

The Art of Scaling

The Art of Scaling

Large social challenges are as much large entrepreneurial opportunities. Solutions need to be innovative to create a breakthrough. Only those enterprises that scale move the needle in terms of impact, new employment and value creation.

Achieving growth is not a given: entrepreneurial growth post startup has numerous challenges which can be an order of magnitude more difficult than starting a venture. We found that of surviving startups, only 0.4 percent reach more than 10 million revenues within 5 years. The remainder stabilizes or grows at a much lower rate.

A scale-up is not a startup. The objectives and the challenges are different. Different strategies are applied, different business approaches are required, different organizational structures are optimal.

Also, the leadership demands are very different. It therefore makes sense to look at scale-ups separately.

Over the last years we have conducted deep research among scale-ups and supported close to a hundred in their development through our support programs. Our team consists of seasoned venture partners, investors and entrepreneurs, business consultants, leadership coaches. This memo reflects our current collective understanding.

Executive Summary

Scale-ups have the “Scale-up DNA” (the intrinsic qualities that provide scale-up potential) and apply “Scale-up Lift Practices” (the practices that allow the young enterprise to quickly take off, gather speed and make progress). Scale-ups are led by ambidextrous leaders: teams with ambition, confidence and competitiveness, with deep entrepreneurial experience and the required management competencies (strategizing, operationalizing, organizing).

Art or formula?

The question is if a scale-up formula exists that provides a reliable recipe of success, i.e. leads to a predictably high success rate. We look at this as a holy grail – a worthy pursuit that will generate real value without its initial goal ever being reached.

The formula does not exist for several reasons. Scale-ups operate in a volatile, uncertain, complex, ambiguous world, so have to take risk and therefore their success will always depend to a large degree on good fortune. Furthermore, every scale-up success story is dependent on background, sequence of events, and time and place specific context. So, like history, scale-up success does not repeat itself. Moreover, each scaling personifies the individual founders. And finally scaling is organic, interconnected, symbiotic. Like life, it cannot be dissected and still work. As a consequence, any formula feels simplistic, mechanistic and sterile. Instead, scaling is an art, in the same category as leading a community, raising a family, or living a fulfilled life.

Still, the pursuit of this holy grail, the formula of scaling success is highly valuable. First, in the pursuit of the formula we will collect many insights in terms of what works and what does not. Sometimes these might be distilled in more generally applicable principles. Even small increases in probability of scale-up success are highly valuable as the odds in general are so low.

Moreover, at the core, the essence of the successful scaling of a new, innovative enterprise is a process of continuous experimentation and learning what works. By pursuing the quest for the secret of successful scaling, we walk the path of the scale-up entrepreneurs we want to support – all of which are also finding out through trial and error the unique success formula for their product, their market, their organization and what fits their own strengths. Therefore, the meta principle of scaling success is to have an explorative mind, an eagerness to learn and a willingness to adapt as a result.

Scale-ups & Stall-ups

We distinguish between scale-ups and stall-ups. Both are ventures post the startup phase, i.e. they have a first product on the market, realize first revenues and have an organization. At that stage, some ventures (so called scale-ups) are able to scale revenues and organization, whereas others stabilize or continue to grow at a much lower rate (so-called stall-ups).

The scale-ups in our database¹ grew their organization in the most recent 3 years to at least 30 FTEs (full time employees), so a full company structure. The stall-ups in our database by contrast stayed below 15 FTEs, so their organization remained that of a development team:

Key figures (all medians)	Scale-up	Stall-up
Age	6 years	5 years
Size organization 2017	26 FTEs	6 FTEs
Size organization 2020	48 FTEs	4 FTEs
Average FTE growth per annum	15%	1%

Note that we have taken two extremes within the broad OECD definition: “all enterprises up to 5 years old with average annualized growth greater than 20% per annum, over a three-year period should be considered Gazelles (scale-ups)” (OECD Eurostat – OECD manual on Business Democracy Statistics). The spectrum from some growth to fast growth is continuous. By taking two segments at the extremes of this spectrum, the differences become clearer.

The companies in our database are all based in the Netherlands. 46% of the scale-ups in our database had acquired VC Series A or Series B, compared to 21% of stall-ups. The rest received Angel Funding, Bank loans and grants.

We realize that “scale-up” and “stall-up” are loaded terms. These are archetypes that provide understanding in what drives scale-up success. No single individual company can be marked a definitive scale-up or stall-up while it is still in its early years. A company that ticks all of the boxes of scale-up characteristics still faces many risks and choices. A company that ticks only few boxes should not despair, as both DNA and Lift principles can still be changed. Success is dependent on good fortune, best practice execution and willingness to experiment and improve.

Our mission: to increase the probability of success of all ventures aiming to become scale-ups.

¹ Consisting of in total 131 companies, all less than 10 years old, all with an innovative product, and typically with external funding, all based in the Netherlands, all with revenues across a wide range of industries

Our Scale-up Success Factors



Scale-up DNA



Before a business ever scales, it first gets started. It all starts with a compelling **vision** – the articulation of a mission to resolve a large, real, urgent need, through an ambitious, future-oriented, innovative, compelling business concept.

We found that having a larger purpose increases the chances of scale-up success. Having an **impact mission**, i.e. aiming for societal or environmental impact, appears prevalent among both scale-ups and stall-ups but even more so among scale-ups. It seems that the complication of multiple objectives (social and financial value creation) does not outweigh the advantages of impact orientation: superior access to talent, lower cost financing and additional brand value.

In the startup-phase, the venture selects its market and decides on its business model. These choices (often after several iterations, so called “pivots”) define its scale-up potential. And it develops its competitive edge and launches its first product that ideally delights its first customers. Competitive edge and initial customer delight to a large degree define its probability of success. Taken together they describe whether the company has the potential to ever realize its vision. We call these elements: scale-up DNA.

Note the relationship between potential and probability: what has little potential to become big will most certainly end up remaining small but what has scale-up potential will still face many perils and can make many mistakes that result in stalling or worse.

Scale-up DNA has four more elements:

Great business: i.e., to play in a large, growing and profitable, international market.

