

MSc education by dr. Jaap Vleugel

TIL5060 Thesis: Living lab experiences

In education you are constantly interfacing with external parties like businesses and governments. We now have a large network of regular commissioners who offer many opportunities for design- and thesis projects.

If students work with a company or government agency, they can access real (live) data. As a result, their methodology and results may and frequently also will be (directly) applied in practice and not end up in a drawer or bin like so many professional studies. This gives student research and the education provided by my co-supervising colleagues and me an exceptional social and economic impact.

Course ID	From	Level	Product	Valorisation	Teams	Single	Manager	Chair	Supervisor	Advisor	Grade	Prep	Proj	Exam	Passed
TUD															successfully
BSA Cie	2021	Bachelor								y					
CT3200	2017	Minor	Report		y		y		y		y				230
TIL5050	2013	Master	Report	y	y		y	y	y		y	2	14		890
TIL5060	2013	Master	Thesis	y		y		y	y	y	y	2	10	2	86
TIL Website/BS	2015	Master					y								
ME54035	2010	Master	Thesis	y		y					y				37
MT54035	2021	Master	Thesis	y		y					y				3
AR3CS100	2020	Master	Essay	y	y	y			y		y				1
AE5322	2024	Master	Thesis	y		y		y	y		y		1		
CEE5007	2021	EngD	Report	y		y		y	y		y	6	2		15
TUD & WUR															
YMS80330	2022	Master	Thesis	y		y		y	y		y				19
															1281

TILexams

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2	1	2	3	7	9	5	9	10	14	11	15				

TIL5060 thesis: EXAMS

[87] Hugo Vaartjes, *Food waste reduction through improved quality control process, A case study at Riedel B.V.*, 12-12-2024, Delft. {Quality Control Process / Food waste management}

[88] Bruno Nijdam, *Comparing Distribution Strategies to Achieve Peak Shaving at Occupancy Levels of the Baggage Handling System of an Airport*, 13-12-2024, Delft. {Cargo handling / Asset management / Airport operations}

TIL5060 thesis: PROJECTS

[Logistics]

Joris Schuurung, *Optimizing Empty Container Repositioning, A Case Study of Royal FloraHolland's Logistics*, Delft. {Reverse logistics / Packaging logistics}

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Harald Rensink, *TATA Steel network management & development*, Delft. {Rail logistics}

Stijn Küppers, *Forecasts and storage optimization*, project for Hapag-Lloyd, Delft.
{Reverse logistics / Forecasting}

Margot van Eck, *Introduction EV Trucks: Case Study PostNL*, Delft. {Logistics / Asset management / Fuels}

Yolande Muris, *Pharmaceutical Supply Chain: Adapting to shortages*, Mosadex Group, Delft. {Medicine logistics}

Pauline Slieker, *Optimizing Component Availability by Managing the Inflow of US Parts in the Internal Shops, A Simulation-Based Case Study at KLM*, KLM E&M, Delft.
{Logistics / Maintenance planning}.

Maxime van Berkum, *Prefab building logistics*, DISTRICON, Delft. {Building construction logistics}

[Smart maintenance]

Khalid Asshab, *Optimising Maintenance strategies for insulated joints; comparison study of conventional strategies and feasibility study towards new alternative maintenance strategies. A case study at Asset Rail*, Delft. {Maintenance / Railway engineering}

[Waste management]

Pien Biersteker, *Resource Policy: From Waste to Resources - Innovative Waste Management in the Dreven, Gaarden, and Zichten Neighborhoods of The Hague*, Sweco, Delft. {Waste management / Waste policy}

TIL5060 thesis: Kick-off planned

Lara de Geus, *Gate cleaning process at Schiphol*, Delft. {Logistic services}

Maartje van den Broek, *Aircraft tire replacement process*, KLM E&M, Delft. {Airport operations / Maintenance}

TIL5060 thesis: Preparation

TIL5060 thesis: Advisory

Dries van Meerwijk, Mammoet.

Tessa van der Hulst, Supply chain management, P&G. {Supply chain management}

TIL5060 thesis: Lost contact

Bilal Abou Hashish, Analysis & Optimization of Inter-Island Logistics, Case Study for End-to-End Maritime Motorcycle Supply Chain in Indonesia, project for STC / PT Pelindo Multi Terminal, Delft. {Port economics / Logistics}

MSc TIL graduates

[2025: ..]

