



**CLUSTER
FOR
LOGISTICS**

LUXEMBOURG
ADDING VALUE IS THE KEY.



THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG
Ministry of the Economy

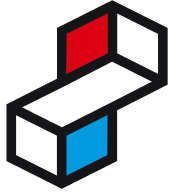
C4L Member Survey on Digital Transformation in Transport and Logistics

June 2022

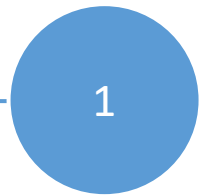
Cluster for Logistics Luxembourg

ADDING VALUE IS THE KEY.

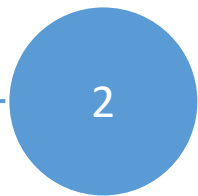
SINCE 2009



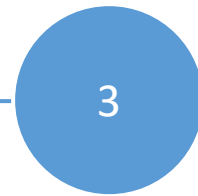
Agenda



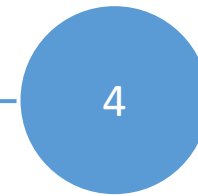
Key data
of the survey



Internal implementation
of digitalization processes



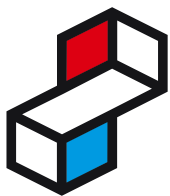
Handling and
processing of data



Excursus: Electronic
delivery notes



Key Results & Action
Points



1. Key data of the survey

Survey period | Company size | Company activities



Key data survey

Survey period:

01/02/2022 to 04/03/2022

Pool of participants:

Members of the C4L (n=92)

Participants:

39 Companies (n=39)



Key survey topics

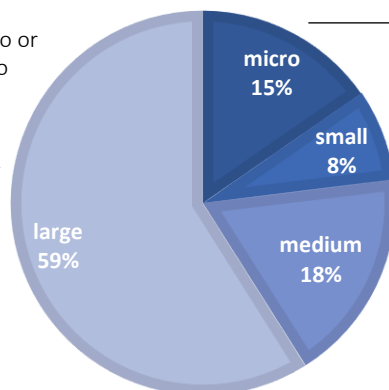
1. Internal implementation of digitalization processes
2. Handling and processing of data
3. Excursus: Electronic delivery notes



Company size

Headcount and turnover or balance sheet

HC: >250;
TO: >50 million euro or
BS: >43 million euro



HC: <10;
TO: ≤2 million euro or BS: ≤2 million euro

HC: <50;
TO: ≤10 million euro or BS: ≤10 million euro

HC: <250;
TO: ≤50 million euro or BS: ≤43 million euro

n = 39

HC: Headcount

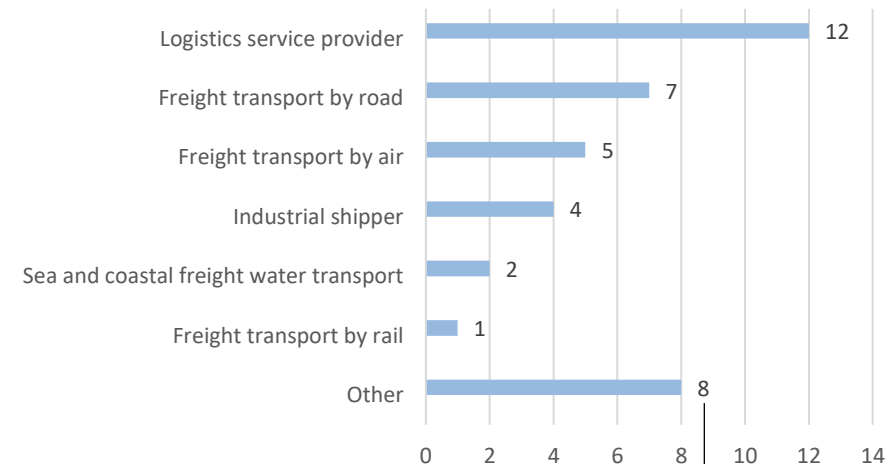
TO: Turnover

BS: Balance sheet



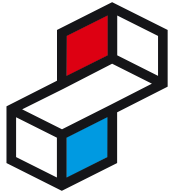
Company activities

NACE CODE



n = 39

Other: e.g., ground handler, warehouse construction, last mile, consultancy, platform provider, etc.



