

Paper 3706:
***Vehicle Telematics; A
Learning Studio for
Vehicle Designers.***

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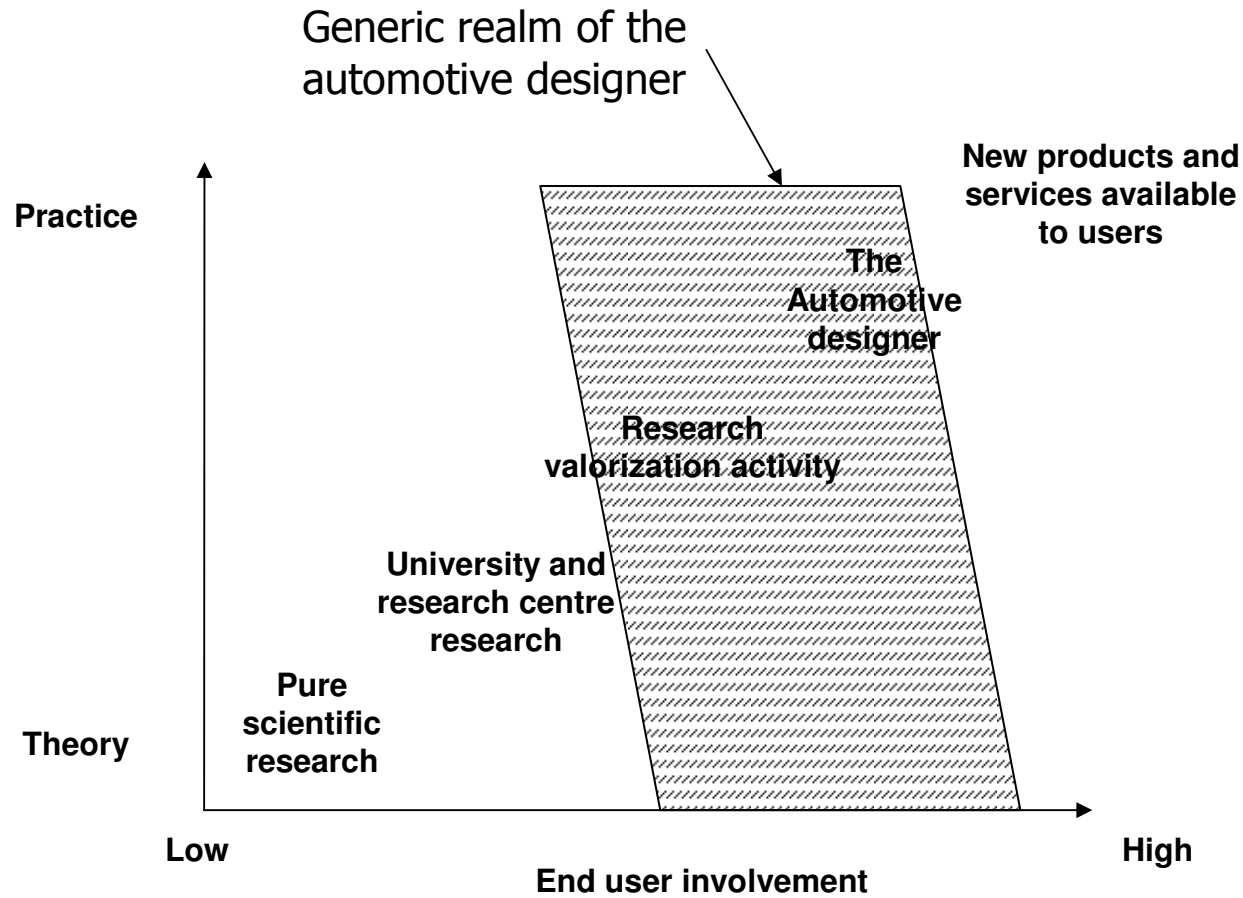
Dave Peck
September 09
European Automotive
Digital Innovation
Studio (EADIS)