[2024: 15]

[86] Yannick Hogers, *Assessing the impact of charging operations on electric lift automated guided vehicles. A simulation study at APM Terminals MVII*, 22-10-2024, Delft. {Asset management / Container terminals / Emerging technologies / Fuels}

[85] Wouter Diebels, *Streamlining conceptual warehouse design: A modular framework approach*, Districon, 21-10-2024, Delft. {Logistics / Warehouse design}

[84] Mayke van der Kroft, *Approaches to mitigate the impact of pre-carriage barging unreliability on export supply chains, A case study at Heineken Netherlands Supply*, 01-10-2024, Delft. {Logistics / barge transport}

[83] Ivar Krijger, *Modelling the optimal inventory distribution of cocoa beans over warehouses, A case-study at Cargill's cocoa beans supply chain in Western-Europe*, 26-09-2024, Delft. {Supply Chain Management / Raw materials}

[82] Bart Szarszewski, *Predictive Analytics of Defective Machinery Parts in Reverse Supply Chain: A Case Study at ASML*, 26-08-2024, Delft. {Reverse logistics / Component quality management}

[81] Zipporah Gerstenbluth, *Decentralized off-grid PV hydrogen production based on small-capacity electrolyzers, Determining the System LCOH - a case study for 6 kW electrolyzers*, 23-08-2024, Delft. {Sustainable energy production / Logistics}

[80] Erik Smit, *Improvement of Productivity by Optimized Scheduling under higher Utilization in Make-To-Order Environments*, Nutreco, 20-08-2024, Delft. {Logistics / Facility location}

[79] Katharina Berger, *Transforming from a paper-based to a digital delivery process, A Study at Coca-Cola Europacific Partners*, 10-06-2024, Delft. {Logistics / Digital supply chain}

[78] Sven Donders, *Sustainable Last-Mile Logistics: Designing Reliable and Cost-Effective CO₂-Neutral Delivery Solutions*, project for Coolblue, 21-05-2024, Delft. {Sustainable transport / Asset management / Logistics}

[77] Jelle van Leeuwen, *Supply chain procurement performance evaluation, A case study on Heineken*, 11-04-2024, Delft. {Supply chain management / FMCG}

[76] Wisse Koopal, *Redesign of the Car Distribution Process: a Dutch case study. A Holistic Approach in a Capacitated Vehicle Routing Problem to Reduce Direct CO₂ Emissions*, project for Pon Automotive, 27-03-2024, Delft. {Supply chain management / automotive logistics}

[75] Anouk Gerritsen, *Creating a continuous outbound flow at the flower auction. A case study at Royal FloraHolland Naaldwijk*, project for Royal Flora Holland, 05-03-2024, Delft. {Supply chain management / Flower logistics}

[74] Thomas van Muiden, *Strategic Development for the Port of St. Eustatius: A Study on the Potential Role of Privatisation*, 11-01-2024, Delft. {Port development / Privatization}

[2023: 11]

[73] Machteld Rouwé, *improving decision-making to reduce downtime caused by equipment breakdown during offshore wind installation projects*, project for Heerema (HES), 21-12-2023, Delft. {Logistics / Maintenance / Sustainable energy}

[72] Koen Schukinck Kool, *Stacking yard process optimization in prefab concrete pile manufacturing, A simulation-based case study at Voton*, 7-12-2023, Delft. {Yard management / Scheduling}

[71] Lars van Biezen, *An assessment of the compatibility between the Flying V design and the airport turnaround process*, 29-11-2023, Delft. {Airport operations / Emerging technologies}

[70] Manuela Hooghwerff, *Design of an Information System for a Control Tower to optimally Orchestrate Transport Orders*, project for NedCargo, 1-11-2023, Delft. {Logistics / Information / Warehouse management}

[69] Emmeline Batenburg, *CO2 reduction in construction of infrastructure projects by changes in the design: A case study on a bridge of Rijkswaterstaat*, project for PwC, 9-10-2023, Delft. {Infrastructure planning / Environmentally sustainable design}

[68] Susanne Zaal, *Improving the inbound system at fulfillment centers. What strategies can be designed to eliminate non-unloaded rejected trucks at fulfillment centers?*, 27-9-2023, Delft. {Logistics / Trucking / Warehouse management}

[67] Pieter Clemens, *To tow or not to tow? A social cost-benefit analysis of engine-off dispatch aircraft towing at Amsterdam Airport Schiphol*, project for KLM, 28-08-2023, Delft. {Airport operations / Emerging technologies}

[66] Tijn Veen, *Understanding the environmental impact of product returns in the fashion industry, The development of a Composite Indicator to provide insights into the environmental and economic performance of product returns for fashion companies*, project for Metyis, 11-07-2023, Delft. {Logistics / Sustainable fashion}

[65] Tim Elbers, *Design of a multi-attribute inventory classification method for fast-moving consumer goods, A case study at Heineken Nederland Supply*, 21-06-2023, Delft. {Logistics / Inventory strategies/ FMCG}

[64] Daan Duthilh, *Reduce idle time for automated storage and retrieval systems, A Coolblue Case Study*, 07-06-2023, Delft. {Logistics / Warehouse automation / Information}.

