



Introductory remarks

The presented study draws on the findings of a Cross Industry Group consisting of six renowned industrial companies and a range of expert contributors. The group explored both, the challenges and the key factors that contribute to successful corporate startup building. The most insightful aspects of their discussions have been condensed in this whitepaper.

About Cross Industry Groups

Corporate representatives from different market segments and technology fields come together in Cross Industry Groups to discuss and develop focus topics. The emphasis is placed on cross-industry knowledge transfer and exchange of experiences – the partners can learn from the open discussions of best and worst practices in the respective area. Experts from the

Fraunhofer Institute for Production Technology IPT, INC Invention Center at the RWTH Aachen Campus and from industry support in identifying and developing solution approaches for today's challenges and derive company-specific recommendations for action. The different topic areas are elaborated in moderated workshops, open discussion rounds and external impulse lectures during three interactive working meetings within nine to twelve months.



Figure 1: Targets of the Cross Industry Group format

About Fraunhofer IPT

The Fraunhofer Institute for Production Technology IPT develops novel solutions and optimizes existing ones for the modern manufacturing plant on behalf of its clients. The mission of the Fraunhofer IPT is to carry out application and industry-oriented research and development for companies across all manufacturing sectors. The results are immediately implemented within the day-to-day practice of the customers. Fraunhofer IPT's experts in technology management advise companies on how to successfully deal with technological and market developments - from the conception and design of strategies, processes, and methods for implementation. In addition to setting up end-to-end technology management for industry partners, the institutes key topics in technology management include the management of digital transformation, circular economy and resilience as well as the design of incubators and innovation labs.

Contact person: Dr.-Ing. Marc Patzwald, Head of Department, Technology Management

About INC Invention Center

The INC Invention Center at the RWTH Aachen Campus is a space for visionaries and agenda-setters to reinvent their businesses. The INC allows industry and research stakeholders to discuss current topics on technology and innovation management and to give free rein to their own innovative spirit. Each year, INC members define their most important questions, which then determine the subject areas of research and development as well as consortium projects. Answers are developed in Cross Industry Groups and workshops up to large-scale studies. In this, modern technology and innovation management methods are used and developed further to achieve even better results.

Contact person: Dr. Stefan Thomas, Executive Director, Products & Ventures

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Getting started with corporate venturing and corporate startups

For many years, the existing competencies, and continuous incremental innovations in the core business of established manufacturing companies have been sufficient to compete internationally. As a consequence of a large number of technological innovations, digital transformation, increased customer requirements and the significantly higher importance of sustainability, these companies are nowadays faced with the challenge of increasing their exploration capability. They need to adapt to high market dynamics through innovation, speed, and willingness to change. By building new areas and developing new business models, companies are now forced to master more radical, discontinuous innovations.¹

Corporate venturing

To meet this challenge, many companies embrace one or more of the various approaches of corporate venturing.² In a narrow sense, corporate venturing is sometimes used synonymously with the term corporate venture capital, which includes the investment of venture capital by a larger company in promising startups. In a broader sense, however, the term also includes other activities to build, partner with, or buy new companies. The overarching aim is to unlock new sources of entrepreneurship and innovation both inside and outside the company.³

In the context of the present whitepaper and the beforementioned Cross Industry Group, the following working definition is used: "Corporate venturing refers to various organizational approaches to generate new revenue streams through scaling radical innovation in separate (internal or external) venture units." The object of consideration in the sense of the object of an individual venture project, is referred to in the following as the "corporate venture", i.e. the project or later the startup that scales an innovation internally or externally.



Corporate venturing refers to various organizational approaches with the intention of generating new revenue streams through scaling radical innovation in separate (internal or external) units."

Corporate startup

Sometimes it may be desirable (for various reasons) to spin off an innovation originating from an established corporate as a subsidiary company for the implementation and scaling phase with the goal of developing and commercializing new products, services, or business models in a more entrepreneurial and agile manner. In this case, the "corporate venture" is referred to as a "corporate startup".

The goal of a corporate startup is often to leverage the resources, expertise and market access of the parent company while benefiting from the autonomy, speed, and innovation culture of a startup.