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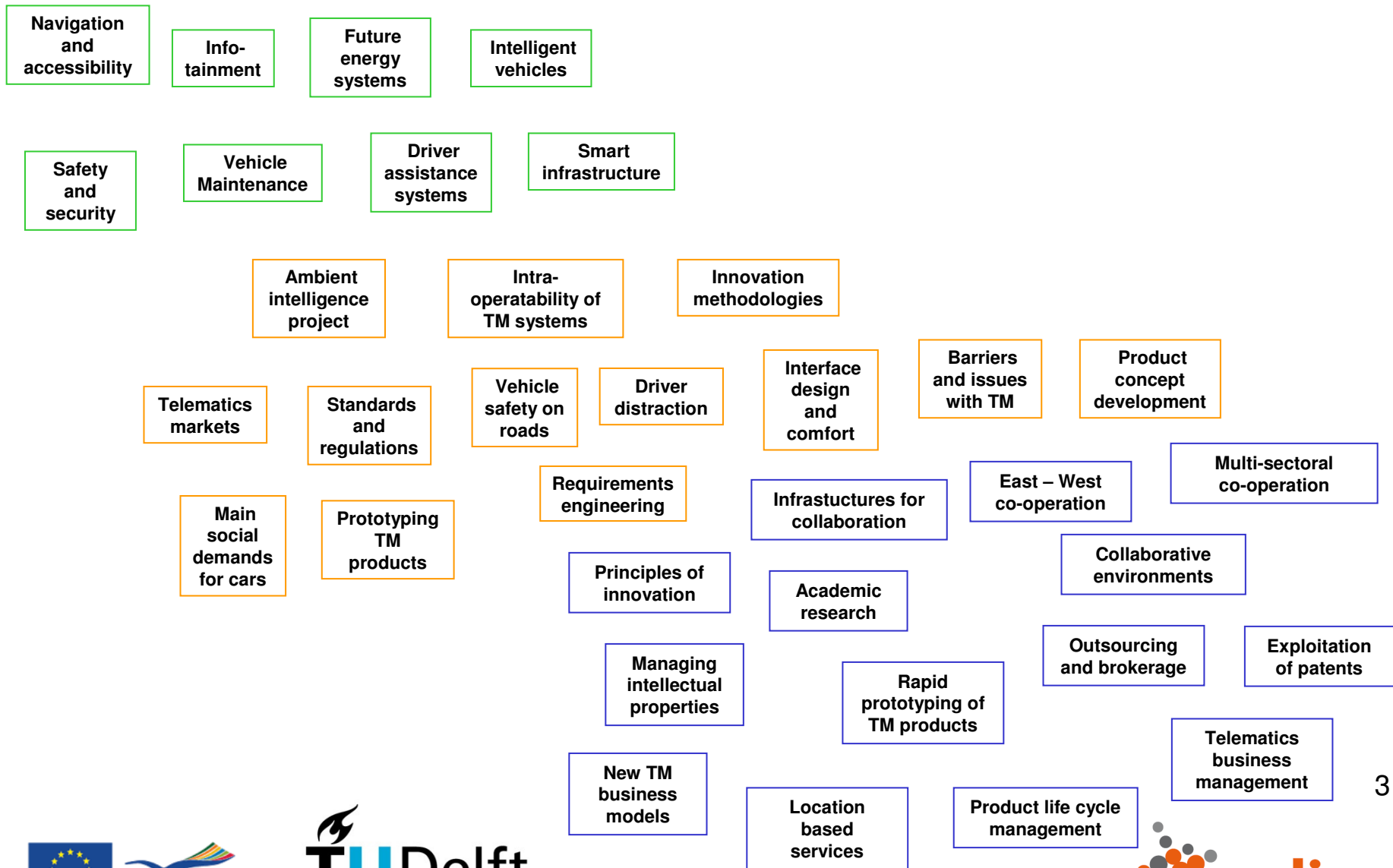


The designers role with respect to the end user



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Vehicle Telematics – the domains

