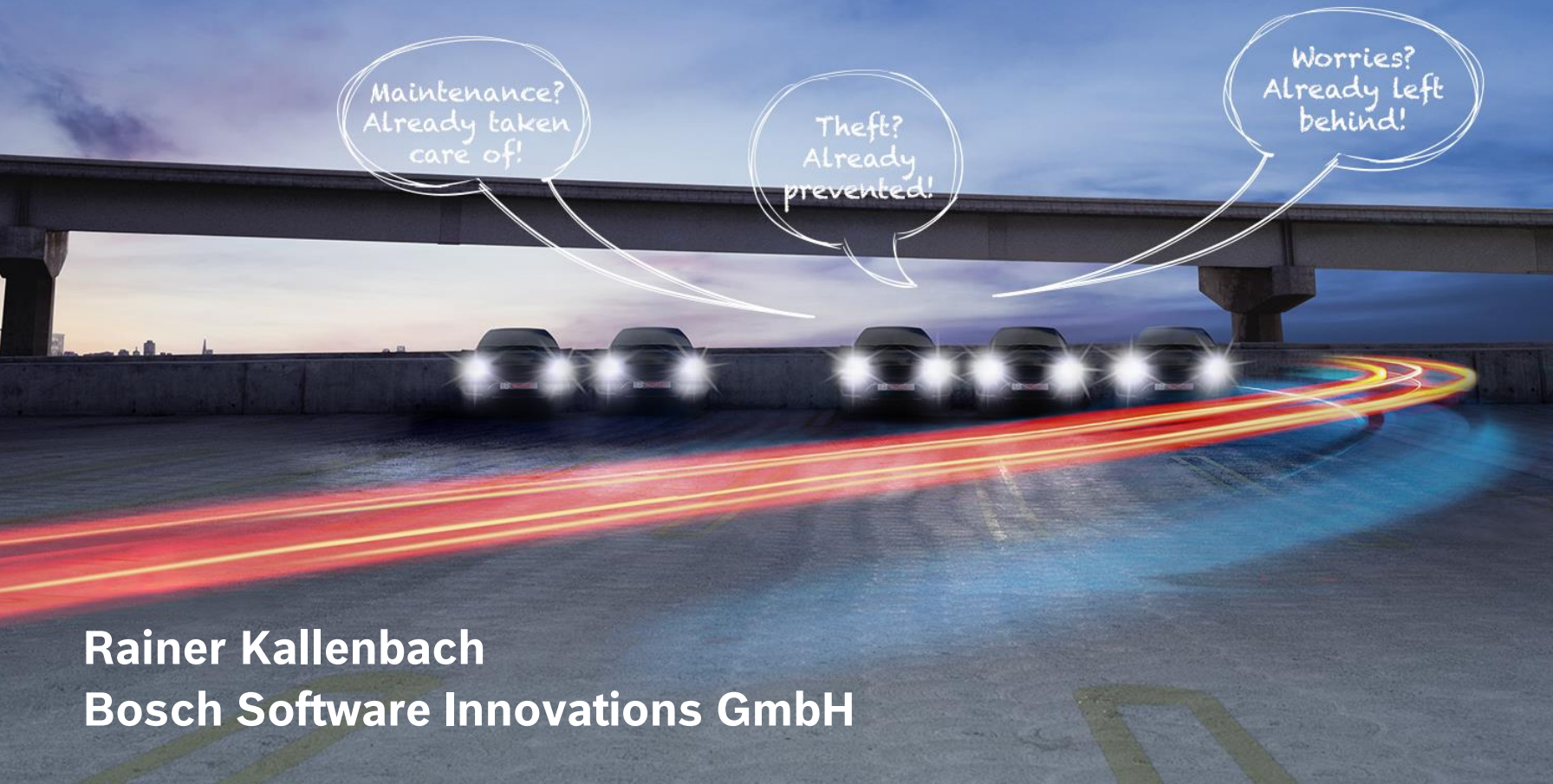


The Internet of Things – and Services



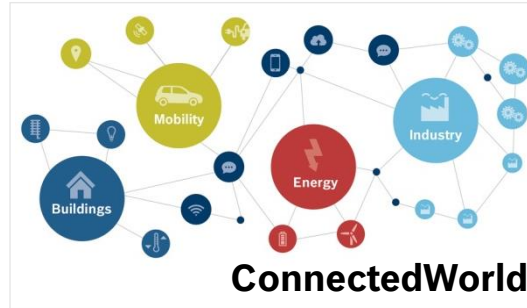
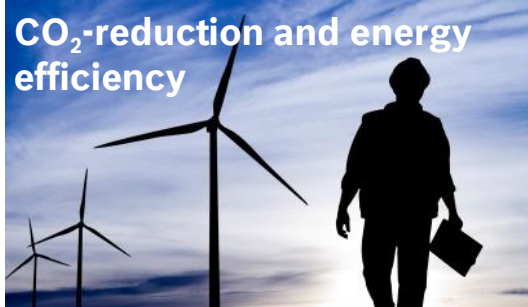
Rainer Kallenbach
Bosch Software Innovations GmbH



