ECG Tech Board

Questionnaire results

March 2024

ECG The Association of European Vehicle Logistics

Executive summary

- Both OEMs and LSPs see pressure on capacity & cost – these are the areas with the highest proportion of business-critical challenges (respectively 36% and 23%)
- In terms of cost, the LSPs highlight energy costs (40% rate it as of very high impact) and cost of equipment (36%), while the OEMs take note of rising transport rates (very high impact for 69% of the respondents), pressure on transport budget (47%) and chartering of dedicated resources (47%).
- Capacity is a challenge on both sides: LSPs lack the commitment to volumes (very high impact for 41%) and highlight the congested ports (53%) as the main factor, while the OEMs suffer from the lack of transport (60%) and storage capacities (52%).
- Lead time is a bigger challenge on the OEM side, who highlighted the lack of transparency of the delivery dates (36%), as well as the long lead times (26%).

Executive summary

- Re. operations, the LSPs stressed the challenge related to waiting times (32%), frequent changes and cancellations (22%) and requirement towards visibility and tracing of vehicle movements (11%), while the OEMs see an issue with the transparency when subcontractors are involved (very high impact for 39% of the respondents) and with the overall visibility and transparency of the vehicle movements (30%).
- LSPs see a challenge with the development of the vehicle size and weight (for 25% of respondents this is a very high impact), as well as the increasing complexity of handling cars (6%). It is also them who directly experience the challenges related to the Mobility package and other EU legislations (very high impact for 24%).
- From environmental awareness point of view, the LSPs feel the pressure to invest in green assets (very high impact for 21%), while CO_2 emission reporting comes also with a high impact rate. The transparency about CO_2 emission was reported having a very high impact by 30% of the OEM respondents.

Executive summary

- Invoicing is mostly a challenge for the LSPs who highlighted too long payment times (very high impact for 25%) and the prevalence of manual processes (12%).
- In the survey most disruption is seen in road transportation, but this importance might be simply due to the proportion of road transporters who took the questionnaire.
- The digitalisation part of the questionnaire revealed that data exchange is the best digitised among the respondents: more than 55% replied that the majority of their processes are digitised and integrated. Fleet and compound management follows with 39% and 32% respectively.
- Re. investment areas, the data exchange with the customers and partners and the route planning occupy the top positions. As far as the level of FVL digitalisation is concerned, 43% replied that their strategy has high impact, while 31% said their strategy has medium impact.

Executive summary

- To the question on FVL tech investment per year the majority of the respondents (34%) answered that they invest more than €250K, while almost 30% invest between €50K and €250K.
- We could observe a positive correlation between the investment and the company's declared level of digitalisation.
- On the LSP side there is a slight correlation between the investment and the visibility and tracking of vehicle movements, while the same from OEM point of view could not yield a robust enough result. The correlation of the investment and the congested transshipment on the OEM side did not yield robust results, while the analysis of the results form an LSP point of view yielded only a slightly positive correlation.

Tech Board questionnaire

- Questionnaire open between: 4 December 2023 and 3 January 2024
- Responses received:
  - Logistics Service Provider: 66 (69,47%)
  - Customer to the LSPs (e.g. OEM): 31 (32,63%)
- Colour code of the tables in the presentation:

0%-10%	
10.1%-20%	
20.1%-30%	
30.1%-40%	
above 40.1%	

- Items in the tables listed in decreasing order
  - Where there are multiple columns, decreasing order is on the column 'Business critical challenges' or 'Very high impact'

Areas with challenges – for both LSPs and OEMs

	No challenges	Minor challenges	Major challenges	Business critical challenges	Total
Capacity	2.15%	17.20%	44.09%	36.56%	93
Cost	3.30%	21.98%	51.65%	23.08%	91
Human Resources	15.05%	36.56%	31.18%	17.20%	93
Lead time	9.89%	34.07%	41.76%	14.29%	91
Environmental awareness	8.60%	39.78%	38.71%	12.90%	93
Regulatory requirements	11.96%	42.39%	34.78%	10.87%	92
Invoicing and accounting	25.27%	46.15%	20.88%	7.69%	91
Operations	16.48%	49.45%	29.67%	4.40%	91
Technical development of the transported cars	20.65%	48.91%	26.09%	4.35%	92

