



Where innovation

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Smart Mobility TU/e
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*The shift to self-steering
and sustainable mobility*

TU/e

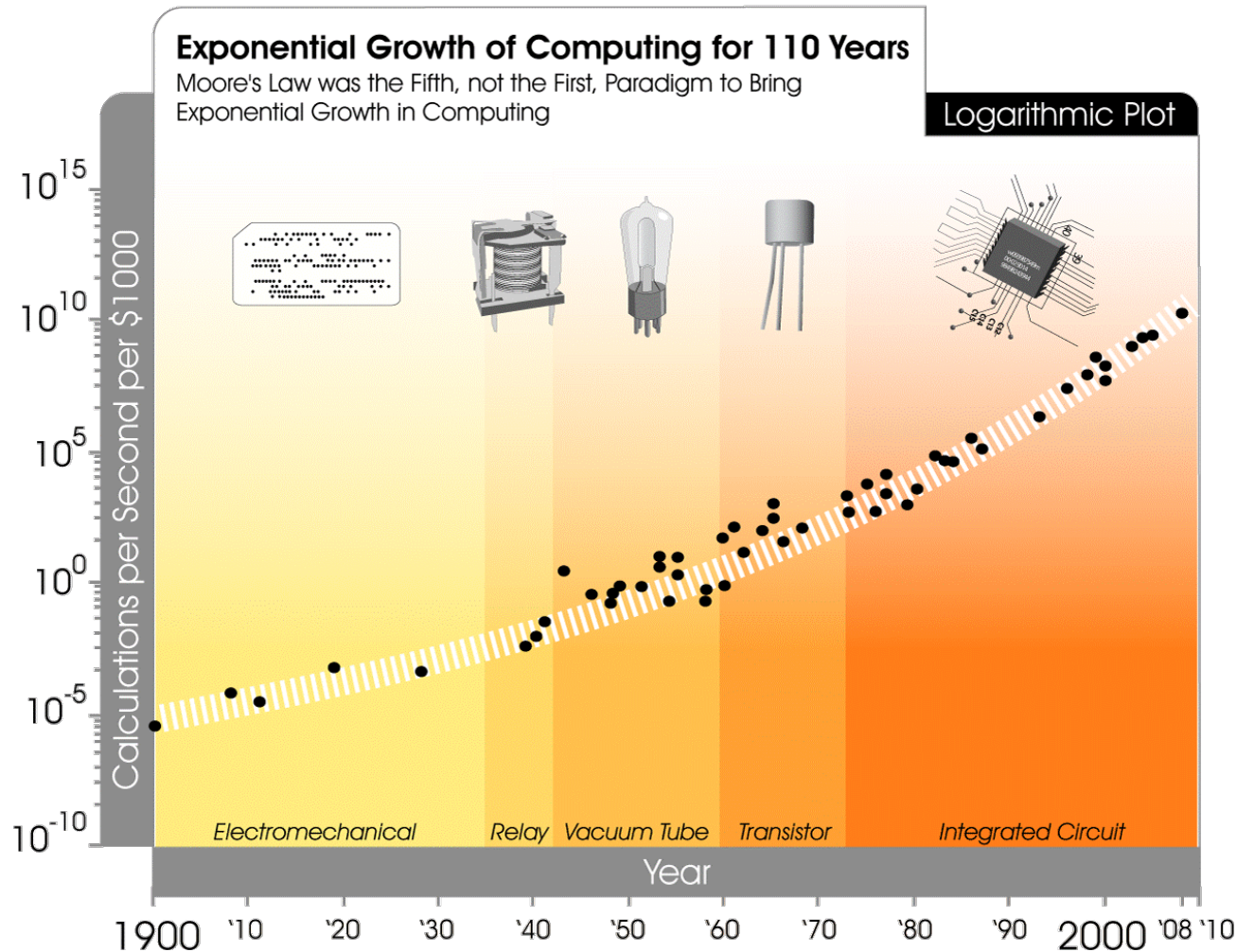
Technische Universiteit
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SUSTAINABLE
MOBILITY

