



Arjen van Klink

Next Strategy

How SMEs can grow into the future

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Next Strategy

How SMEs can grow into the future

Inaugural Lecture

Arjen van Klink

Lector Next Strategy

2 November, 2017

*'Companies fail because
they missed the future.'*

Larry Page, CEO Alphabet

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Nederlandse samenvatting

Strategisch management is sinds het begin van de 20^e eeuw een management-discipline. Het is ontstaan vanuit scientific management, dat op basis van wiskundige principes beoogde productieprocessen te optimaliseren. Hierdoor ligt in het traditionele strategisch management de nadruk op planning, zoals het maken van scenario's en het opstellen van prognoses. Hoewel het een breed gebruikt concept is, lopen definities over wat strategie is sterk uiteen. Henry Mintzberg vatte de dimensies van strategie samen in vier P's. Voor de één is het vooral een toekomstvisie (perspectief), voor de ander een in te nemen plaats in de markt (positie); voor de één is strategie een uitgewerkt plan (plan), voor de ander een route die stapsgewijs ontstaat (patroon).

In de laatste decennia is er veel scepsis over strategie en strategisch management ontstaan. Het begrip lijdt aan inflatie, alles van belang is 'strategisch'. Strategie blijft volgens sommigen hangen in plannen maken en papier produceren, met te weinig oog voor implementatie. De veranderingen gaan zo snel dat strategische plannen deze niet kunnen bijhouden. Strategie is soms te veel programmeren en blijft beperkt tot iets van het topmanagement. Traditionele strategieënaderingen zijn vooral gericht op bestaande markten en statische concurrentievoordelen. Tot slot, innovatieve starters hebben soms succes schijnbaar zonder strategisch plan.

Voor bedrijven in het MKB was strategie altijd al problematisch. Zij zijn informeel en operationeel ingesteld en hebben weinig met plannen. Binnen MKB bedrijven geldt harmonie en eendracht; discussie en tegenspraak zijn ongewoon, hetgeen vernieuwend denken over de toekomst belemmert. Bovendien zijn MKB bedrijven vaak ingebed in langjarige relaties in de regio, die zijn geen stimulans voor verandering en strategisch denken. Dat geldt ook voor MKB bedrijven, die onderdeel zijn van een productieketen van een grote onderneming.

Terwijl het traditionele strategie-denken kritiek oproept en MKB bedrijven weinig met strategie hebben, veranderen samenleving en economie in hoog tempo. De veranderingen - in dit boek samengevat met ontwikkelingen in technologie, klimaat, demografie, consumentengedrag en kapitaalmarkt - hebben grote invloed op MKB bedrijven. Het economisch systeem verandert fundamenteel en de Next Economy ontstaat. Voor de metropoolregio Rotterdam-Den Haag is de Roadmap Next Economy opgesteld om in te spelen op de veranderingen en de regio weerbaarder en duurzamer te maken.

Veel MKB bedrijven staan stil, ondanks de dynamiek in de omgeving. Volgens onderzoek van de Erasmus Universiteit Rotterdam heeft 70% van het MKB in Nederland een omzetgroei van minder dan 10% per jaar. De stagnatie heeft verschillende oorzaken: veel bedrijven hebben een relatief lage productiviteit, eigenaren zijn tevreden over hun bedrijf, zij zijn onvoldoende in staat om te innoveren, ondernemers hebben soms onvoldoende toegang tot financiering en er is sprake van vergrijzing onder ondernemers. Ook het ontbreken van strategie is een oorzaak van de stagnatie.

Nieuwe beweging brengen in MKB bedrijven is van belang, omdat MKB bedrijven van grote betekenis zijn voor de Nederlandse economie: stagnatie bedreigt de werkgelegenheid. Ook voor het slagen van de Roadmap Next Economy moeten MKB bedrijven aan de slag. Om beweging te brengen in bedrijven is nieuwe aandacht voor strategie wenselijk. Daarbij zal rekening moeten worden gehouden met specifieke kenmerken van MKB bedrijven en met nieuwe benaderingen over strategie en innovatie. Geleerd kan worden van innovatieve startups: zij ontwikkelen zich iteratief, op basis van een aansprekende visie, permanente dialoog met de markt en experimenten. Proces is daarmee een nieuwe dimensie van strategie, naast plan, perspectief, patroon en positie. Voor MKB bedrijven kan een strategieproces van vijf activiteiten behulpzaam zijn om naar de toekomst toe nieuwe waarde te creëren:

- Verkennen: actief en gestructureerd 'buiten' informatie ophalen door alle medewerkers en deze informatie gezamenlijk delen.
- Doel bepalen: heldere doelen helpen om medewerkers te betrekken bij de ontwikkeling van de onderneming, tijd vrij te maken voor de aanpassing en resultaten te meten.
- Experimenteren: uitproberen van nieuwe mogelijkheden in processen en producten in nauw contact met klanten en andere stakeholders.
- Monitoren: actief volgen van de ontwikkeling van de onderneming en de experimenten met toegesneden indicatoren.
- Aanpassen: daadwerkelijk doorvoeren van veranderingen in de onderneming (of expliciet besluiten dit niet te doen).