Scalable model, i.e. a model that becomes disproportionately more profitable with scale (based on increasing returns, viral dynamics, product improvement through use, or economies of scale).

Competitive edge, i.e., a unique advantage that makes the product distinctive. An edge that cannot be easily replicated without permission, so provides a defensive “moat” versus competition. This edge can be a superior technology (if protectable or sustainable), a unique skill or a privileged relationship, e.g. with a development partner.

Delighted customers, i.e., providing a product that solves a real and urgent need, is significantly better than what is currently out there, and it delights its customers through its surprise, essence and attractiveness. Think of the iPhone.

The characteristics listed expand on the notion of “product/market fit” – the degree to which a product satisfies a strong market demand, or in Marc Andreessen’s words “being in a good market with a product that can satisfy that market.”

Of all the elements of scale-up DNA, Delighting Customers is the one that also defines the end of the start-up phase. Once this dimension is becoming substantial, it is time to scale up. Delighting customers is tracked through customer surveys/NPS, user growth, intensity of product usage and customer retention. Customer centricity is make/break in the startup-phase and needs to be embedded before the company starts scaling.

Still, in some cases, the company needs to scale before this is established. For instance, the product may need a certain customer base to provide value (e.g. in case of market places), or all parts of the solution need to be developed before the wicked problem is truly solved, or the business has large economies of scale, or competition or industry dynamics (“windows of opportunity”) force one to scale as quickly as possible.

ScaleUpNation database findings

Compelling vision. 74% of scale-ups versus 41% of stall-ups have articulated their future clearly, instead of leaving it relatively unknown (CI:95%). Furthermore, having a mission that is socially orientated, increases the probability of scaling by approximately 3 times (Source: digital proxy analysis).

Playing in a large market. 89% of scale-ups versus 69% of stall-ups (CI: 90%) operate in a large, international market (>10 billion market size).

Playing in an attractive market. Most (60%) of scale-ups operate in industries with a high profit margin and high growth, but this does not differentiate them from stall-ups. Playing in an attractive margin apparently is a sine qua non to even establish a viable start-up.

Scalable business models. Almost all scale-ups have a product or service that becomes more valuable to customers as their sales increase (89%) and have a product or service that cost less to produce and deliver as its sales increase (96%). For stall-ups the scores are slightly smaller. In the follow-up interviews we found that all scale-ups and stall-ups have a business model that is scalable but the degree of scalability can differ while at the same time highly scalable models are also higher risk. Also, 28% of scale-ups versus 13% of stall-ups (CI 80%) sell mostly online.

Competitive edge. 59% of scale-ups have a product/service that is hard for others to replicate. This is also the case for most stall-ups. So having a competitive edge is a common but not differentiating factor.

Delighted customers. 56% of scale-ups versus 37% of stall-ups (CI 80%) have a product/service that is a must-have for their customers.

Scale-up DNA best practices

Compelling vision. When articulating an ambitious, innovative and compelling vision, scale-ups take into consideration two elements: the different potential applications of their core technology and the potential markets they could enter. To realize their vision, scale-ups translate it into a strategy with clear actions and measurable goals.

Scalable model. Scale-ups adopt a model that is leveraging online and is software based, or outsources the less scalable activities, e.g. production. They are using English as the main operating language and supporting multiple time zones with their product/service. Their product is technologically advanced to a level it can support the size of the market they aim to conquer.

Competitive edge. Scale-ups do not assume their competitive edge, they trace it out. By maintaining a close relationship with their customers, scale-ups dig into qualitative data to track down what truly attracts users to their product and keep improving on it to stay ahead of competition.

Delighted customers. Scale-ups constantly collect feedback for their product and services from customers, experts and partners. They track their customers' interaction with the product, their customers' satisfaction over time and perform user tests for every feature addition or change.

By analyzing customer journey and mapping customer activities, they understand the situation, motivation, needs and pain points and propose solutions that delight their customers. Common practices are increasing the speed, lowering the cost, gamifying the user experience, introducing the personal element, and integrating features that allow the product to become viral (e.g. invite industry peers).

Scale-ups help their customers spread the word about their company by making their product simple, memorable and creating a compelling story around it that the customers can share. Customers will share this story if it is authentic, triggers emotions and has a practical value..

**The team is more
important than
the dream**



Ambidextrous teams

1. Full-size, entrepreneurial team

Management team of 3 or more members. In the majority of both scale-ups and stall-ups, the founders continue as MT in the scale-up phase, so they play a major role in that phase as well. Scale-ups are founded by at least three individuals – so the size of a real team instead of a duo or single personal act. Having a founding team allows for constructive debate combining different perspectives and accumulates experience.

Entrepreneurial experience. Scale-up founders do not necessarily have more entrepreneurial experience, but the scale-up MT members in total do have more entrepreneurial experience than the stall-up MT members. Scaling is an experience game. It truly helps to have gone through the dynamic of starting and scaling a venture before and to have experienced the intricacies of product/market fit, of competition, of growing an organization.

Functional expertise. More scale-up founders than stall-up founders see themselves as industry insiders with deep expertise. We conclude that functional expertise provides understanding of past success and failure and avoids reinventing the wheel.

No difference in management experience. Leading a scale-up requires management capabilities: the ability to direct, support, empower, and enable many others. Management is typically developed through experience. Both scale-up and stall-up founder teams have ample management experience.

Size and experience database findings

Teams not individuals. 96% of scale-ups been founded by 3 or more founders versus 57% of stall-ups (CI 95%).

Entrepreneurial experience. 42% of scale-up have founded 1-2 ventures prior to the current one. The same stands for stall-up founders. However, 46% of scale-up MT members versus 25% of stall-up MT members (CI 80%) have founded at least 3 ventures (with >5FTEs) prior to the current one. It is the cumulated team experience that makes the difference.

Industry expertise. 45% of scale-up founders see themselves as industry insiders with deep expertise (instead of creative outsiders who write and change the rules of the games) versus 30% of stall-up founders.

Personnel management experience. Scale-up founders have on average 7 years of personnel management experience. The same stands for stall-up founders.

