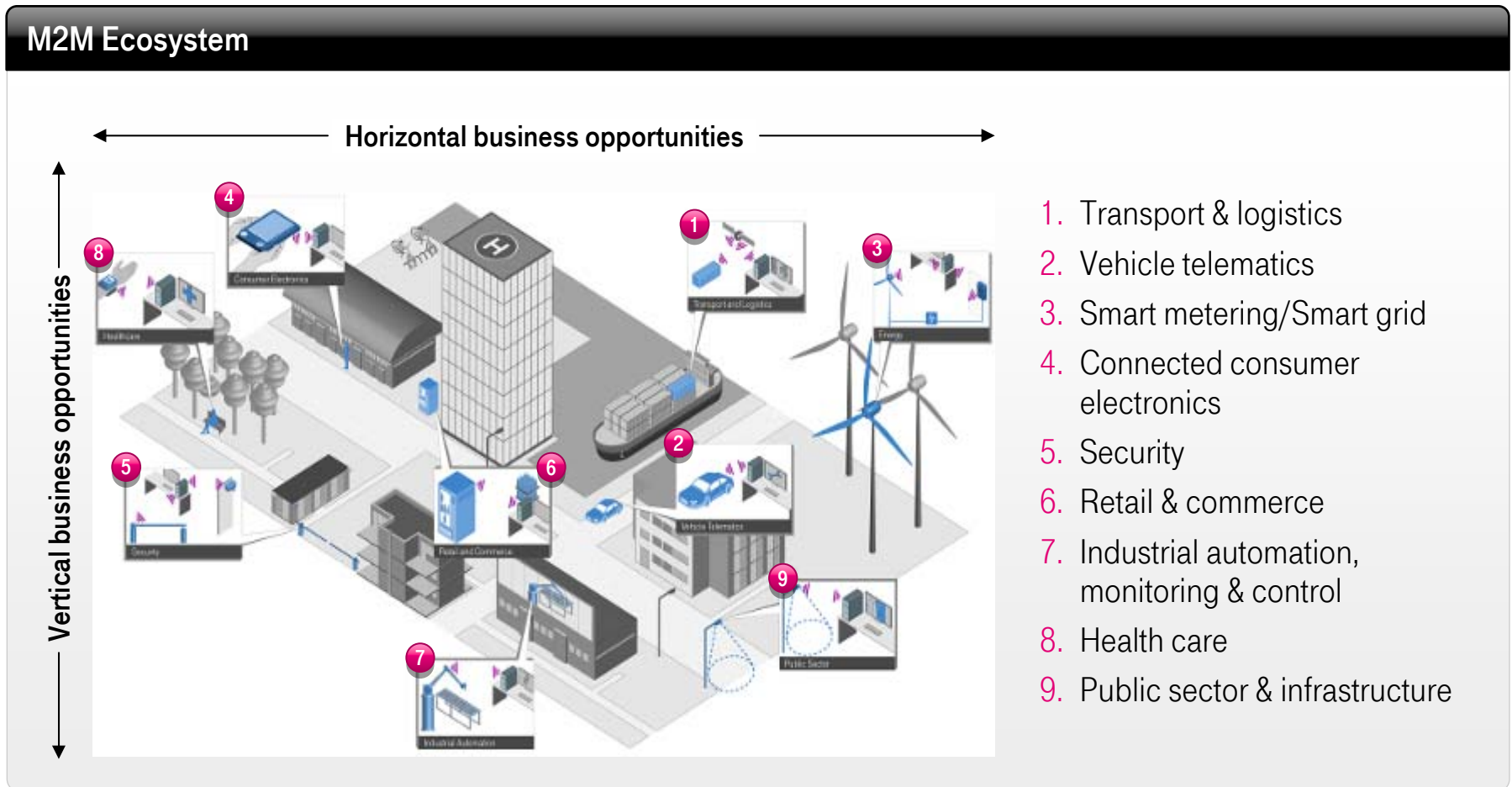
Jürgen Hase ,Vice President M2M Competence Center, Deutsche Telekom AG  
Connected Living Summit, Gothenburg, October 23rd, 2012

Life is for sharing.