Deze activiteiten omvatten het strategieproces als een cyclus. Met de dynamiek in de economie is het zaak om deze cyclus frequent te doorlopen. De activiteiten worden beïnvloed door vier randvoorwaarden: de missie of het hogere doel van de onderneming, de persoonskenmerken van de ondernemer, de cultuur van de onderneming en het netwerk van de onderneming.

De leeropdracht van het lectoraat Next Strategy richt zich op het uitwerken en toetsen van modellen en instrumenten waarmee MKB bedrijven een strategie kunnen ontwikkelen en uitvoeren. Het kader van het strategieproces, zoals hierboven geschetst, zal nader worden uitgewerkt en in de praktijk worden getoetst. De Next

Strategy Scan is ontwikkeld om het strategische vermogen van MKB bedrijven te analyseren; met een eerste versie van de scan hebben studenten inmiddels zeven MKB bedrijven onderzocht. De focus van het lectoraat ligt op bedrijven met 10 tot 100 medewerkers in de metropoolregio Rotterdam-Den Haag, met name in sectoren waar transitie nadrukkelijk aan de orde is zoals goederenvervoer, metaalbewerking, zakelijke dienstverlening, handel en tuinbouw. Drie vragen staan centraal in de leeropdracht:

1. Wat doen MKB bedrijven aan strategie?
2. Welk strategieproces is effectief voor MKB bedrijven?
3. Hoe kunnen MKB bedrijven zich aanpassen aan de Next Economy?

De lector is aangesteld bij het Kenniscentrum Business Innovation. Onderzoeksprojecten kunnen plaatsvinden in elk van de drie onderzoekslijnen van het kenniscentrum: circular economy, digital economy en start-up economy. De lector werkt nauw samen met docent-onderzoekers en studenten van de vier economische instituten van Hogeschool Rotterdam. Ook met andere instituten en kenniscentra van de hogeschool en met andere hogescholen wordt waar mogelijk samengewerkt. Partners in de praktijk zijn MKB bedrijven, brancheverenigingen, gemeenten, Innovation Quarter, Kamer van Koophandel en de metropoolregio Rotterdam-Den Haag.

Steeds breder wordt erkend dat HBO instellingen en MKB bedrijven elkaar veel te bieden hebben en dat betere interactie goed is voor de regionale economie. Met de ontwikkeling van de nieuwe HR Business School en de werkplaats Nieuwe Bedrijvigheid beoogt Hogeschool Rotterdam het samenspel met het bedrijfsleven te intensiveren. Meer aandacht voor strategie bij MKB bedrijven past uitstekend bij de versterking van de relatie tussen hogeschool en bedrijfsleven. Strategie ligt immers aan de basis van nieuw beleid en investeringen. Bovendien vraagt strategie om creatief, holistisch en kritisch denken. Dat zijn belangrijke nieuwe vaardigheden voor studenten. Tot slot is werken aan strategie inspirerend - want wat is leuker en leerzamer dan nieuwe mogelijkheden verkennen en omzetten in actie?

Introduction

This chapter introduces the subject and set-up of this book. Strategy is insufficiently applied by small and medium-sized companies today and it is time to help them pay more attention to strategy. The development of knowledge through applied research is the aim of the new lectorate Next Strategy at Rotterdam University of Applied Sciences. This book sets the scene for the lectorate.

'I don't need a strategy, because I have sufficient success right now. Moreover, I do not have time for it'. That statement of a Rotterdam entrepreneur, in an interview by students of the Rotterdam University of Applied Sciences, exactly addresses the topic of this book: the lack of strategy among small and medium-sized companies (SMEs)¹ and the way in which strategy can be made applicable and useful for them.

Many companies are drifting with the present flow of change. Some act opportunistically: in their opinion, the business environment changes too fast to plan for the longer run. They have decided consciously to react whenever necessary. Many more companies are not aware enough of the changes and their potential impact. That applies to large corporates, but especially to SMEs. Owners and managers of those companies live in the 'present perfect' and/or do not have the means to steer according on the flow of change. So they miss opportunities for expansion and transformation and they can be confronted with sudden threats. With the present speed of change, 'disruption' might change the business scene overnight. In the Netherlands, it appears that a significant part of SMEs is stagnant (Jansen en Roelofsen, 2017; ING, 2016).