Years in management roles. The average cumulative years of scale-up founder teams in previous management roles amounts to close to 10 years. Roughly, the same for stall-up founding teams. (Based on LinkedIn)

2. Well-versed in Conducting and Directing

We have identified four leadership skills:

- *Exploring*. Discovering new opportunities and creating the appetite for new offerings.
- *Architecting*. Building smart and scalable systems and processes
- *Conducting*. Talent hiring, team building, culture development and skill building
- *Directing*. Visioning, direction setting, thoughtful risk-taking, and managing tight execution.

Exploring and Architecting skills tend to heavily dominate start-up founding teams at inception. This is only natural; Explorers discover growth markets and drum up new business opportunities, while Architects mould those opportunities into a coherent product (suite).

Once the company reaches the scale-up phase it faces a new set of challenges that require new leadership skills. It is the level and combination of those skills that drives scale-up performance. The key skills to excel at are Conducting (i.e., enabling others) as well as Directing (i.e., visioning, and driving excellence).

Conducting. To be a leader means not attempting to solve every issue at hand oneself but enabling and empowering others. This requires the leaders to also be strong coaches and people developers. And it requires them to provide full transparency on progress and challenges, inviting all employees to share concerns and ideas and ensure collective endorsement for decisions made. To encourage an experimental culture where failure is accepted as a learning opportunity. And to recognize the contribution of their employees, supporting them in taking responsibilities and protecting them when making mistakes.

At the scale-up phase, the leaders start relying on others, not only because of the shift of traction and workload increase, but in order to allow development in the organization. To build their team with people with expertise, but also reliability for the quality of their work; people they can trust. Trust not only in their capabilities to perform but trust that they have best interest at heart. Scale-ups are built on a foundation of professionalism and trust, a culture of openness and togetherness.

To build a foundation of professionalism and trust, scale-up leaders act as “multipliers”. They spot and unleash the genius in their employees and provide the context and resources that allow people to flourish. They challenge their employees by involving them in the discussion of key decisions, by sparking debate and creating a motivating environment for bold thinking. “Multiplier” leaders expect top performances, but they understand that mistakes are part of the learning process. They utilize every person’s abilities and strive towards reducing the organization’s dependency on them. The goal is to help everyone around them rise to the level they become multipliers themselves.

Being a “multiplier” leader requires seeding the opportunity and setting the direction for others, but is mostly about managing yourself. Knowing when to step back and leverage everyone’s brains, while at the same time keep personally learning and growing. This can be achieved by detaching their identity from the leader’s role and maintaining a continuous self-reflection mode. In this process, a supportive, yet challenging, net of coaches, advisors and board members is necessary.

Leadership database findings

Directing as well conducting. 46% of scale-up founders lead from behind, by enabling the team to take over. 25% lead from the front, leading by example and by going first. The remainder (29%) strike a balance. We notice the same patterns for stall-ups.

Senior hiring. Scale-ups take senior hiring more serious. 42% of scale-up CEOs spent >10% of their time per quarter on senior hiring, versus 21% of stall-up CEOs (CI 80%). Both scale-ups (54%) and stall-ups (39%) have objective criteria for senior positions screening.

Directing. During the scale-up phase, the leaders need to direct the organization forward by articulating the vision and mission, telling stories that lead to act, role modelling, and providing reinforcing directives, incentives and rewards.

Scale-up leaders invest in opportunities with an uncertain outcome – opportunities they envision much clearer than others and which they are able to translate into plans, through a thoughtful approach of planning and serendipity. Acting on a vision of the future means making bets. The opportunity is uncertain as it depends on many assumptions and uncertain events. The skill is to make these bets smart by mitigating and minimizing downside (by reducing, sharing or offloading investments) and while maximizing the probability of success (through focus, collaboration and timing). Making bets will lead to inevitable failures. Growing from failure entails dealing with inevitable setbacks through timely interventions, proper reflection and learning and turning the set-back towards one's advantage. Successful Directors are able to move from vision, to story, to action without getting bogged down in opportunities with diminishing returns.

Directing database findings

Visioning. 74% of scale-up founders articulate the future clearly, more than leaving it relatively unknown, versus 41% of stall-up founders. CI: 90%)

Action planning. 55% of scale-up founders believe that growth happens with careful, articulated and methodical planning. Only 5% believe that growth is only a gamble: you take what you get and hope for the best. 40% believe in a combination. Same for stall-up founders.

3. Coaching boards

More scale-ups have a supervisory board than stall-ups. Scale-ups would benefit from having a board that coaches them on their scaling journey, instead of having an interventionist, controlling and directing board.

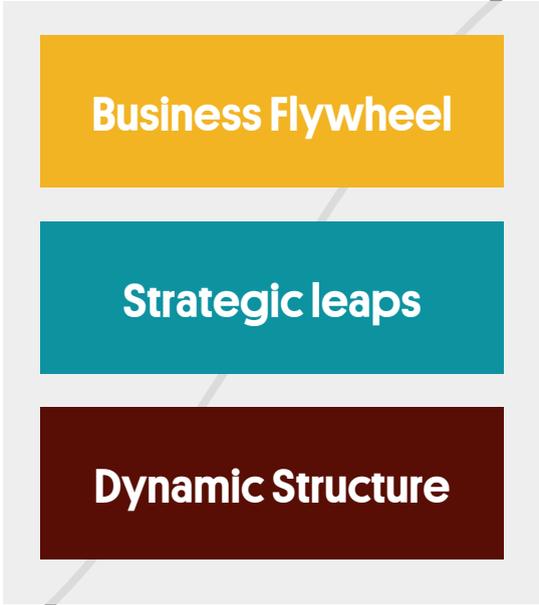
Boards database finding

Supervisory board. 63% of scale-ups have a supervisory board, versus 46% of stall-ups.

Board's time investment. For 80% of scale-ups, versus 38% of stall-ups (CI 95%), board members spend **2 or less** hours per week on the venture. Apparently, scale-up boards can restrain themselves from becoming interventionist.

Board's support type. For 80% of scale-ups, versus 54% of stall-ups (CI 80%), board members use coaching as a method of support instead of advising.

