

Market Roadmap Smart Mobility





Partners:











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Introduction and group overview

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Objectives and targets

This report was made through multiple interactions with EIC Scaling Club stakeholder members, including scaleup companies, investors, corporates and public institutions representatives.

It provides a **snapshot of the stakeholder members vision and insights** on the state of the smart mobility market in Europe.

It is designed to help professionals and, especially entrepreneurs, grasp meaningful insights to build their scaling strategy.

The report is designed to...



... Help companies and entrepreneurs assess current market positioning to define future roadmap by comparing with peer positions and considering expert's insights and reports

And was designed thanks to...



... A mix of data-driven inputs in conjunction with qualitative insights obtained from live surveys, online and onsite workshops as well as dedicated interviews of club members







Highlights Report - Summary









Members of the club who participated to the study





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Scaleups selected

Following nominations of the most promising European scaleups according to stakeholder members, Companies have been selected based on their application to the program. Various criteria were taken into consideration, including technology maturity – management experience – go-to market strategy – competitive positioning – investment potential. Moreover, geography and gender balance were also considered to guarantee a fair representation of the European diversity.

эəze	Daze has developed DazePlug, the first totally autonomous conductive charging system for Electric Vehicles (EV) to automate EV recharge	Delivering Today	The world's first cargo drone airline, enabling same day delivery for everyone, everywhere
C Easelink	A high-tech company dedicated to facilitate e-mobility at scale with the development of the automated conductive charging technology Matrix Charging® for electric vehicles		Elaphe is a leading developer of direct-drive in-wheel electric propulsion technology for electric vehicles
κονυχ	Combining Machine Learning algorithms and IoT to deliver software-as-a-service solutions for operation, monitoring, and maintenance process automation	MANNA	Provides drone delivery as a service stack to restaurant chains, dark kitchens, and online food delivery platforms
SHIPPEO	The most recommended real-time transportation visibility platform in the world	tallan o	Tallano Technologies is a pioneer in the field of particle emission reduction systems for vehicle braking.
1547≮I⊾	A software solution that works as an enabler for connected car, telematics and autonomous car applications	Transmetrics	Combining human planners' inputs with AI, data mining, predictive analytics and computer optimization to enhance transport flows
	Vay aims to pioneer a sustainable, affordable, door-to-door mobility service with remotely driven ("teledriven") cars.		A mobility data platform for managing connected and shared mobility in the urban public realm







Program mentors



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hello tomorrow



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Key results

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Europe is a breeding ground for smart mobility scale ups, facing a dense international competition and having to overcome highly fragmented regulations



Europe is responsible for 28% of the global VC funding in mobility funding in 2023 while leading the debate when it comes to global early-stage funding in the industry.

\$9Bn

Were raised by European startups in the sector in 2023 making it the 3rd most funded sector behind energy and health



83%

Of club members think that the regulation frame in Europe is insufficient to enhance the development of smart mobility. Whether regulations are missing, or too fragmented, further actions are needed

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A mobility transformation is underway. From electric vehicles to connected mobility, new technologies are transforming the way we move but companies need first to face a **fragmented industry**.

Rapid deployment of US scale-ups is identified as the biggest competition for European scaleups

The mobility market in Europe is currently undergoing a dynamic transformation, driven by remarkable innovations strona and investor The transition commitment. to sustainable mobility and the rapid development of infrastructure for electric vehicles are at the forefront of this evolution.

While key technologies such as hydrogen and high-energy-density batteries are still maturing, significant progress is being made, paving the way their widespread adoption. for Moreover, the sector is benefiting from robust investment flows and supportive regulatory frameworks, which are mitigating risks such as raw material volatility price and economic uncertainties.