Moore's law

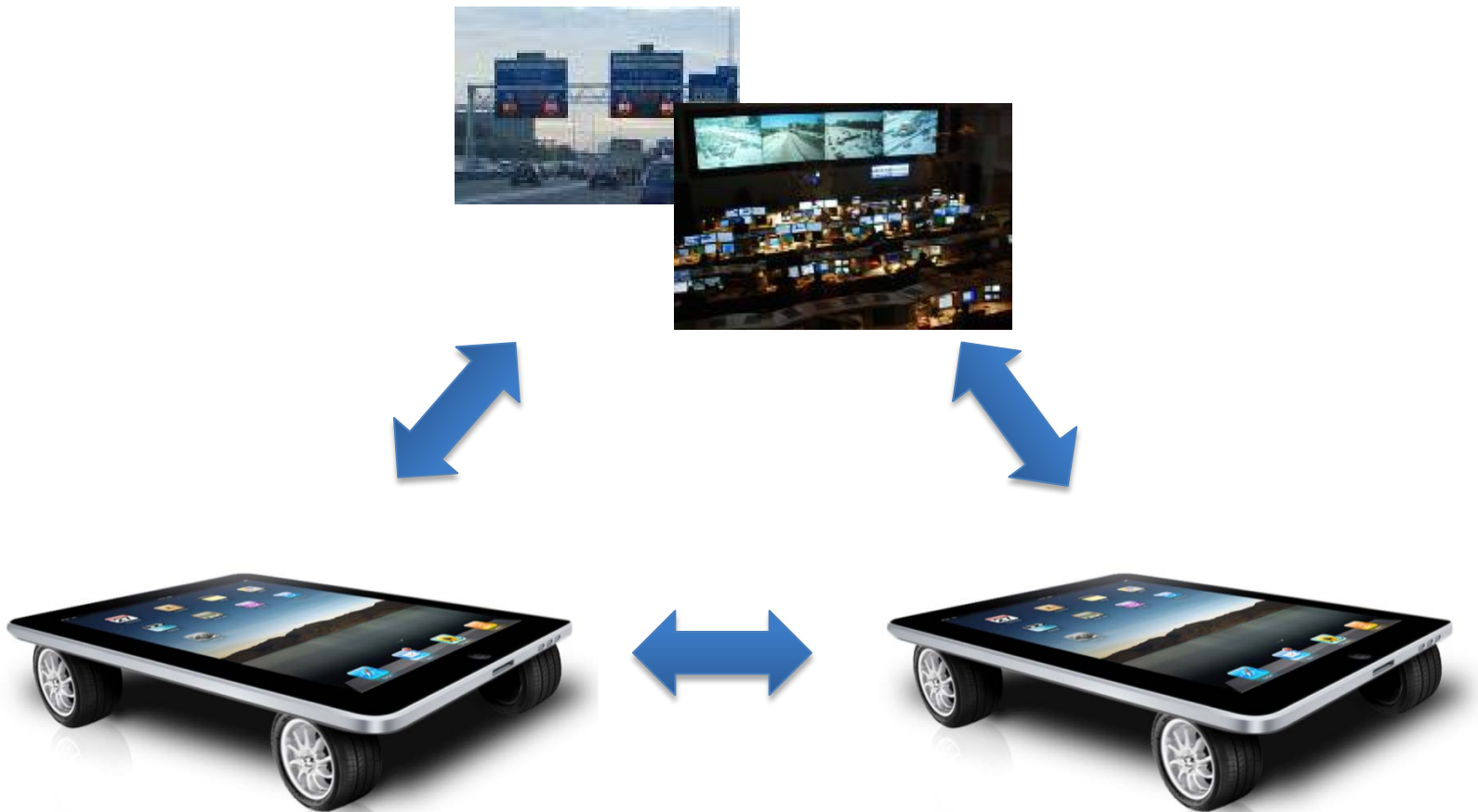


Source: Raymond Kurzweil, *Kurzweil Accelerating Intelligence*

And now, Moore's law has entered the vehicle...



- *A modern car produces 100Tb data per hour*
- *The new Mercedes S-Class has more ECU's and 100x more lines of software code compared to a Boeing 747*
- *The vehicle starts outsmarting the driver. After ESP and ABS, more and more functions are taken over by the vehicle*





Smart Mobility: Cars using ICT are jointly solving their own problems

Cost of Mobility



In 2009:

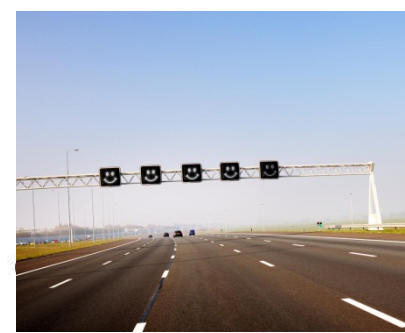
- Safety: 1,7 - 2,3 % GDP
- Congestion: 0,9 - 1,2 % GDP
- Environment: 0,3 - 1,4 % GDP

TOTAL: 3,0 - 4,9 % GDP

Source: KiM Mobiliteitsbalans 2009, CPB 2004, I&M 2008

Traffic Management 2.0

- Traffic management is quickly changing towards a self-steering system of well-informed individuals. Traffic jams are a voluntary and predictable event, information about all other options is available and people will use them.
- Road Authorities can substantially safe on traffic management:
 - Everybody is informed; hardly anybody will look on public signs anymore
 - Variable Message Signs, Matrix Signs, Dynamic Route Information Panels, Radio broadcasted traffic information, all will be redundant
- Infrastructure will be far less complicated. "Smart Cars on Stupid Roads"



Thank You

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