LSPs – Challenges related to cost

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Rising energy costs	0.00%	14.89%	44.68%	40.43%	0.00%	47
Rising cost of equipment	0.00%	19.15%	44.68%	36.17%	0.00%	47
Rising taxes / tolls	8.51%	27.66%	36.17%	27.66%	0.00%	47
Rising blue collar salaries	6.25%	33.33%	31.25%	27.08%	2.08%	48
Pressure on transport rates from customers	10.42%	22.92%	37.50%	27.08%	2.08%	48
Increased expectations of customers	2.08%	29.17%	41.67%	27.08%	0.00%	48
Rising white collar salaries	4.35%	39.13%	36.96%	17.39%	2.17%	46
Rising interest rates	4.17%	20.83%	58.33%	16.67%	0.00%	48
Rising real estate cost	14.89%	55.32%	21.28%	8.51%	0.00%	47
Poor utilization	14.89%	38.30%	34.04%	8.51%	4.26%	47

OEMs – Challenges related to cost

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Rising transport rates	0.00%	4.35%	26.09%	69.57%	0.00%	23
Pressure on budget for transports	0.00%	4.35%	47.83%	47.83%	0.00%	23
Chartering of dedicated resources	0.00%	30.43%	26.09%	43.48%	0.00%	23
Rising salaries in transport department	9.09%	59.09%	13.64%	18.18%	0.00%	22

LSPs – Challenges related to capacity

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure
Congested ports and compounds (waiting times unpredictable, special rules, etc.)	4.26%	21.28%	19.15%	53.19%	2.13%
Lack of commitment to volumes	2.08%	16.67%	37.50%	41.67%	2.08%
Poor outlook in planned customer demand (forecast)	2.13%	25.53%	36.17%	36.17%	0.00%
Lack of storage space	19.15%	12.77%	29.79%	36.17%	2.13%
Lack of workforce	6.25%	33.33%	35.42%	25.00%	0.00%
Lack of equipment	19.15%	29.79%	29.79%	21.28%	0.00%
Customers chartering dedicated resources	12.77%	38.30%	27.66%	17.02%	4.26%
Customers working directly with subcontractors	18.75%	37.50%	25.00%	16.67%	2.08%
Reduced capacity due to regulation (e.g. zero emission zones)	15.22%	39.13%	30.43%	15.22%	0.00%
Reduced productivity due to many drop off points	14.58%	41.67%	29.17%	14.58%	0.00%

OEMs – Challenges related to capacity

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Lack of transport capacities	4.35%	4.35%	30.43%	60.87%	0.00%	23
Lack of storage capacities	4.35%	17.39%	26.09%	52.17%	0.00%	23
Congested transshipment points (ports and compounds)	0.00%	8.70%	39.13%	47.83%	4.35%	23
Lack of commitment to volume	8.70%	21.74%	43.48%	21.74%	4.35%	23

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LSPs – Challenges related to lead time

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Short lead time requirements	21,28%	34,04%	29,79%	14,89%	0,00%	47
Lack of transparency concerning delivery dates	14,89%	46,81%	27,66%	10,64%	0,00%	47
Penalties for breaching agreed service level	22,92%	43,75%	18,75%	14,58%	0,00%	48

OEMs – Challenges related to lead time

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Lack of transparency concerning delivery dates	0.00%	18.18%	36.36%	36.36%	9.09%	22
Long lead times	0.00%	21.74%	52.17%	26.09%	0.00%	23

LSPs – Challenges related to operations

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Waiting times at collection and delivery	15.22%	19.57%	30.43%	32.61%	2.17%	46
Frequent changes / cancellations	8.89%	26.67%	42.22%	22.22%	0.00%	45
Requirements towards visibility and tracking of vehicle movements (ETA, loading and unloading information, real time information)	15.56%	35.56%	37.78%	11.11%	0.00%	45
Many unloading points	17.78%	37.78%	33.33%	11.11%	0.00%	45
Issues at loading and unloading points of customer	11.11%	46.67%	33.33%	8.89%	0.00%	45
Documentation and clarification of damages	15.22%	47.83%	26.09%	8.70%	2.17%	46
Documentation requirements	17.39%	52.17%	26.09%	4.35%	0.00%	46
Too many and not reliable subcontractors	21.74%	50.00%	23.91%	4.35%	0.00%	46
Language barriers	43.48%	45.65%	10.87%	0.00%	0.00%	46

OEMs – Challenges related to operations

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Lack of transparency if subcontractors are involved	4.35%	21.74%	34.78%	39.13%	0.00%	23
Lack of visibility and transparency on vehicle movements (ETA, statuses)	0.00%	21.74%	47.83%	30.43%	0.00%	23
Poor information about planned delivery dates	0.00%	26.09%	47.83%	26.09%	0.00%	23
Working with too many suppliers	17.39%	43.48%	21.74%	17.39%	0.00%	23
Unannounced collections and deliveries	4.35%	39.13%	30.43%	17.39%	8.70%	23
Documentation and clarification of damages	0.00%	52.17%	34.78%	8.70%	4.35%	23
Language barriers	43.48%	34.78%	21.74%	0.00%	0.00%	23