By fostering continuous innovation and adapting to evolving market dynamics, the industry is poised for a sustainable and prosperous future 11



Y. Marteil, Managing Partner, Shift4Good President of the Smart Mobility Group

Sources: Accelerating the global transition to connected, autonomous and sustainable mobility, PwC

The State of European Mobility in 2023, Via ID



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Europe and North America are the prioritized target markets for all companies in the mobility sector

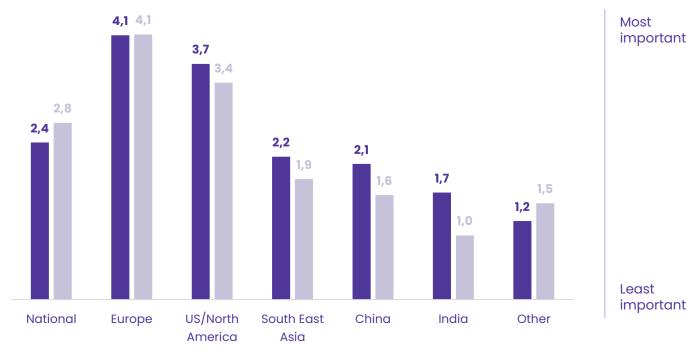
Both companies and stakeholders have a strong market focus on Europe and North America. However, corporates are more inclined to diversify their market development, especially towards Asia.

Prioritized geographic market in the next 3 years

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Average ranking from respondents, 1 being the least important and 5 the most important



StakeHolders Companies

* 19 people answered from live survey questions

// Start with national market to legitimate the next market. It needs to be case by case, not necessarily Europe first, then the US. It depends on the business model, the technology, where is the competition. If it's Europe, it's important to stay open to Eastern or Southern countries as well not always Belgium, Germany or the UK.





Yann Marteil, Managing Partner at Shift4Good

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Expanding in Europe is harder than it is for the US due to different dynamics and organizational behavior. To expand in Europe, national cultures require individual approach, it needs understanding and knowledge of each target. Different incentives based on national strategies affect market behavior.



Luka Ambrozic, CCO at Elaphe Propulsion Technologies



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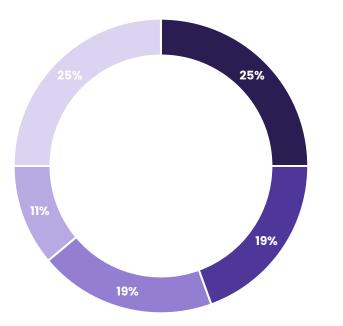
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OEMs, automotive suppliers and public organizations are prioritized when it comes to scaling which raises the issue of long sales cycle in this industry

OEMs, automotive suppliers and public organizations are the most sought-after partners to scale

Prioritized potential partners market in the next 3 years

Percentage of each option in the top 3, out of 36 votes – 12 respondents, 3 votes each Other includes freight and supply chain operators, and transportation hubs



OEMs

- Automotive suppliers (Tier 1,2,3)
- Public organizations/cities
- Infrastructure investors
- Other

OEMs are quite slow in their decision-making process as they are very conservative. I would recommend to have always something to develop in parallel, which would provide them with additional market traction, and I suggest having smaller companies test their products before the OEMs.



Sonia Ferreira, Key Global Clients Director at Maersk

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Automotive suppliers are driven by business goals of the next 5 years and shareholder returns, **not long-term competitiveness.** Making deals with them takes time as they are very slow and conservative. Some of the target partners, especially in the software market, do not exist outside of US or China (or have operations in Europe).



Luka Ambrozic, CCO at Elaphe Propulsion Technologies



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Hiring qualified staff, cost-price competitiveness and market specialization have been identified as the biggest challenges

Most

Least

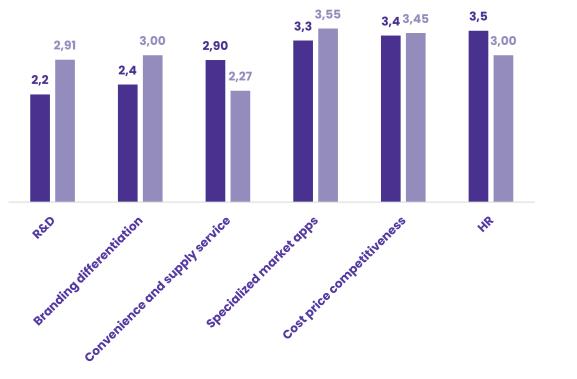
important

important

Hiring qualified workforce and reaching cost-price competitiveness are the main challenges for all actors. However, companies are more inclined to insist on branding differentiation and R&D while stakeholders will be keen on optimizing the supply chain.