# M2M market view.

Deutsche Telekom serves a broad variety of market segments, which provide horizontal as well as vertical business opportunities.



# T-City was started in 2007 as a DT Group-wide project.

## Internal objectives.

- A lighthouse project categorized as high priority by the Group Board of Management of Deutsche Telekom
- As many innovation projects stemming from the entire Group as possible implemented at one location for the first time
- Demonstrate synergies created based on a state-of-the-art ICT infrastructure

## External objectives.

- Demonstrate the social added value provided by innovative information and communication technologies (ICT)
- Present the opportunities and potential provided by improved
  - Communication options
  - Technical simplifications
  - Time and money savings
  - Resource preservation

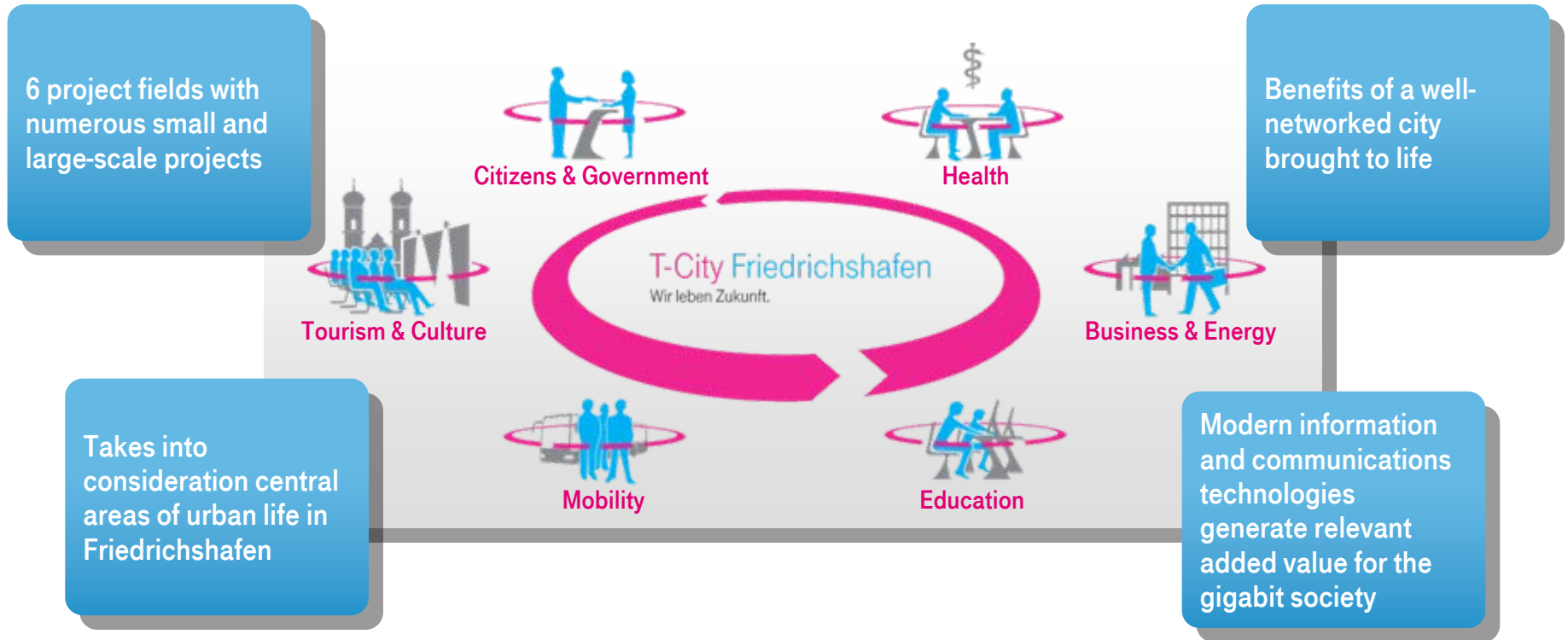


**“For us, T-City is a unique, innovative beacon project with special importance, as the Deutsche Telekom Group is cooperating with an entire town. We created T-City to demonstrate what we understand under the collective achievement of an innovation-friendly, integrated telecommunications Group.”**

René Obermann, February 2007



# 6 original project fields.



During the first phase of T-City (2007 - 2012), more than 40 projects were implemented.