LSPs – Challenges related to the technical development of cars

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Size and weight of vehicles	8.51%	27.66%	36.17%	25.53%	2.13%	47
Increasing complexity of handling cars	14.89%	44.68%	31.91%	6.38%	2.13%	47
Safety concerns of Electric Vehicles	12.77%	42.55%	40.43%	4.26%	0.00%	47
Digitisation of Vehicles	15.22%	58.70%	21.74%	2.17%	2.17%	46

OEMs – Challenges related to the technical development of cars

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Size and weight of vehicles	4.35%	34.78%	43.48%	17.39%	0.00%	23
Lack of services provided for Electric Vehicles	4.35%	69.57%	8.70%	13.04%	4.35%	23

LSPs – Challenges related to regulatory issues

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Mobility package requirements (especially return of trucks and drivers)	26.67%	20.00%	22.22%	24.44%	6.67%	45
Weight and dimension restrictions	17.78%	33.33%	24.44%	20.00%	4.44%	45
Cabotage regulations	26.67%	28.89%	26.67%	13.33%	4.44%	45
Documentation and control of driving and rest times	17.78%	48.89%	15.56%	11.11%	6.67%	45
Requirements for mandatory weekly rest times and resulting fines	22.73%	34.09%	27.27%	11.36%	4.55%	44

LSPs – Challenges related to environmental awareness

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Pressure to invest in green assets	8.51%	19.15%	51.06%	21.28%	0.00%	47
Reporting on fuel and CO_2 emissions	10.64%	42.55%	40.43%	6.38%	0.00%	47

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OEMs – Challenges related to environmental awareness

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Transparency about fuel and CO2 emissions	4,35%	39,13%	26,09%	30,43%	0,00%	23

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LSPs – Challenges related to invoicing and accounting

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Payment time (too long)	2.13%	31.91%	40.43%	25.53%	0.00%	47
Manual processes related to documentation and verification	10.64%	40.43%	36.17%	12.77%	0.00%	47
Management of contractual rates	6.38%	53.19%	31.91%	8.51%	0.00%	47
Correct cost and revenue allocation (according to routes and customers)	23.40%	36.17%	31.91%	8.51%	0.00%	47
Compliance to different invoicing requirements	6.38%	48.94%	38.30%	6.38%	0.00%	47

OEMs – Challenges related to invoicing and accounting

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Compliance of invoices with invoicing standard	8.70%	56.52%	17.39%	13.04%	4.35%	23
Invoice verification process	4.35%	47.83%	30.43%	13.04%	4.35%	23
Management of contractual rates	8.70%	69.57%	13.04%	4.35%	4.35%	23

LSPs – Challenges related to human resources

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Recruiting	6.38%	34.04%	31.91%	27.66%	0.00%	47
Productivity management	12.77%	42.55%	31.91%	12.77%	0.00%	47
Qualification management	10.64%	44.68%	31.91%	12.77%	0.00%	47
Absence management	19.57%	41.30%	28.26%	10.87%	0.00%	46
Administrative effort around employing foreign personnel	21.28%	46.81%	19.15%	10.64%	2.13%	47

OEMs – Challenges related to human resources

	No or very limited impact	Limited impact	High impact	Very high impact	I am not sure	Total
Recruiting in the area of FVL	8,70%	34,78%	34,78%	13,04%	8,70%	23
Qualification management	8,70%	47,83%	26,09%	8,70%	8,70%	23

LSPs – Services most impacted by the challenges

	Not impacted by challenges	Limited impact of the challenges	High impact of the challenges	Very high impact of the challenges	N/A	Total
Road Transport	10.87%	8.70%	47.83%	28.26%	4.35%	46
Compound Storage and Handling	13.04%	21.74%	34.78%	23.91%	6.52%	46
Ship Transport	7.14%	21.43%	21.43%	16.67%	33.33%	42
Additional services on cars (e.g. car evaluation, wrap application, mechanical work)	23.81%	33.33%	14.29%	9.52%	19.05%	42
Train Transport	7.14%	21.43%	23.81%	7.14%	40.48%	42

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OEMs – Services most impacted by the challenges