Prioritized challenges in the next 3 years

Average ranking from respondents, 1 being the least important and 5 the most important



Stakeholders Companies

In the past 2 years, hiring skilled workforce has been the #1 challenge for **81%** of club members.

First, scaling and hiring good talent in multiple jurisdictions is key for us now. Secondly, access to capital is our priority and we are currently competing with US and Middle Eastern Companies for this capital.



Eoghan Huston, CFO of Manna Drones

The companies need to produce a roadmap to know, regarding R&D, how to go from point A to point B. In this sense, that's not a challenge. Additionally, **it depends on the development phase of the company. A scale up, as here, is much more market oriented than a startup, hence more investments on the sales.** In this phase, you only need a few people to keep an eye on where you are in the roadmap regarding R&D.



Laureen Cook CEO of Extelcon Consulting



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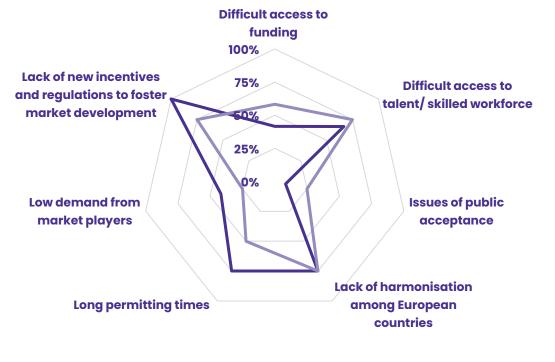
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While the state of regulations is still a strong market barrier, difficulties to hire qualified staff, access to funds and issues of public acceptance are increasing

New incentives and regulations have been put in place and the challenge resides in their harmonization around Europe. Moreover, access to funds and qualified workforce as well as public acceptance are growing concerns.

Prioritized market barriers in the past vs. next 3 years

Percentage of respondents who selected the answer in their top 3 market barriers



-----Past 3 years ------Next 3 years

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EU VC ecosystem is not as well connected as the US VC system. Also, public funding is easier to access in US compared to EU.



Eoghan Huston, CFO at Manna Drone

Unfortunately, US or China are markets that are moving way faster because **they are united markets.** We keep talking about "a unified market" when it comes to the EU, however, there are too many cultural differences and ways to interprete the regulations, that **EU is more a** group of markets rather than a unified market.



Mika Rytkönen, CEO at Remoted



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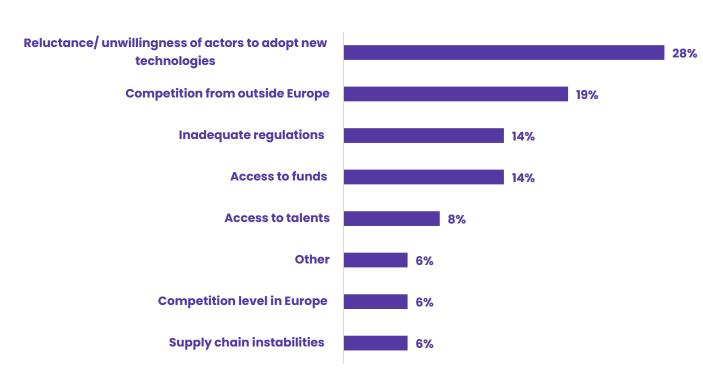
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The adoption of new technologies appears as the top market risk together with international competition and access to funds

Altough access to funds will remain one of the top risks in the coming years, reluctance to adopt new technologies together with competition and regulation come up as main risks for companies.

