



Scaleup Ecosystems and The Future of Mobility

Summary

Introduction

This study aims to provide a framework to understand how an ecosystem contributes to the growth and prosperity of scaleups. This document summarises the research study “Scaleup Ecosystems and The Future of Mobility” which is initiated by Deloitte and conducted by Erasmus Centre for Entrepreneurship, Erasmus University. It zooms in on parts of the Future of Mobility ecosystem (i.e. innovative passenger mobility solutions in the fields Green Mobility and Mobility as a Service) to clarify the importance and functioning of the ecosystem for its scaleup companies. The research is carried out by qualitative methods. An extensive

literature review and desk study are conducted to arrive at a framework for analysing scaleup ecosystems. To create specific insights regarding the Future of Mobility, additional literature and desk research are conducted as well as interviews with experts and five scaleup companies in the Future of Mobility field (Parkbee, SnappCar, Lightyear, Hardt Hyperloop and VanMoof).

Scaleups and their importance

A scaleup (also known as a high-growth firm or gazelle), is a company that has passed the stage of a startup and is growing at high rates. Scaleups are important for socio-economic progress.

They are key drivers of job creation and industry productivity growth. Moreover, scaleups play a crucial role in the innovative transformation of industries and sectors. Due to their fast-growth, they can make a large and increasing impact on the development, application and diffusion of innovations, new business models, and new concepts and practices within and across industries and markets.

Ecosystems and their importance

The idea of an ecosystem is that entrepreneurship and company growth is a collective achievement of a set of

interdependent actors and factors. Ideally, companies and actors benefit from and contribute to the ecosystem by exchanging and sharing various kinds of resources, and human-, intellectual-, and relational-capital. Indeed, various studies have shown that rich ecosystems support the creation and growth of new ventures. In this study, we focus on ecosystems that support the growth and prosperity of scaleups: a system of interactions, collaborations and exchanges between agents within an institutional and cultural context which fosters the enduring fast-growth of companies. This system is characterised by and dependent on access to: market, related and supporting industries, talent and knowledge and capital as depicted in Figure 1.

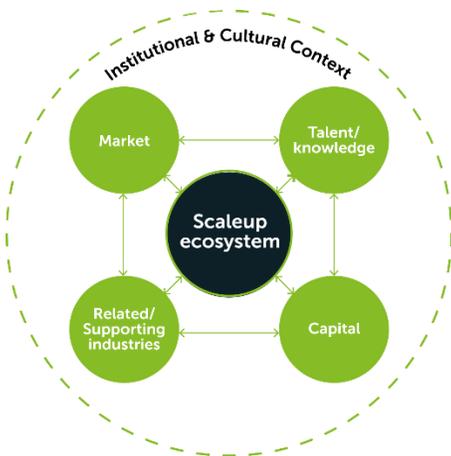


Figure 1: Building blocks of scaleup ecosystems

Scaleup survival & growth and ecosystems

A well-functioning scaleup ecosystem is necessary to help overcome the difficulties ('Valleys of Death') faced when scaling up an organisation and maintaining high levels of growth. Many startups struggle to survive and grow into scaleups. About 90 percent of young firms die within 5 years after conception. This is often referred to as the 'First Valley of Death'. Three major reasons identified by founders that were forced to seize their startups are: a lack of market need; a lack of funding; and a lack of a solid founding team. Those reasons highlight the

importance of two particular building blocks of a scaleup ecosystem: access to market and access to capital.

Only a small portion (about 5%) of startups will eventually turn into a scaleup. Yet, about two-third of those companies lose their fast-growth (they stop growing or even shrink or die) before their eighth year. We refer to this as the 'Second Valley of Death'. Whereas the first valley is mostly about scaling the business model, the second valley is much more about scaling the organisation. Most young scaleups are aware of two dimensions of scaling, namely growth in turnover and growing relationships with customers, investors, suppliers and partners. Yet, there is a third dimension which is about dealing with the increasing size and complexity of one's internal organisation. As such, scaling is about simultaneously driving growth and managing growth. If companies fail to develop and professionalise their internal organisation properly, they may enter the 'Second Valley of Death'. While access to market and access to capital remain important, the second valley particularly highlights the importance of the other building blocks of the ecosystem: notably access to talent and knowledge, and access to related and supporting industries.