What may sound great in theory is often not easy to realize in actual practice. This is why Fraunhofer IPT and INC Invention Center joined forces with industry leaders in this Cross Industry Group to find answers to the question:

How to launch a corporate startup?

The results are actionable insights that can be summarized in eight core key aspects that every corporate startup founder should address right from the beginning to lead his or her venture to success.

To enhance actionability, the eight aspects are structured along three phases from the first thought of scaling an internal innovation to the actual market launch.

Aligning the venture

Corporate startups do not enjoy the same freedom as greenfield startups to pivot and experiment in unknown waters. Therefore, target definition is key – it must be agreed on at an early stage which primary objective is to be pursued by the corporate venture and how it relates to the other venture



A corporate startup is a subsidiary or spinoff company created by a larger, established company with the goal of developing and commercializing new products, services, or business models in a more entrepreneurial and agile manner."

- 1 Billig, F., Windhagen, E. & Petersen, G., 2021. Germany 2030: Creative Renewal. [Online]
 Available at: https://www.mckinsey.com/featured-insights/europe/germany-2030-creative-renewal (accessed: 23 May 2023)
- 2 Sanders, D. et al., 2022. Multi-Channel Corporate Venturing. A Build, Partner, Buy approach for corporate leaders in the new decade. [Online] Available at: https://www2.deloitte.com/de/de/pages/technology/articles/corporate-venturing.html (accessed: 23 May 2023)
- 3 Reimsbach, D. & Hauschild, B., 2012: Corporate venturing: an extended typology. In: J Manag Control 23 (1), pp. 71–80. DOI: 10.1007/s00187-012-0151-1.

activities. Common objectives are e.g. driving the core business forward, diversifying the portfolio, generating financial returns, or exploring new business models. Additionally during this early phase, suitable exit strategies according to the main objective should be pre-defined, as the exit strategy has a crucial impact on further decisions for a successful launch.

In contrast to independently founded startups, corporate startups have the opportunity to access corporate resources during operation. This unfair advantage should be consciously taken into account and leveraged when defining the innovation target.

Corporate venturing requires fast decision-making under a high degree of uncertainty regarding unfamiliar topics and with big investments which require an adapted decision-making process. Therefore, the process must consciously address the challenges of venturing and it is important to address early on how to make high-quality decisions in an uncertain and fast-moving environment and ensure that the key stakeholders are all on the same page.

Defining the set-up

The initialization is the starting signal to turn the venture project into a(n) (internal or external) corporate startup and therefore at this point, it is time to define the right set-up. One of the most well-known success factors for a startup is having the right team. However, finding the ideal composition of corporate employees and external forces is a major challenge.

Since the parent company cannot or will not always provide the necessary financial resources, raising money from external investors can be a solution. However, due to the origin, it is not always easy to find a suitable investor. Venture capital investors often fear the strategic interest of the corporate, but there are criteria according to which corporate startups are evaluated to be attractive for them.

Another relevant component in initializing a corporate startup is determining a suitable legal form for the startup. When already dealing with the legal aspects, thinking about the different options to involve the employees in the future success by (virtual) stock options is recommended.

Launching successfully

Once the organizational aspects have been clarified and the corporate venture has passed the first hurdles, operationalization is a masterpiece. Only with a successful market entry, there is any chance at scaling the innovation – and this is very much a critical point, especially in B2B businesses. Therefore, defining a "go-to-market strategy" and prioritizing sales at the C-level is crucial to put it into practice sooner rather than later.

Finally, steering a startup differs significantly from the day-to-day business of a corporate and therefore requires a different approach – especially during the first highly uncertain months to years.

