-MULTI STAKEHOLDER INSIGHTS FROM OFF-PEAK DELIVERIES WITHIN HITS2024

18/JUNE/2021

ITM/ITRL



SOURCE: UNSPLASH







Design experiments and methods for collaborative future making & servitization -To explore, prototype and understand conditions for a sustainable integrated transport system in the city.

By addressing...

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

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SUSTAINABLE CITIE AND COMMUNITIES

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Applications, data sharing

Cloud / Control towers

TIM SELIM



VETENSKAP OCH KONST

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MOTIVATION

8/11 INE/202

The results from off-peak delivery research and pilot projects have showcased increased transport efficiency while lowering the environmental impact. However, our initial exploration has highlighted that the adoption of off-peak deliveries has been challenging for the receiving partners. In general, off-peak delivery projects have an increased provider perspective. Therefore, further research was needed to look at pain points and gain points within off-peak deliveries, how value is spread through off-peak deliveries, the motivations for off-peak deliveries, and possible barriers to collaboration.





RESEARCH QUESTIONS



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What are the pain points and gain points within off-peak deliveries? (Co-operation)



How is value spead within off-peak deliveries and how are off-peak deliveries motivated?

What are possible barriers for collaboration within off-peak deliveries?







RESEARCH METHOD

COLLABORATION



SEMI-STRUCTURED INTERVIEWS COLLABORATION VALUES **INNOVATION**



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ROUTINES GAIN-POINTS PAIN-POINTS

JOURNEY MAPPING



CO-OPERATION



FOCUS

ETENSK.

A-total of seventeen semi-constructed interviews have been conducted within off-peak deliveries focusing on different stakeholders.

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REGULATOR



OEM

COMPANY







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PAINS

Initial investment in off-peak technology is a pain-point for many companies

Transport desk not operational 24/7 - limiting support for drivers in the field

Operational issues with obtaining keys tags and codes and access to delivery points

Driver safety at nighttime remains a continous concern

Night work salary cost remains a prohibiting factor for the reciever.

Noise pollution (noise levels) cause continous concerns in certain areas resulting in legal complaints

Getting access to locations has been a big issue many discussions with clients in relation to locks, alarms and safety

The off-peak certified technologies wear off quicker than anticipated and result in increased noise levels

Off-peak certified trucks can op Delivering goods at nighttime sa The driver experiences less stres Benefits from off-peak deliveries Silent truck - Better environmen Transportation is more precise, Less interactions wit citizens/cu Deliveries are most often on time

terminals.

Clients could change the schedule since the deliveries were unmanned and save costs by having their staff come later



GAINS

erate 24/7 resulting in decreased feet size	
aves time as the truck is not stuck in traffic.	
ss due to the lack of traffic (congestion)	
s outweigh drive nighttime cost (providers)	
It for the drivers.	
effective and sustainable	
ustomers/city-life	-
e due to the lack of traffic at night and in loading	









UNMANNED DELIVERIES





RESULTS:

MOTIVATIONS FOR OFF-PEAK DELIVERIES



Freight transport between 22:00-06:00 in the inner city of Stockholm using off-peak certified vehicles and support gear to ensure low sound emissions and geo-fencing to ensure the operation in electric mode in the restricted areas as defined by Stockholm Stad. The deliveries are both manned and unmanned at the receiver stage.



Freight transports at similar times to offpeak times to avoid congestion and wait in traffic and loading terminals. These deliveries are most often unmanned and do not always use off-peak certified vehicles.





Freight transport without employees required on the receiver side. These locations are usually located in industrial zones and the outskirts of the city. These transports are not always conducted at off-peak times and also not with offpeak certified vehicles.



BARRIERS

Several barriers for collaboration within off-peak deliveries have been identified during the interview process with the different stakeholders:



UNWILLINGNESS TO SHARE RISK AND REWARD



INADEQUATE INFORMATION SHARING



LACK OF TRUST AMONG THE PARTNERS



LACK OF COLLABORATIVE AND STRATEGIC PLANNING



LACK OF SUPPLY CHAIN VISION/UNDERSTANDING





DISPARITY IN TECHNOLOGICAL CAPABILITY AMONG PARTNERS



OPERATIONAL LICENCE UNCERTAINTIES (DISPANS)



THANK YOU FOR YOUR ATTENTION!

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