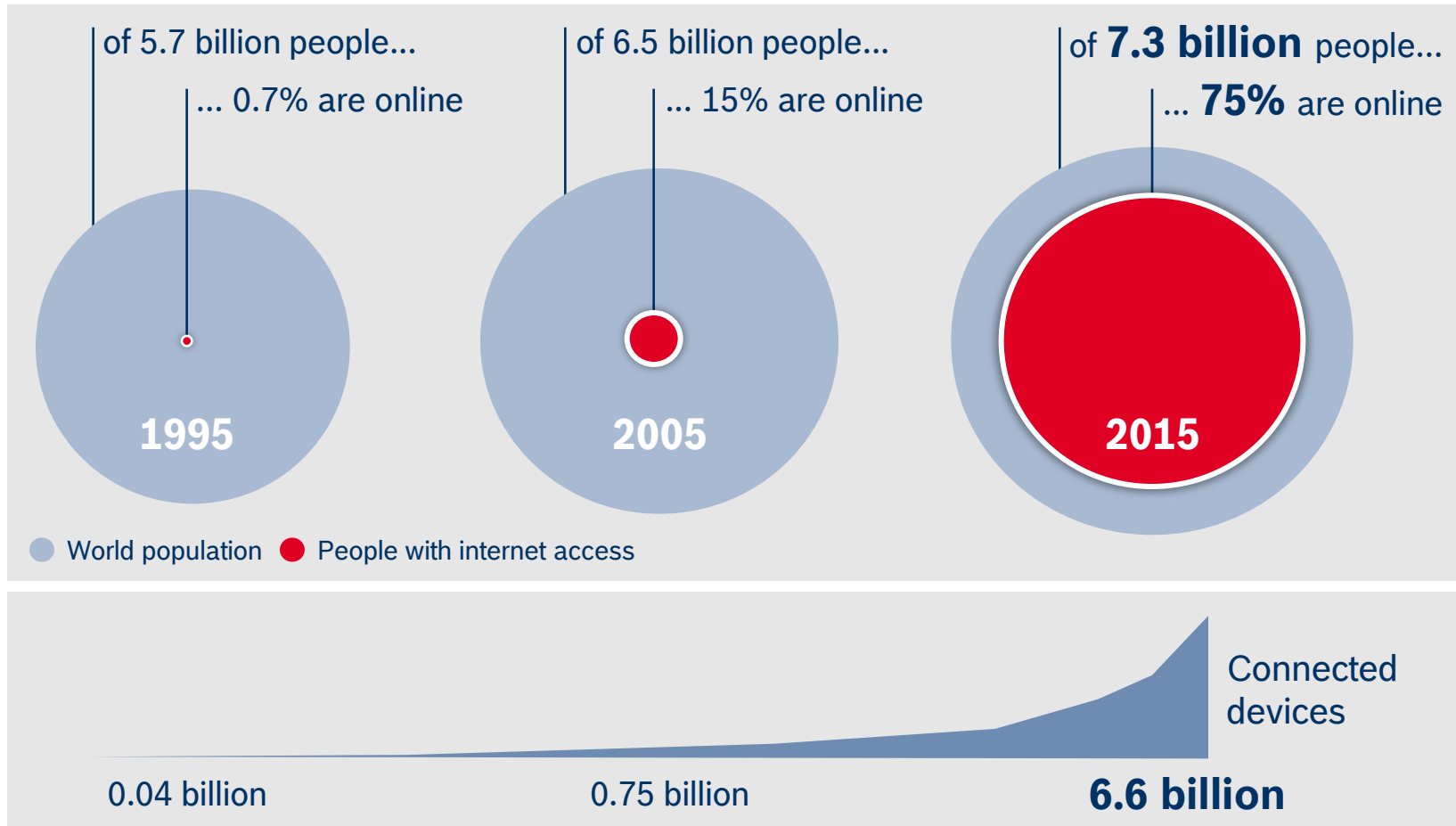
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The Internet of Things - and Services

We are living in a rapidly changing world...