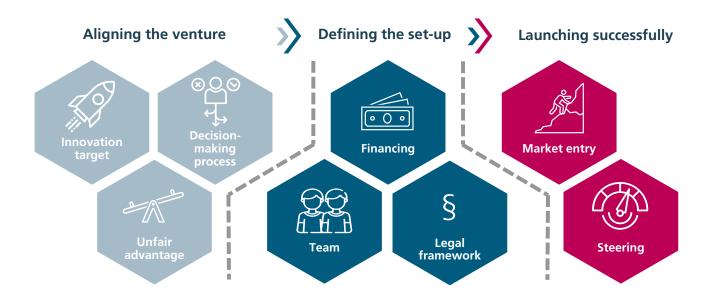


Figure 2: Framework for structuring the key aspects for successfully launching a corporate startup

Aligning the venture

Innovation target

Venturing focuses on innovations that do not fit into the regular innovation funnel of the core business, i.e. are not purely incremental. In contrast to those incremental innovations, radical innovations refer to new products, services, or technologies that represent a significant deviation from existing offerings and that have the potential to transform entire industries or markets. These innovations often involve disruptive technologies, novel business models, or new ways of meeting customer needs that were previously unmet or underserved. They can result in changed value chains, shifted competitive positions, or even the creation of new markets or industries.

Therefore, it is usually not implicitly defined right from the start, how the innovation is aligned with the corporate strategy and what its main objective is, but rather requires proactive consideration of the question:

How to define the target and consequently the most suitable organizational setting for a venture?

The first step is to characterize the innovation and align it to the corporate strategy. Based on the corporate strategy, it is possible to identify areas of opportunity where innovations could have a significant impact. This may involve analyzing market trends, customer feedback, and internal competencies to identify gaps or pain points that the innovation could address. Once the areas of opportunity have been identified, it is time to define the value proposition of the innovation. This should articulate how the innovation will create value for the organization, whether through new products, processes, services, or business models or by improving existing offerings.

To ensure that the innovation aligns with the organization's strategy, it is recommended to map the innovation to the specific goals and objectives outlined in the corporate strategy. This does not mean that the innovation necessarily needs to have a strong strategic relation or address aspects directly related to the core business. Instead, innovation could also be more focused on exploring new markets or technologies or it presents just a chance for alternative financial returns.



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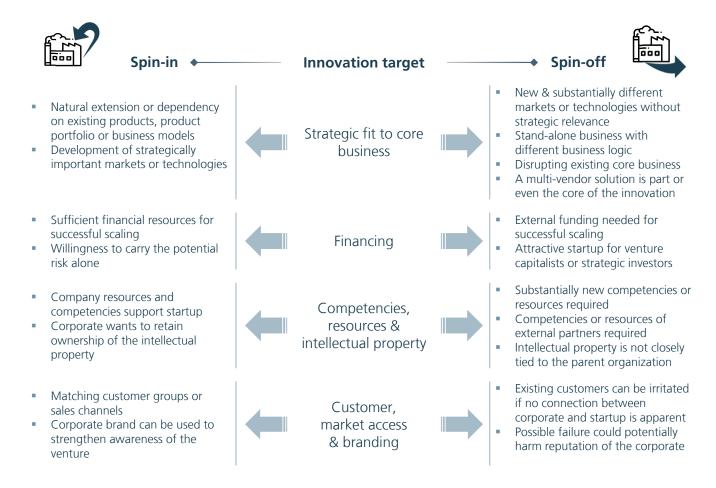


Figure 3: Arguments for spin-in or spin-off of a venture

A detailed consideration regarding the characteristics of the innovation for a venture activity is crucial when deciding on the perspective form of exploitation respectively the organizational form for implementation and scaling. A distinction can be made between internal and external exploitation paths respectively between spin-in and spin-off. Internal exploitation usually means the integration into an existing business unit to scale the innovation. External exploitation refers to the scaling of the innovation in the form of a corporate startup, which in the long-term results in a new (independent) business or is sold. In reality, there is also a wide range of set-ups in between (e.g. a new business unit, a joint venture, or a spin-merge) and the decision is highly dependent on the characteristics and key objective of the corporate venturing activities. It is important to consider the specific goals and priorities of the parent organization, as well as the unique opportunities and challenges of the startup itself.

While there is usually no univocal recommendation for spin-in or spin-off (or any of the various options in between), the following factors can provide an indication of which option is in principle more suited and why, or how a suitable compromise could be designed:

- Strategic fit to core business
- Financing
- Competencies, resources, and intellectual property
- Customer, market access, and branding

Figure 3 summarizes the most relevant arguments in favor of spin-in or spin-off for each factor. Rarely will all factors lead to a clear statement when considering an innovation, but a tendency will become apparent, in which areas compromises or custom solutions must be found.