2. Internal implementation of digitalization processes

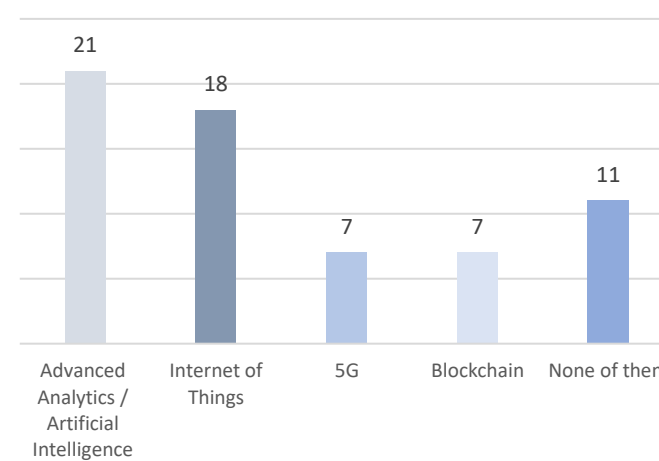
Main Use Cases | Investigated Technologies | Maturity of Projects

Which of the following do you consider as the main use case(s) for the digital transformation of your transport and logistics processes?



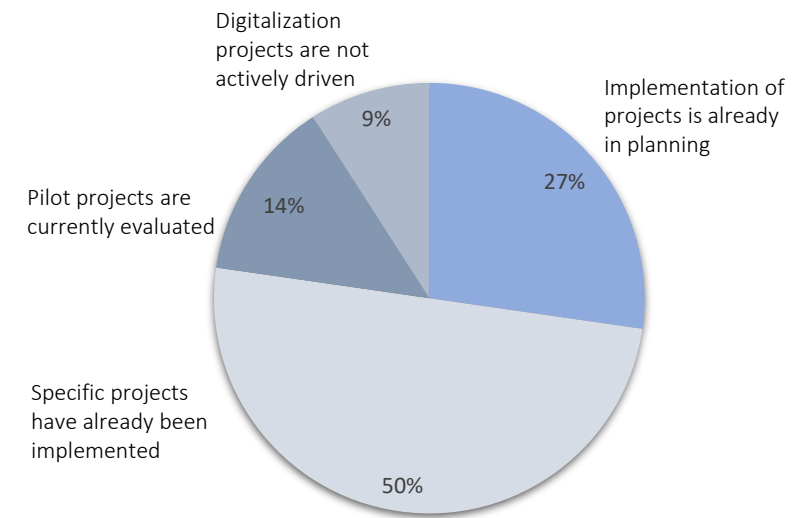
n = 39
Multiple answers were possible

Have you investigated one of the following technologies in the context of the digital transformation of your transport and logistics processes?

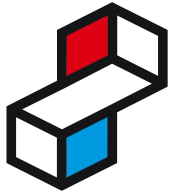


n = 39
Multiple answers were possible

How would you rate the maturity of your company's digitalization projects?



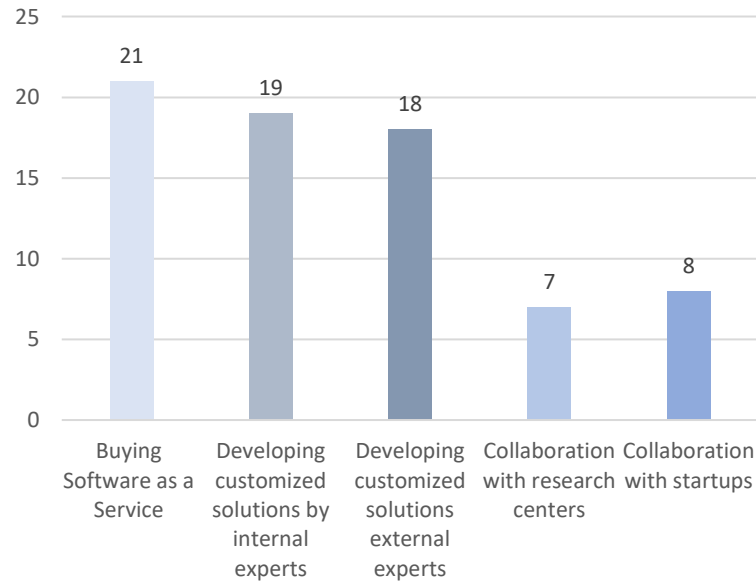
n = 39
Only a single answer was possible



2. Internal implementation of digitalization processes

Development of Projects | Barriers to Innovation | Skill & Talent Challenges

How does your company proceed to put digitalization projects into practice?