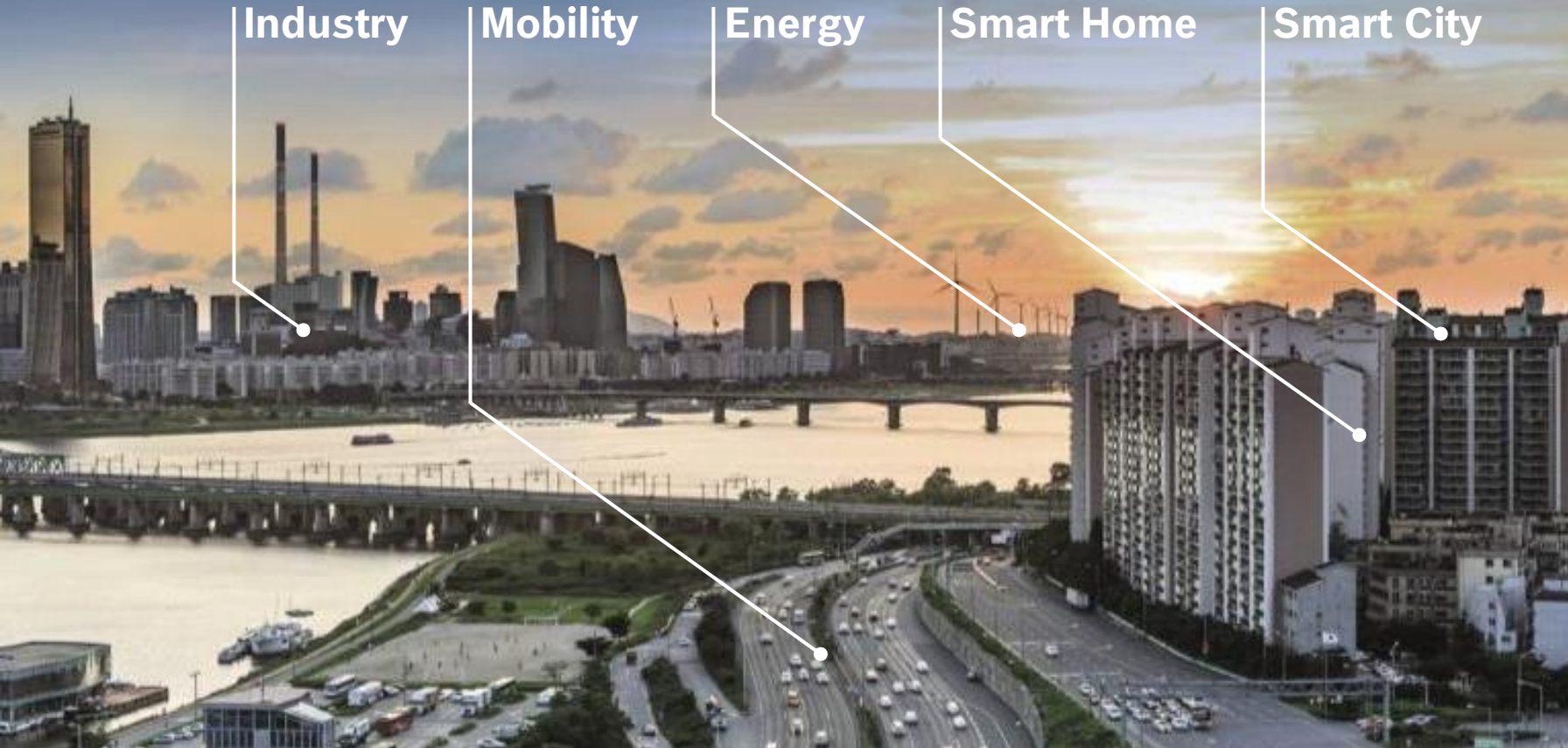


... a highly connected world



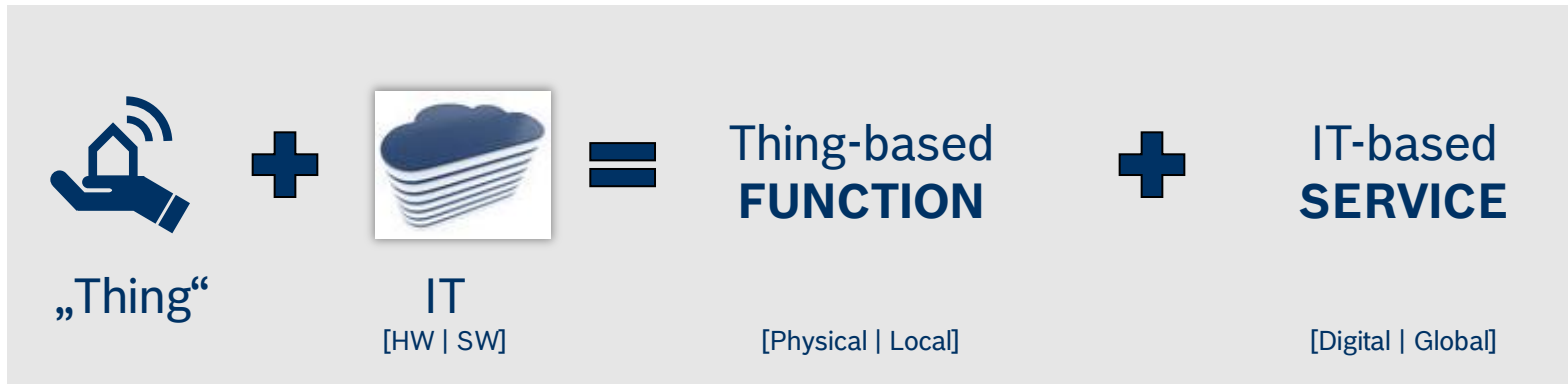
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Internet of Things Vision: Connected World



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Connected “smart” things allow new services