Main risks perceived by stakeholders and companies in the next 3 years

Percentage of respondents who shared their top 3 predicted market risks



Existing transportation systems are **not yet ready to harness smart mobility technologies**. For example, the advancement of share mobility services will only be possible after **large investments** [...] and **auspicious cooperation between government, tech providers and OEMs etc.**



Joseph Boadi-Darkwah, Associate at Hyundai Cradle

Regulation as a way to foster the adoption of new technologies :

Fragmented and not coordinated regulation, not in terms of general mobility city/region/state principles, but in the way **new solutions can be tested across the EU to generate critical mass feedback**. It limits testing and deployment, reduces democratisation of investment, reduces human capital mobility, and increases uncertainty for investors.



Jose Pacheco, Chief Innovation Office at Astara



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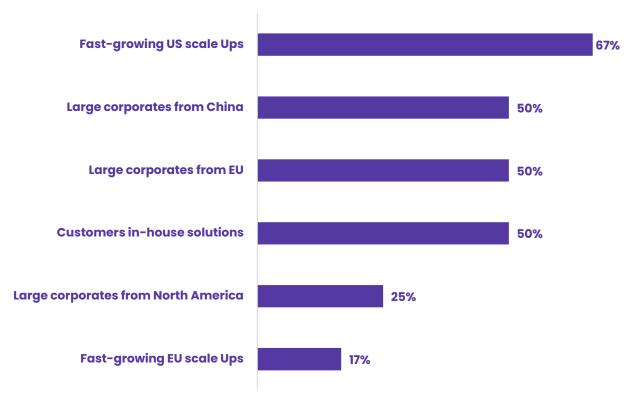


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US scaleups are identified as the main competition for European scaleups

Scale ups from the US are the main competitors. However, solutions brought by European and Chinese corporates are also looked upon just as much as customers in-house solutions

Main competitors perceived by all club members in the next 2 years Percentage of respondents who shared their top predicted competitors



There is a saying when it comes to comparing the US, Europe and China:

The US are innovating, Europe is regulating, and China is executing.

However, it is important to understand that for a company to expand in China or in the US, they need to understand the culture, the way of consuming and in China, replicating is a very common thing. It is part of their culture. //



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Mika Rytkönen CEO at Remoted

R&D will keep creating solutions, but the key for open innovation is finding the gaps and the pain points with the customers, and together to fill these gaps. We are going to co-exist, so it is critical for companies to bring in solutions from the outside, solutions they can't build internally due to lack of understanding of some markets or the lack of the right people or technology to // do it.



Joseph Boadi-Darkwah, Associate at Hyundai Cradle



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Methodology, authors and EIC Scaling Club contacts

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Methodology

The research used a quantitative methodology based on the approach advocated by the consortium members.

This study was conducted by a combination of live surveys and open discussions. The questions and answers were designed in advance through interviews with industry experts to make sure we grasp the right information. Open-ended responses for additional comments were also available.

The survey was voluntary and not anonymous.









Additional references and reports of the EIC Scaling Club

Selection of additional reports to go further

- 1 <u>European Mobility report 2023</u> Via ID (via-id.com)
- 2 <u>Smart Mobility Hub | PwC</u>
- 3 Council adopts new framework to boost the roll-out of intelligent transport systems Consilium (europa.eu)

Other Market Roadmaps of the EIC Scaling Club

Market Roadmap – Renewable Energies	$(\mathcal{P}_{\mathcal{P}})$
Market Roadmap – Digital Security & Trust	
Market Roadmap – Next-Gen Computing	

Scaling Challenges Roadmap of the EIC Scaling Club

In addition to Market Roadmaps, the EIC Scaling Club consortium produced a series of report dedicated to help companies solve their specific chellenges to scale, based on literature review and workshops with experienced professionals, have a look here:

Challenge Roadmap - Go-to-Market Strategy







Authors and acknowledgments

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Experts' interviews



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