	Not impacted by challenges	Limited impact of the challenges	High impact of the challenges	Very high impact of the challenges	N/A	Total
Road Transport	0.00%	8.70%	47.83%	43.48%	0.00%	23
Ship Transport	4.35%	13.04%	34.78%	43.48%	4.35%	23
Train Transport	4.35%	13.04%	30.43%	30.43%	21.74%	23
Compound storage and handling	4.35%	30.43%	39.13%	26.09%	0.00%	23
Additional services on cars (car evaluation, wrap application, mechanical work)	8.70%	69.57%	17.39%	0.00%	4.35%	23

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Level of digitalisation

For both LSPs and OEMs

Level of digitalisation

	All processes offline	Some processes digitized but function specific isolated systems	Majority of processes digitized and integrated with interfacing functions and companies	Intelligent decision making systems	Machine learning and AI	N/A	Total
Data exchange with customers and partners (Orders / Statuses / Movements / Services)	2,99%	28,36%	55,22%	7,46%	1,49%	4,48%	67
Management of your own fleet	6,06%	19,70%	39,39%	7,58%	1,52%	25,76%	66
Management of your own compounds	1,49%	22,39%	32,84%	8,96%	5,97%	28,36%	67
Management of own refurbishment operations	1,49%	17,91%	22,39%	11,94%	0,00%	46,27%	67
Disposition and route planning	4,55%	18,18%	39,39%	15,15%	1,52%	21,21%	66
Procurement	10,45%	34,33%	31,34%	4,48%	1,49%	17,91%	67
Settlement process (invoicing, accounting)	1,49%	35,82%	46,27%	8,96%	1,49%	5,97%	67
Recruiting	16,42%	35,82%	26,87%	1,49%	1,49%	17,91%	67
People management and human resources	9,09%	39,39%	28,79%	1,52%	1,52%	19,70%	66

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Investment areas

Answer Choices	Responses	
Data exchange with customers and partners (Orders / Statuses / Movements / Services)	71.21%	47
Disposition and route planning	48.48%	32
Management of your own fleet	37.88%	25
Management of your own compounds	33.33%	22
Settlement process (invoicing, accounting)	31.82%	21
Procurement	28.79%	19
Recruiting	27.27%	18
People management and human resources	24.24%	16
Management of own refurbishment operations	10.61%	7
Other (please specify)	4.55%	3
	Answered	**66**
	Skipped	**29**

Level of digitalisation of FVL

Answer Choices	Responses	
Our digital strategy has high impact (is thoroughly executed and constantly reviewed to reflect business challenges, new technologies and the development of digital capabilities of our organization)	43.94%	29
Our digital strategy has medium impact (is updated in irregular intervals and is executed in parts)	31.82%	21
We have a digital strategy, but it is outdated and lacks real impact	16.67%	11
We don’t have a digital strategy	9.09%	6

Investment in FVL tech in € per year

Answer Choices	Responses	
<50k	13,43%	9
50k-250k	29,85%	20
>250k	34,33%	23
I have no Idea	22,39%	15
	Answered	**67**
	Skipped	**28**