Source: University of St. Gallen, Prof. Dr. Elgar Fleisch

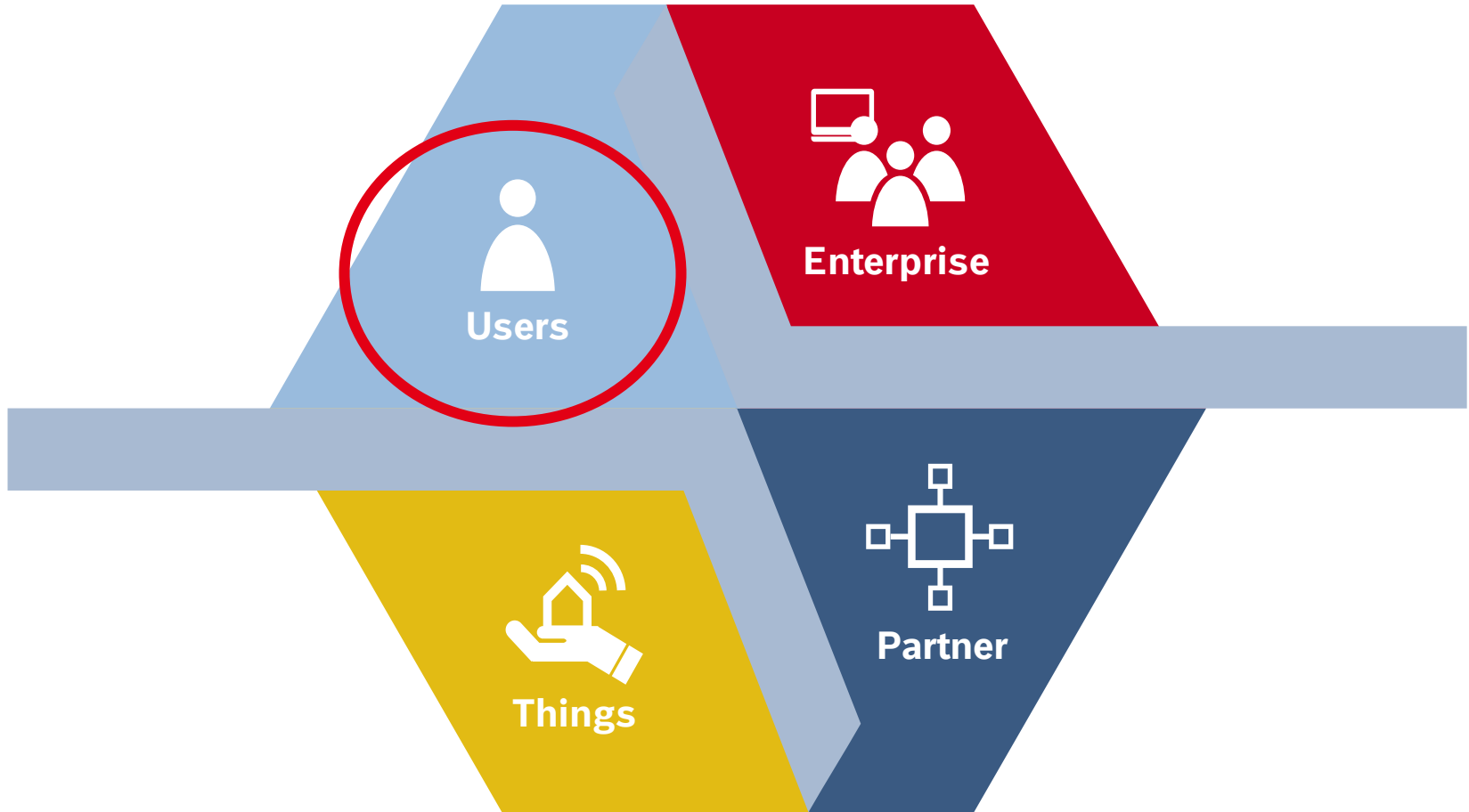


Example FUNCTION:
Charging EV with electricity.



Example SERVICE: Find charging station,
reserve and pay as you go.

Connected World Solutions cover 4 Areas



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Future Mobility: electric, automated, connected.



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The Internet of Things - and Services