In general, a spin-in may be the more favorable option if the startup closely aligns with the organization's core business and represents a natural extension of its offerings, and if the parent organization has the necessary competencies, resources, and expertise to support the startup.

In contrast, a spin-off may be the better option if the startup is pursuing a new standalone business which might even disrupts existing core business, external financing is needed for successful scaling and there are no significant synergies in terms of resources, competencies, customers, or the brand.

Unfair advantage

Corporate startups have the possibility to access resources from their parent company during their operation. This might serve as an unfair advantage over conventional startups. An unfair advantage allows a company to possess a distinctive selling proposition that is not easily replicated or acquired by its competitors. When aligning the venture, it is essential to take these possible unfair advantages into account.

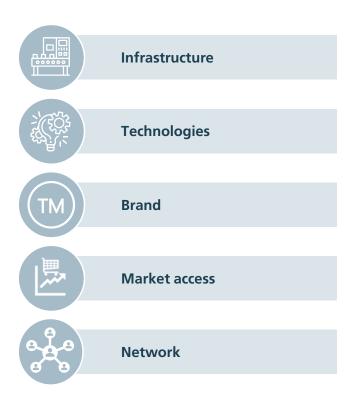


Figure 4: Five potential drivers for the unfair advantage

4 Nieminen, J., 2021. The Art of Decision-making as an Innovation Leader. [Online]

Available at: https://www.viima.com/blog/decision-making-as-an-innovation-leader/ (accessed: 31 July 2023)

What corporate contexts can really create an unfair advantage for a corporate startup and how can they be realized?

There are five potential drivers for an unfair advantage. To successfully realize these drivers, challenges should be analyzed in advance and addressed through specific measures.

On the one hand, a relevant unfair advantage may arise from the use of the existing infrastructure of the corporate such as the production infrastructure. However, in the event of capacity bottlenecks, the corporate may claim the primary use of its resources so that the corporate startup may be deprioritized and not be able to fulfill the customer's wishes at the agreed time. To ensure planning security for both, corporate and corporate startup, liabilities in the infrastructure utilization should be secured by concluding contracts to charge for the service used.

The use of technologies developed by the corporate is a second potential driver for an unfair advantage. It is recommended to avoid potential IP problems in advance by defining the rights of use of the technologies e.g. through granting licensing.

Another unfair advantage of a corporate startup is the use of the well-known brand of the corporate. However, if a negative event such as the emissions scandal results in a reputational loss for the corporate brand, this reputational loss is automatically transferred to the brand of the corporate startup. A feasible alternative to overcome this hurdle is a market entry with an own brand of the corporate startup.

Easier and faster market access, which is made possible, for example, by using existing sales networks of the corporate or by using existing knowledge about the corporate's customers and markets, is another potential driver for the unfair advantage. To successfully realize this unfair advantage, particularly good human collaboration between the corporate and the corporate startup is required. An essential basis for good collaboration is the acceptance between the corporate startup's and the corporate's employees. To ensure mutual acceptance and thus good collaboration, support of management, as well as targeted team-building measures, are crucial.

The existing network of the corporate, including contacts with customers, suppliers, and other partners, as well as knowledge of relevant regulations, represents another potential unfair advantage. The network of the corporate has already been built up over a long period and cannot be easily replicated by other startups. Additionally, no significant hurdles come along with this unfair advantage. Therefore, the unfair advantage of a network is considered the real unfair advantage of a corporate startup.

Decision-making process

"The first, and most important thing is to accept the fact that whatever innovation strategy or business plan you've created, it will always be either plain wrong, or at best, sub-optimal." Under these conditions, how can a decision-making process be designed to push the most promising ventures?