Correlation Analysis

For some Key aspects

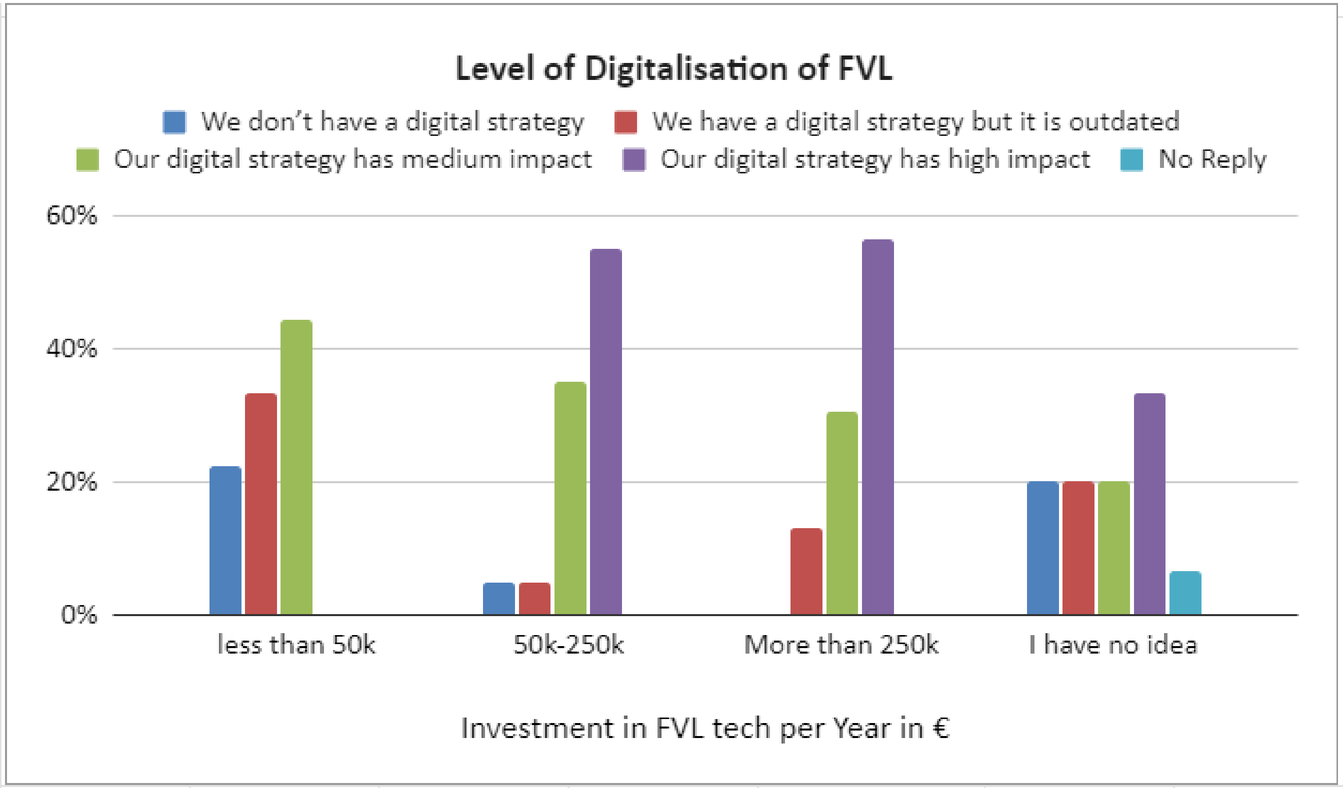
We analyzed some questions of the survey if they have correlation between each other:

Does "Investment in FVL Tech per year" correlate with

1. All Respondents: "Level of Digitalization"
2. LSPs: "Requirements towards visibility & tracking of vehicle movements"
3. Customers of LSPs: "Lack of visibility and transparency on vehicle movements"
4. Customers of LSPs: "Congested transshipment points
5. LSPs: "Congested ports and compounds

?

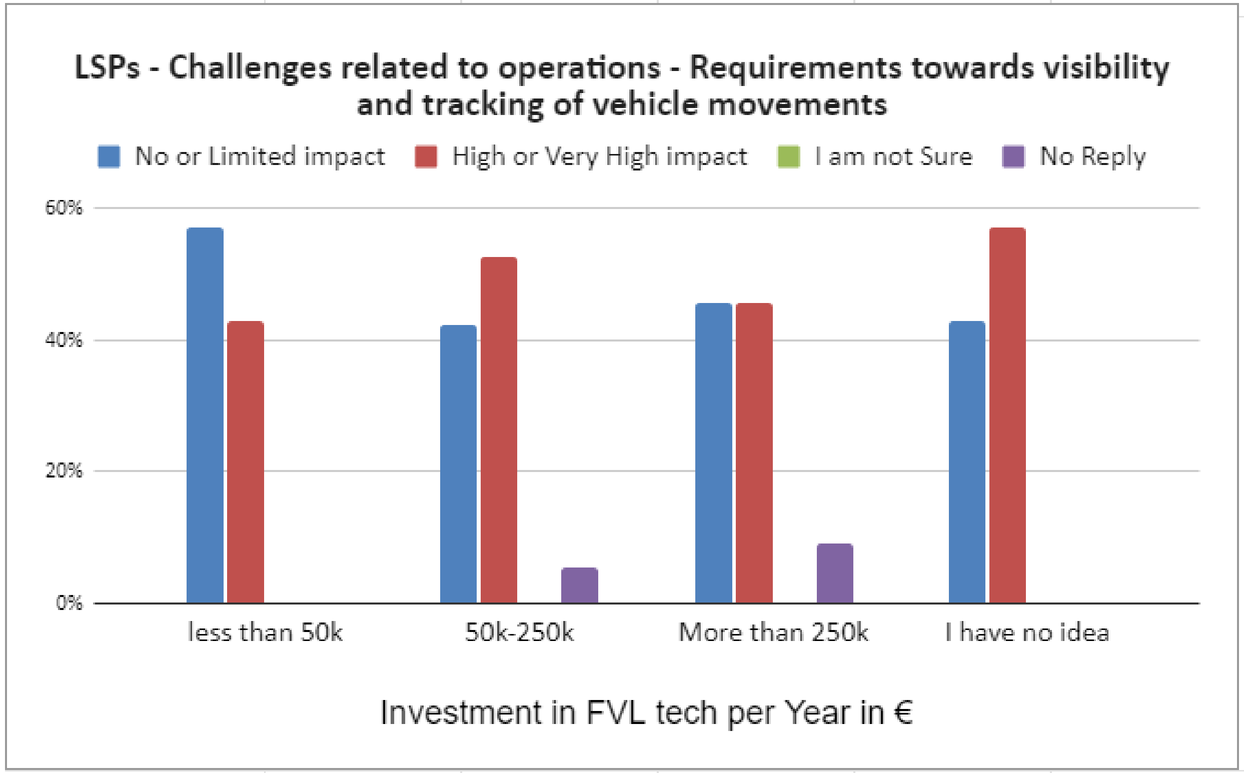
"Investment in FVL Tech" vs. "Level of Digitalization"



