

## THE SIX-STAGE MODEL OF PROFITABLE GROWTH AND ENTREPRENEURSHIP IN FINLAND: A DELPHI STUDY

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**Abstract.** Our research has focused on addressing the following research questions for the growth strategies of SMEs: (1) What are the stages of profitable growth, and what factors contribute to these growth stages? (2) Which critical factors must be addressed for an organization to progress to the next stages of growth? (3) What is the importance of management in identifying and addressing critical growth factors? We have utilized the Delphi method and emphasized the role of company managers who have experienced profitable growth process as experts. Based on our findings, we have developed a Six-Stage Model of Profitable Growth (SSMPG), which we explain in detail in the article. The SSMPG model is compared to the prevailing Death Valley and Startup growth company development models. The article identifies the most crucial factors for the profitable growth of SMEs at different stages of growth within the SSMPG model. This model emphasizes sales, profitability, the individual characteristics of the entrepreneur, and leadership, in contrast to the debt-driven growth models emphasized in the other approaches. Further research could explore developing a start-up business culture using the new phasing model in Europe and elsewhere. In the future, it is important to consider profitability at both the company level and within clusters and regions.

**Keywords:** profitable growth, entrepreneurship, small and medium-sized enterprises (SMEs), critical growth factors, leadership, management, Delphi method.

**JEL Classification:** O4, O12, P12.

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## 1. Introduction

We know that profitable business growth and better growth dynamics are major and common economic challenges for European firms, as Eurostat stated in its yearly report in 2023. In 2020, a clear and overwhelming majority, 99% of enterprises in the EU were micro or small enterprises, which employed fewer than 50 workers. However, their economic weight was much smaller relative to their contribution to employment or value added. In the EU region, micro and small enterprises employed just under half, i.e. 48.5% of the EU non-financial business workforce. Their total share of entrepreneurial activity in value added was slightly over one-third (35.4%). In the year 2020, around 42,000 large companies (i.e. employing at least 250 workers) were involved in the non-financial business economy in the EU region. These

large Euro-companies accounted for only 0.2% of all businesses in the EU region. The share of medium-sized enterprises (i.e. enterprises with 50–249 employees) was about 0.9%, or less than 1% in 2020 (Eurostat, 2023). Thus, the European Union and its member countries need more dynamic growth companies.

Profitable growth of companies results in job creation, well-being, and security. Moreover, it also fosters sustainability and crisis resistance. Hence, special attention must be paid to the challenges of the profitable growth of SMEs, from the initial phase of the company to its founding, to encourage more profitably growing companies. The key is to recognize the role of the entrepreneurial personality and individual entrepreneurial spirit and the challenges of management in the different phases of business growth.

Our research addresses this challenge by creating a six-stage ladder model of SME growth, identifying the most critical growth factors for each stage. Entrepreneurial personalities have a significant influence during the early stages of growth. However, after the growth starts, the continuation of growth poses different management issues. Our research involves utilizing entrepreneurs who have experienced the various stages of SME growth as experts, which is a unique approach. Even the best business leaders can learn something from other best business leaders. Additionally, there is a need for a geographical perspective. For example, the structure of companies in Finland, an arctic operating environment, differs in some respects from the structure of densely populated centers. The research uses the Finnish business environment as part of the EU.

The paper is divided into several sections. In Section 2, we discuss the unique aspects of our research, including its connection to the Finnish SME business environment, three alternative approaches to growth entrepreneurship, and the comparison between different growth models. Recent literature emphasizes the need for three growth horizons and the central role of financial arrangements in growing firms. In Section 3, we used three rounds of Delphi expert panel interviews to develop a six-stage model of profitable growth, with the final round in 2021. Section 4 presents findings from the third round, including assessments of the model's expandability and critical growth factors. In Section 5, we discuss the dominance of debt-driven models and propose a new approach focused on cash flow and sales. Section 6, The "Conclusions" section summarizes the benefits and opportunities of different approaches and suggests a greater focus on studying profitable growth while considering critical growth factors.

## **2. Background literature**

### **2.1. Theoretical frameworks**

In the field of futures research, the planning horizon and the mapping horizon are key issues. These two issues are interlinked. Planning is always based on some kind of future map (possible futures). Theoretically, the six-stage model of profitable growth is a planning model and has its own planning horizon. There can be a scenario model, which can be seen as a theoretical futures map covering key aspects of a futures scenario (see e.g. Kuusi et al., 2015). From this perspective, our approach is a comprehensive future research project with future mapping and planning horizons.

The futures of entrepreneurship and small businesses have been discussed widely in many research articles (Fuller, 2003; Fuller & Warren, 2006; Anton, 2019; Hajizadeh & Valliere, 2022) and these topics are also relevant from broader perspectives of capitalism

and its future evolution. In this article, we limit our focus on the evolutionary life cycle aspects of companies. Both products and firms seem to have dynamic life cycles in markets (Bass, 1980; Beck & Demircuc-Kunt, 2006). The evolution of markets includes this kind of fundamental evolutionary elements which is close to the so-called S-curve hypothesis of product development (Freeman, 1992; Nunes & Breene, 2011; Fisher et al., 2020). The assumption of bounded rationality (Cyert & March, 1963; Ahuja, 2007; Gavetti et al., 2012) is nowadays linked to foresight thinking, with the idea of foresight and strategy being key management tools, which limit the human space of bounded rationality and manage major risks and uncertainties (see e.g. Porter, 1980; Torres & Pena Jr, 2021; Porter & Kramer, 2006). Today, digitalization tools help firms to make more and more advanced foresight analyses – even with big data and data pools of firms (see e.g. Feeser & Willard, 1990; David, 2000; Stenzel et al., 2007; Mühlroth & Grottko, 2018; Fisher et al., 2020; Geurts et al. 2021).

In many business research studies, companies are examined by external business analysts and categorized based on a certain kind of phase or maturity model. There are statistical data to support the models (for example, a classic study by Churchill and Lewis (1983), who identified five growth stages: Existence, Survival, Success, Take-off, and Resource-Maturity – see also Aho and Kaivo-oja (2014)). Recent state of art literature underlines key aspects of Churchill and Lewis growth life-cycle model (see Bhattacharya et al., 2020; Barros et al., 2023; Ehsani & Osijevskyy, 2023; Cristofaro et al., 2024; Kumar & Raman, 2024). In general, all these studies underline the need for three growth horizons: (1) *Horizon 1*: Maintain and defend the core business (existing market), (2) *Horizon 2*: Nurture emerging business (emerging market), and (3) *Horizon 3*: Create genuinely new business (new market), which is actually McKinsey's basic development approach (see Wright, 2023). These new stages of firm cycle studies also underline the central role of financial arrangements of growing firms as we also do in this article.

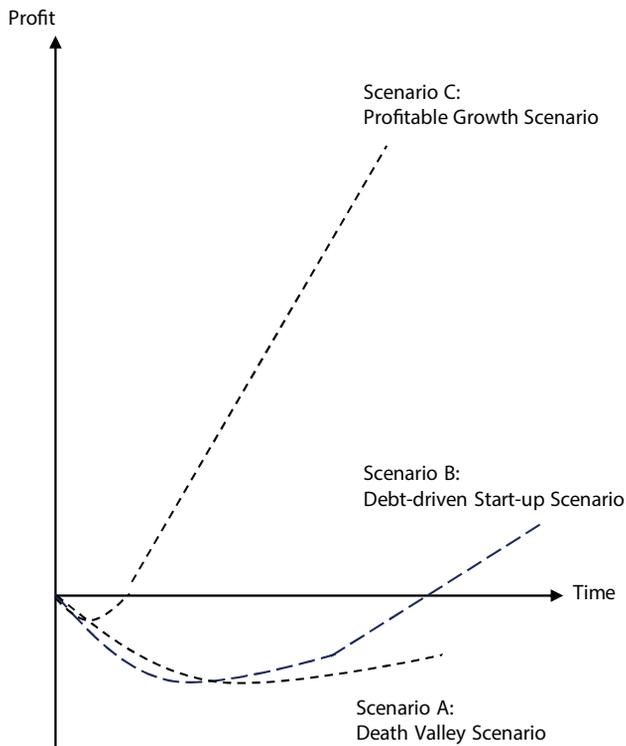
Less scientific attention has been paid to very early phases of firms' growth, especially to the first stage of growth, when turnover is less than 1 million Euros (an exception is, for example, the study by Savolainen et al. (2019)). Most Finnish firms are really small companies employing 0–4 persons (see Figure 4). Life-cycle research of firms has created many new results since. Relevant milestone studies on company life cycles include Baron and Shane (2005), DeAngelo et al. (2006), Kuratko and Hodgetts (2007), Levie and Lichtenstein (2008), Puri and Zarutskie (2012) and Eisenmann (2021).