Lift Principles



Business Flywheel

Strategic leaps

Dynamic Structure

Once the company starts delighting its customers it is still relatively unknown, below minimum economic scale and vulnerable to competition. Competition can kill a scale-up by offering a better product, by being faster to the market, through aggressive price competition, through customer lock-up, through legal tactics, etc. At the same time, competition is good for the scale-up as it forces it to take off the ground quickly and gather as much speed and make as much progress as possible. Like a small airplane it needs a lot of lift, upward aerodynamic force to get up in the air.

We asked scale-ups and stall-ups: “What is the most important factor that defined the success of your company so far?” The most frequent (>25%) answers given by scale-ups are: the quality of the team (35%) and having a smart strategy (25%). Stall-ups by contrast answer mostly: perseverance (35%).

Similarly, we asked both scale-ups and stall-ups: “What is the most important factor to continue growing the company in the coming 2 years?” The most frequent answer given by scale-ups are: expanding the team (40%) and execution excellence (30%). The stall-ups answer: execution excellence (45%).

We conclude that the scale-up success factors center around business operations, strategy and organizational development. The three Lift Principles covering these three dimensions are: (1) building a business flywheel, (2) making strategic leaps, and (3) creating a dynamic structure.

A step-change in productivity

Income



Business Flywheel

During the scale-up phase, the company has to quickly accelerate sales momentum. Operations needs to keep the business moving and functioning at peak level, as well as rapidly learning how to become better and more efficient.

Think of a flywheel. Flywheels provide continuous power output in systems where the energy input is coming in with bursts. Flywheels accumulate energy and then release it at over a relatively short time when needed, and they control direction and stabilize movement.

This all translates into a step-up in productivity. Productivity (net income per employee) is almost flat for small firms and then becomes linear once they scale at around 50 people and get their business flywheel spinning.

A business flywheel has three components: (1) beachhead, (2) lean operations and (3) learning velocity.

1. Beachhead

Speed is necessary. The first to reach customers may own them, those first to reach scale are more cost competitive and may even lead you to a winner-takes-all position. Reid Hoffmann calls this "Blitz scaling": once a company starts delighting its customers it needs to grow as quickly as possible in order to blow its competition away and dominate its target market. This applies especially in markets with hyper competition, winner-take-all market dynamics and network effects.

As a startup, the company has already won over some early lighthouse clients (B2B) or trend setters (B2C). Now it needs to penetrate the larger market. To do so, scale-ups quickly establish a beachhead: a dominant share in a niche segment within the larger market. By dedicating to this niche, it can keep its product range focused, and it can quickly claim an established leadership position (which builds trust in the brand).

Marketing is focused on earning as much as possible free publicity through creative ideas (events, initiatives, PR) and by stimulating first clients to act as advocates. For this, maintaining a very high "New Promotor Score" plus executing an active referral program are critical.

To accelerate Sales, scale-ups apply SPIN and Growth Hacking. The SPIN (situation, problem, implied need) methodology directs the sales reps to the customer situation and their needs. This tunes the sales reps to be solution oriented and avoid trying to push products "down customers throat", a sure recipe for low product usage, high customer churn, and negative NPS. Growth hacking is optimizing customer acquisition through

multi-channel optimization, including effective leverage of third party websites. Growth Hacking focuses on acquisition, activation, retention, revenue referral so can go deep into product philosophy. Growth hacking depends on the usage of online sales channels and continuous A/B testing of placement, promotion, price and product to keep improving the key ratios to unleash sales growth (Sales flywheel).

Beachhead database findings

Beachhead. Most (72%) of scale-ups have segmented their market, and have a priority segment, they conquer first. This is the same for stall-ups. The difference lies in their discipline in saying no to customers outside their priority segment.

2. Lean Operations

"Lean" requires one to have end-to-end process control over development, sales, production and delivery. It means pruning the product and operational activities of all that does not impact customer satisfaction – ranging from not-needed functionality, to rework, waste and stock.

It requires standardizing processes so that these can be repeated efficiently, new employees can be trained quickly, and processes can be automated to lower costs.

And it requires modularization, so that new products can be configured within the same production process from standard modules.

Lean operations require a high-level product, business and IT architecture based on a perspective of the success formula a couple of years out. This architecture is translated into development projects. These projects are designed as continuous experiments (trial-learn-improve) while the business is live and rapidly evolving. This goes further than a strict agile philosophy of not being able to plan out what the final picture will be and instead build something and see if it works and meets customer needs and then build the next smallest piece.

Lean Operations database findings

Quality control. The majority (60%) of scale-ups are able to focus on growth while maintaining product service quality. This is also true for scale-ups for which this is obviously less of a challenge.

In-house production. Almost all scale-ups (92%) conduct production and delivery in house. This is also true for stall-ups. Apparently at this stage of development, it is too early to establish strategic partnerships or outsource activities.

In-house development. All scale-ups (100%) conduct their R&D fully in-house, which allows for control and quick iterations. Less stall-ups (87%) do so (CI 90%).

Standardized development & production. The majority (68%) of scale-ups have standardized their development process. This also holds true for standardization of production (72% of scale-ups). We find similar scores for stall-ups, implying that this is not a bottleneck.

In-house and standardized support processes. Almost all scale-ups (88%) keep their support processes (Finance, Admin and HR) in house and also (88%) have these standardized. For stall-ups the percentages are significantly lower: i.e., 65% and 71% respectively, CI 95% and 80%).

Accelerating sales. 48% of scale-ups have sales that grow faster than their production/delivery team, versus 33% of stall-ups (no sign. diff.)

3. Learning velocity

The first products are far from perfect, the understanding of customer needs is still limited and the underlying technology are still in development. Hence, the scale-up needs to climb a steep learning curve. For this it needs to understand the key performance indicators that define success and have quantified benchmarks and targets for which to aim. By constantly conducting experiments, and track resulting performance improvement, scale-ups achieve a high “learning velocity”.