Unpacking the building blocks of (Future of Mobility) Scaleup Ecosystems

In order to understand how an ecosystem contributes to the growth and prosperity of scaleups, we unpack each of the five building blocks of the scaleup ecosystem: access to market; access to related and supporting industries; access to talent and knowledge; access to capital; and the institutional and cultural context. We deep dive into the Future of Mobility scaleup ecosystem to illustrate the intrinsic peculiarities of a specific type of ecosystem focused on emerging and new mobility solutions.

Access to Market:

Well-functioning scaleup ecosystems offer sufficient access to high-growth markets and a high-growth customer base. This entails similar customer behaviours and needs across related and international markets (reaping economies of scale) as well as related customer needs within and across markets (reaping economies of scope and cross-selling). A high prevalence of scaleups in the market is also conducive for growth, especially through reinforcing effects such as forming a high-growth customer base for scaleups to tap into. Similarly, the presence of competing actors are an important component in scaleup ecosystems. By indicating market readiness, competition helps to drive further innovation and growth.

Future of Mobility zoom-in:

The mobility market reflects high-growth potential, especially considering the rise of mobility as a service (MaaS) solutions, such as shared mobility solutions encompassing smart platform-based applications and autonomous vehicles, as well as Green Mobility solutions such as electric vehicles. For the latter to realise its growth potential, it is crucial for sustainability to drive consumer choices to overcome the "intention-action gap" currently defining consumption patterns. For scaleups to tap into a high-growth customer base, it is essential that there is a high prevalence of scaleups in the ecosystem and an uptake of corporate mobility solutions (CMaaS). Competition (from multiple national and international players from various industries) is key for the Future of Mobility scaleup ecosystem as it not only drives further innovation but also the market readiness of emerging mobility solutions.

Calls to action:

- **Find high-growth markets:** to reap economies of scale and scope, (potential) scaleups can spot opportunities for expansion in related and international markets by i

identifying complementary customer behaviours and needs within and across markets.

- **Overcome the “intention-action gap”:** to fully realise the high-growth potential of Green Mobility solutions, consumer choices need to be more strongly incentivised by sustainability drivers so that those who intend to choose sustainable mobility solutions end up doing so. Nudging and targeted incentives by relevant private and public stakeholders should therefore increase the market attractiveness of Green Mobility solutions.
- **Invite more ecosystem actors to the market:** more players in the ecosystem stimulates the market readiness of innovative (new mobility) solutions. With more high-growth players, growth dynamics are accelerated. By providing credibility to (new mobility) solutions and connecting investors to (potential) scaleups, governments can establish platforms for high-growth. Examples in the Netherlands are initiatives such as *nlgroeit* and *Techleap*. Since investments are often large and infrastructure-dependent for the Future of Mobility, with governments on board, financial and other support organisations in the ecosystem are in turn encouraged to invest in the growth of (potential) mobility scaleups.

Access to Related & Supporting Industries

Successful scaleup ecosystems foster dynamic interactions, collaborations and exchanges resulting in an active portfolio of partnerships, alliances and M&As. Through spillover- and network effects, (high-tech) scaleups can leverage the benefits of location when they are in close proximity to related industries, especially when they are located within a high-tech district. For instance, *Brainport Eindhoven* facilitates strong relationships between key ecosystem actors in the region. Moreover, the availability of professional and advisory services is useful for the

development and professionalisation of elements of the organisation in the scaling up process (e.g. finance, HR, strategy, product development, legal, sales/marketing) and for international credibility.

Future of Mobility zoom-in:

Operating in the Future of Mobility relies on connections to a vast network of related and supporting industries, which calls for the implementation of frameworks such as *Collaboration as a Service (CaaS)* and *Seamless Integrated Mobility Systems (SIMSystems)*. The *Researchlab Automated Driving Delft (RADD)*, a cooperation between governments, knowledge institutions, and SME entrepreneurs in the region, provides a prominent example of spillover- and network effects being leveraged in the ecosystem. Given the nature of mobility solutions encompassing sectors beyond transportation, scaleups can benefit from collaboration with complementary industries (e.g. Insurance, Finance, Transport, Media, Telecom, Technology, Retail, Medical, Legal, and Energy) and governments. The complexity behind these cross-sector collaborations requires support from specialised professional and advisory services to help navigate these relationships.