Decisions on venture activities differ in many aspects from the usual innovation projects. The information base is usually much lower, the risk of failure much higher, the investment requirements often larger and difficult to estimate at the beginning, and the time pressure on decisions greater. Critical decisions on whether to move forward with the venture, modify the venture to address concerns, or reject the venture often must be made within a few days or weeks, even when it comes to large investment sums. Corporate venturing, therefore, requires the establishment of a clear and rigorous process to ensure this decision-making capability.

The design of this decision-making process should consider the structural, procedural, and cultural peculiarities of the corporation and is, therefore, highly company-specific. In principle, however, the following four points should always be somehow defined: organization, people, timing, and information.

Organization

In organizing the process, it is essential to maximize decision -making ability. While the design may vary depending on the company, the goal should always be to make a diligent decision without taking up too much valuable time and resources of both decision-makers and the venture team. Whether a committee discusses and makes the decision together with the "innovators" in one meeting or whether each decision-maker first makes his or her judgment before the final decision is discussed in a larger group is only a brief description of the various possibilities.

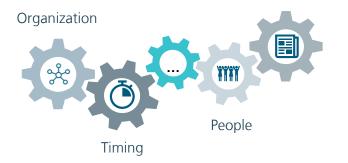


Figure 5: The four main elements to design a decision-making process

People

Without a doubt, top-level commitment is crucial for corporate venturing right from the start. Therefore, all key stakeholders (usually the C-level and leaders in charge of innovation) must be involved in the process early on. However, it is important to avoid involving too many executives and over-prioritizing personal interests in the decision-making process. It is helpful to make a clear distinction from the outset between who makes investment decisions and who is merely informed. Finally, there should be a clearly defined process for how and when business units come into play as internal customers of the venture activities.

Timing

When it comes to timing, "on-demand" is the keyword. As soon as it becomes apparent that a "demand" is imminent, a meeting for a decision needs to be set-up. The need for a decision can arise from a variety of situations, including the foreseeable transition from one innovation phase to the next or specific crucial decisions that need to be made in the near future, such as addressing unforeseeable critical investment requirements. In the case of ongoing venture activities in an advanced phase, it may also make sense to provide decision-makers with regular updates (e.g. quarterly) on the current status.

Information

The topic of information depends on the innovation phase of the venture. However, the validation of the business model is always at the core. In the early phases, where validation of the market and the problem-solution-fit are in focus, the focus is on hypotheses and assumptions which need validation. Later, the technological feasibility and the market fit are key aspects until finally, the entire business model is to be validated. For each phase, the respective goal should be defined, and the milestones to be achieved in the next phase and the required investment should be presented to the decision-makers. To facilitate decision-making and make decisions comparable across different projects, it can be useful to work with defined templates and to have a defined catalogue of key questions specific for each phase. In the case of innovations that involve e.g. a high degree of technical complexity, it can be helpful to involve internal or external experts in the process who can actively help to ensure the necessary basis for a well-founded decision.

Defining the set-up

Team

Studies show that the right team is primarily responsible for the success of a corporate startup. However, to find the ideal team composition is a great challenge.⁵

What positions are required in the early stage?

In the early stages of a corporate startup, the focus is on building a strong core team covering the most important positions. This requires individuals in these core positions to have specific competencies based on experience, skills, and knowledge to properly perform their distinctive tasks. However, because financial resources are scarce, it is not always possible to directly recruit every desired position. Therefore, hires may need to take over temporary tasks from positions that have not yet been filled and thus demonstrate some flexibility. Furthermore, this core team needs to come along with "skin-in-the-game". Typically, the following three positions are most important at the very beginning of a corporate startup:

Chief Executive Officer (CEO)

Responsible for the strategic orientation of the company, profitable growth of the company incl. managing key resources; in the early stage often also responsible for the financial management, sales, and impulse generation for product development from the market point of view

Chief Technology Officer (CTO)

Responsible for managing all internal and external technology within a company; in the early stage often also responsible for product creation and the management of day-to-day operations

Chief Marketing Officer (CMO)

Facilitates corporate startup growth and awareness through marketing, public relations, and internal communication; in the early stage often also responsible for client acquisition, sales, and partner search and communication

Where can employees be found for relevant positions?