[63] Thomas Teunisse, *The potential of autonomous charging for EV fleet operators*, project for RocSys, 20-04-2023, Delft. {Asset management / Container terminals / Emerging technologies / Fuels}

[2022: 14]

[62] Maikel Blom, *Potential of the E-Pusher as Transport Mode in the Dutch Carbon Capture and Storage System*, project for Kotug, 22-12-2022, Delft. {Sustainable barge transport / Maritime innovations}

[61] Rinke Jebbink, *The design of a 'water droplet'-based ufp mitigation system at airports*, project for Schiphol Group, 20-12-2022, Delft. {Airport operations / Emerging technologies}

[60] Mike van der Meer, *Machine learning applications in supply chain management: A case study at MPO*, 08-12-22, Delft. {Supply chain management / Big data analytics}

[59] Laurens Gerlach, *Research on improving quay crane performance by predicting its cycle time taking the location of the (un-)loaded containers into account, A case study at APM Terminals Maasvlakte II*, 31-10-2022, Delft. {Container handling / Optimization}

[58] Daan Emmerig, *Towards sustainable logistics by evaluating the performance of carbon reduction strategies using a backcasting approach*, project for Heineken HNS, 24-10-2022, Delft. {Sustainable logistic strategies} /Cum Laude/

[57] Arthur van Bruggen, *Integrated inventory and warehouse operations model of aviation standard parts under a cap-and-trade policy*, project for Fokker Services, 10-10-2022 Delft. {Inventory management / Sustainable parts handling}

[56] Teddy de Jong, *Steering on mobility hubs: exploring the potential of an adaptive policy to guide the development of mobility hubs towards societal goals*, project for TNO, Delft, 26-09-2022. {Smart mobility}

[55] Marinke Ziedses des Plantes, *ZeroEmission Airside 2030 Backcasting Study at Rotterdam The Hague Airport*, Delft, 15-09-2022. {Airport development / Emerging technologies}

[54] Jonathan Imang, *Design and assessment of public transport policies for Greater Paramaribo*, Delft, 01-08-2022. {Public transport / Network optimization}

[53] Willem-Jan Eil, *The Impact of Order Characteristics Uncertainty on Different Configurations of the Outbound Logistics of a 3PL Warehouse*, study for NedCargo, Delft, 01-06-2022. {Logistics / DC design simulation}

[52] Claire Post, *Towards optimized customer segmentation parameters to reduce Cost-to-Deliver and Environmental Costs*, A Case Study on Royal Philips, Delft, 06-04-2022. {Logistics / Service optimization}

[51] Christine van Diemen, *Flash deliveries: value adding business model or societal nightmare? A qualitative research on the effects of flash delivery on the livability of Amsterdam*, study for Deloitte, Delft, 30-03-2022. {Logistics / Livability impact}

[50] Michiel Roos, *Managing car traffic by smart mobility hubs, towards effective policy making*, Delft, 29-03-2022. {Traffic management concepts}

[49] Michiel Nanninga, *Export costs and service conditions in times of a global container shortage*, A case study for Heineken Netherlands Supply, Delft, 15-03-2022. {Logistics / Asset management / Finance}

[2021: 10]

[48] Andrian Supryanto, *Redesign of reverse supply chain strategies for returnable packaging*, A case study at Prysmian Group The Netherlands, Delft, 23-12-2021. {Reverse logistics / Asset management}

[47] Jet Dijkzeul, *Exploring the reduction of lost parcels in the logistic chain*, A case study at Bol.com, Delft, 16-12-2021. {Logistics / Lost parcels}

[46] Jules Boelhouwer, *Towards an optimal distribution of lease bicycles*, A case study at Swapfiets, Delft, 02-12-2021. {Logistics / Asset management}

[45] Erik Hadders, *Incorporating interdependence into a decision support framework for the renewal of hydraulic infrastructure*, A case study at Zoutkampstudy for TAUW, Delft, 2-12-2021. {Water management / Asset management}

[44] Israe Chetouani, *Exploring integrated hubs, An exploratory study into the possibility of allocating logistics functions to mobility hubs*, study for AT Osborne, Delft, 29-11-2021. {Logistics concepts} - TRB congress paper.