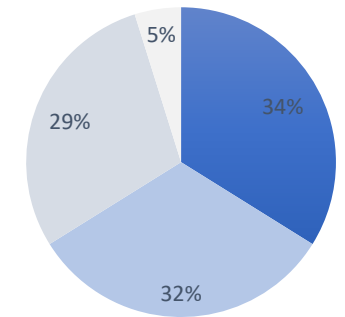
n = 39
Multiple answers were possible

What is the main barrier for driving digital transformation processes in your company?



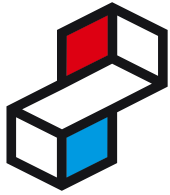
n = 39
Multiple answers were possible

What are in your view the main challenges with respect to skills/talents regarding the digital transformation of your company?



- Managing cultural change
- Recruiting people with the right skills
- Reskilling current workforce
- Other: e.g., Time & resources, Keep skilled employees with us

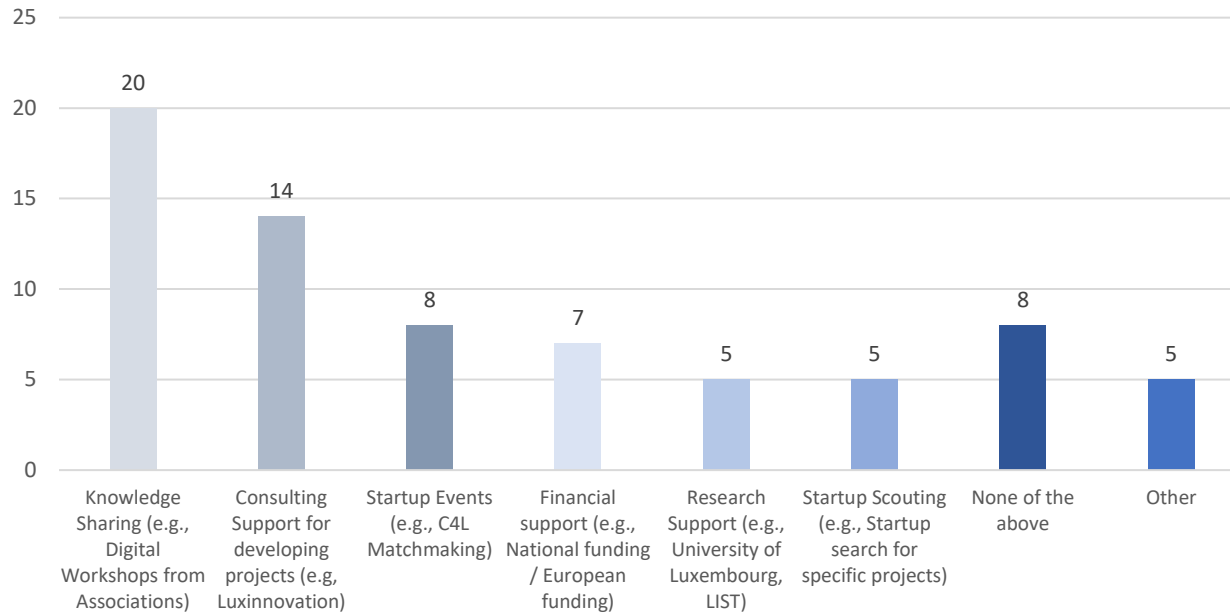
n = 39
Multiple answers were possible



2. Internal implementation of digitalization processes

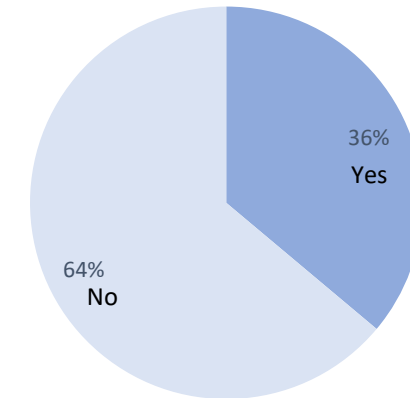
Support Initiatives | Percentage of Participation | Percentage of Participation

What kind of support would you need for moving forward in your digitalization efforts?



