Key challenges, opportunities and barriers in urban transport

Professor John Polak
Director, Urban Systems Laboratory
Imperial College London
j.polak@imperial.ac.uk
• After more than 50 years of urban transport policy and planning, I think we can draw some very broad conclusions:

• There are some things we are rather good at;
  • Improving vehicle technology
  • Improving safety
  • Squeezing extra capacity from heavily congested networks

• And there are some things we are not very good at;
  • Improving systemic efficiency
  • Harnessing technical and business model innovation
  • Escaping from the contradictions of agglomeration and density
Key challenges

• To address the transport system as a whole, avoiding modal silos

• To fully embrace technological and business model innovation

• To create new understandings of how transport innovation can contribute to the success of cities
Opportunities

• We have entered a period of unprecedented insurgent business model innovation e.g., servisation of mobility, impact of sharing economy

• Enormously disruptive technological innovation is on the horizon e.g., virtualisation of experience, automation, distributed manufacture

• The massive de-centralisation of control e.g., pervasive edge analytics
Barriers

• Premature and ill-considered policy interventions (e.g., governments “picking winners”)

• Predatory innovation

• Collapse of trust in institutions
Thank you

j.polak@imperial.ac.uk