Several staffing options exist depending on the priorities of the corporate startup. Positions should be filled by internal employees from the corporate when the expertise from the corporate is to be used synergistically in the corporate startup or when the existing network of the corporate is to be accessed. Also, internal hires are beneficial when employees with a high level of commitment are desired, as they are familiar with the goals and strategy of the corporate. At the same time, it must be taken into account that internal employees might have less experience in agile way of working, which is mostly required within the volatile environment of a startup and could therefore be an obstacle during the work. Alternatively, external employees can fill the positions. External hires are typically preferred when new ways of thinking – due to their distance from the corporate – are necessary. In addition, external employees should be prioritized when specific expertise is required and fewer compromises should be made in terms of competencies. However, external employees benefit less from the corporate network.

Both internal and external employees can be hired as full-time employees or as service providers. The latter has the advantage that they can be booked flexibly according to the required capacities and thus burden the financial resources as needed.

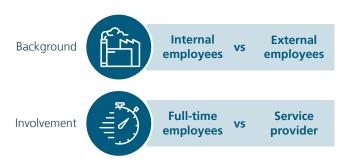


Figure 6: Staffing options for corporate startups

⁵ Mass Challenge, 2022. 9 Make-or-Break Startup Roles (and Why They Are Important). [Online], Available at: https://masschallenge.org/articles/ important-startup-roles/ (accessed: 23 May 2023)

Financing

Considerable financial resources are required for the corporate startup, to be able to initiate the market launch phase and scale its business after the validation of its business case. However, the corporate is not always able or willing to provide the necessary money. Accordingly, it may be necessary to attract external investors. Therefore, various criteria must be fulfilled to be considered as an attractive corporate startup by external investors.

Fundamentally, financial criteria influence the investment decision of venture capital (VC). In this context, strategic investors often unfold their value only in the later stages of a venture. The later stage is characterized by a proven business model, a broad investor and customer base as well a moderate risk profile. Based on a profitable business model, the VC evaluates whether and how a collaboration can be profitable for both, the corporate startup and the VC. Additionally, the team is a fundamental criterion for investors, as already shown in the previous chapter about the team.

According to which additional criteria do external investors evaluate the attractiveness of a corporate startup?

From a VC perspective, an investment in a corporate startup is only considered if specific legal, strategic, and operational criteria are met. All three criteria reveal the independence of the corporate startup and apply analogously to startups.

The legal criteria include that the corporate does not hold any special contractual rights, e.g. rights of first refusal or veto rights. Furthermore, it must be ensured that the IP belongs 100% to the corporate startup. Additionally, it is important for the investors that the founders of the corporate startup hold

sufficient stakes. Within the context of the strategic criteria, the autonomy in the strategic decision-making must lie with the founders of the corporate startup to ensure that no dependence on the strategic decision of the corporate exists. The operational criteria of investors require no operational partnerships that create dependencies, no exchange of external data with the corporate as well as no persons with operational positions in both companies. Additionally, no IP-driven business models are beneficial.

Overall, VCs rarely invest in corporate startups – usually because of the conflict of strategic goals: While corporates and founders tend to make investment decisions based on a strategic fit with the corporate and thereby do not necessarily focus on the (rapid) achievement of significant market share, VC investment decisions tend to be return-oriented. Accordingly, the VC's focus is on the rapid commercialization of the technology. Thus, the strategic goal of a corporate startup is a decisive factor in determining the form of financing.

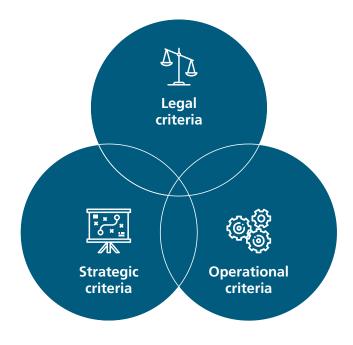


Figure 7: Three dimensions of criteria for external investors investing in corporate startups

Legal framework

As mentioned earlier, a corporate startup is a subsidiary or spin-off company created by a larger, established company. To accelerate innovation processes or to prepare a separation for later sale, the formation of separate legal entities from an existing company is aimed at, for example, separating the risk of corporate startup from the parent company. However, with the separation of the corporate startup from its parent company, changes in the legal form are necessary.