The timing of actions in different growth processes is a critical factor for business growth. An important recent study of Swedish gazelle firms found that small and old companies are unlikely to ever become fast-growing gazelle companies. This study suggests that growth measures are needed when companies are not yet old but young companies, if we want more high-growth firms (HGFs) or dynamic growing "gazelles". The key findings of the Swedish business company study were that, in numerical terms, most HGFs (and also most growth-oriented companies) are small, and in terms of HGF probabilities, it is not unusual for large companies, in particular, to grow rapidly. Old micro-enterprises have (by far) the lowest business chance of becoming high-growth firms (Coada & Karlsson, 2022).

From a managerial perspective, growing SMEs face a wide range of challenges. A recent study of SMEs emphasizes not only various types of managerial challenges but also underlines the importance of taking a balanced, broad approach to facing them. There are three overarching themes in SME management – business model, leadership, and

people. We need an overarching, integrative perspective and context-dependent role of strategies on SME growth challenges (Di Cintio et al., 2017; Kindström et al., 2022). Generally speaking, the psychological resilience of entrepreneurs is considered in recent SME research a more important element of a growth process than in earlier studies (Chadwick & Raver, 2020; Hartmann et al., 2022; Djuricic, 2022). Our SME stage model approach with various managerial aspects takes these new results and scientific findings seriously, especially the role of networking and professionalism issues. It is relevant to note that relatively few firms allow studying the micro-foundations of strategic behavior (Schilke et al., 2018; Teece, 2007).

When we analyze basic scenarios for companies, we can identify three basic growth scenarios which are visualized in Figure 1, the Death Valley Scenario (A), the Debt Driven Start-up Scenario (B) and the Profitable Growth Scenario (C).

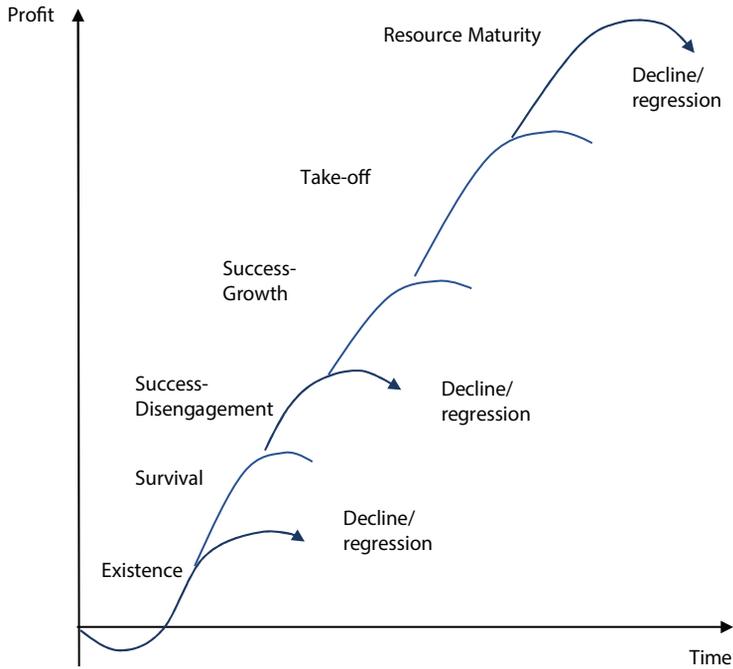


**Figure 1.** Three alternative scenarios. Death Valley Scenario (Scenario A), Debt-driven Start-up Scenario (Scenario B), Profitable Growth Scenario (Scenario C)

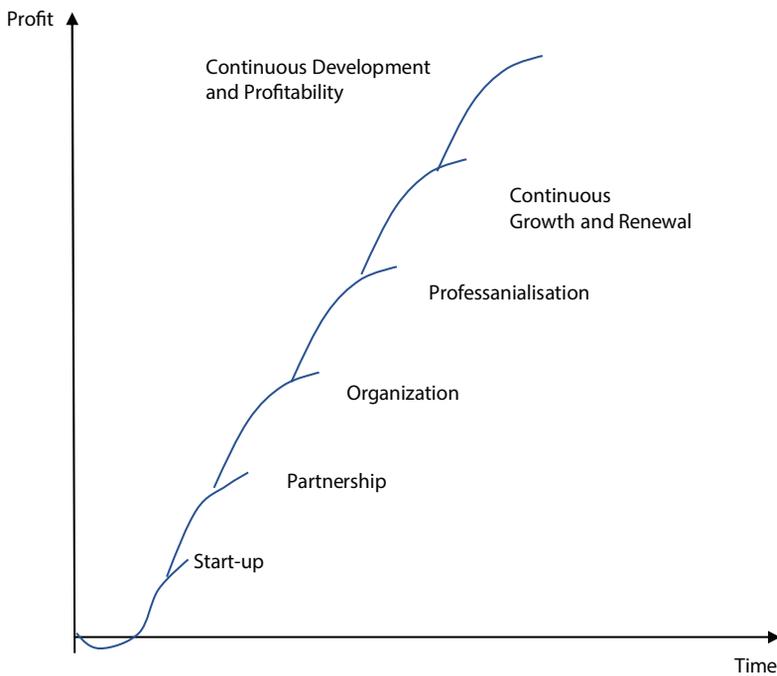
In Figure 2 we have visualized the conventional lifecycle model of a firm. This visualization is based on the pioneering interpretation of Churchill and Lewis (1983).

In Figure 3 we have presented the Six-Stage Model of Profitable Growth which has been developed in Finland.

To compare the Life Cycle model (Churchill & Lewis, 1983) and the Profitable Growth Model, we present Table 1. We can note that the Six-Stage Model is quite similar to the Life Cycle Model.



**Figure 2.** Life Cycle model of a company, visual interpretation based on Churchill and Lewis (1983)



**Figure 3.** A basic model of profitable growth

**Table 1.** Comparison of Life Cycle Model (Churchill & Lewis, 1983) and Six-Stage Model (Myllylä & Kaivo-oja, 2022)

Life Cycle Model, Churchill and Lewis (1983)		Six-Stage Model, Myllylä and Kaivo-oja (2022)	
Phase	Personnel	Stage	Personnel
I: Existence	Less than 50	1: Start-up	1–5
II: Survival	Less than 50	2: Partnership (networking)	6–20
		3: Organization	21–50
III a: Success-Disengagement	Less than 50 or 50–249	4: Professionalization	51–150
III b: Success-Growth	50–249		
IV: Take-off	250 or more	5: Continuous Growth and Renewal	151–250
VI. Resource Maturity	250 or more	6: Continuous Development and Profitability	More than 250

There are various methods to evaluate maturity levels and development stages of firms (see Grullon et al., 2002; Lester et al., 2003). Also self-evaluation processes by firm experts can be applied in evaluations of development stages. In Table 2 we have compared the Six-Stage model to the Life Cycle Model, comparing the role of sales, costs, and profits in each stage.

**Table 2.** Sales, costs, and profits. Comparison of Life Cycle Model and Six-Stage Model

Life Cycle model Churchill and Lewis (1983)		Six-Stage model Myllylä and Kaivo-oja (2022)	
Stage	Sales, costs, profit	Stage	Sales, costs, profit
1: Introduction	Low sales, High costs, No/Little profits	1: Start-up phase	High sales, Low costs, Some profits
2: Growth	Increasing sales, Reduced costs, Some profits	2: Partnership 3: Organization	High sales, Low costs, Increasing profits
3: Maturity	Consistent sales, Reduced costs, Increased profits	4: Professionalization	High sales, Low costs, Increasing profits
4: Decline	Reducing sales, Constant costs, Reducing profits	5: Continuous Growth and Renewal	High sales, Low costs, Increasing profits
5: Life cycle extension	Increasing sales etc.	6: Continuous Development and Profitability	High sales, Low costs, Increasing profits

In Table 3 we present the classic 5p model of Mintzberg (1987). This widely applied model can help us to elaborate our basic models of company growth and development. We link the 5p model to the conventional planning and management tools of business planning and management. Managers and decision-makers use these tools in different ways in their business operations and strategy. The Six-Stage Model of Profitable Growth is an integrative tool of 5ps and other business management tools.