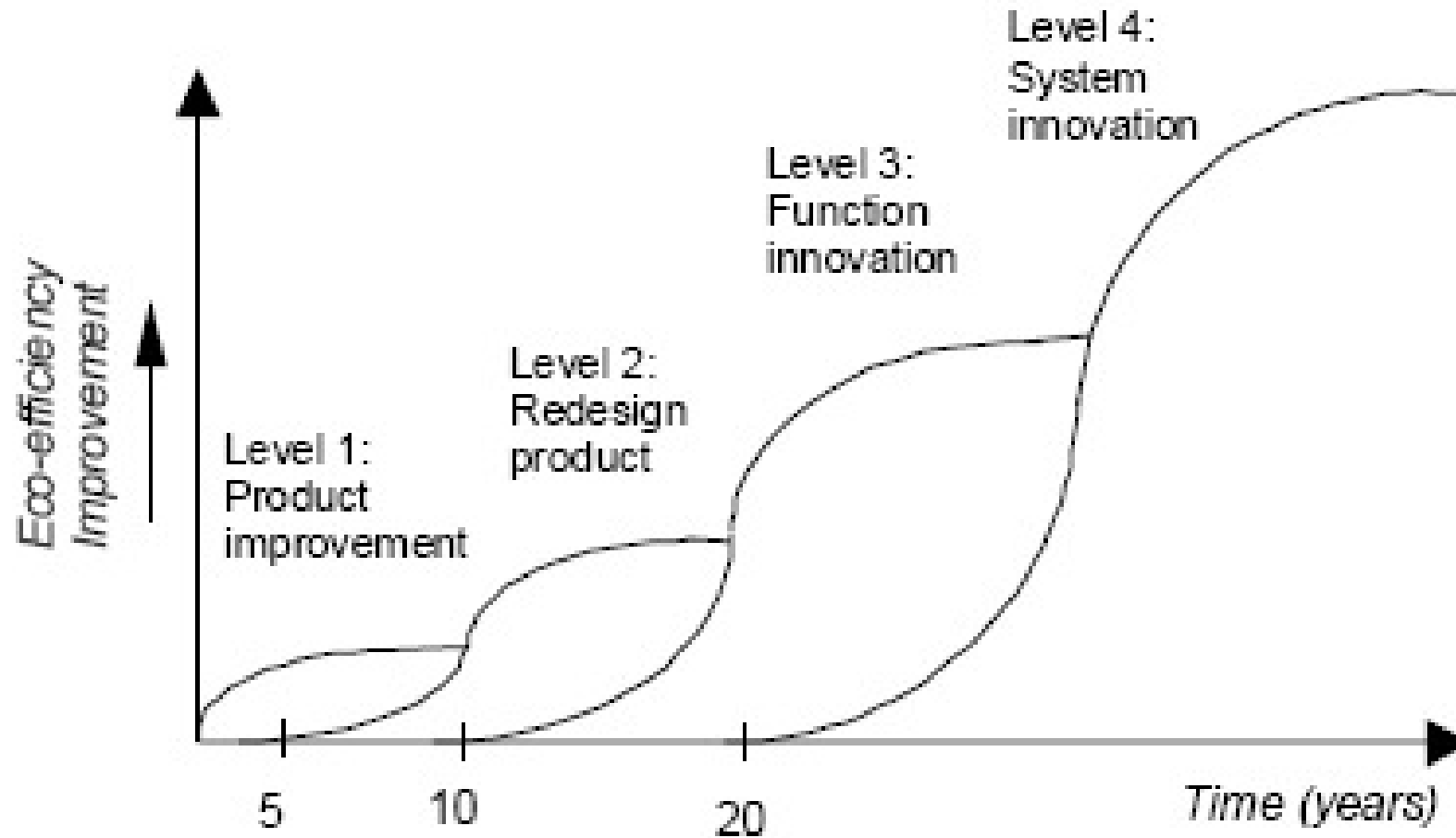


Innovation challenges for the automotive designer

- Privacy – location, movements and data
- Security from data fraud
- Alternative energies
- Cheaper cars – longer life – vehicle systems complexity
- Low carbon footprint
- Robust infrastructure – energy/power supply, reliability & system life span
- De-skilling of driver - MMI & portability.
- Public policy – clarity and acceptance
- Deterioration in social communication
- Vehicle, infrastructure and communication - test facilities are lacking
- Different development cycles of the emerging technologies:
- Technology integration mobile / vehicle and infrastructure