Calls to action:

- **Leverage the power of location:** (potential) scaleups should strategically choose the right location(s) with strong connections to their market, other (high-tech) scaleups and support organisations to help ensure a promising growth trajectory.
- **Collaborate with other more established industries: (potential) scaleups should collaborate with related industries** to build on and improve their business model in order to leverage the positive spillover- and network effects of the Future of Mobility scaleup ecosystem.

- **Professionalise the management of growth:** besides focusing on their core competencies, (potential) scaleups should also professionalise the management of their growth trajectory. Future of Mobility scaleups, for example, can specifically seek the support of professional and advisory services in their endeavours for cross-sector collaboration and the implementation of a range of management systems.

Access to Talent & Knowledge

Sufficient capability and leadership development in the scaleup ecosystem is crucial to foster larger and functionally balanced founding teams with growth ambitions and complementary skills. The availability of external senior executives is useful to help scaleups form an optimal top-management team with substantial prior industry and entrepreneurial experience. Access to a diverse and international workforce comprised of highly educated scientists/engineers as well as sufficient personnel that do not require a high level of education is necessary for scaleups to carry out various functions when growing rapidly. Opportunities to offer flexible employment conditions, such as remote working options, to a diverse workforce in the scaleup ecosystem is also conducive to the growth process.

Future of Mobility zoom-in:

Mobility is inextricably linked to the public sector, which emphasises the importance of capability and leadership development in (city) governments to partner with the private sector and enable citizen participation and involvement in new mobility solutions. Availability of senior executives with experience working with/in the public sector in the Future of Mobility scaleup ecosystem is therefore important for optimal top-management team composition. The top-management team must also be flexible enough to offer corporate mobility solutions to their

employees to reinforce the success of other mobility solutions offered in the ecosystem. Arguably most importantly, the gap in technical talent needs to be filled in order to successfully develop innovations in the Future of Mobility scaleup ecosystem.

Calls to action:

- **Hire in senior executives:** fast-growth requires a drastic change in how the company should be managed, which requires hiring senior manager(s) to bring in the knowledge to implement the necessary management systems. For Future of Mobility, having public sector experience in the management team is especially important in the growth and expansion stage due to the high level of dependency of mobility solutions on public infrastructure.
- **Diversify the growth team:** fast-growth also requires a drastic change in the operations of a company, which calls for recruiting and retaining a functionally balanced and diverse team. The top management team must be able to both drive and manage growth. This often requires executive attention for functional areas. The professionalisation of the finance function is typically a first key area requiring attention. In addition, the HR function typically needs more attention as the company grows.
- **Bridge the gap in tech talent:** knowledge institutions have a key role to play in overcoming the shortage in tech talent facing Future of Mobility scaleups. The Future of Mobility ecosystem would benefit from development by knowledge institutions of attractive educational programmes and courses specifically focused on innovating in mobility solutions and cultivating the technical skills necessary to carry out these specialised innovations.

Access to Capital

A diverse international funding landscape including patient investors with “deep pockets” is required in order for scaleups to gain access to growth financing. To navigate this complex landscape, a “funding escalator” (a well-developed system to help scaleups transition between different types of funding) and sufficient expertise is necessary to address various investors’ needs. Exit opportunities at every stage of scaleup growth are beneficial—opportunities for M&As at earlier stages can fast-track growth processes, for instance, while an active stock exchange can facilitate IPOs at later growth stages.

Future of Mobility zoom-in:

Funding new mobility solutions are typically risky and not yet profitable given the early stages of market development of the associated innovations. As such, there is a financing gap for companies especially in the growth phase. It is thus even more crucial for Future of Mobility scaleups to ensure that there is sufficient financial expertise to help gain access to growth capital. Nevertheless, Original Equipment Manufacturers (OEMs) and knowledge intensive service companies (KIS) have emerged in the ecosystem as key investors.

Calls to action:

- **Get the right expertise for growth funding:** (potential) scaleups that manage to successfully secure the necessary investments for growth often have a supervisory board/board of advisors or a senior executive with experience in growth funding to help them navigate the complex funding landscape.
- **Find investors that can look beyond the (short-term) business case:** the markets in the Future of Mobility scaleup ecosystem are too immature to show the ‘right’ figures to smoothly secure funding in the growth phase since returns are often expected to appear at a later stage. It is therefore important for investors to look beyond

the business model and focus on the mission of scaleups in the Future of Mobility scaleup ecosystem.