If the product and the business processes are all digital, the entire business can be analyzed and optimized. This requires advanced analytics in online market research, (e.g., social sentiment analysis, spatial, video and/or satellite data analysis), usage modelling, behavioral science, segmentation, and data visualization. The majority of scale-ups now have “big data” analysts on board to enable high learning velocity.

Learning Velocity database findings

Improvement velocity. The majority (56%) of scale-ups have metrics to measure the speed of improving product and service performance, versus only 30% of stall-ups (CI 90%).

Product improvement. Scale-ups undertake product improvement efforts, much more than stall-ups. 80% of scale-ups launch at least two improved versions of their product/service per year, versus 53% of stall-ups (CI 95%).

Experimentation. Scale-ups much more than stall-ups undertake experiments. 54% of scale-ups support many, small experiments realizing that of those many will fail, compared to 27% of stall-ups (CI 95%). Also, 58% of scale-ups conduct at least 3 experiments per quarter compared to 40% of stall-ups (CI 80%)

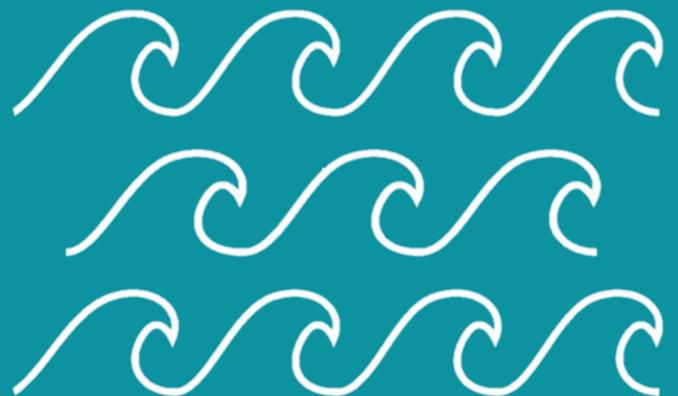
Business Flywheel best practices

Beachhead. Scale-ups establish a leading position in one specific market segment first (beachhead). . Having a deep understanding of the specific needs of this segment, allows them to tailor their product/service accordingly. The key in establishing a beachhead is to have the discipline to say “no” to customers that are not in the beachhead, dilute focus on the beachhead and complicate product and service requirements.

Lean operations. Scale-ups maintain production in-house and invest in improving the quality, capacity and time efficiency of their production process. However, “Lean” does not apply merely to production, as it has traditionally been linked to, but to all operations. Standard Operating Procedures (SOPs) and documented guidelines are all common practices among scale-ups for all their processes. They have in place metrics to assess their progress (i.e. measure the speed, outcomes, and mistakes) and take steps towards reducing the time and effort required to process and interpret the data collected by automatizing the data analyses as much as possible.

Learning velocity. The speed of learning in scale-ups is defined by constant data collection and analysis that allows fast experimentation for improving the product, technology and processes. Before collecting any data, scale-ups specify the metrics that matter most. They gather quantitative data, that allow for pattern recognition and prediction, as well as qualitative data, that help them gain a deep understanding of their customers, their thoughts, their feelings and the deepest reasoning behind using their product. Based on the information collected, they prioritize the issues to be tackled and perform experiments to improve performance. The experimentation process is a clearly defined “development-testing-releasing” cycle that allows a rhythm to be maintained. The experiments themselves can be both physical or virtual, and standards are applied to make them comparable. Scale-ups often perform experiments together with their customers and stay open for experimentation opportunities. The most important element is to avoid falling in theoretical discussion loops, therefore, validation is an important element.

**What is the use
of running if
you're not on the
right road?**



Strategic Leaps

Strategy is about discovering new products and services the business may want to offer, as well as new markets and customers it may want to serve in the future. It is concerned with where and how to compete in the future and what to do to get there. For this, a scale-up has to conduct business in the leading international markets.

Once the company starts delighting customers, other firms may be launching their own version of your product or service. Established brands will be figuring out how to leverage their own assets to own part or all of your space or might sue over copyright infringement. So, to stay ahead, the company needs to maintain its lead, so keep innovating. Think of a skater on thin ice: it needs to keep moving forward to not break through the ice and drown.

1. Going international

Scale-ups have to go international if their home market is not the lead market or if it is imperative to go international to reach sufficient scale. So, selecting which international markets to enter is a strategic not opportunistic choice.

Going international requires selecting the right entry mode, selling direct at least initially to get unfiltered customer interaction and feedback, and fostering local entrepreneurship while maintaining “one firm”. It requires combining local adaptation to cater to local market requirements with cross-country synergies and brand consistency. This means creating product “skins” with a common architecture.

Success needs “growing multiple cropping”, i.e. experiment and ensure rapid learning. Throughout, management needs to solve competing priorities between home and abroad and ensure real commitment of senior leadership.

Going International database finding

Internationalization. Scale-ups are internationalizing and do so strategically, much more than stall-ups do. 64% of scale-ups generate >20% of their revenues internationally (outside their home market), versus 39% of stall-ups (CI 90%). Also, for 60% of scale-ups the international market entry was strategic instead of opportunistic, versus 42% of stall-ups (CI 80%).

2. Keep innovating

Scale-ups keep launching new-to-world, innovative products. After all, standing still will mean that competition catches up. Also, the first product might have been a “hack” that now needs to be rethought. To keep developing and launching new products scale-ups have a clear product roadmap that combines how they envision improving their product quality and functionality over time. This so-called technology roadmap underpins the product roadmap and requires ongoing R&D investment.

Keep Innovating database finding

R&D intensity. 44% of scale-ups invest in R&D, at least 1000 FTE hours per quarter, versus 26% of stall-ups (CI 80%).

Product expansion. 60% of scale-ups constantly expand their product service, as compared to 35% of stall-ups (CI 90%).

3. Riding waves

Scale-ups ride waves: i.e., they take advantage of unexpected opportunities as these arise and they optimize the timing of their business building actions to favorable events and trends as these occur. This gives them the additional momentum to move fast. The idea is to be prepared like a surfer waiting for a

wave; to recognize the opportunity in an event; and to act fast to take maximum advantage.