**Table 3.** 5p model and Six-Stage Model

5p model	Links to Six-Stage Model	Standard Management Tools
Strategy as Plan	1, Start-up	Brainstorming, SWOT, Budgeting, Financial analysis, Tools of strategic planning, Monitoring tools, STEEPV/PESTEV analysis, Root-Cause Analysis, S-curve analysis of products, Business Canvas, Business modeling tools.
Strategy as Ploy	2: Partnership 3: Organization	Game theory, Strategic planning tools. SWOT analysis, Scenario analysis, WI-WE and VUCA tools, Futures Wheel, and Impact analysis.
Strategy as Position	2: Partnership 4: Professionalization	Tools to define sustainable competitive advantages, Porter's Diamond, Porter's Five Forces, VRIO analysis (valuable (V), rare (R), and costly to imitate (I), and the firm must be organized (O).
Strategy as Perspective	5: Continuous Growth and Renewal	Tools of marketing, Market segmentation, Mergers analysis, Competitor analysis, company purchases, fusions analysis, Boston Consulting Matrix, Segmentation tools, Pareto Principle.
Interrelating the Ps	All stages	Six-Stage Model as an integrative tool.

One cannot expect to reach profitable growth without dynamic capabilities. In Table 4 we have linked the concept of dynamic capabilities to the stages of profitable growth.

**Table 4.** Stages of profitable growth, critical growth factors and dynamic capabilities

Stages of profitable growth	Critical growth factors	Dynamic capabilities*
1: Start-up stage, 1–5 persons	Entrepreneurial person Sales and customer acquisition Economic development	Relational capability
2: Partnership stage, 6–20 persons	Reliable partner/network Earnings logic Skilled staff	Relational capability
3: Organization stage, 21–50 persons	Management and management systems The will to grow Division of responsibilities, strategy, goals	Sensing capability
4: Professionalization stage, 51–150 persons	Information management Vision and mission Set of values	Integrative capability
5: Stage of continuous growth and renewal, 151–250 persons	Emphasis on leadership Internationalization Acquisition of businesses	Absorptive capability
6: Stage of continuous development and profitability, more than 250 persons	New business segments	Absorptive capability

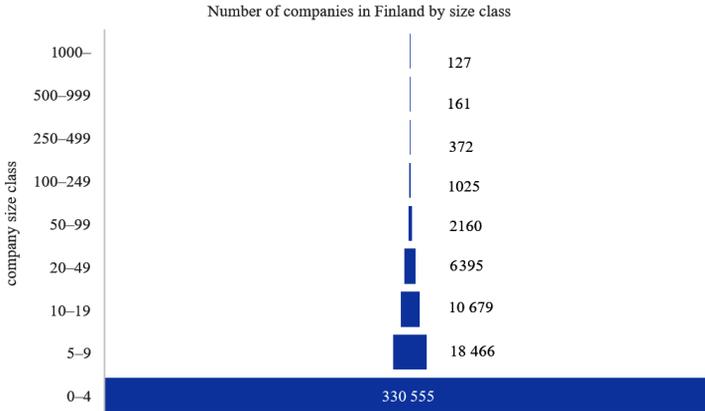
Note: \* Lin et al. (2016).

This kind of theoretical approach is good to keep in mind in the real-life operationalization of the profitable growth model.

## 2.2. Finnish business environment

In Finland, about 90% of companies employ less than five people and only 1.04% employ more than 50 people. There are 660 large companies with more than 250 employees, which is only 0.18% of the total number of 369,940 companies. Companies with less than 50 employees account for 54.5% of jobs and 44.5% of turnover in Finland. The statistics include about 73,984 enterprises in the agricultural and forestry sector, of which 72,478 enterprises are in the enterprise size class of 0–4 persons (Official Statistics of Finland [OSF], 2021, see Figure 4).

Increasing middle-sized and large companies has been seen to be a key challenge in the EU (Eurostat 2023, p. 11). Companies of this size make up only a small minority of Finnish companies. As a starting point for promoting growth entrepreneurship, science and technology orientation in Finland is emphasized from the outset, rather than a business orientation based on profitable sales, where non-technology-based innovations are often also emphasized. The potential for business growth is great if business orientation is taken as a goal, and companies in the entire class of 5–50 people or smaller are taken into account and bottlenecks in business creation are aptly identified. In this case, these can be covered, for example, by coaching activities that support the development of business produced by research. Research on SME growth should therefore focus more on the early stages of SME activity (see Muhos et al., 2010, 2014, 2017), be researched from within companies, be geographically linked and be proactive in identifying critical drivers of growth factors – such as digitalization and sustainable development requirements and many environmental factors. These perspectives are included in this study.



**Figure 4.** Finnish companies by number of employees in 2019 (OSF, 2021)

In some research on growth companies, attention has only been paid to the growth of companies when so-called milestones have been reached. In Finland, for example, such turnover milestone levels are seen to occur, in the light of statistical business data, at turnovers of EUR 1 million (first milestone), EUR 5 million (second milestone), and EUR 10 million (third milestone) (Komulainen, 2016). These milestones can be linked to the stages of profitable growth model (Myllylä & Luoma, 2022, p. 21). It is necessary to identify the conditions for an increase in turnover of EUR 1 million to attract more growth companies (see Komulainen, 2016).

### 2.3. Research focus

The research focus in this empirical Delphi study seeks to identify critical growth factors for each growth stage so that by anticipating the factors, economic standstill and the death of the firm can be avoided. Research must also be geographically linked. Geography defines and explains always some competitive advantages of firms (see e.g. Porter, 1990; Porter & Kramer, 2006). For example, Finland is sparsely populated, far from large consumer markets, and Finnish business activities emphasize e.g. exploitation of natural resources and business-to-business type business models (Myllylä & Kaivo-oja, 2015; Myllylä et al., 2016), because business-to-customer model approach is more challenging in Finland than in less sparsely populated countries. Nordic or Western European companies also have common features in corporate governance frameworks and structures, as well as in the ecosystems of their industries (for example, see Lekval, 2018).

Based on the identified growth stages and their critical growth factors, a six-stage model of growth was formulated. The stage model can be applied to the growth of companies by positioning themselves on a stage in the model, either through research or through a coach who utilizes and applies it. By being aware of the critical bottlenecks for growth, a business can use the model to put them in order. The time spent on each stage depends on the learning and ability of the company and organization to work together to put the critical factors in each growth stage in order. Leadership has the greatest single role here. (See section "Key results and findings").

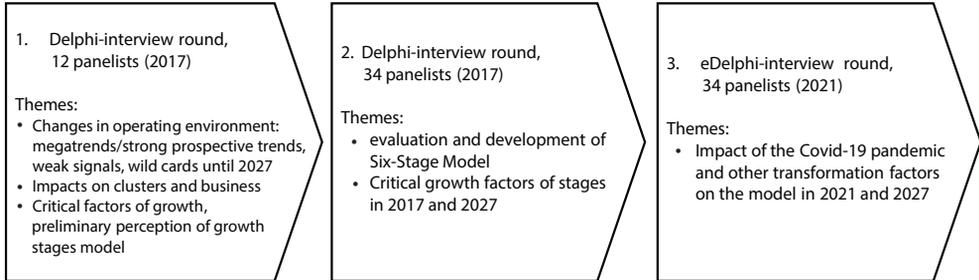
## 3. Research methodology

This empirical Delphi study is strongly linked to the scientific development of Delphi methods and variants. In particular, important speeches have been related to (1) the emergence and development of politics and development, (2) the utilisation and real-time nature of ICT, (3) the encouragement to adopt new areas of application for the use of the Delphi method, and (4) the discussion of the doctrines generated by the expanded use of methods for new areas of application of research and users of the method (Turoff, 1970, 1975; Linstone & Turoff, 1975, 2011; Rowe & Wright, 2011; Gordon & Pease, 2006; Landeta, 2006; Förster & von der Gracht, 2014; Aengenheyster et al., 2017; Flostrand et al., 2020; see also Myllylä & Kaivo-oja, 2024).