- **Mend the fragmented (mobility) funding landscape:** it would be highly valuable if key (international) players in the Future of Mobility ecosystem such as institutional and public investors would offer grants with flexible terms as well as blended finance (equity and high-risk debt) options. Dedicated investment vehicles at an EU-level focusing specifically on the scaleup phase would be useful. Moreover, advisory and knowledge institutions are also crucial players that can help connect relevant parties in the funding landscape to bridge financing gaps.

Institutional & Cultural Context

Supportive formal (government and educational) institutions, with high quality (ICT) infrastructure and low trading barriers for example, form an important backdrop of successful scaleup ecosystems. With sufficient support to help scaleups comply to a multi-country institutional environment, international scaleup growth can be fostered. An entrepreneurial spirit and “local buzz” facilitating positive spillover effects via strong (regional) networks and “dealmakers” reinforce the interactions, collaborations and exchanges taking place within a scaleup ecosystem. An ambitious and growth-oriented culture fostered by an entrepreneurial spirit as well as societal norms that tolerate risk, mistakes and failure, and favours innovation, creativity and experimentation encourage scaleups to continue their growth trajectories.

Future of Mobility zoom-in:

Mobility solutions are inherently infrastructure-dependent. This requires, for instance, well-functioning electric road systems and ICT infrastructure to implement these innovations. With enough flexibility, regulatory frameworks (e.g. regarding safety, liability, data usage, fuel economy, decarbonisation) can foster the growth of mobility scaleups. A cultural shift away from ownership towards trust,

transparency, accountability combined with social influence and enhancing the ease of use are important to reinforce the success factors in the Future of Mobility scaleup ecosystem and accelerate the adoption and thereby growth of new mobility solutions.

Calls to action:

- **Take leadership to pave the way for the Future of Mobility:** with the speed of technological innovations in mobility solutions outpacing regulations, it is crucial for (city) governments to stay up to date and take sufficient action. The public sector should take leadership and ensure that there is an enabling regulatory framework, which accommodates the necessary infrastructure development and further growth of new mobility solutions.
- **Trust takes transparency and time:** new mobility solutions are contingent on public use, which requires trust from the general public who are often hesitant to adopt unfamiliar solutions. The relevant public and private stakeholders involved in the development of new mobility solutions need to play a key role in building trust and providing transparency in the ecosystem by facilitating information and knowledge sharing. For example,

the proliferation of accurate and reliable safety statistics can overcome the risk perception bias of shared and autonomous mobility (which is often perceived as riskier than it objectively is). This relies on the involvement of reputable players such as governmental organisations. As such, given sufficient time, the market can become more familiarised with the path towards the Future of Mobility and start to trust and make use of new mobility solutions.

- **Foster a growth-oriented culture and mindset:** successful scaleups are often based in a region that has a growth-oriented culture with supportive stakeholders that benefit their fast-growth trajectory. Regional players are therefore key orchestrators in the scaleup ecosystem. By setting up successful incubation centres and scaleup campuses that promote and drive entrepreneurship, (governmental) institutions can thereby foster a growth-oriented culture in their respective regions. Successful scaleup entrepreneurs and leaders often embed this into their recruitment and HR processes by making sure that they hire employees with a growth mindset and thereafter provide training to further stimulate

entrepreneurship and growth within the team. The use of professional and advisory services could be useful to scaleups to help guide these processes. For the Future of Mobility specifically, it is especially important for this growth-oriented culture of experimentation to permeate within the organisation to the mindset of the employees. Solutions that are so radically new to the market require a special type of (risk-taking and growth) mindset to drive its growth.

- **Local partners are key to scaling internationally:** ecosystems are dependent on the local context, which requires adapting to new market conditions abroad. Scaleups can navigate an increasingly complex multi-cultural institutional environment with local partners such as advisory services that have international exposure and experience.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.nl/about to learn more.

Deloitte is a leading global provider of audit and assurance, consulting, financial advisory, risk advisory, tax and related services. Our network of member firms in more than 150 countries serves four out of five Fortune Global 500® companies. Learn how Deloitte's approximately 264,000 people make an impact that matters at www.deloitte.nl.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the "Deloitte network") is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.