Resilience is the counter action to riding waves: diving through them without running out of air. It includes anticipating difficulty, being able to take a hit, and having the power to bounce back. Resilience is required to overcome setbacks that hamper growth or even threaten the existence of scale-ups. Resilience ideally turns in to learning from failure, i.e., taking one's own mistakes as learning experiments, with serious reflection on the root causes of failure and translation into improved action.

Riding Waves database findings

Riding waves. 36% of scale-ups view the success of their company to be the result of unexpected favorable circumstances to at least a moderate degree. Same for stall-ups (but their success is obviously a more limited version).

To make strategic leaps, the cycle of creating, approving and putting the strategy needs to be very short. Plans should be ambitious and realistic. Progress should be constantly reviewed with timely corrections based on progressive insight and changing circumstances.

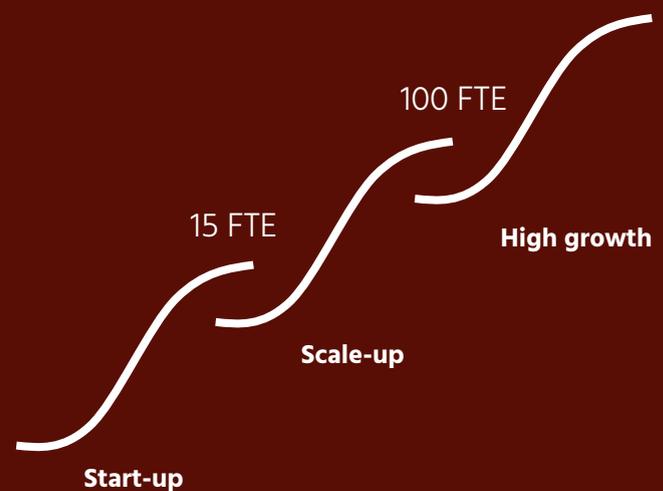
Strategic Leaps best practices

Going international. Scale-ups have a product/service that supports their global expansion, both technology- and communication-wise.

In deciding which geographic market to focus on next, scale-ups do not just consider the overall market volume, but dive deep in defining the beachhead segment that allows foreign market entry. Target markets are defined based not just on size and local regulations, but also based on their financial and cultural capacity to accept innovativeness.

Keep Innovating. Scale-ups run fast experimentation cycles and embrace failure. They invest in constant learning, continuous improvement of their products, services and processes, and innovation by mastering the process of R&D and experimentation.

**Lone wolves
hunt rabbits,
wolf packs
hunt bison.**



Dynamic Structure

The scale-up phase is the phase in which organization needs to grow from a team of up to 30 people to a company of about 100 employees or more. In the words of Reid Hoffman: "the company develops from a family to a tribe."

According to Greiner: "In the birth stage of an organization, the emphasis is on creating both a product and a market. The founders of the company are usually technically or entrepreneurially oriented, and they generally disdain management activities; their physical and mental energies are absorbed entirely by making and selling a new product. Communication among employees is frequent and informal. But as the company grows, those very activities become the problem. Larger production runs require knowledge about the efficiencies of manufacturing. Increased numbers of employees cannot be managed exclusively through informal communication. Additional capital must be secured, and new accounting procedures are needed for financial control".

The scale-up needs more organization than a startup. At the same time, it needs to remain highly flexible and adaptable to deal with this phase of rapid development and change. The result is a dynamic structure – like a pack of wolves that is agile yet trained, open to increase in numbers yet closely knit together, flexible yet perfected in its practices. In packs, grey wolves bring down bison, moose, or musk oxen. On their own, they hunt rabbits or beavers.

1. Learning and experimental culture

At the scale-up phase, attention is required both internally and externally as the company seeks to find new customers and markets, maintain innovation, build an effective operational engine and develop to a structured yet flexible organization. All happening simultaneously and at a high speed. This is the time when scale-ups define their culture, the best ways of working together, their reward system, their unwritten rules, their rituals.

Experimentation. Scale-ups know they still can and still need to become much, much better. This requires an experimental mindset. A mindset that celebrates failure as it is inextricably linked to experiment. It requires curiosity and an open mind – an external orientation, a probing attitude to customers and a willingness to challenge own convictions.

Learning. As the complexity increases, scale-ups need to embed in their DNA the elements of learning and unlearning. A learning culture enables the people in the organization to learn by themselves, increasing the levels of flexibility and adaptability in the organization in the face of fast change. Having this dimension defined as a cultural one rather than solely as a learning process, ensures that growth mindset becomes an embedded part of the organizational behaviors (i.e. employees' selection, development and interaction).

Entrepreneurial freedom. At the same time, the organization needs to react to unexpected events and exploit unforeseen opportunities. This requires that everyone feels empowered to deviate from the playbook when beneficial or required. This results from providing people with the mandate to act, to train them on opportunity identification and problem solving, and to coach them on leadership, self-development and collaboration.

Learning database finding

Experimentation. Almost all scale-ups (96%) encourage their employees to experiment. This holds for stall-ups as well.

Entrepreneurial Freedom. In 63% of scale-ups, each employee has the freedom to deviate from the playbook when they deem necessary. Same for stall-ups.

2. Fostering a tribe

Culture. The culture of each scale-up is a unique persona, often with close resemblance of the personalities of the founders. As such it is defined by its birthright legacy, its purpose and vision, its sources of pride and its interpretation of what defines performance and success. In addition, scale-ups share some common culture elements:

- *Ambition* to create a company that has positive impact on the world and does so at scale, will allow for taking the actions required and persist.
- *Performance orientation* with a focus on reaching growth targets. For this there is a need to set targets, install processes, attract best practice expertise, and build internal capabilities.
- *Competitive stance* towards the alternative providers of the product/service to survive the inevitable competition.
- *Innovation and risk-taking* to introduce new solutions and take bold actions to make them happen.
- *Cohesion, togetherness and trust* to provide full transparency on progress and challenges, inviting all employees to share concerns and ideas and ensure collective endorsement for the decisions made.
- *Heterogeneity* in people's expertise and backgrounds, perspectives, and ways of thinking. This keeps the spark of challenge alive, prevents confirmation biases and pitfalls of repetitions.
- *Commitment and resilience* to offer meaningful responses to crises.