Example: Electric Charging Services

Driver

Enterprise



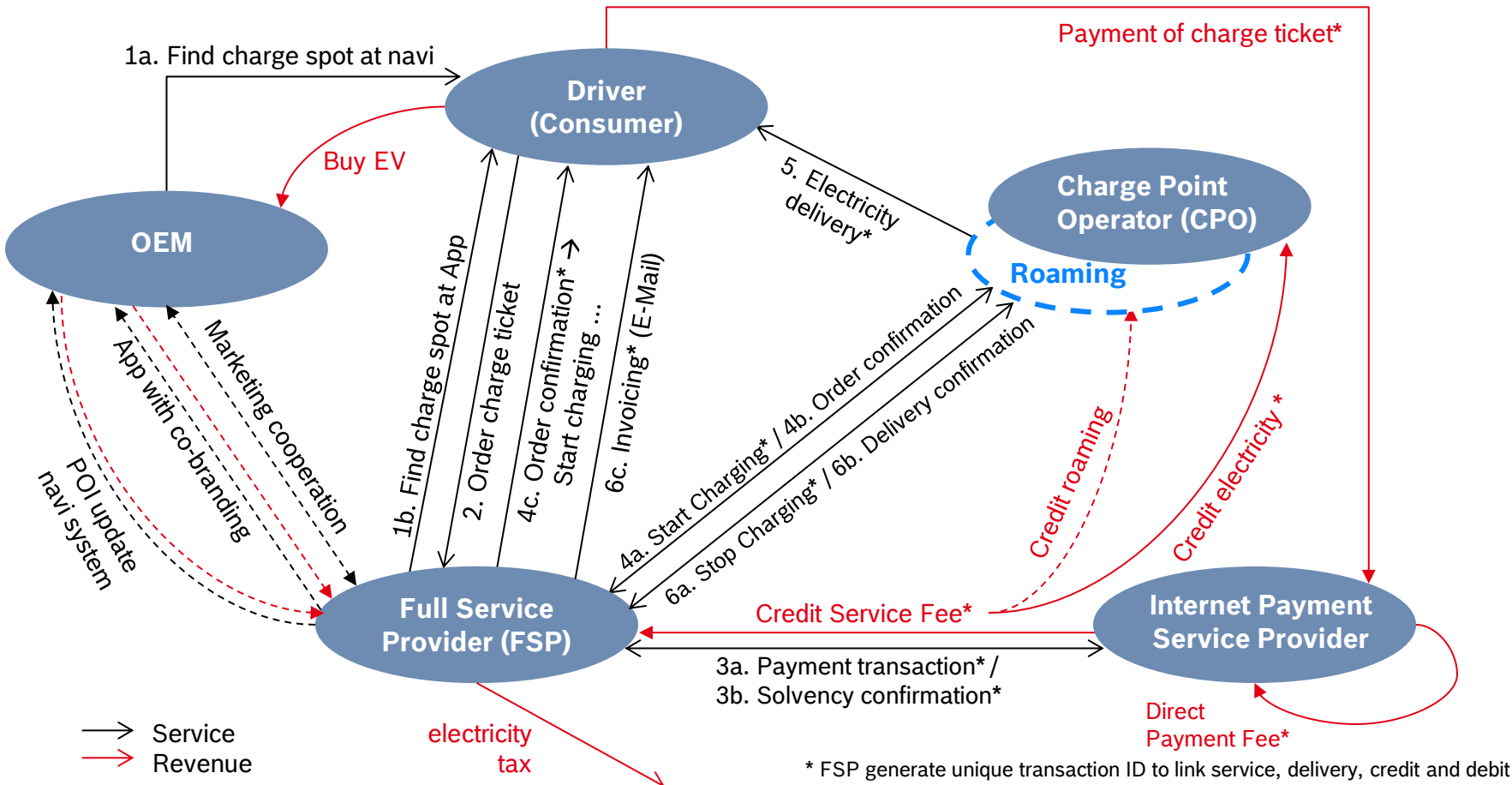
Car

Partner



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Example: Service “Public Charging – Easy to Use”



Example: Fleet Management

Driver

- Flexible tariffs („pay as you drive“)
- Accident documentation / faster settlements
- Economic driving

Car

- Minimize depreciation
- Theft/misuse prevention
- Unrestricted vehicle selection

Enterprise

- Leasing companies, rental, insurances, corporate fleets
- Flexible contracts
- Process efficiency
- Individual reports
- IT Integration