	We don't have a digital strategy	We have a digital strategy but it is	Our digital strategy has medium impact	Our digital strategy has high impact (is thoroughly	No Reply	**Total**
less than 50k	2	3	4	0	0	**9**
50k-250k	1	1	7	11	0	**20**
More than 250k	0	3	7	13	0	**23**
I have no idea	3	3	3	5	1	**15**
No Reply	0	0	0	0	28	**28**
Total	**6**	**10**	**21**	**29**	**29**	**95**

We see positive correlation

"Investment in FVL Tech" vs. "Visibility and tracking"



	No or Limited impact	High or Very High impact	I am not Sure	No Reply	**Total**
less than 50k	4	3	0	0	**7**
50k-250k	8	10	0	1	**19**
More than 250k	5	5	0	1	**11**
I have no idea	3	4	0	0	**7**
No Reply	3	0	0	19	**22**
Total	**23**	**22**	**0**	**21**	**66**

We see slight positive correlation

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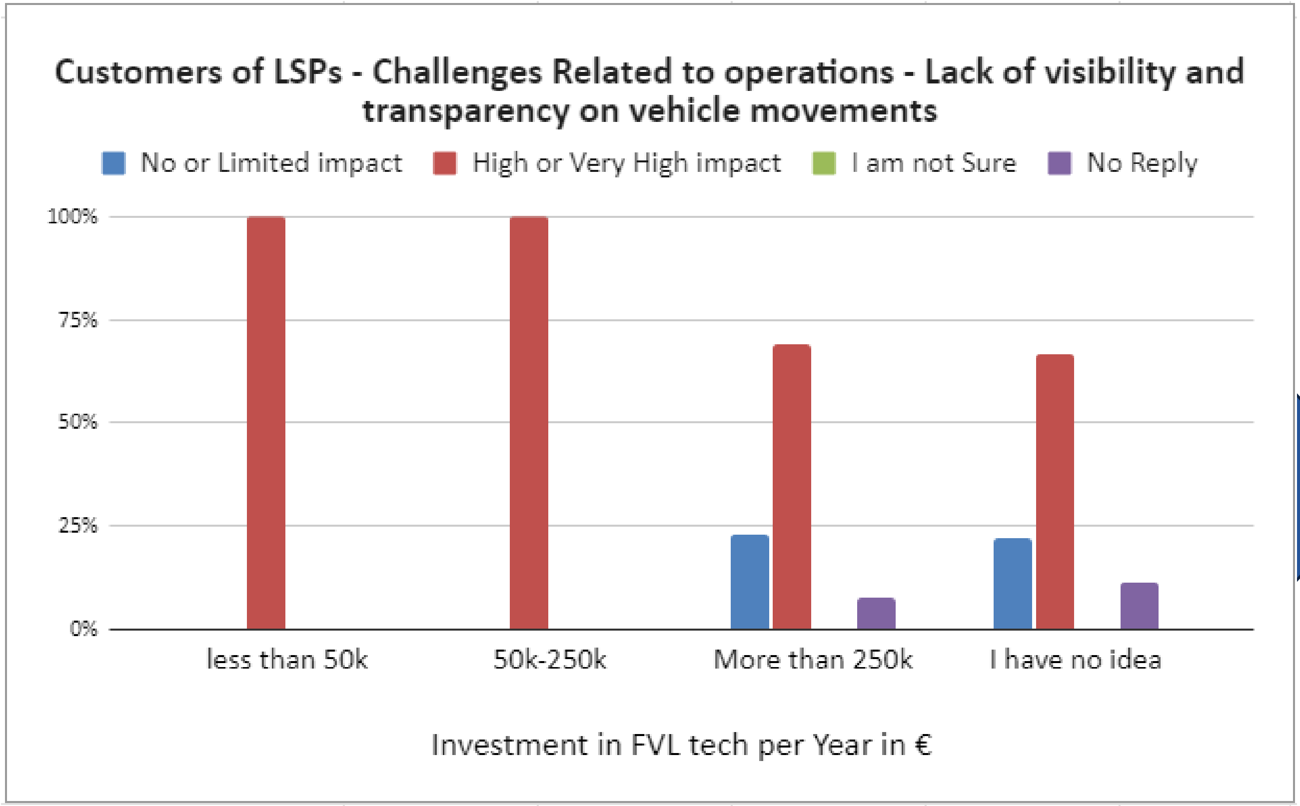
"Investment in FVL Tech" vs. "Visibility and tracking"