Keeping the soul alive. As the organization quickly expands in size, onboarding lots of newcomers with little sense of history, the scale-up's culture risks becoming blurred or compromised. Through onboarding processes, storytelling, celebrations, rituals, and social events, scale-ups are able to maintain their culture - what keeps them together.

Culture database finding

Ambition & Self-efficacy. 92% of scale-ups versus 75% of stall-ups (CI 80%) believe they can have global impact instead of ("only") building an attractive small business.

Performance orientation. About half of scale-ups are driven by achieving performance more than being driven by creating opportunities. Same for stall-ups.

Competitiveness. 67% of scale-up founders view the alternative providers of their product/services as competitors more than collaborators, versus 43% of stall-up founders (CI 90%).

Archetype. Scale-ups are about innovation and risk-taking (83%), relationship building within the team (67%), results-oriented behaviors (63% and to a lesser degree about organizing and control (38%). A similar archetype we notice in stall-ups.

Socialization. 54% of scale-ups versus 21% of stall-ups (CI 80%) are like "one, big family" instead of having clear separation between work and life.

3. Firm management and support processes

Onboarding. Scale-ups are constantly under-resourced and need to up not only their numbers but also the level of seniority and expertise. They have their own "secret" source to find people. They select for true talent. They have clear recruiting criteria and avoid bias in selection. They have designed their onboarding process to quickly bring new hires up to speed and embedded it into the culture. And they are able to leverage partners, contractors and customers as "external employees".

Business beat. Scale-ups need specialization and professionalization of the employees, introduction of processes and performance tracking, formalization of communication, and increased sophistication in planning and control. They establish a simple functional structure with focus, targets, accountability and transparency. They combine projects (to continue to innovate, experiment and be creative) with process (to provide focus, quality and productivity). This builds rhythm and concentrated energy in the company, an intense, focused concentration on the activities right here and now, with full control, incorporating feedback on the spot, feeling intrinsically rewarded and strongly sensing that the company will succeed: a strong business beat!

Firm processes database finding

Onboarding process. 75% of scale-ups have an onboarding process, versus 50% of stall-ups (CI 90%).

Business Beat. For 71% of scale-ups, each employee has clear tasks and accountability. This is the case for 54% of stall-ups.

Consolidation. The vast majority of scale-ups (71%) encourage their employees to consolidate practices. The same stands for stall-ups.

Dynamic Structure best practices

Culture. Scale-ups emphasize the formulation and crystallization of their organization's core values in order to clearly outline how people work together and how new members are attracted and recruited. Defining the core values is a joint effort, in which the whole team needs to contribute. Employees are encouraged to track their performance based on the core values, which leaders are expected to exemplify. Culture is further manifested in the informal activities organized for the whole team development as well as in the opportunities provided for the personal support and development.

Onboarding + Keeping the soul alive. When discussing onboarding, defining *how* you recruit and *who* are both relevant and necessary. Our research showed that scale-ups acknowledge the importance of having a standardized HR management process in place. They apply clear recruiting criteria and engage multiple people in the hiring process from defining the position characteristics to assessing the interviewees. They often leverage their network to attract suitable candidates. When discussing who to recruit, scale-ups pay attention to their core values and the person's alignment with those. In that sense,

they search for "cultural fit", however, people who "add" value to the organization and culture are highly appreciated. Scale-ups also recruit people with the experience, skills and motivation required to keep up with a growth culture; support professionalization and being able to grow with the company.

While scaling, the pace and direction of growth is unpredictable and funds are limited. Scale-ups gain flexibility while making the most out of their still limited resources by leveraging external collaboration.

Business Beat. Scale-ups steer their direction by defining quarterly goals and setting up plans of action. They use KPIs and establish a weekly meeting rhythm to track performance. They particularly invest in training their employees to define smart and relevant numbers for their KPIs.

Access to Finance

1. Positive working capital

Dependent on the business model, significant funding might be required to lift the enterprise. Think of the capital required for production facilities or to build an international sales team.

It truly helps if the business model allows for positive working capital - indeed firms with negative working capital can grow themselves into bankruptcy.

2. Independent from subsidies

In an efficient market for investment capital, enterprises with scale-up potential should be able to get growth funding at competitive terms. If this is not the case, the social or ecological impact potential could be such that the firm is able to attract subsidies instead. Often, subsidies or grants are only provided in case of market failure. However, market failure also means that scaling will provide difficult.

Finance database findings

Working capital. 50% of scale-ups, versus 25% of stall-ups (CI 90%), have positive working capital.

Subsidies or grants. 38% of scale-ups, versus 64% of stall-ups (CI 90%), attract significant subsidies or grants.

Can you scale?

Scaling is an art, it is not a mechanistic formula. Still, it is possible to define which ventures have the right DNA and Lift Practices.

That is why we developed the **ScaleUpScan** – a comprehensive diagnostic tool that pinpoints exactly where ventures are on their scaling journey.

It incorporates thousands of data points from international ventures that have scaled and stalled, which allows us to benchmark ventures' performance against the average scale-up and stall-up. This data is combined with responses from the management team and full team, and with an automated scan of competitors on key strategic indicators.

Our goal is to create the space for management teams to have a courageous, data-based discussion about the future of their organization. Together, we will be able to confidently define growth priorities for the next 6-12 months.

So what are you waiting for? Go to www.thescaleupscan.com and take the test.



This Document

The initial “scale-up vs stall-up” research project was conducted in the Spring and Summer of 2017 by a joint research team from ScaleUpNation Kathryn Maunders, Sander van Lochem, Jessica Beketa, Elizabeth Gray, Annie Chen, Menno van Dijk; Utrecht University (Erik Stam, Chen Fleisher, Rainer Harms, Pedrag Ignjacevic); University of Twente (Petra de Weerd-Nederhof, Isabella Hatak); and University of Groningen (Aard Groen), with financial support from the Goldschmeding Foundation.