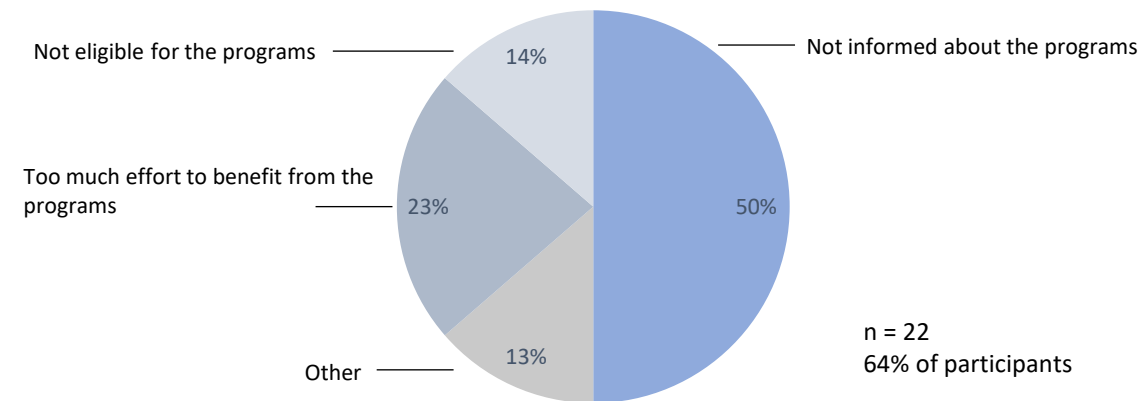
n = 39
Multiple answers were possible

Has your company already benefited from support initiatives offered in Luxembourg?

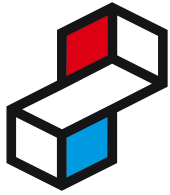


n = 36

If not, why has your company not benefited from such a support initiative(s) yet?



n = 22
64% of participants

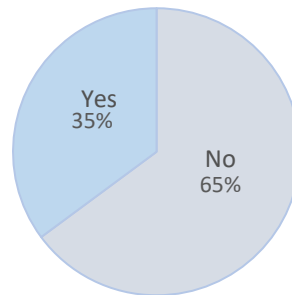


3. Handling and processing of data

Data Strategy | Sharing Data Key | Challenges of Data Collection

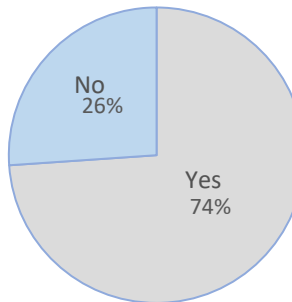
Does your company systematically collect and process data in order to evaluate and predict certain operational processes?

n = 37

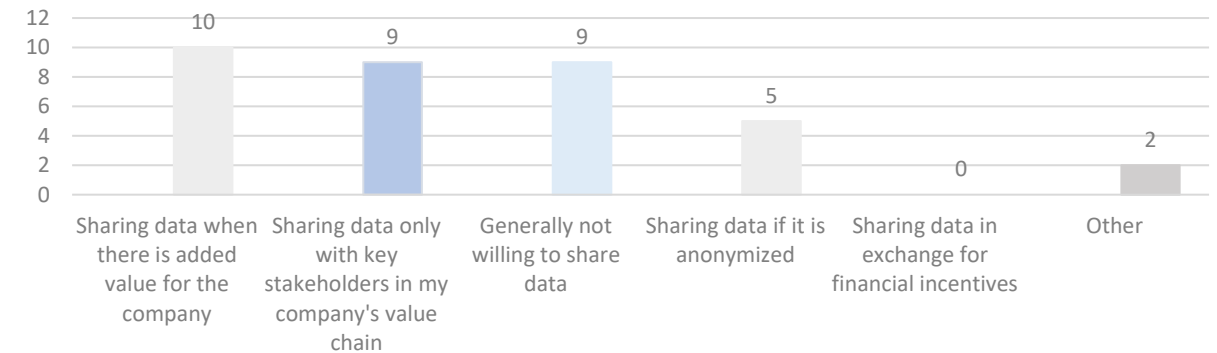


If so, has your company a defined data strategy to ensure the collection, use and governance of data?