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Brezet sustainable innovation model

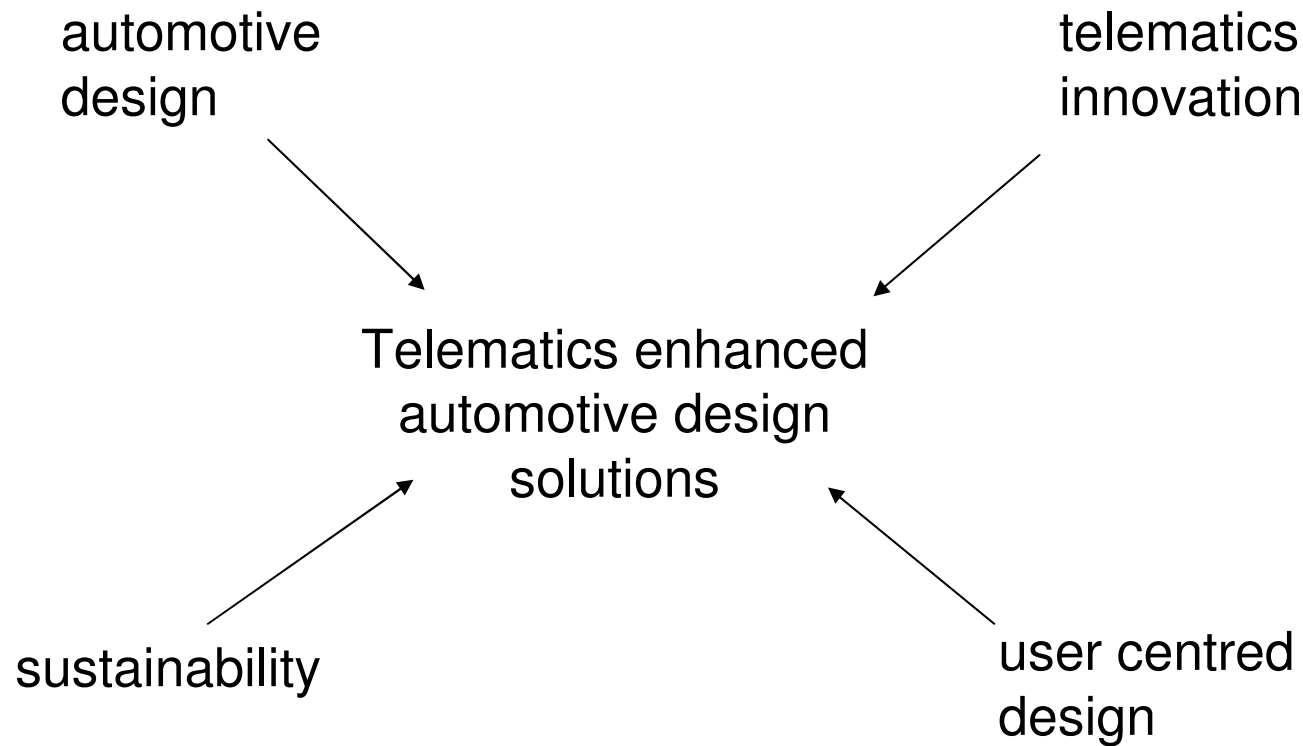


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The main areas of automotive telematics