The second “scale-up vs stall-up” research project, known as “ScaleUpPriorities”, was conducted in the year 2019 with financial support from the Goldschmeding Foundation. It allowed the renewal of our data as well as the identification of the scale-up priorities and scale-up best practices. The project team was comprised of: Afroditi Terzi (Senior Researcher), Daan Bak (Project Manager), Adelina Iacob (Marketeer & Content Developer), Nora Helal (Customer Engagement Manager), Nina Kotterik (Interview Researcher), Nik Ouvenis (Full-stack Developer), and Ceferino Villalba (Full-stack Developer).

This analysis and synthesis was prepared by Menno van Dijk and Afroditi Terzi in Spring of 2020. The Art of Scaling is a living document, constantly enriched by experiences of founders and board members in the ScaleUpNation community, ScaleUpLab research projects, and academic publications.

We are very thankful for the strong financial support from EFRO, Province of North Holland, New Venture and Goldschmeding Foundation.

As such, your insights and experiences on scaling topics are valuable as we build our collective knowledge. As a friend of the Nation, we invite you to contribute to The Art of Scaling via a short memo. Please share with Menno directly: menno@scaleupnation.com.



Thank you founders at all of the companies that participated in both research projects:

- 12Return
- Accerion (Unconstrained Robotics B.V)
- Acerta Pharma
- Active Cues
- Adjuvo Motion
- Aerialtronics
- Afval Loont
- Alpha.One
- Ampelmann
- Ampersand Health
- Audion Therapeutics
- Aurum Europe BV
- Bestico
- Betty Blocks
- Bidroom
- black bear carbon
- Bloomon
- Boldking
- Botalys SA
- BrainCreators BV
- Brevel
- Buurtboer bv
- BUX
- Bynder
- Bzzt AB
- Camarilla/Appical
- Catawiki
- Ceradis BV
- Chainels
- Charly Cares
- Chess Wise BV
- Circle Economy
- Civolution
- Clear Flight Solutions
- Cleeng
- Clicksupply Travel BV
- CocoPallet International
- Collaborne
- Confocal.nl
- COOLBACK Company
- CRDL
- Crobox
- CTcue bv
- Cytosmart technologies BV
- Data Dwell
- DEGIRO
- DELMIC BV
- Dental Media
- desolenator
- Dezima/Biogeneration ventures
- Dimebox
- Disruptive Technologies
- Duxxie
- DyeCoo Textile Systems
- Dynasource
- easee BV
- eFaqt
- eFarmer BV
- EMARK
- EnergyNest
- Envio Systems Inc.
- Equigerminial
- everywhereIM
- Eurekite
- Exasun
- Fairphone
- FashionQlub/Magnius
- Fast Track Company
- Fastned
- FDX Fluid Dynamix GmbH
- felyx
- Finch Buildings
- Firm24
- Fixico
- Floryn
- FlyMedi
- Fourdeg
- FourTOP ICT
- Fresh-r
- Friigo Magic
- Frontclear
- Gearbox Innovations BV
- GEM motors
- GeoPhy
- GlucoSet
- GoodUp
- GoParity
- GreenHome
- G-Therapeutics
- Happy Helper
- Hello Energy
- Hemics
- HOOKIPA Pharma Inc.
- HousingAnywhere.com
- i2i - Intelligence to Integrity
- iLost
- Impact Terrs
- Innoboost
- INSTALL SRL
- Interswitch
- InvoiceSharing
- Ioniq Technologies
- Iwell
- Klup B.V.
- Lavie Bio
- Layar
- Leerunieik
- Lemon Companies BVBA
- Livis
- Lone Rooftop
- Luhv Drinks
- LUMICKS
- Luxexcel Holding NV
- Maiseficaz
- Manometric
- Mantelaar
- Mapiq
- Marqeting
- Matrix
- MEAZON SA
- Mellon Medical
- Member Get Member Company
- MgAubel
- 30MHz
- MI Airline/Mees Essentials
- Mimetas
- MMT SA
- Mobiteam
- Mooui
- Mytomorrows
- NABRAWIND TECHNOLOGIES
- Nemo Healthcare B.V.
- Nicolab
- NightBalance
- NLC | The healthtech venture builder
- Nordic Unmanned AS
- Nutrileads
- Office App
- Olery
- One2many
- OneFit
- Onegini
- Online Payment Platform
- Open Mind Innovation
- OPLoG
- Orange Pearl BV
- Pacmed
- Peerby B.V.
- Pennock & Postema
- PHYSEE
- Picnic
- Plurionics SA
- Play Solutions SRL
- Polarsteps
- Powerpeers
- Protifarm
- Protix
- Puraffinity
- Qandidate.com/ VONQ
- Qredits
- Quby
- Questionmark
- Quicargo
- QWIC
- RadiSurf ApS
- RedSocks Security
- Relay42
- Retailisation BV
- Roadmap
- Robot Care Systems
- Rollz International bv
- ScienceCup
- seed-x
- SendCloud
- Senfal
- sentiance
- Sensoterra
- Shaerpa Fund Management
- Shypple
- sightcorp
- Sigmascreening
- Slim Opgewekt
- Smart Robotics
- Software
- SolarCreed
- Speakap B.V.
- Squila
- Sphere Fluidics Limited
- Spireaux
- Staan
- Starred
- Star Stable Entertainment AB
- Studyportals
- Studytube
- Sustainer Homes
- swyMed
- Symbid
- Synaffix B.V.
- Synappz
- Syndy
- Talk360
- Taxi Electric
- taxi2airport.com
- TechTribe
- Telfie (Voice of TV)
- Terra NutriTECH
- The Next Closet
- The New Motion
- THNK
- Tinybots
- Tiqets
- Tony's Chocolonely
- Triposo
- Ultimaker
- ULU B.V.
- Undeveloped
- Urban Ponics
- Usono
- Vandebroon
- VANMOOF
- Virtuagym
- Viisi
- Voradius.nl / Producten.nl
- WakaWaka
- We are reasonable people
- WeGo B.V.
- Wellsun
- Wizenoze
- Woosh5
- Xnext s.r.l.
- Xsens
- Yieldr