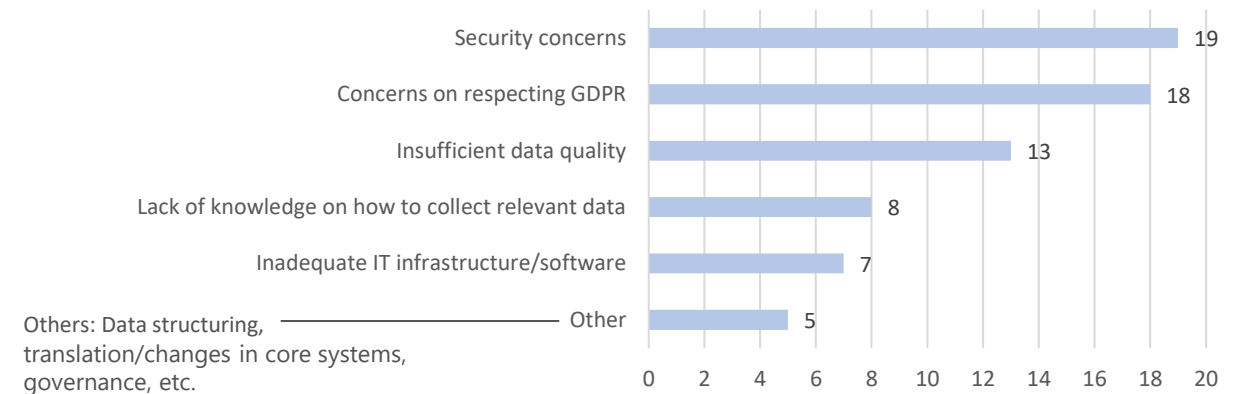
n = 23



How do you rate your company's willingness to share data?

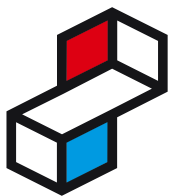


What do you see as the key challenges around data collection and processing?



n = 34

Multiple Answers were possible

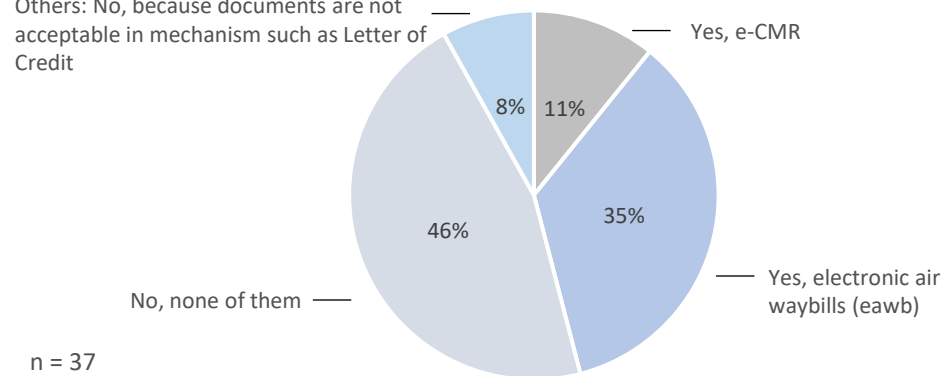


4. Excursus: Electronic delivery notes

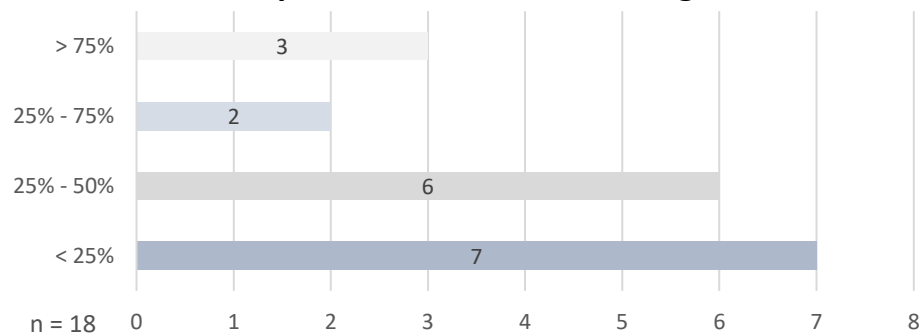
Usage of Electronic delivery notes

Does your company already work regularly with electronic delivery notes?