Which legal form is suitable for a corporate startup?

To select a suitable legal form, six criteria are of high relevance:

- Legal form should permit single shareholders.
- Liability of the corporate startup should be limited.
- Funding should allow for a clear separation of assets of the corporate but also for the inclusion of third parties, i.e. external investors.
- Steering and control of the corporate startup should enable the influence of the corporate.
- Taxation of the investment profit/ capital gain should be optimized in terms of timing and amount.
- Exit/ disposal of a corporate startup should be as fungible as possible and, if necessary, ensure a simple return path to the parent company.

Taking these criteria into account, the recommended and most common legal form for a corporate startup in Germany is a so-called "Gesellschaft mit beschränkter Haftung" (GmbH).

How can employees be involved in the success of the corporate startup?

Employee participation as an incentive is a crucial element for the founders and all team members of the corporate startups. Usually, the salaries are comparable to what they have earned in previous corporate jobs, although the risk of working in a corporate startup is much higher than in the core company. Thus, employee shareholdings can ensure the long-term commitment and motivation of employees.

One option for an employee shareholding is the virtual stock option plan (VSOP). By means of contractual agreement, recipients are treated as if they held a predefined number of shares in the corporate startup. In this way, recipients participate in an increase of the future value of the corporate startup. The payment claim usually arises only upon the occurrence of an "exit event" (e.g. the sale of company shares to a third party/ IPO). Thus, one advantage for the recipients is the taxation, which only takes place in the event of an exit and not already when the shares are allocated. A further advantage of VSOP is that the contract does not need to be notarized and therewith enables a very flexible and fast adjustment and implementation of the arrangements such as the underlying value, the participation in profit distributions, the definition of the exit event, and the vesting of the entitlement. Finally, this form of employee participation is particularly attractive for corporate startups, as these hardly have any liquid funds in the early phase to remunerate work there accordingly.



Figure 8: Illustration of VSOPs

Launching successfully

Market entry

A successful market entry with the developed innovation is crucial for the scaling of the corporate startup. Various measures within a "go-to-market strategy" contribute to an exponential increase in demand and confirm the actual marketability of the innovative product.

What are the success factors for fast and sustainable market entry?

One success factor for a fast and sustainable market entry is the definition of the target market. For a successful definition of the target market, all industries are first to be considered and analyzed. Subsequently, it should be zoomed in fast on a promising niche where current market conditions should be considered continuously.

To drive the development of use cases successfully within this niche, it is recommended to develop products and their features closely together with the customer. This ensures that customer feedback is constantly incorporated into product development. If it becomes apparent from customer feedback that there is no real need for the current offering, it is important to pivot quickly and adapt the business model accordingly – even if the executive team is very convinced of his product.

To enable pivoting in a corporate startup, the right structures must be created. Top management should provide the corporate startup with the freedom to pivot. This agile approach supports the incorporation of customer feedback by flexibly moving back and forth within a phase and is therefore highly relevant, in all phases up to market establishment.

What are the success factors on how sales should be organized for business models for scaling?

Sales are one of the most important pillars for the successful scaling of a corporate startup, as it maintains the involvement with the customer through joint discussions about the product and thus customer feedback can be obtained. Accordingly, the sales area should not be outsourced too early. Rather, the core team should acquire the first ten clients and build a good sales team around the core team.

Furthermore, the selection of sales channels is of enormous relevance. Not only a few traditional channels should be relied on. Instead, it is recommended to try out as much as possible, to track the success of every single channel, and to identify the one that fits best for you.



Figure 9: Market entry process

Steering

Attributed to Peter Drucker's motto "You can't manage what you can't measure", performance measurement is of enormous relevance to enable the management of corporate startups.

Performance measurement has the goal of efficiently and effectively using resources needed for organizational activities by providing information, executing internal planning and management, and controlling processes.

How to measure the performance of the corporate startup?

To enable performance measurement, key performance indicators (KPI) are typically used. The challenge is to establish a KPI system that is valuable for the specific needs of an individual corporate startup, achieves high benefits and at the same time requires little effort to implement.