The background of the study is the growth step model originally created during two Delphi expert interview rounds in 2017 (see Myllylä, 2018) (see Figure 5). The 2nd interview round of the 2018 survey was based on an assessment of 34 Delphi panelists, where about a third of the participants were entrepreneurs or managers experienced in various stages of SME growth, a third were private growth coaches and the last third were actors in the so-called public innovation environment. The perceptions of these stakeholders about critical growth factors were compared. The views of entrepreneurs who had experienced growth and private business coaches were closest to each other. Representatives of the public innovation environment differed from the other groups, especially in the first stage of growth. In identifying the critical growth factors of the profitable growth model, the views of business leaders who have experienced the growth stages of SMEs were emphasized.

Due to the COVID-19 pandemic and the scientific verification of the study, a new Delphi panel was established in 2021 to test and supplement the content of the stage model and its critical growth factors. To carry out the study, a Delphi expert panel was set up, which panelists who had experienced all the growth stages of the previous Delphi round (Myllylä, 2018) and new entrepreneurs and managers who had experienced the growth stages, in

particular, were invited as respondents. They represented high-level business expertise in Finland. The interviews were conducted over the eDelphi platform ([www.edelphi.org](http://www.edelphi.org)) in September–October 2021. A total of 34 business experts took part in answering questions on the eDelphi panel. The panelists were all from Finland, but many of them also had broader international experience.



**Figure 5.** Six-Stage Model and Delphi rounds

About one-third of the respondents also took part in the 2017 panel (Myllylä, 2018) and the rest were new respondents. About 40% (15 persons) of respondents had gone through all the stages of growth, i.e. the basic stages of SME firms. The criterion was considered to be that the company represented employed at least 250 people or had a turnover of at least 50 MEUR. However, one company employing 220 people and exchanging just over 44 MEUR was placed in this category. In addition, there were three business experts whose companies' turnover or number of employees did not reach this level, but who had listed their companies on the stock exchange. This was considered a special business experience.

Less than 30% (nine persons) had experienced growth in grades 1–4. The measure was a turnover experience of about 10–50 MEUR and an employment experience of about 50–150 people. The lowest turnover in the group was 8.9 MEUR and the highest 42.9 MEUR. Approximately 30% (10 persons) of the respondents reached the 1st–3rd grade according to the model growth stages (turnover approx. 1–3 MEUR, employment approx. 5–50). Net sales and headcount were mainly based on Finder's 2020 financial statement data (Finder, 2021). In some cases, especially for groups, the information was more easily found in the IS business information service (Ilta-Sanomat [IS], 2021). Data for 2018 or 2019 were used for four individual companies.

There were three women in the respondents, about 10% (three female persons in leadership) of all participants, but this expert sample was 100% of women who experienced a growth process with the Delphi expert interviews. In Finland, men still hold 90% of management positions in companies. In companies with more than 250 employees, 81% have no women in their management. In companies with fewer than 50 employees, the figure is slightly better, at 85.7% (Dun & Bradstreet, 2023). In this way, the expert sample emphasised the gender equality aspect quite well, because not all men, who had been in the program were 100% included in the Delphi expert panel. About a quarter of the panelists had experience in construction services or products, a quarter in business services, and two in the energy sector, metals, tourism and catering, ICT, and real estate. In addition, one expert representative was from the welfare sector, the car trade sector, the maritime logistics sector, the mechanical wood processing. Many panelists, on the other hand, represent more than one industry branch.

It is important to note that the third round of Delphi interviews took place during the Corona crisis (see Figure 5). The interviews were implemented in Sept-Oct 2021. The COVID-19 pandemic situation in Finland was easing compared to the worst situation due to vaccinations and loosened restrictions, and the basic functions of society were normalizing. In general, the crisis was managed quite well in Finland, and decision-making abilities were not compromised by the occasional confusion. Restrictions have been less stringent in Finland compared to most reference countries, and mortality has been lower. Health security has been a priority in managing the pandemic. The structures in managing the pandemic, where healthcare operators are focal, as well as metrics used in decision-making on the epidemic, emphasized health security over other goals (Stenvall et al., 2022). In the conditions of the pandemic, the business environment of companies changed significantly, and the normal operations of work organizations had become more virtual, and e.g. teleworking and hybrid work had increased. This has posed new challenges for companies' business governance, as the transmission of tacit knowledge has not been possible to the extent it was before the pandemic. This is worth remembering when evaluating management systems in Finland. In any case, it is good to remember the timing of a Delphi study of profitable economic growth.

## 4. Key results and findings

### 4.1. The six-stage model of profitable growth

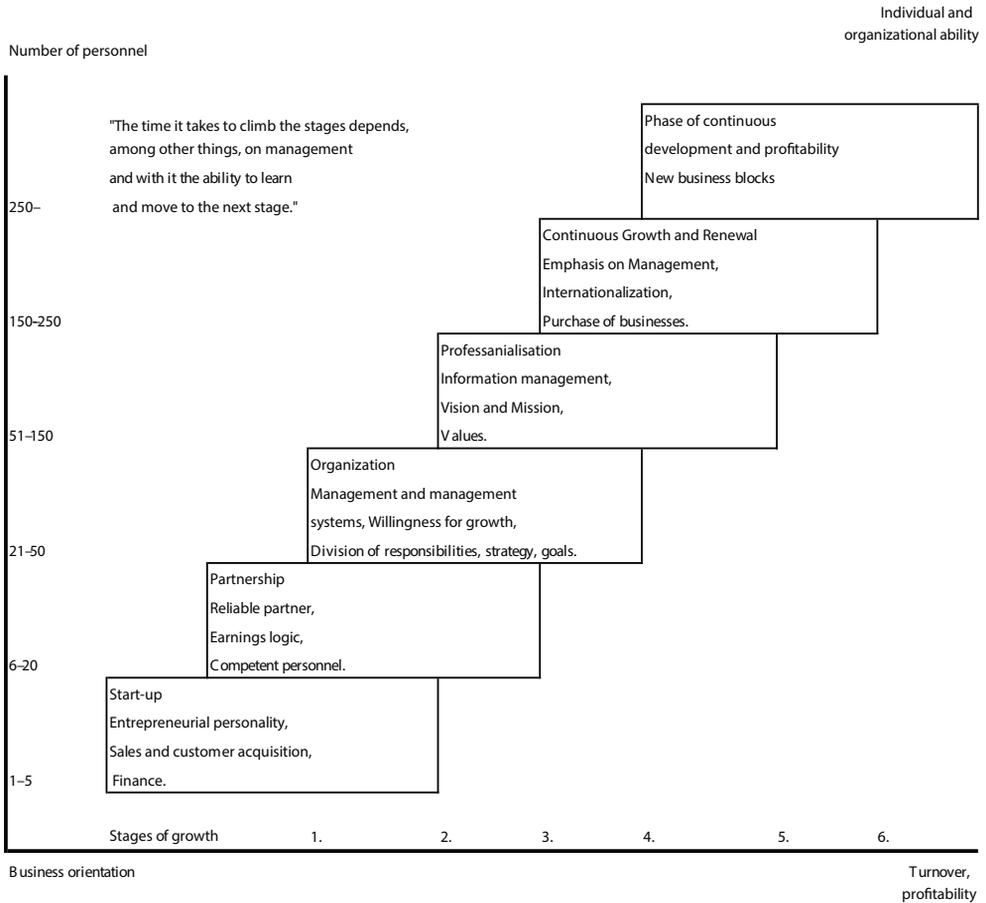
The SSMPG model is a very futures-oriented business model and its development is rooted in the foresight and anticipation research tradition in Finland (see e.g. Malaska, 1985; Holstius & Malaska, 2004; Roth et al. 2020). This research is related to Finnish companies and thus seen as part of the business research tradition taking place among Nordic companies. In Figure 6 we have visualized the Six-Stage Model of Profitable Growth.

For the eDelphi panel, the stage model in Figure 6 and the contents of the stages were described a little more extensively than the image compression. Respondents commented on how the model works when the pandemic and other changes observed in the operating environment are taken into account. Respondents commented extensively on the stage model and each of its steps and gave an index on a Likert scale of 1–5 of how well the model is performing now (2021) and is expected to work in 2027. In Table 5 we have reported key results of the expert evaluation of the Six-Stage Model.