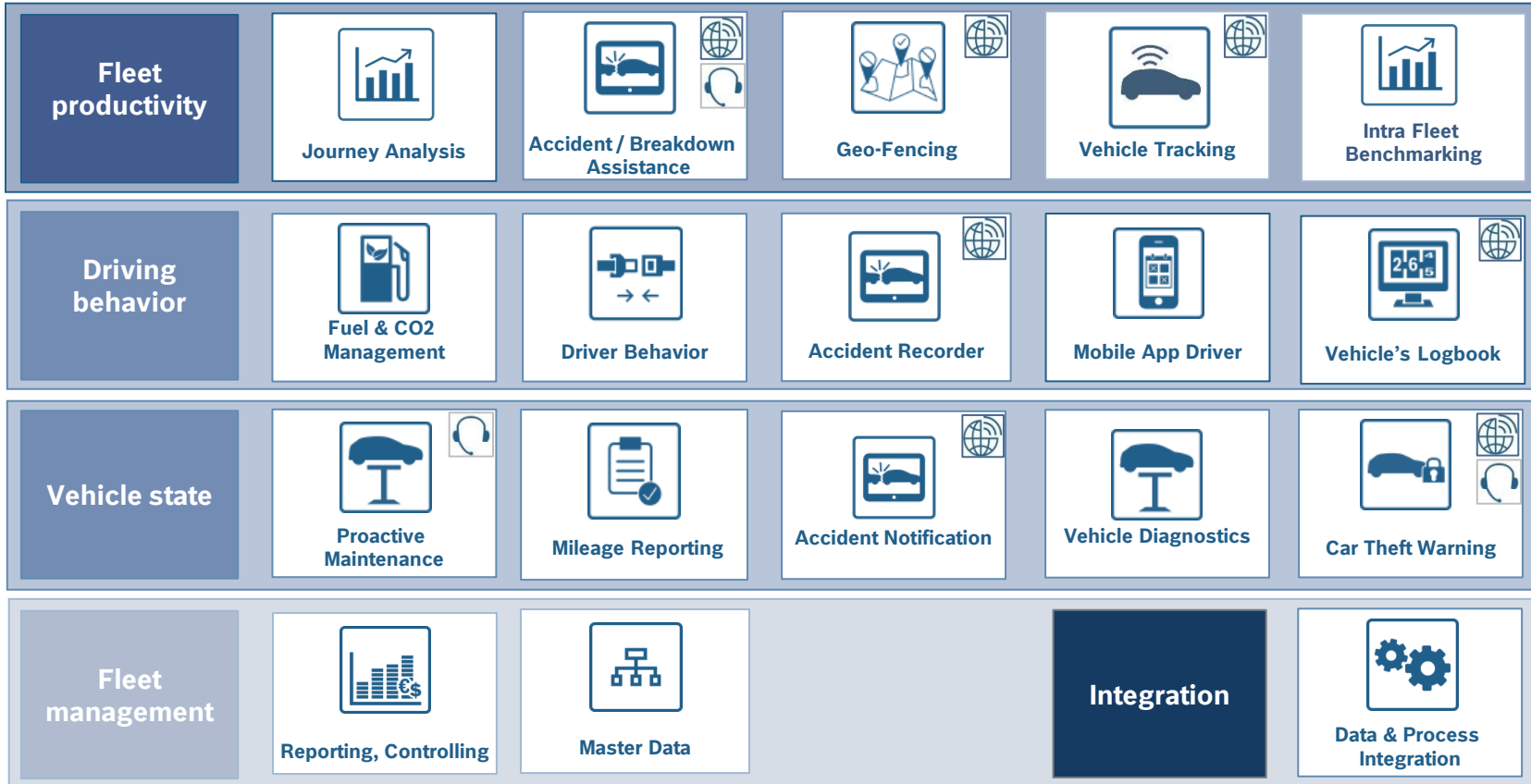
Partner

- Worldwide partner network
- Hotline and services in over 30 languages
- Efficient resource utilization