Four factors contribute to successful performance measurement:

- Only the most relevant KPIs should be selected since measuring and evaluating KPIs involves an enormous amount of work
- Valuable KPIs, that are associated with a goal from which concrete measures can be derived, need to be established.
- KPIs should be closely related to the strategy, the business model, and the product or service type.
- Depending on the innovation maturity stage of the corporate startup, the appropriate metric and its specific type of metric should be determined.

The idea is still quite vague, so this phase is characterized by high risks and uncertainties as well as high flexibility. Measuring with quantitative KPIs is still not useful in this phase. Instead, the focus should be on learning and rapid iterations to be able to pivot or make changes as quickly as possible. Accordingly, a hypothesis-based, agile measurement with OKR is to be aimed for. In the scaling phase, i.e. after the proof of product-market fit, the product is already very concrete, and its success is validated. Additionally, this phase is characterized by reduced risk and already established structures. Measuring with KPIs in conjunction with the stage-gate approach allows to optimize performance and is therefore recommended. Once the product has reached a certain level of maturity and is established on the market, the focus is increasingly on financial KPIs

The most relevant KPIs in the scaling phase, can be categorized into four dimensions: Finance (e.g. burn rate, revenue growth), product (e.g. customer satisfaction, churn rate), and team/risks (e.g. fluctuation rate, recruiting time). An additional dimension "environmental sustainability" is to be included in the future due to the increasing relevance of climate change and the success of purpose-driven organizations.



Figure 10: The four most relevant dimensions of KPIs for corporate startups in the scaling phase

Summary

By launching startups, corporates can create new products or services, tap into new markets, and develop new business models. This can help them to stay ahead of the curve and adapt to emerging trends and technologies, and ultimately prevent them from getting easily disrupted by new external market entrants. So building a corporate startup can be a valuable vehicle to stay competitive in a fast-paced and dynamic business environment. To be successful as a corporate, some crucial aspects need to be considered, which are summarized in the following key learnings:

Unfair advantage

The "Unfair advantage" of a corporate startup is the access to the corporate's existing network of customers, suppliers, and other partners which can't be copied by independent startups.

Decision-making process

A clear and stringent process allows for quick decision-making, involves key stakeholders, and includes a clearly defined process for involving business units as end customers; timing should be on-demand, with lead time appropriate to decision-makers' schedules.

Team

In the early stage of a corporate startup, focus is on a strong core team fulfilling the three core positions of CEO, CTO, and CMO. This core team needs to come along with "skin in the game".

Financing

Specific financial, legal, operational, and strategic criteria which show the independence need to be met for a corporate startup to be considered for Venture Capital. Notably, strategic investors unfold their value in later stages of development.

Legal framework

The recommended and most common legal form for a corporate startup is a GmbH. To ensure the long-term commitment and motivation of employees, virtual stock option plans (VSOP) can be used for employee participation in future earnings at an exit event.

Market entry

Focus needs to be on sales and customer feedback which can be integrated into the development of a customer-oriented product.

Steering

The use of quantitative KPIs is recommended not directly from the beginning but rather after the proof of product-market fit, since in this scaling phase the product or service offering is already concrete, and its success is validated.

Authors



Prof. Dr.-Ing. Dipl.-Wirt.-Ing.
Günter Schuh
Member of the board of directors of
Fraunhofer IPT and chair holder of the chair of
Production Engineering at the Laboratory for
Machine Tools and Production Engineering (WZL)
of RWTH Aachen University



Leonard Schenk, M.Sc.Research Fellow, Technology Management,
Fraunhofer Institute for Production Technology IPT



Johanna Jacobi, M.Sc. Research Fellow, Technology Management, Fraunhofer Institute for Production Technology IPT

In collaboration with INC Invention Center



Contact

Dr.-Ing. Marc Patzwald Technology Management Phone +49 241 8904-159 marc.patzwald@ipt.fraunhofer.de

Fraunhofer Institute for Production Technology IPT Steinbachstrasse 17 52074 Aachen Germany

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