In summary, all the stages of the model were considered to be rather accurate both currently as well as in 2027. In other words, confidence in the performance of the model was strong. The start-up phase was seen to correspond with reality very well at the moment, but to depict the situation in 2027 somewhat less accurately, but still well. One factor in the change in the operating environment based on the comments is e.g. the pressures of change brought to the model by digitalization. According to new evaluation research, digitalization is taking very different forms in different industries. For example, the future role of Artificial Intelligence (AI) is very difficult to predict. Digitalization is not a wave advancing as a process, but takes place in various ways in industry and services. Based on this information, it is plausible to conclude that ignoring the challenges of digitalization poses a significant risk to growth.

The standard deviation number is less than 1, which means that the responses are well concentrated around the same numerical values. The averages in this case describe the group's opinion very well (see Table 5).

Six-Stage Model of Profitable Growth



**Figure 6.** The Six-Stage Model of Profitable Growth and critical growth factors

**Table 5.** Testing the stage model of the Profitable Growth Management study

Question: Evaluate in more detail each step of the profitable growth model. How well does the description of the stage correspond to reality at the moment, taking into account the pandemic (COVID-19) and other factors of change?  
Enter a weight value of 1–5, where 1 = image poorly, 2 = image poorly, 3 = image fairly well, 4 = image well, 5 = image very good.

	Average, a		Number of responses N	Standard deviation, SD		Number of comments N
	This moment / In 2021	In 2027		This moment / In 2021	In 2027	
Stage 1: Start-up	4.4	4.0	27	0.6	0.8	19
Stage 2: Partnership	4.2	4.2	27	0.5	0.6	21
Stage 3: Organization	4.3	4.3	26	0.5	0.5	19
Stage 4: Professionalization	4.2	4.2	25	0.6	0.7	19
Stage 5: Continuous Growth and Renewal	4.3	4.5	21	0.6	0.5	17
Stage 6: Continuous Development and Profitability	4.4	4.4	22	0.5	0.5	15

## 4.2. Critical growth factors in the Six-Stage Model of Profitable Growth

Within the stage model, there are critical growth factors, which in turn are divided into many sub-factors in terms of content. The critical growth factors and about a dozen sub-factors highlighted by the panelists were produced and tested in the 2017 Delphi study. The idea of the model is that each stage highlights certain factors that need to be put in place for growth to continue. Factors resolved in the previous stages must be in order and taken care of, even in the higher stages, so that growth can continue. The following is the 2021 expert panel's view of the average importance of these factors considering the different stages of the model. The estimates have been made both for now and for 2027. Based on standard deviation, the averages are a good reflection of the group's opinion. The variance of responses between the different options is small or at most in line with normal distribution.

According to Table 6, the following are currently very important for growth (weight in brackets 1–5, where 1 = poorly described, 2 = slightly illustrated, 3 = fairly well illustrated, 4 = well illustrated, 5 = very well illustrated): 1. Sales (4.7), 2. Management (4.6), 3. Customer Acquisition (4.6) and 4. Strategy and Objectives (4.5).

The related coaching products could thus be expected to be currently focused on e.g. coaching and companies' own growth bottlenecks on average. In 2027, the top three will be the same, but the order will change and a few others will rise in importance: 1. Management (4.9), 2. Customer acquisition (4.9), 3. Sales (4.8), 4. Strategy and objectives (4.7), 5. People / Staff (4.7), 6. Practices and Innovations (4.7), 7. Values, Vision, and Mission (4.6); and 8. Interaction and Trust (4.6).

In Table 6, we have reported assessments about the importance of critical growth factors now (2021) and in 2027.

**Table 6.** Importance of critical growth factors in 2021 and 2027

Question: How important are the following factors for the company's growth and getting to the next stage now and in 2027? Enter a weight value of 1–5, where 1 = image poorly, 2 = image poorly, 3 = image fairly well, 4 = image well, 5 = image very good.								
Critical growth factors		This moment / in 2021			In 2027			Change 21–27
		a	N	s	a	N	s	
1	Management	4.6	20	0.6	4.9	20	0.4	0.3
2	Economic	4.0	20	0.9	4.2	20	0.9	0.2
3	Production, installation, maintenance	4.0	20	0.8	4.0	20	0.8	0.0
4	Internationalization	3.3	20	1.0	4.0	20	0.9	0.7
5	Sales	4.7	20	0.5	4.8	20	0.4	0.1
6	Customer acquisition	4.6	20	0.5	4.9	20	0.4	0.3
7	Marketing communication	3.6	20	0.7	4.1	20	0.8	0.5
8	Personal development	4.2	20	0.8	4.4	20	0.7	0.2
9	Practices and innovations	4.0	20	0.6	4.7	20	0.5	0.7
10	Strategy and objectives	4.5	20	0.7	4.7	20	0.6	0.2
11	Networking	3.8	20	0.7	4.2	20	0.6	0.4
12	Information management	3.8	20	0.8	4.4	20	0.7	0.6
13	Interaction and trust	4.2	20	0.8	4.6	20	0.6	0.4

End of Table 6

Critical growth factors		This moment / in 2021			In 2027			Change 21–27
		a	N	s	a	N	s	
14	Values, vision and mission	4.3	20	0.6	4.6	20	0.7	0.3
15	Ownership	3.9	20	0.6	3.5	20	0.9	-0.4
16	Funding	4.0	20	0.6	4.1	20	0.9	0.1
17	IPR/Intellectual property	3.3	20	0.6	3.6	20	0.8	0.3
18	People / Staff	4.3	20	0.7	4.8	20	0.7	0.5
19	Product development/Production/ Concept	4.0	20	0.6	4.2	20	0.7	0.2
20	Other, what?	3.1	18	1.1	3.8	18	1.4	0.5

Note: a = mean of responses, N = number of responses, s = standard deviation.

From 2021 to 2027, the following factors are most significant (change of at least 0.4 units): 1) Practices and Innovations (0.7), 2) Internationalization (0.7), 3) Information Management (0.6), 4) People / Staff (0.5), 5) Marketing Communication (0.5), 6) Networking (0.4) and 7) Interaction and Trust (0.4).

The importance of all described critical growth factors will only grow in the future, except ownership. Based on the general comments on the stage model above, it can be stated that e.g. digitalization is a key factor affecting all other issues. Examples include the increase in teleworking and the “disruptive” new approaches to the platform economy. It also plays a role in the development of customer acquisition methods and internationalization. Demographic change, the consequent challenges of acquiring skills and the need for continuous training, the entry of young millennials into the labor market with new values and expectations, including management, and the increase in the number of workers with a migrant background are also contributing to the emphasis. Based on some step-by-step comments, the Values, Vision and Mission themes, for example, are also a means of recruiting labor. In addition to digitalization, ecology, and sustainable development are becoming important drivers of management. One factor that diminishes in significance is Ownership (-0.4). This may refer to e.g. the growing importance of digitalization and the platform economy, as well as the sharing economy and networking, as a starting point for business.

## 5. Discussion

Referring to the “Background literature” section, we state the following. This study is partly in support of previous research and well-established literature of the growth cycle model of firms, partly it highlights new important features of growth companies. In the growth processes of firms there are still needs to maintain and defend the core business, nurture emerging business, and create genuinely new business (see e.g. Wright, 2023). In this way our Delphi study supports partly old “good” wisdom of business growth. As a new result can first be mentioned new definitions of the stages of profitable firm growth and the critical management and leadership factors related to them. This result was based on feedback and expert assessments provided by the Delphi panel experts in real business life. Key novel and central perspectives were also: The central significance of the entrepreneurial mindset and

personality, the significance of leadership at different stages of the profitable growth process, and critical changes in the content of leadership at different stages of profitable growth.

Proactive leadership and management of the critical factors through business management process was an important new perspective. This has not been much emphasized in previous research literature linked strongly to start-up model and exit thinking and death-valley model. The Delphi method to study these critical issues is a methodological novelty, and this developed futures studies method helped us pay more attention to entrepreneurial personalities and their mindsets in relation to the next steps of business management.