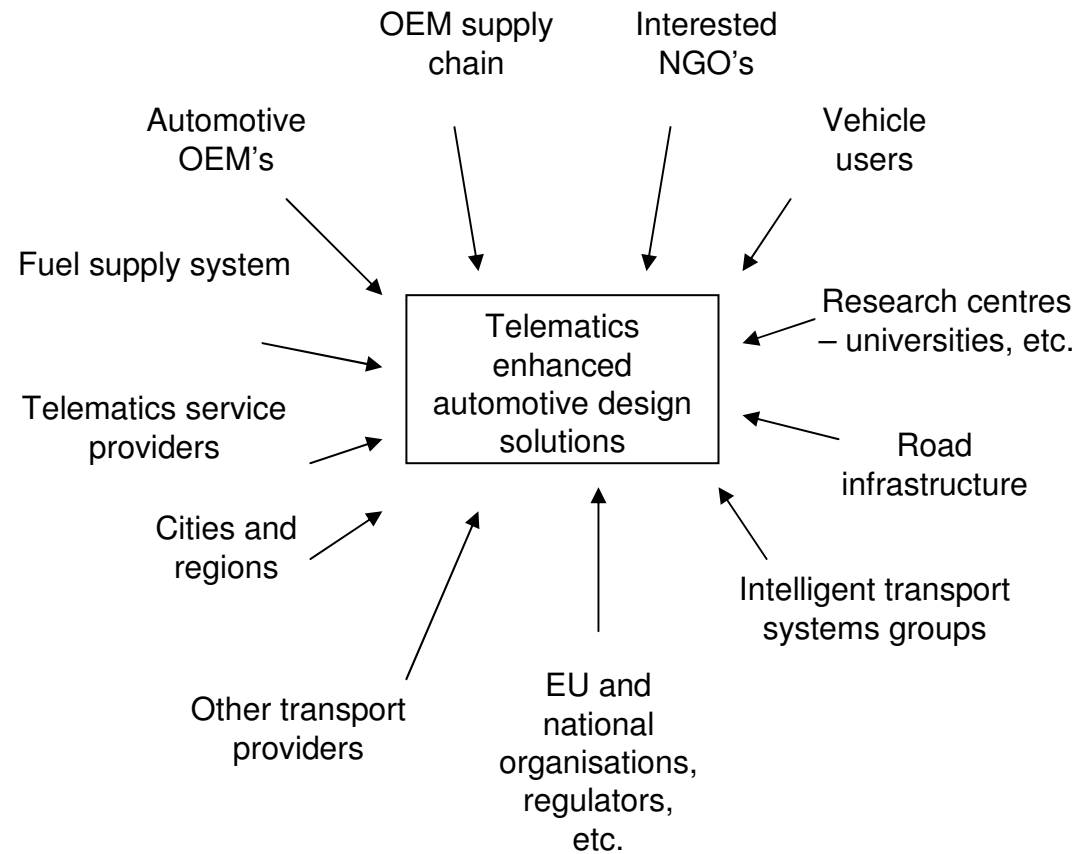
	Approach	Comments
Eco Driving	<ul style="list-style-type: none"> ▶ Information to driver ▶ Efficient acceleration/braking ▶ Recommends speed & gear 	<ul style="list-style-type: none"> ▶ Driver behavior focused ▶ 5-15% fuel savings (Navteq) ▶ Navteq: Electronic Horizon SW
Eco Routing	<ul style="list-style-type: none"> ▶ Routing for min fuel usage ▶ Road segment: Fuel use index 	<ul style="list-style-type: none"> ▶ Navigation system focused ▶ 5-10% fuel savings (Navteq)
Eco-Powertrain	<ul style="list-style-type: none"> ▶ Map attributes to lower fuel use ▶ Low cost: "Map ECU" ▶ Use is 100% and autonomous 	<ul style="list-style-type: none"> ▶ Navteq MPE: 2-5% fuel savings ▶ 4GB map, MCU, GPS, gyro ▶ No driver action needed
Eco Hybrid & Electric	<ul style="list-style-type: none"> ▶ Similar to above approach ▶ Extends use of electric motors 	<ul style="list-style-type: none"> ▶ Battery recharging focus ▶ Likely future standard

The innovation challenge



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Stakeholders



Thank you



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