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Example: Fleet Management Services



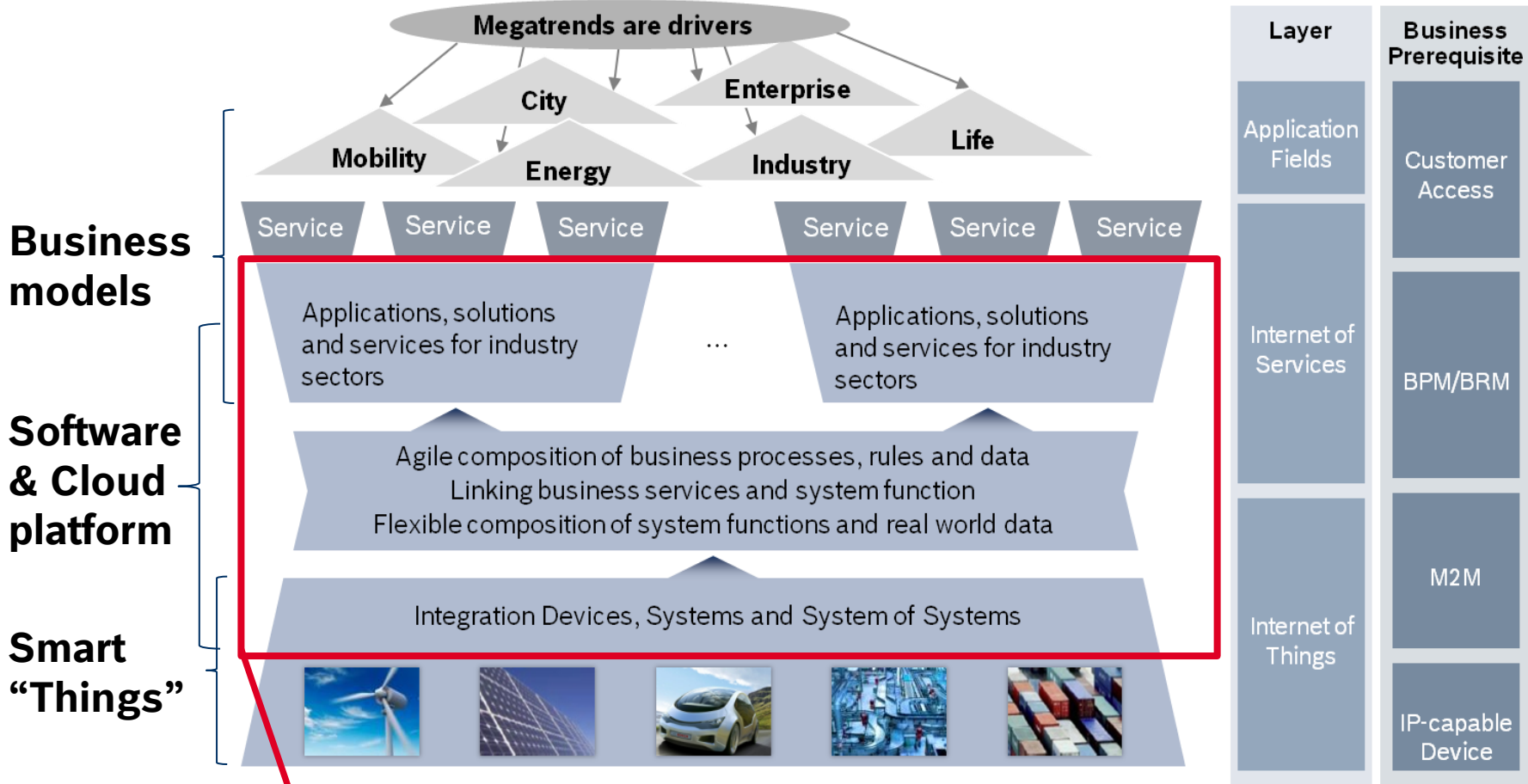
GPS required

Agent-based (optional)