[43] Hidde van Wezel, *Conceptual Design of a Parcel Hub Scheduling Process to Balance the Inbound Transportation Flow, a casestudy at DPD Veenendaal*, Delft, 16-11-2021. {Logistics / Scheduling}

[42] Quirine van Rooyen, *Towards a zero defect based assembly warehouse, A case study at DHL Supply Chain Bergen op Zoom*, Delft, 26-08-21. {Logistics / Assembly / Performance}

[41] Anne van Langevelde, *Designing a strategic process performance measurement system for the Dutch Flower Auctions*, study for Royal Flora Holland, Delft, 24-08-21. {Logistics / Performance / Management}

[40] Julius Scheepens, *Modelling the optimal customer-allocation in an edible oil supply chain network, A case-study at Cargill's fully refined rapeseed oil network in Western-Europe*, Delft, 26-05-21. {Logistics / Food / Finance}

[39] Vittorio Mandolesi, *Evaluating transport and warehousing costs savings opportunity through direct delivery implementation in a supply chain distribution structure with DCs: Case study at Philips coffee business*, Delft, 26-05-21. {Logistics / Non-food / Finance}

[2020: 9]

[38] Peter Joon, *Improving on-site logistics, The case of the on-site transportation planning of Tata Steel IJmuiden*, study for ORTEC. Delft, 15-12-2020. {Logistics / Planning}

[37] Stefan van Lier, *Optimizing solid waste management in theme parks, A case study at Efteling*, Delft, 04-11-2020. {Waste management / Sustainability}

[36] Max Buirma, *Ship based carbon capture storage and utilisation, A roadmap towards implementation for large LNG powered offshore vessels*, study for Heerema Contractors, Delft, 29-10-2020. {Sea shipping / Fuels / Sustainability} - Journal paper: energies-15-00813-v2

[35] Frank Heins, *Freight traffic on the Dutch railway network in 2030 and 2040*, study for DB Cargo Nederland, 29-09-2020. {Rail freight network analysis}

[34] Joost de Graeff, *Determining the feasibility of a new airport passenger terminal concept based on seamless flow technology, Mixing domestic and international passengers in passenger terminal facilities*, study for NACO, Delft, 20-08-2020. {Airport operations optimization}

[33] Ward de Jong, *Towards smart transport infrastructure, A concept roadmap to implement smart transport infrastructure for movable bridges in the Netherlands*, study for Witteveen + Bos, Delft, 17-08-2020. {Asset management / Infrastructure planning}

[32] Iris Vendrik, *Strategies to regulate inbound logistics at convention centers, A case study of the RAI Amsterdam*, Delft, 01-07-2020. {Logistics / Area management}

[31] Tugba Uzel, *Information sharing and collaboration between the logistic partners of intermodal rail transport*, study for Port of Rotterdam Authority, Delft, 25-06-2020. {Port rail logistics / Cooperation}

[30] Willemijn van der Elst, *Towards continuous flow in production lines, A case study at Heineken Zoeterwoude*, Delft, 13-05-2020. {Logistics optimization}

[2019: 5]

[29] Jacob Thijssen, *How can financiers improve the carbon efficiency of their shipping portfolios. Case study at NIBC Bank*, Delft, 31-11-2019. {Sea shipping / Sustainability / Finance}

[28] Thomas Mulder, *How to increase local value added and make the supply chain of cashew nuts more sustainable*, study for TDG, Delft, 11-07-2019. {Logistics / Food / Sustainability}

[27] Tim van Rugge, *A-Pier Clean VOP Developing a strategy for on-time cargo delivery to the aircraft under clean apron conditions*, study for KLM Cargo, Delft, 24-06-2019. {Airport development}

[26] Jasmijn Kusters, *Exploring improved maintenance strategies of (rgs) at the intersection of principal-agent theory and economic relevance: A case study*, Delft, 09-05-2019. {Public transport / Asset management / Maintenance}

[25] Ilias Bouhannouche, *Evaluating the operational and financial feasibility of battery-electric AGVs at brownfield container terminals*, study for ECT, Delft, 07-02-2019. {Container handling / Asset management / Sustainability}

[2018: 9]

[24] Evangelos Giannoulakis, *Optimizing Packaging Availability for Reverse Logistics, A case study at ASML*, Delft, 10-12-2018. {Reverse logistics / Maintenance}

[23] Dioeke Tromp, *Airside vehicles: Roads to CO2 reduction The design of an Emission-Prediction-Decision Model (EPDM)*, Delft, 12-11-2018. {Airport / Asset management / Sustainability}

[22] Thomas van der Heijden, *Supply Chain Design for Heineken Flexbrewery*, Delft, 22-10-2018.