# Spotlight on energy projects. Transition to Smart Grids in Practice.

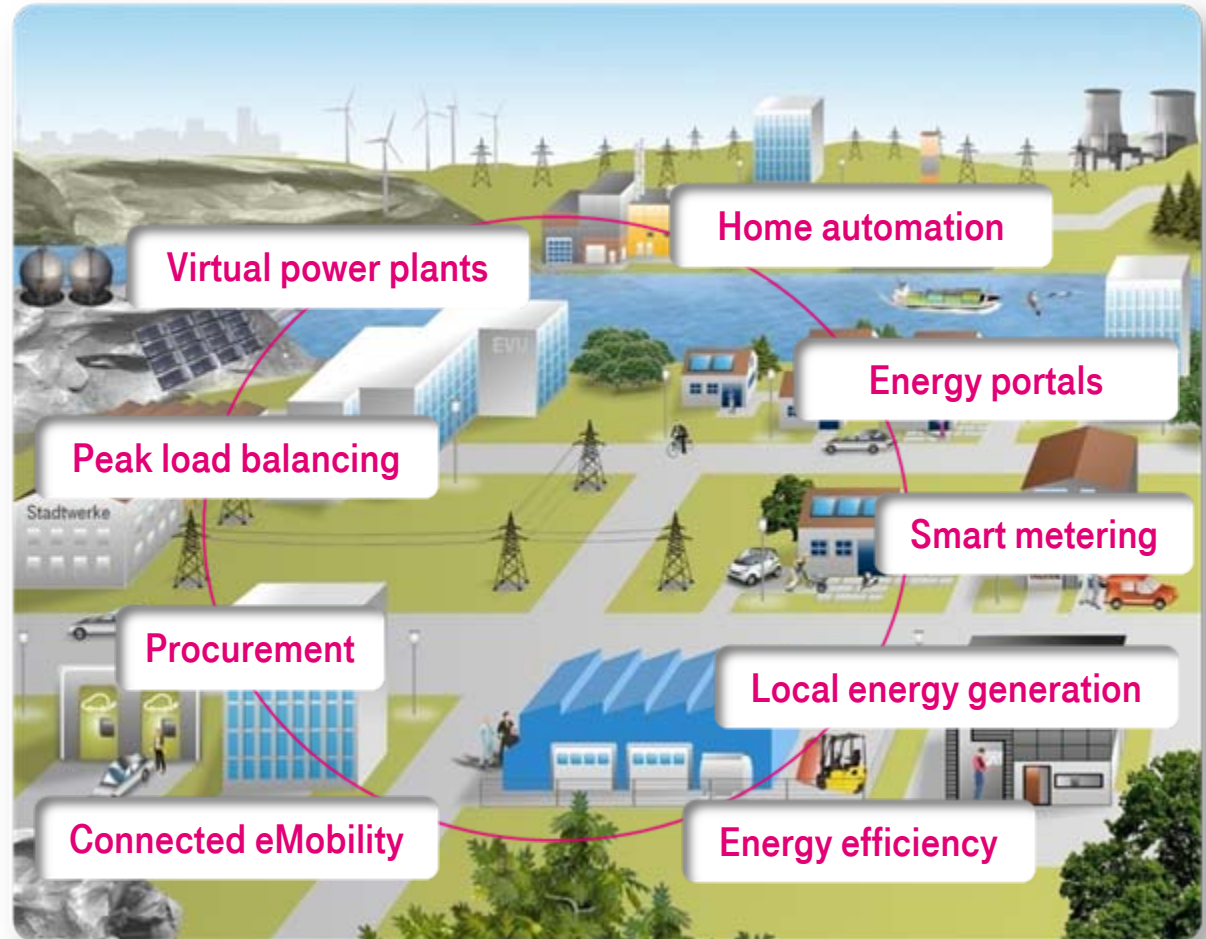
## Energy @ T-City.