Three basic scenario models can be identified from the companies' growth patterns (Figure 1). The Death Valley scenario model is widely accepted, even if the company never becomes profitable. Often this kind of business life cycle scenario model can be defended that so-called "creative destruction process" requires the adoption of this kind of negative scenario narrative (see e.g. Aghion & Howitt, 1992). In addition to the Death Valley scenario model, the Startup growth company development model is also debt-driven. In previous studies, these three alternative growth models of firms and alternative scenarios are not much discussed or problematised. It is quite typical that in many studies of firm development, only one scenario path is discussed and mentioned. In this study, the research design was designed in such a way that it enabled the study of companies with a profitable growth strategy. In further growth company studies, it would, of course, be possible to develop a comparative research design with companies that have adopted a different company strategy to compare different strategies (also including companies in Death Valley and companies that have chosen a debt-driven exit strategy). This could be possibly a fruitful benchmark framework for further comparative case study research.

The conventional business cycle model dominates growth strategy discussions. We showed that traditional business cycle model and its variations are different compared to profitable growth model although some similarities are still the same (see Tables 1 and 2). We emphasised the critical functions of networking and professionalism in critical growth phases. A Delphi study validated their importance in the management process of profitable growth.

Surprisingly little business research has been done on the model of profitable growth. Research has largely focused on the obvious challenges of the Death Valley scenario model. In Finland, for example, as many as half of companies sink into the valleys of death. In promoting the growth of science and technology-focused start-ups in particular, product development and conception receive surprisingly much attention instead of customer acquisition, sales, and the resulting profitable growth.

The profitable growth model we present emphasizes profitable operations based on the companies' cash flow from the very beginning. This is quite a new approach, which has not been mentioned much in previous business management literature.

## **6. Conclusions**

As a new interesting result of this study can first be mentioned new definitions of the stages of profitable firm growth and the critical management and leadership factors related to them. This key result was based on feedback and expert assessments provided by the Delphi panel experts in real business life. Key novel and central perspectives were also: (1) the central significance of the entrepreneurial mindset and personality, (2) the significance of leadership at different stages of the profitable growth process, and (3) critical changes in the

content of leadership at different stages of profitable growth. Also, (4) proactive leadership and management of the critical factors through management processes was an important new perspective of this study.

Based on our findings, we have developed a Six-Stage Model of Profitable Growth (SSMPG), which we report in detail in the article. The SSMPG model is compared to the prevailing Death Valley and Startup growth company development models. The article identifies the most crucial factors for the profitable growth of SMEs at different stages of growth within the SSMPG model. This model emphasizes sales, profitability, the individual characteristics of the entrepreneur, and leadership competences, in contrast to the debt-driven growth models emphasized in the other growth approaches.

The Delphi method is well suited for foresight research, where the important panel experts are business leaders with real business experience. In this way, our study was not a pure academic exercise. The method is also well-suited for identifying critical growth factors. There are not many empirical studies where the Delphi method has been combined with studies of profitable company growth. The interviewed experts have themselves gone through critical steps of growth and learning. Using the Delphi method often involves describing the learning experiences of experts in detail. In this study we have documented these phases of growth process, in a concrete way. When utilizing expert knowledge in the future, it is important to pay special attention to the expert's perspective on the phenomenon being investigated. Also, gender views and aspects are relevant in the context of leadership. The gender structure of the panel reflected the current reality of growth-experienced business leaders in Finland. The proportion of female executives who have experienced growth in the growth steps of companies is likely to be higher in the future. In order to anticipate this situation, it would have been justified to increase the proportion of women on the panel even now. If one wants to find a limitation in the study, it can always be said that although companies were well involved in this Delphi study, there could always be more companies to study.

The results reflect, of course, the Finnish business environment and context, but the results can be useful in other European and international business contexts as well. The importance of critical growth factors may vary due to, for example, external factors in the population and education system, financial system, etc. For example, the aging population in Finland emphasizes the importance of personnel as a critical growth factor in the future.

We believe that the model of profitable growth stages should be taken as one of the desired ways of promoting entrepreneurship. Passing on the experiences of the profitable growth model to start-up entrepreneurship shortens the unprofitable time of doing business. Business research should focus on the factors that can be used to make a business profitable at different stages. In our opinion, this presupposes the inclusion of the entrepreneur and the staff of the companies in the research, as well as the inclusion of the initial stages of the company and entrepreneurship in the research. Geography and context, as well as industry or cluster-specific research are also needed in the future.

A recommendation for further research could be: developing a start-up business culture using the new phasing model developed in Europe and elsewhere. Also the role of financial incentives and systems needs more attention. It would be good to study national operating environments, their local significance, and gender aspects of leadership in more detail. By applying the Six-Stage Model of Profitable Growth (SSMPG), permanent jobs, and tax revenues are created for societies and European welfare states. It is important to focus not only on the profitability of individual companies but also on the profitability of companies in clusters and regions. This will help to improve the reform and innovation potential of the regions

and ensure the competitiveness of the European Union. However, in the Finnish case, this systematic approach has yielded promising results in economic and financial terms.

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## Author contributions

Yrjö Myllylä (YM) and Jari Kaivo-oja (JKO) conceived the study and were responsible for the design and development of the data analysis. YM was responsible for data collection in the Delphi studies. YM and JKO were responsible for data interpretation and conclusions. YM wrote the first draft of the article. JKO edited the article with YM.

## Disclosure statement

The authors declare no conflict of interest. Authors do not have any competing financial, professional, or personal interests from other parties.

## References

- Aghion, P., & Howitt, P. (1992). A model of growth through creative destruction. *Econometrica*, 60(2), 323–351. <https://doi.org/10.2307/2951599>
- Aengenheyster, S., Cuhls, K., Gerhold, L., Heiskanen-Schüttler, M., Huck, J., & Muszynska, M. (2017). Real-time Delphi in practice – A comparative analysis of existing software-based tools. *Technological Forecasting and Social Change*, 118, 15–27. <https://doi.org/10.1016/j.techfore.2017.01.023>
- Aho, S., & Kaivo-oja, J. (2014). *Yrityksen elinkaariteoria ja foresight 2.0 elinkaariteorian validius suomalaisissa pörssiyrityksissä vuosina 2004–2012* [Company life cycle theory and foresight 2.0 validity of life cycle theory in Finnish listed companies in 2004–2012]. Tulevaisuuden tutkimuskeskus. e-julkaisu 1/2014. Turku. Retrieved February 19, 2024, from <https://www.utupub.fi/handle/10024/147484>
- Ahuja, H. L. (2007). *Advanced economic theory: Microeconomic analysis*. S Chand and Company Limited.
- Anton, S. G. (2019). Leverage and firm growth: An empirical investigation of gazelles from emerging Europe. *International Entrepreneurship Management Journal*, 15(1), 209–232. <https://doi.org/10.1007/s11365-018-0524-5>