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Bosch is active on three levels in the IoT

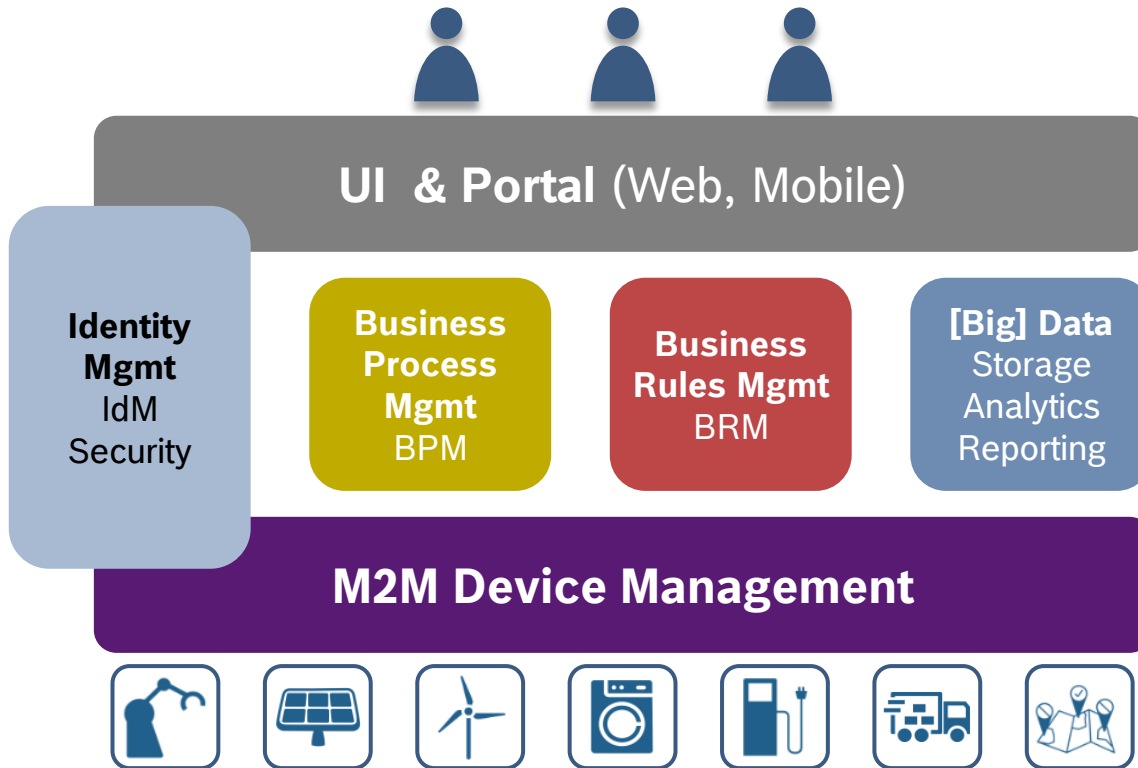


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The Bosch IoT Suite: Software for Connected World Services



One IoT platform
for all domains:

Smart Mobility
Smart Home
Smart Energy
Smart Industry
Smart City



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Challenge: Will the user have enough choices and control of “his” data usage?

Owner has or gets ...	Smart Phone	Smart “Thing”
Choice of Device	✓	✓
Choice of “Operating System”	✓	?
Choice of Telco service provider	✓	?
Choice of “Apps” from different sources	✓	?
Choice of business services / providers	✓	?
Only explicitly agreed SW updates	✓	?
Only explicitly agreed data usage	✓?	?
Monitoring of privacy	✓* ?	?

*Example: www.cluefulapp.com



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Requirements for widely accepted, successful IoT solutions

Technology

- safety, security and reliability of hardware, software and services

Common Platforms

- open standards as basis for flexible, individual business solutions
- flexibility and ease-of-use for all involved stakeholders

Business Ethics and Legal Regulations

- trustworthy handling of data
- respect for individual's privacy
- transparency and choices for customers regarding services and usage of data



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