

Course

From Horse to Porsche: innovations in transport and logistics

Date:	27 October 2023
Time:	Day 1: 09.15 – 15.30 h. (follow-up day t.b.d.)
Location:	TU Delft
Room:	t.b.d.
Course leaders:	Prof. dr. Harry Geerlings (EUR), Dr. Jan Anne Annema (TUD)
ECTS:	0.5 (attendance only) - 1 (attendance + passing the assignment)
Days:	1 (& 2 hours - to present assignment)
Course fee:	free for TRAIL/Beta/OML members, others please contact the TRAIL office
Registration:	info@rstrail.nl

Objectives

To gain insight into transport and logistics innovation theories and to learn which factors determine the success or failure of an innovation.

Course description

Containerization, from horse to Porsche, from 80 days around the world to just 24 hours: the world of transportation and logistics innovations is fascinating. This course gives an introduction to transport innovation. Technology dynamics and transport innovation theories will be explained. Two real-world innovation cases (automated driving and light electric vehicles in city logistics) are used as examples to discuss potential success and failure factors of innovations. The course is partly based on the book 'Innovations in Transport' (see TRAIL site, <https://rstrail.nl/wp-content/uploads/2022/11/innovations-in-transport.pdf>).

This course aims to improve the participants' knowledge of:

- Success and failure conditions of transport innovations;
- Technological and societal conditions for the implementation of transport innovations;
- Innovation theories and methodological approaches in order to give PhD candidates some baggage that they might use in their thesis. Because, let's face it, most of the theses aim to contribute to something 'new'.

Program

09.15 - 10.15 h.: Innovation Theory and Technology Dynamics (*Harry Geerlings*)
 10.30 - 11.45 h.: Success, Failure and Societal Impacts: related to innovations theories (*Jan Anne Annema*)
 11.45 - 12.00 h.: Debate, questions, and lessons learned from the morning session (interactive)
 12.00 – 12.30 h: *Lunch*
 12.30 – 13.30 h.: Explaining the Growth in Light Electric Vehicles in City Logistics (*Ron van Duin*)
 13.45 – 14.45 h.: Automated Driving on the Path of Enlightenment (*Maaïke Snelder*)
 15.00 – 15.30 h.: Debate, questions, and lessons learned from the afternoon session and total wrap-up

Assignment

Each student has to deliver an assignment to complete the course.

The objective of the assignment is that each student assesses his/her own PhD study, and reflects what extent the PhD-study contains innovative elements (hardware or process-oriented).

The questions to be addressed in the assignment should be: what is the possible societal impact of the PhD-study, and what strategy would be opportune to take care that these innovative elements (or element) will actually be used by parties (either governments, business or consumers, or any combination). Paramount in this analysis is to try to identify potential success and failure factors (based on theory and practice as taught during the course) for your innovation and ways how to deal with these. It is important that the assignment reflects the theoretical notions presented in the course.

The assignment should contain around 2000 words (+/- 10%) including references.

The assignment has to be sent to the TRAIL office: info@rstrail.nl (date to be determined).

Each student is expected to give a brief presentation on his/her assignment on – date to be determined - to the classmates and the course leaders. After the presentation the course leaders will give their comments on the assignment.

Course material

Distributed during the class.

Prerequisite

None