- Baron, R. A., & Shane, S. (2005). *Entrepreneurship: A process perspective*. Thomson. USA.
- Barros, V., Guedes, M. J., Santos, P., & Sarmiento, J. M. (2023). Does CEO turnover influence dividend policy? *Finance Research Letters*, 44, Article 102085. <https://doi.org/10.1016/j.frl.2021.102085>
- Bhattacharya, D., Chang, C.-W., & Li, W.-H. (2020). Stages of firm life cycle, transition, and dividend policy. *Finance Research Letters*, 33, Article 101226. <https://doi.org/10.1016/j.frl.2019.06.024>
- Bass, F. M. (1980). The relationship between diffusion curves, experience curves and demand elasticities, for consumer durable technological innovations. *Journal of Business*, 53(3), S51–S67. <https://doi.org/10.1086/296099>
- Beck, T., & Demirgüç-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11), 2931–2943. <https://doi.org/10.1016/j.jbankfin.2006.05.009>
- Chadwick, I. C., & Raver, J. L. (2020). Psychological resilience and its downstream effects for business survival in nascent entrepreneurship. *Entrepreneurship Theory and Practice*, 44(2), 233–255. <https://doi.org/10.1177/1042258718801597>
- Coad, A., & Karlsson, J. (2022). A field guide for gazelle hunters: Small old firms are unlikely to become high-growth firms. *Journal of Business Venturing Insights*, 17, Article e00286. <https://doi.org/10.1016/j.jbvi.2021.e00286>
- Cristofaro, M., Abatecola, G., Giannetti, F., & Zannoni, A. (2024). The survival of the fastest: Unveiling the determinants of Unicorns and Gazelles' early success. *Scandinavian Journal of Management*, 40(2), Article 101335. <https://doi.org/10.1016/j.scaman.2024.101335>
- Cyert, R. M., & March, J. G. (1963). *A behavioural theory of the firm*. Prentice-Hall, Inc.
- Churchill, N. C., & Lewis, V. L. (1983). The five stages of small business development. *Harvard Business Review*, (May). Retrieved February 19, 2024, from <https://hbr.org/1983/05/the-five-stages-of-small-business-growth>
- David, P. A. (2000). *Knowledge, capabilities and human capital formation in economic growth* (New Zealand Treasury Working Paper, No. 01/13). The Treasury New Zealand, Wellington, New Zealand.
- DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: A test of the life-cycle theory. *Journal of Financial Economics*, 81, 227–254. <https://doi.org/10.1016/j.jfineco.2005.07.005>
- Di Cintio, M., Ghosh, S., & Grassi, E. (2017). Firm growth, R&D expenditures and exports: An empirical analysis of Italian SMEs. *Research Policy*, 46(4), 836–852. <https://doi.org/10.1016/j.respol.2017.02.006>
- Djuricic, K. (2022). *Entrepreneurial foresight as entrepreneurs' transformative power: Inducing contextual change through opportunity formation*. Turun yliopiston julkaisu – Annales Universitatis Turkuensis sarja. Ser. e osa – Tom. 94, Oeconomica. Turku School of Economics Finland Futures Research Centre, Turku, Finland. <https://urn.fi/URN:ISBN:978-951-29-8986-7>
- Dun & Bradstreet. (2023, March 7). *Naisten osuus johtotehtävissä on kasvussa, mutta muutos on edelleen hidasta* [The proportion of women in management positions is increasing, but change is still slow] (News note). <https://www.dnb.com/fi-fi/meista/uutiset/naisten-osuus-johtotehtavissa-on-kasvussa.html>
- Ehsani, M., & Osiyevskyy, O. (2023). Firm failure and the exploration/exploitation dilemma: The role of firm life cycle. *Long Range Planning*, 56(3), Article 102307. <https://doi.org/10.1016/j.lrp.2023.102307>
- Eisenmann, T. (2021). *Why startups fail: A New Roadmap for Entrepreneurial Success*. Currency. Random House, New York.
- Eurostat. (2023). *Key Figures on European Business*. Publications Office of the European Union. Retrieved February 19, 2024, from <https://op.europa.eu/en/publication-detail/-/publication/e53ff6a6-30f1-11ee-946a-01aa75ed71a1/language-en>
- Feeser, H. R., & Willard, G. E. (1990). Founding strategy and performance: A comparison of high and low growth high tech firms. *Strategic Management Journal*, 11(2), 87–98. <https://doi.org/10.1002/smj.4250110202>
- Finder. (2021). *Everything essential about Finnish companies. Contact information, decision-makers, Financial information, and services*. Retrieved November 1, 2021, from <https://www.finder.fi/>
- Fisher, G., Wisneski, J. E., & Bakker, R. M. (Eds.) (2020). *Strategy in 3D: Essential tools to diagnose, decide, and deliver*. Oxford University Press. <https://doi.org/10.1093/oso/9780190081478.001.0001>

- Flostrand, A., Pitt, L., & Bridson, S. (2020). The Delphi technique in forecasting – A 42-year bibliographic analysis (1975–2017). *Technological Forecasting and Social Change*, 150, Article 119773. <https://doi.org/10.1016/j.techfore.2019.119773>
- Freeman, J. (1982). Organizational life cycles and natural selection processes. *Research in Organizational Behavior*, 4, 1–32.
- Fuller, T. (2003). Introduction. Small business futures in society. *Futures*, 35(4), 297–304. [https://doi.org/10.1016/S0016-3287\(02\)00082-4](https://doi.org/10.1016/S0016-3287(02)00082-4)
- Fuller, T. & Warren, L. (2006). Entrepreneurship as foresight: A complex social network perspective on organisational foresight. *Futures*, 38, 956–971. <https://doi.org/10.1016/j.futures.2005.12.016>
- Förster, B. & von der Gracht, H. (2014). Assessing Delphi panel composition for strategic foresight – A comparison of panels based on company-internal and external participants. *Technological Forecasting and Social Change*, 84, 215–229. <https://doi.org/10.1016/j.techfore.2013.07.012>
- Gavetti, G., Greve, H. R., Levinthal, D. A., & Ocasio, W. (2012) The behavioral theory of the firm: Assessment and prospects. *The Academy of Management Annals*, 6(1), 1–40. <https://doi.org/10.1080/19416520.2012.656841>
- Geurts, A., Gutknecht, R., Warnke, P., Goetheer, A., Schirrmeister, E., Bakker, B., & Meissner, S. (2021). New perspectives for data-supported foresight: The hybrid AI-expert approach. *Futures & Foresight Science*, 4(1), 1–14. <https://doi.org/10.1002/ffo.299>
- Gordon, T., & Pease, A. (2006). RT Delphi: An efficient, “round-less” almost real time Delphi method. *Technological Forecasting and Social Change*, 73(4), 321–333. <https://doi.org/10.1016/j.techfore.2005.09.005>
- Grullon, G., Michaely, R., & Swaminathan, B. (2002). Are dividend changes a sign of firm maturity? *The Journal of Business*, 75(3), 387–424. <https://doi.org/10.1086/339889>
- Hajizadeh, A. & Valliere, D. (2022). Entrepreneurial foresight: Discovery of future opportunities. *Futures*, 135, Article 102876. <https://doi.org/10.1016/j.futures.2021.102876>
- Hartmann, S., Backmann, J., Newman, A., Brykman, K. M., & Pidduck, R. J. (2022). Psychological resilience of entrepreneurs: A review and agenda for future research. *Journal of Small Business Management*, 60(5), 1041–1079. <https://doi.org/10.1080/00472778.2021.2024216>
- Holstius, K., & Malaska, P. (2004). *Advanced strategic thinking: Visionary management*. Publications of Turku School of Economics and Business Administration. Retrieved February 19, 2024, from <https://urn.fi/URN:ISBN:951-564-186-1>
- Ilta-Sanomat. (2021). *Ilta-Sanomat Business Information Service*. Retrieved November 1, 2021, from <https://www.is.fi/yritys/>
- Kaivo-oja, J., & Roth, S. (2023). Strategic foresight for competitive advantage: A future-oriented business and competitive analysis techniques selection model. *International Journal of Foresight and Innovation Policy*, 16(2–4), 323–353. <https://doi.org/10.1504/IJFIP.2023.136714>
- Kindström, D., Carlborg, P., & Nord, T. (2022). Challenges for growing SMEs: A managerial perspective. *Journal of Small Business Management*, 62, 700–723. <https://doi.org/10.1080/00472778.2022.2082456>
- Komulainen, V. (2016). *Läpi kasvun lasikaton. Miljoonasta kymmenen, kymmenestä sata* [Through the glass ceiling of growth. From a million to ten, from ten to a hundred]. Gordionpro.
- Kumar, A., & Raman, R. K. (2024). Small business. *Reference Module in Social Sciences*. <https://doi.org/10.1016/B978-0-443-13701-3.00087-6>
- Kuratko, D. F., & Hodgetts, R. M. (2007). *Entrepreneurship: Theory, process, practice* (7th ed.). Thomson, Mason, OH. Retrieved August 11, 2024, from <https://www.proquest.com/other-sources/entrepreneurship-theory-process-practice-10th/docview/2071228175/se-2?accountid=14774>
- Kuusi, O., Cuhls, K., & Steinmuller, K. (2015). The futures map and its quality criteria. *European Journal of Futures Research*, 3(1), 1–14. <https://doi.org/10.1007/s40309-015-0074-9>
- Landeta, J. (2006). Current validity of the Delphi method in social sciences. *Technological Forecasting and Social Change*, 73(5), 467–482. <https://doi.org/10.1016/j.techfore.2005.09.002>
- Lester, D., Parnell, J., & Carrahel, S. (2003). Organizational life cycle: A five-stage empirical scale. *International Journal of Organizational Analysis*, 11(4), 339–354. <https://doi.org/10.1108/eb028979>
- Levie, J., & Lichtenstein, B. B. (2008). *From stages of business growth to a dynamic states model of entrepreneurial growth and change*. WP 0802. Hunter Centre for Entrepreneurship, University of Strathclyde, UK.