[21] Hadassa Stevens, *Towards an adequate methodology for GHG emissions accounting in logistics, A case study at Heineken*, Delft, 1-10-2018. {Logistics accounting / Sustainability}

[20] Hester Horn, *Decision support system design by means of a Customer Relationship Management strategy, Application in the retail banking industry*, Delft, 16-08-2018. {Financial decision-making}

[19] Rutger van Ouwerkerk, *Environmental network optimisation using Physical Internet logistics in the parcel delivery industry*, study for Post.nl, Delft, 31-07-2018. {Logistics / Sustainability}

[18] Wouter Cordesius, *Improve distribution network of BMN Bouwmaterialen*, Delft, 25-04-2018. {Logistics network optimization}

[17] Harmen Scholvinck, *Outbound logistics at Lidl DC, What process improvement can be implemented to achieve higher productivity?*, Delft, 18-04-2018. {Logistics improvements}

[16] Joke Blom, *Optimizing the track and traceability of packaging materials, a case study at Heineken HNS*, Delft, 22-01-2018. {Logistics optimization}

[2017: 7]

[15] Rex van Damme, *Product allocation strategies in a saturated distribution center, Case study at the L'Oreal distribution center (Alphen a/d Rijn)*, Delft, 29-11-2017. {Logistics}

[14] Max Mol, *Design of an End-State Cross Docking Hub for a Pure Online Grocer, A case study at Picnic Supermarkets*, Delft, 23-10-2017. {Logistics network / Customer-driven}

[13] Simone Rietbroek, *A service level optimization - A case study at HEMA logistics*, Delft, 17-10-2017. {Logistics optimization}

[12] Anna Simons, *Strategic positioning of the customer order decoupling point in a project based organization*, study for Vanderlande, Delft, 27-09-2017. {Logistics decision-making}

[11] Katharina Peer, *The impact of pre-sorting and conveyor configuration on material flow performances at a parcel hub, A case study at TNT Express*, Delft, 26-06-2017. {Logistics / DC technology}

[10] Robin van der Sande, *Analysis of filler dwell time and the financial consequences for Euro Pool System*, Delft, 09-05-2017. {Logistics / Asset management / Finance}

[9] Joris Jacquemijns, *Improving the lead-time for ACD products in the distribution center of L'Oreal located in Alphen aan den Rijn*, Delft, 23-03-2017. {Logistics optimization}

[2016: 3]

[8] Jaap van der Steenhoven, *Optimizing Logistic Flows at Action DC Echt*, Delft, 04-10-2016. {Logistics optimization}

[7] Dino Ramic, *CTT Rotterdam case study: development and improvement of the tri-modal inland container terminal at Rotterdam*, Delft, 28-09-2016. {Container terminal development}

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[6] Anniek de Milliano, *A supply concept for the delivery process of nanostores at NS train stations*, Delft, 18-08-2016. {City logistics}

[2015: 2]

[5] Nadezda Iakovleva, *Development of impact assessment methodology for sustainable city logistics initiatives: case of SMARTFUSION project*, Delft, 2015. {City logistics / Sustainability}

[4] Daphne Kerpel, *Analysis of main factors in site selection for Distribution Centers in a port area and the hinterland*, Delft, 22-06-2015. {Logistics / DC location choice}

[2014: 1]

[3] Celenie Piccot, *Influence of the performance of hinterland transportation in port choice decision making*, Delft, 08-01-2014. {Freight transport / Hinterland}

[2013: 2]

[2] Roger Peeters, *Green City Distribution*, Delft, 2013. {City logistics}

[1] Erik Altena, *Optimization of modal shift and empty container repositioning at Maersk Line*, Delft, 08-04-2013. {Freight transport / Empty container management}

MSc Thesis advisor 2013+

Neal de Vreede, *Improving performance of cargo acceptance process at Air France - KLM Cargo*, Delft, Delft, 09-03-2017. {Air freight handling}