Others: No, because documents are not acceptable in mechanism such as Letter of Credit

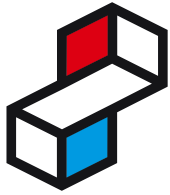


If so, how large is the share of electronic paperless freight documents compared to conventional freight documents?




If not, why are digital delivery notes not yet being used by your company?






5. Key Results & Actions from the Digital Transformation Survey

A = Action




91% actively drive digitalization projects

- 50%** have already implemented specific digitalization projects
- 27%** are planning the implementation
- 14%** are evaluating pilot projects



Main Use Cases

Operational Efficiency	Transportation Planning Processes (28) Digital Freight Documents (21) Warehouse operations (12)
Service Quality	Tracking & Tracing (27) Customer Service (17)



Main Technologies

AI	Advanced Analytics and Artificial Intelligence Solutions (21)
IoT	Internet of Things based Solutions (18)
None	Some companies seem to look at technologies they develop themselves (11)



Main barriers of driving digitalization projects

- 66%** Indicate having a lack of time or conflicting priorities A Action: Provide tailored support to our member companies regarding identified digitalization priorities to save the time of own research.
- 33%** Indicate having a lack of internal expertise A Action: Integration of digitalization expertise into school education DT Logistics, Bachelor in Logistics, etc.
- 1%** Indicate having a lack of financial expertise



Top priorities of support initiatives for C4L members

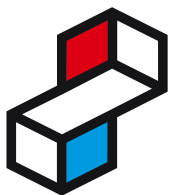
- 51%** Knowledge sharing organized by industry associations (e.g., Digital Workshops, Conferences, etc.) A Action: Organize digital workshops with experts on hot topics of digital transformation in logistics Knowledge sharing in our Podcast & Newsletter
- 36%** Consulting Support for developing digitalization projects (e.g., Luxinnovation) A Action: Maintain and extend startup matchmaking events to the needs of our members
- 21%** Startup Events (e.g., C4L Matchmaking Events)



64% have not benefited from support initiatives

- 50%** have not been informed about existing initiatives
- 23%** too much effort to benefit from initiatives
- A Action: Develop joint information campaigns about support initiatives in the ecosystem MECO, Luxinnovation, C4L, etc.

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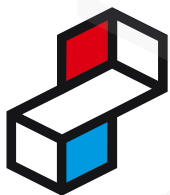


C4L Members and Partners

The frame contains the following logos and text:

- CHAMBER OF COMMERCE LUXEMBOURG** POWERING BUSINESS
- clc** commerce transport services
- Cluster Maritime** Luxembourgeois
- FEDIL** The Voice of Luxembourg's Industry
- LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY** | **LIST**
- LUXINNOVATION** TRUSTED PARTNER FOR BUSINESS
- uni.lu** UNIVERSITÉ DU LUXEMBOURG
- ARTHUR WELTER**
- ASTRON**
- cargolux**
- CFL multimodal**
- lux airport**
- CHAMP**
- DB SCHENKER**
- INL**
- Luxair CARGO**
- LUXPORT LORANG THESILUX** LUXPORT GROUP
- Post LUXEMBOURG**
- SOURCIFY**
- TRANSALLIANCE**
- enovos**
- SINGLE WINDOW FOR LOGISTICS LUXEMBOURG**
- LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG** Ministère de l'Éducation nationale, de l'Enfance et de la Jeunesse
- THE GOVERNMENT OF THE GRAND DUCHY OF LUXEMBOURG** Ministry of the Economy
- LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG** Ministère de la Mobilité et des Travaux publics Département de la mobilité et des transports

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