- Lin, H.-F., Su, J.-Q., & Higgins, A. (2016). How dynamic capabilities affect adoption of management innovations. *Journal of Business Research*, 69(2), 862–876. <https://doi.org/10.1016/j.jbusres.2015.07.004>
- Linstone, H. A., & Turoff, M. (2011). Delphi: A brief look backward and forward. *Technological Forecasting and Social Change*, 78, 1712–1719. <https://doi.org/10.1016/j.techfore.2010.09.011>
- Linstone, H. A., & Turoff, M. (1975). *The Delphi method: Techniques and applications*. Addison-Wesley. <https://doi.org/10.2307/1268751>
- Lekval, R. (2018). The Nordic way of corporate governance. *Nordic Journal of Business*, 67(3–4), 164–182.
- Malaska, P. (1985). Multiple scenario approach and strategic research in European companies. *Strategic Management Research*, 6, 339–355. <https://doi.org/10.1002/smj.4250060404>
- Mintzberg, H. (1987). The strategy concept 1: Five Ps for strategy. *California Management Review*, 30(1), 11–24. <https://doi.org/10.1007/s40309-015-0074-9>
- Muhos, M., Kess, P., Phusavat, K., & Sanpanich, S. (2010). Business growth models: Review of past 60 years. *International Journal of Management and Enterprise Development*, 8(3), 296–315. <https://doi.org/10.1504/IJMED.2010.034865>
- Muhos, M., Kess, P., Distanont, A., Phusavat, K., & Sanpanich, S. (2014). Early stages of technology-intensive companies in Thailand and Finland. *International Journal of Economics and Business Research*, 7(2), 177–197. <https://doi.org/10.1504/IJEBR.2014.060031>
- Muhos, M., Simunaniemi, A.-M., & Saarela, M. (2017). Early stages of services business – review and synthesis. *International Journal and Management and Enterprise Development*, 16(3), 151–173. <https://doi.org/10.1504/IJMED.2017.085036>
- Mühlroth, C., & Grottko, M. (2018). A systematic literature review of mining weak signals and trends for corporate foresight. *Journal of Business Economics*, 88, 643–687. <https://doi.org/10.1007/s11573-018-0898-4>
- Myllylä, Y. (2018). *Kannattavan kasvun johtaminen – Keskeneräisyyden taidetta. Liiketoiminnan luonnin vaiheet pk-yritysten näkökulmasta*. [Leading profitable growth – The art of unfinished business. Stages of business creation from the point of view of SMEs] (Vol. 1). Tulevaisuuden kasvupolut Oy, Tutkimusraportti, Loviisa.
- Myllylä, Y., & Luoma, O. (2022). *Kannattavan kasvun johtaminen – Keskeneräisyyden taidetta. Liiketoiminnan luonnin vaiheet pk-yritysten näkökulmasta*. [Leading profitable growth – The art of unfinished business. Stages of business creation from the point of view of SMEs] (Vol. 2). Tulevaisuuden kasvupolut Oy, Tutkimusraportti, Loviisa.
- Myllylä, Y., & Kaivo-oja, J. (2015). Integrating Delphi methodology to some classical concepts of the Boston Consulting Group framework: Arctic maritime technology BCG Delphi foresight – A pilot study from Finland. *European Journal of Futures Research*, 3(2). <https://doi.org/10.1007/s40309-014-0060-7>
- Myllylä, Y., Kaivo-oja, J., & Juga, J. (2016). Strong prospective trends in the Arctic and future opportunities in logistics. *Polar Geography*, 39, 145–164. <https://doi.org/10.1080/1088937X.2016.1184723>
- Myllylä, Y., & Kaivo-oja, J. (2022). Kannattavan kasvun johtaminen – Keskeneräisyyden taidetta. Tutkimuksen keskeisten tulosten päivitys ja verifiointi. [Leading Profitable Growth – The Art of Unfinished Business. Updating and verifying the key results of the study]. In Y. Myllylä & O. Luoma (Eds.), *Kannattavan kasvun johtaminen – Keskeneräisyyden taidetta. Liiketoiminnan luonnin vaiheet pk-yritysten näkökulmasta* (Vol. 2, pp. 28–35). Tulevaisuuden kasvupolut Oy, Tutkimusraportti, Loviisa.
- Myllylä, Y., & Kaivo-oja, J. (2024). A hybrid foresight study of the environmental reference laboratory system in Finland: a foresight study for the Government of Finland. *European Journal of Futures Research*, 12(2). <https://doi.org/10.1186/s40309-023-00223-z>
- Nunes, P. F., & Breene, T. (2011). *Jumping the S-Curve: How to beat the growth cycle, get on top, and stay there*. Harvard Business Review Press.
- Official Statistics of Finland. (2021). *Official Statistics of Finland. Structural business and financial statement statistics*. Retrieved November 16, 2021, from <https://www.stat.fi/til/yrti/index.html>
- Porter, M. E. (1980). *Competitive strategy*. Free Press.
- Porter, M. E. (1990). The competitive advantage of nations. *Harvard Business Review*, (March–April), 73–91. <https://doi.org/10.1007/978-1-349-11336-1>

- Porter, M. E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78–92. <https://hbr.org/2006/12/strategy-and-society-the-link-between-competitive-advantage-and-corporate-social-responsibility>
- Puri, M., & Zarutskie, R. E. (2012). On the lifecycle dynamics of venture-capital- and non-venture – capital-financed firms. *Journal of Finance*, 67(6), 2247–2293. <https://doi.org/10.1111/j.1540-6261.2012.01786.x>
- Roth, S., Schwede, P., Valentinov, V., Pérez-Valls, M., & Kaivo-oja, J. (2020). Harnessing big data for a multifunctional theory of the firm. *European Management Journal*, 38(1), 54–61. <https://doi.org/10.1016/j.emj.2019.07.004>
- Rowe, G., & Wright, G. (2011). The Delphi technique: Past, present, and future prospects – Introduction to the special issue. *Technological Forecasting & Social Change*, 78, 1487–1490. <https://doi.org/10.1016/j.techfore.2011.09.002>
- Savolainen, T., Ikonen, M., & Nurmenniemi, H. (2019). Trust and resilience supporting the entrepreneurial process of becoming a self-employed entrepreneur. *Nordic Journal of Business*, 68(3), 5–22.
- Schilke, O., Hu, S., & Helfat, C. E. (2018). Quo vadis, dynamic capabilities? A Content-analytic review of the current state of knowledge and recommendations for future research. *The Academy of Management Annals*, 12, 390–439. <https://doi.org/10.5465/annals.2016.0014>
- Stenzel, J., Cokins, G., Flemming, B., Hill, A., Hugos, P. N., Schbert, K., & Stratton, A. (2007). *CIO best practices. Enabling strategy value with information technology*. Wiley Best Practices. John Wiley & Sons.
- Stenvall, J., Leskelä, R.-L., Rannisto, P.-H., Tolkki, H., Cansel, A., Leponiemi, U., Johanson, J.-E., Pekkola, E., & Tupala, T. (2022). *Koronajohtaminen Suomessa: Arvio covid-19-pandemian johtamisesta ja hallinnosta syksystä 2020 syksyyn 2021* [Corona management in Finland: Assessment of the management and administration of the Covid-19 pandemic from autumn 2020 to autumn 2021]. Valtioneuvoston selvitys- ja tutkimustoiminnan julkaisusarja 2022:34. Valtioneuvoston kanslia, Helsinki.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and micro foundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28, 1319–1350. <https://doi.org/10.1002/smj.640>
- Torres, L. A., & Pena Jr, M. A. G. (2021). Foresight as decision-making support within bounded rationality in individuals and organizations – Embrapa’s strategic intelligence system – Agropensa’s case. *Foresight*, 23(4), 477–495. <https://doi.org/10.1108/FS-07-2020-0072>
- Turoff, M. (1970). The design of a policy Delphi. *Technological Forecasting and Social Change*, 2(2), 149–171. [https://doi.org/10.1016/0040-1625\(70\)90161-7](https://doi.org/10.1016/0040-1625(70)90161-7)
- Turoff, M. (1975). The policy Delphi. In H. Linstone & M. Turoff (Eds.), *The Delphi method: Techniques and Applications* (pp. 84–101). Addison-Wesley.
- Wright, T. (2023). Three horizons framework To help you grow (with template). *Cascade*. <https://www.cascade.app/blog/mckinseys-three-horizons-of-growth>