



Title ITS service platform: In search of working

business models and ecosystem

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# Business model for ITS service platform (Paper ID: C3-3D3)

WCTR2016, Shanghai, 10-15 July 2016 Dr. Aki Aapaoja (with Zulkarnain, Prof. Leviäkangas & Kostiainen)

## MOBiNET: the Europe-wide e-market place of mobility services for businesses and end users





#### www.mobinet.eu



@MOBINET\_EU



Group MOBINET "the internet of (Transport and) Mobility"

- A comprehensive Europe-wide directory of mobility and transport-related data and services
- An e-marketplace as an e-commerce network linking content providers, service providers and end users
- Traveller assistance tools for service roaming and virtual ticketing
- Third-party service composition to discover and add content and services to existing products
- An "App Directory" and smart Communication Manager for end-user devices
- A Service Development Kit to enable easy creation of new user services

#### A need for ITS Platforms



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- Users want...
  - One-stop-shop for context-aware mobility services
  - Pan-European (or even global) roaming, coverage and access to services
  - Integrated user-account for transport services
- Road or transports operators and authorities want...
  - Publish traffic and travel information to all users
  - Attract new customers and expand customer base'
  - Save costs (enhanced cost-benefit –ratio)
- Service and data providers (B2B or B2C)
  - Deliver services to any kind of compliant customer devices
  - Directory of all mobility-related data and services
  - Service and data trading without one-to-one contract

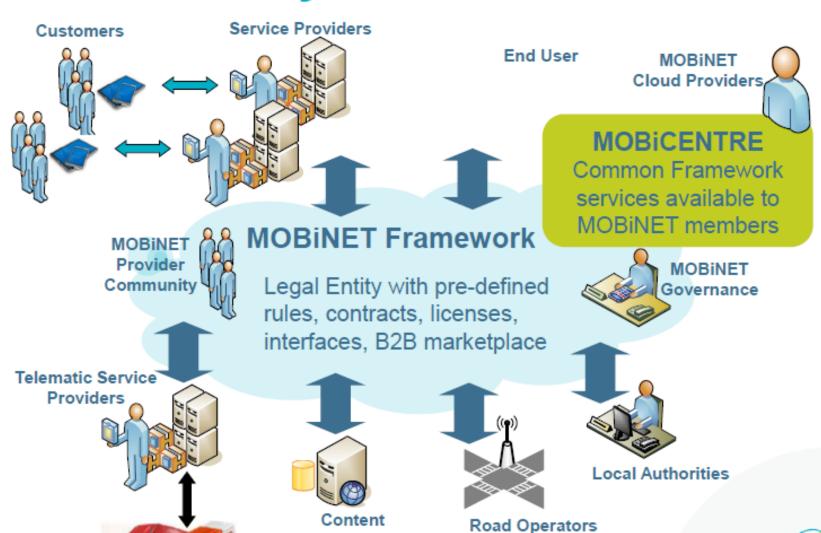
## Today's business ecosystem

One-to-one relationship





## MOBiNET ecosystem



www.mobinet.eu

**Providers** 

#### **Potential services**

**VIII** 

- Green Light Optimal Speed Advice
- Use-based insurance
- Multimodal travel assistance
- Ad-Hoc priority routing
  - Traffic light management (e.g., emergency vehicles)
- Demand-responsive Transit
  - Dial-A-Ride
- Non-stop truck (i.e., automated weight-in)
- Floating Vehicle Data (e.g., real-time traffic information)
- Parking services (with integrated mobile payment)
- Location-based contextual voice-based information