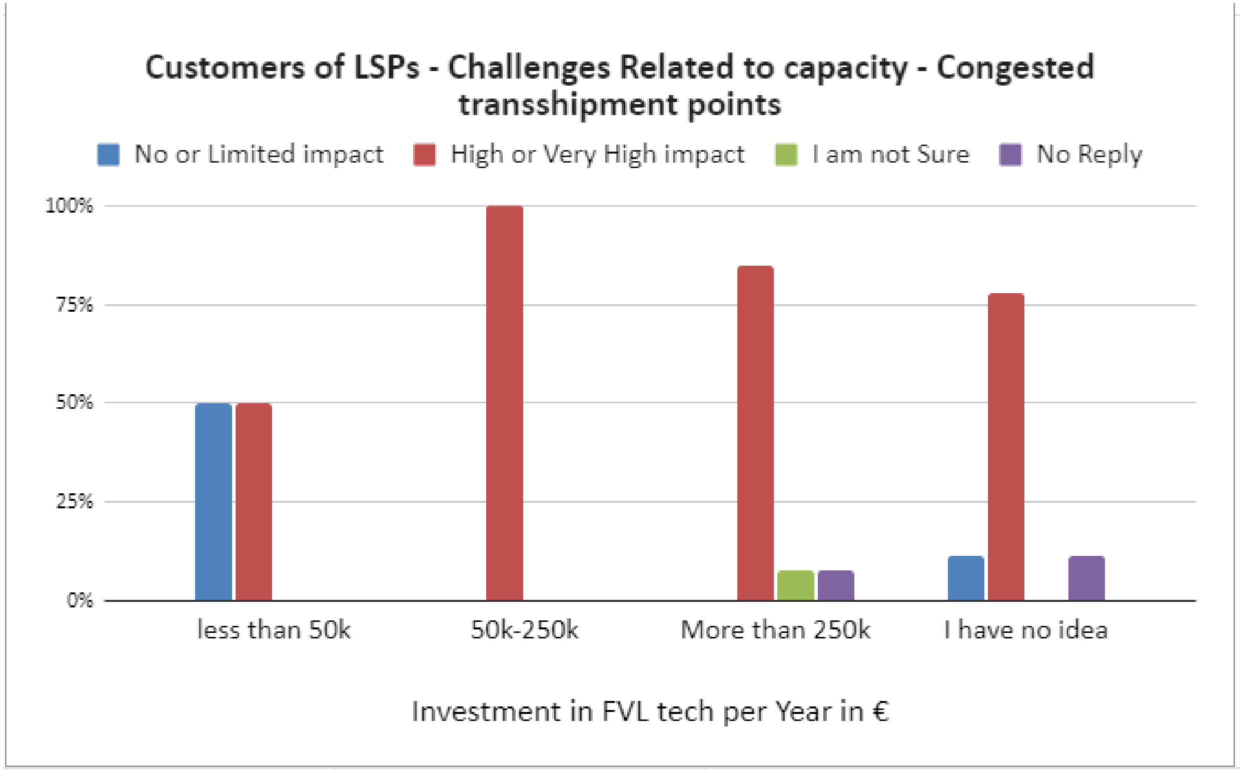


	No or Limited impact	High or Very High impact	I am not Sure	No Reply	**Total**
less than 50k	0	2	0	0	**2**
50k-250k	0	1	0	0	**1**
More than 250k	3	9	0	1	**13**
I have no idea	2	6	0	1	**9**
No Reply	0	0	0	6	**6**
Total	**5**	**18**	**0**	**8**	**31**