### Objectives

- Test secure ICT infrastructure for new energy world
- Generate benefits for utility and end-users
- Enable energy efficiency: transparency and control
- Integrate prosumers to manage loads and optimize procurement

### Project examples:

- Smart metering as base
- Home networking
- Smart grid to the home (PV, mCHP, heat pumps)
- Virtual power plants
- Energy efficiency for SME and MNC
- Portals for different stakeholders
- Connected eMobility



# Smart City Key Success Factors have been mastered and lead to a continuation of our partnership.

## Key Success Factors.

- Cooperation with local stakeholders
- Open innovation with partners
- Zukünftler (futurist households)
- Communication
- High visibility
- Strong executive support within DT
- High-level stakeholders



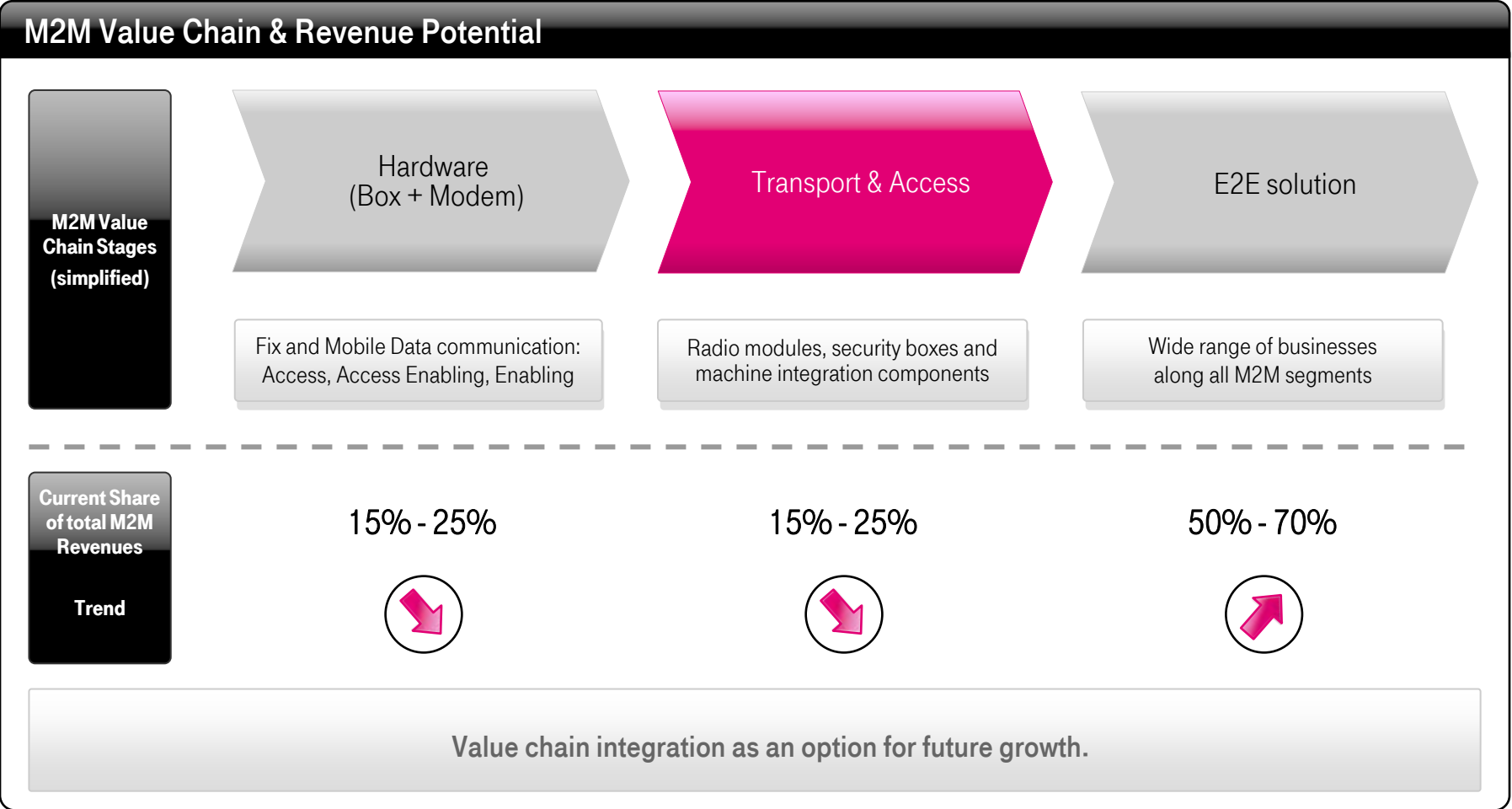
## Continuation until 2015.