**Priority Route** 

Non-Stop Truck

On-Demand

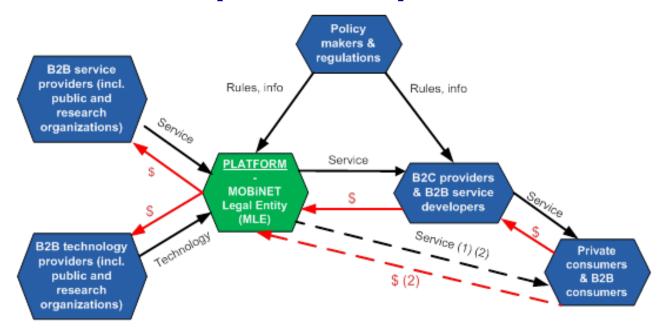
**Transport Services** 

Multi Modal Travel

Assistant

#### Initial business concepts of ITS platform





- Option 1: e-marketplace just for B2B services
  - E.g., Amadeus delivers ticketing and routing services for airlines, hotels etc.
- Option 2:B2B services and a B2C service directory for B2C customers ("yellow pages")
  - E.g., eBay, Amazon: provides a search engine for B2C services but do not sell those
- Option 3: Commercial B2B and B2C services
  - E.g., Google Play, Apple: provides B2B services, own B2C services and e-marketplace for 3rd party B2C services

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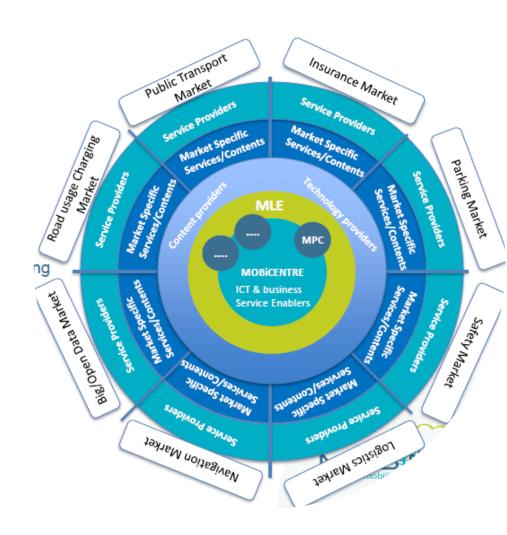
#### Challenges of different business concepts



### Challenges may rise when being B2C and B2B provider

- The platform operator may have an unfair competitive advantage if it offers own B2C and B2B services
  - Biased service recommendations and promotions for platform's own services
  - May discourage external service providers from joining
- Too much emphasis on providing B2C services, B2B end-users may not find the platform
- Broader focus (both B2C and B2B services along with the platform itself) requires extensive resources
  - e.g., customer support services and help desk





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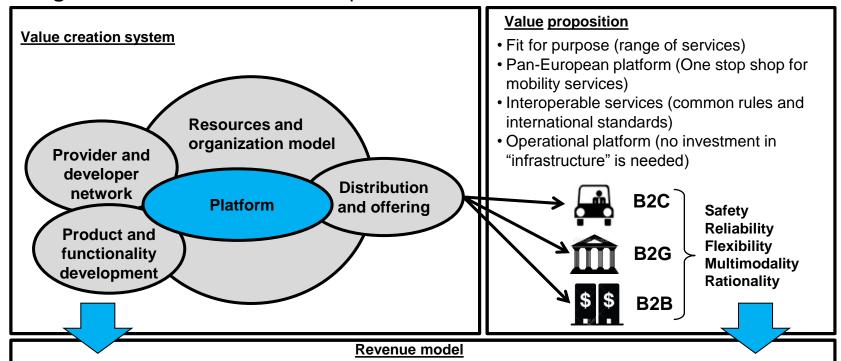
#### Generic business model for ITS platform



**Value creation systems:** who offer and what (independent HWs and SWs) → develop and produce valuable offering

Value propositions/offering: integrated entity and offering, fit-for-purpose

**Value capturing / revenue model:** How the operations are financed



A multi-vendor B2B2C e-marketplace and service directory where service providers can publish and exchange their products, technology and services and hence improve their offering and the customer base

- Single access point to wide service base that allows and attracts end-users to find the most valuable services (providers pays for advertising and/or commission from purchases by users (B2B or B2C))
- A service directory helps in finding other businesses that provide or purchase services or data (providers pay for usage or publishing of content and/or services)
- Tools and functionalities for all the customers to assist them in developing transport and mobility services (customers pays for utilizing platform functionalities to improve their services)











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