Negative correlation

Few respondents per cluster
=> Results not robust

"Investment in FVL Tech" vs. "Congested transshipment"



	No or Limited impact	High or Very High impact	I am not Sure	No Reply	**Total**
less than 50k	1	1	0	0	**2**
50k-250k	0	1	0	0	**1**
More than 250k	0	11	1	1	**13**
I have no idea	1	7	0	1	**9**
No Reply	0	0	0	6	**6**
Total	**2**	**20**	**1**	**8**	**31**

Positive correlation

Few respondent per cluster
=> Results not robust

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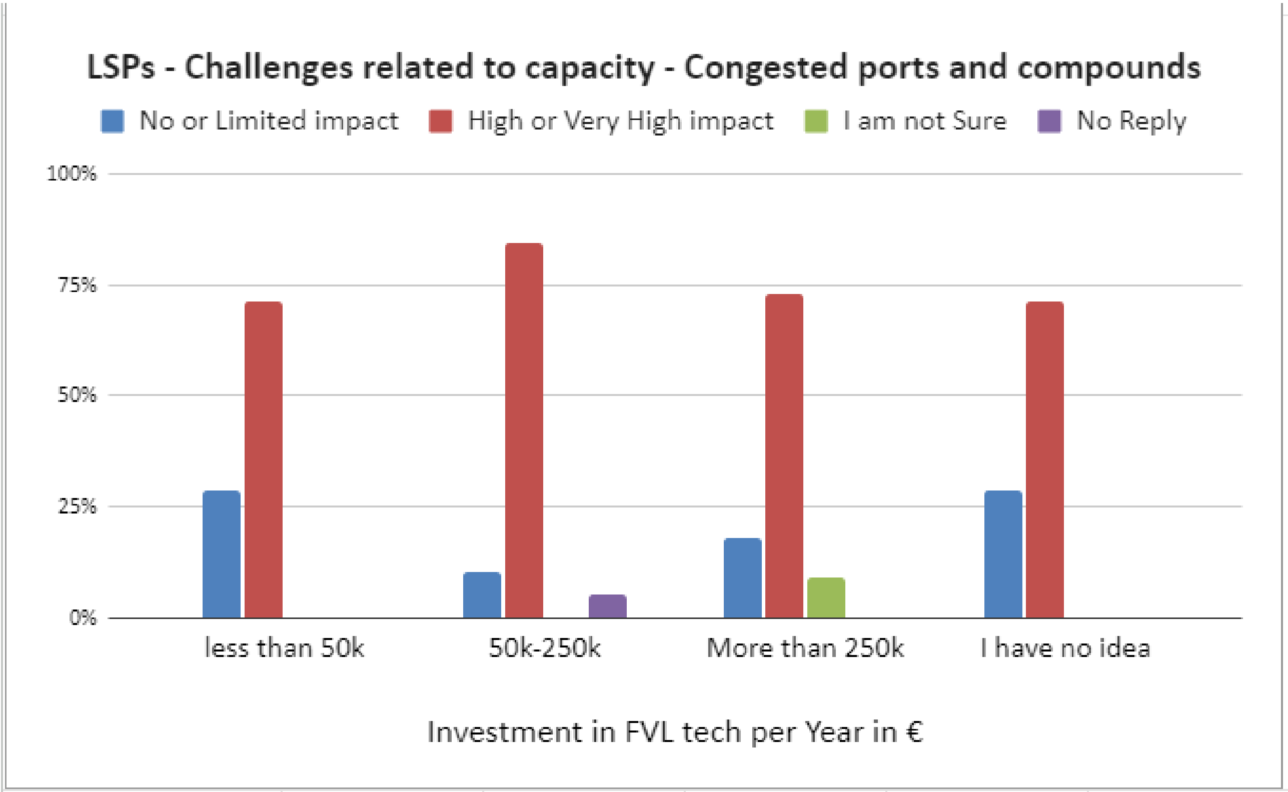
"Investment in FVL Tech" vs. "Congested Ports"



	No or Limited impact	High or Very High impact	I am not Sure	No Reply	**Total**
less than 50k	2	5	0	0	**7**
50k-250k	2	16	0	1	**19**
More than 250k	2	8	1	0	**11**
I have no idea	2	5	0	0	**7**
No Reply	4	0	0	18	**22**
Total	**12**	**34**	**1**	**19**	**66**

We see slight positive correlation

Thank you

Any questions or comments?

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