- Next phase 2012 – 2015
- Continuation of successful partnership
- CEO T-Systems and mayor lead partnership
- Focus areas
  - Energy
  - Health
  - Mobility
- Numerous ongoing and new projects




# Distribution of M2M revenues along the value chain.

## Entire revenue potential is far more than just connectivity.




# Deutsche Telekom M2M strategy deep dive.


**M2M** – from connecting everybody to connecting everything –  
global SIM, open and scalable platform, global service alliance, global partner and developer network.



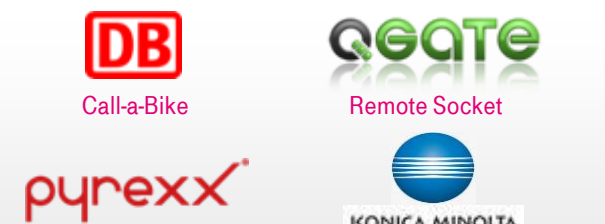
M2M Partner Portal



M2M Marketplace

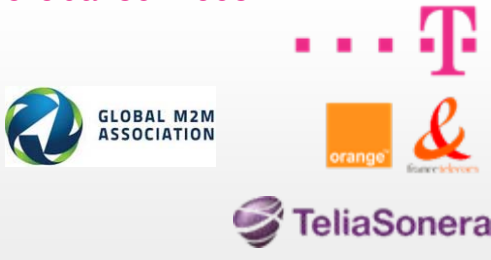


Innovations with 'ideabird'



Call-a-Bike  
Remote Socket  
Connected Fire Detector  
Remote machines management

### Global services



## M2M

- M2M Solutions
- M2M Services
- M2M Developer Platform
- M2M Access & Enabler Platform


### Global developer network

Everything you need to design kits enabled by Intel® architect  
[Details](#)


- Compute platform incl. Intel
- Module 2G/3G/WLAN/Zigbee
- SDK
- Technical documentation

789,00 €

[Request Toolkit](#)



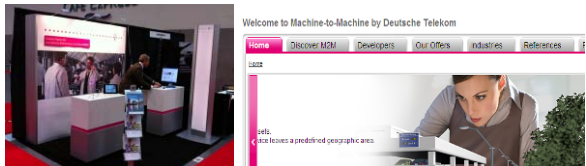
### Open and scalable platform, global SIM



Month:	Selection column 1:	Selection column 2:
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### International Marketing

Online Marketing  
Direct Marketing & Events  
Analysts Relations






Back Up.



# A large set of local and global partners provide the basis for open innovation and a successful partnership .

**Premium partners**

Alcatel-Lucent

SAMSUNG

**Political partner**

DSTGB  
Deutscher Städte- und Gemeindebund

**Scientific partners**

zepelin university

universität bonn

**T-City Project Partner**



# „Connected Mobility“.

A showcase for „triple play“ – the future of mobility.



## Communications

Real-time data exchange (e.g. to / from car) and smooth change of transportation modes



## Connected Mobility



## Transportation

Network public and private transportation – one tariff & one booking process



## Energy

Smart Grid for efficient charging, V2G, metering & payment



If you can think it, it's possible... with us!

**Jürgen Hase**

M2M Competence Center, Deutsche Telekom AG

Landgrabenweg 151, 53227 Bonn, Germany

[www.telekom.com/m2m](http://www.telekom.com/m2m)



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