1 SMEs are firms employing up to 249 persons or up to 50 million euro turnover. SMEs are categorised as follows: micro (1 to 9 employees or max 2 million euro turnover), small (10 to 49 and up to 10 million turnover) and medium (50-249 and up to 50 million turnover).

Some people compare the present period of change with the little glacier epoch: a lowering of temperature by approximately two degrees, between the years 1430 and 1700, changed the economy and society in Europe fundamentally: a crisis in agriculture transformed the rural economy into an economy based on trade and manufacturing, and local communities became part of larger urbanised social systems. According to historian Philip Blom (2017), Mercantilism found its roots in those decades, with a political focus on economic growth, competition, and international (re) division of labour and capital. The present changes may be of a similar nature. In effect, they might ultimately change the fundamentals of the present economic system. Once again with climate change as a driver, in addition to technological, demographic and geopolitical changes. Once more with Europe in the epicentre of the dynamics, because the welfare of the continent is at stake. The difference with the little glacier epoch is that at present the pace of change is much faster, given the interconnectedness of the global economy, the speed of technological cycles, the low cost of new technologies, and the fickle consumer behaviour.

Change favours the prepared mind. That proverb also holds true today. Strategy is still important, despite the fast-changing business environment that makes strategic planning useless according to some people. Indeed, conventional strategic management tools may be not effective nowadays. Those tools were developed for large corporates with multiple product/market divisions and staff dedicated to planning. Moreover, conventional strategic management assumes stable patterns in the longer run. The tools were not developed for SMEs; the instruments did not help them in stable periods let alone in the present time of unprecedented transformation.

When strategy is still important, but strategy tools are not effective in general and for SMEs in particular, there is a need for a new approach. The central thesis of this book is that SMEs can apply strategy in a cycle of learning and development. That orientation has been in development by strategy scientists and consultants for the past five years, on the basis of the way innovative start-ups work. Further elaboration of that approach demands knowledge development, despite the already very rich knowledge base on strategic management with thousands of books and articles. The background and outlines of the new approach will be presented in this book. In addition, a research agenda will be set up to expand the knowledge base through applied research. The new approach is labelled throughout this book as 'Next Strategy'.

New tools for strategy-making by SMEs can be helpful all round the world. In this book the focus is on the Rotterdam-The Hague metropolitan region. Fundamental developments affect its core industries such as transport, petrochemicals, agriculture, food, and retail. The region suffers from a weak socio-economic

structure, with a large number of lower educated people. The area is also vulnerable given fossil energy use, pollution, impact of climate change, and health issues (OECD, 2015). The region is currently working on an agenda for the so-called 'Next Economy' (RNE, 2016): in five transformational pathways, the regional economy is to be made future proof. Being the backbone of the regional economy, SMEs have to position themselves into the Next Economy and new strategy tools can be highly supportive for that transformation.

Addressing strategy to facilitate SMEs in adapting to the Next Economy is one reason to establish the lectorate Next Strategy and to write this book. Another reason is to add to the general knowledge on strategy with respect to SMEs in the context of the fundamental transformation of the economy. The final reason for the lectorate and this book is that strategy is a crucial domain for business students. The present dynamics are a great arena for learning. Strategy requires a holistic view and a multidisciplinary approach, as it has relationships with marketing, internal organisation, technology, finance, human resources, and other disciplines. Thus it helps students to integrate their knowledge. Strategy requires a curious attitude and ability to think ahead based on new perspectives; these competences are crucial for every professional today.

This book sets the scene for the new lectorate on Next Strategy and outlines the research agenda for the lectorate. It has been written for all those interested in the concept and practice of strategy: academics - lecturers, researchers and students - but also for professionals, entrepreneurs, managers and consultants. The book is not meant to be yet another handbook. However, some preliminary elements for improved strategy formulation and implementation among SMEs will be advanced and discussed, as hypotheses for the research to be undertaken.

The structure of the book is as follows. First, people's difficulties with the longer term will be explained. Then, the concept of strategy will be defined and the historic development of strategic management will be briefly described. Afterwards, strategic management will be placed in a critical context, given the scepticism about strategy today. In the following chapter, the current dynamics in the business environment will be summarised. Then, the stagnation of SMEs and the reasons why SME's hardly have effective strategies are discussed. In the next chapter, the focus is on the metropolitan region of Rotterdam-The Hague: the economic challenges of the region are discussed and the new economic strategy - the Roadmap Next Economy - is summarised. Afterwards, attention will be paid to the way universities in general and the Rotterdam University of Applied Sciences in particular can link up with business and can address strategy. Then, the results of a first research project on Next Strategy will be reported. Finally, the research agenda for the new lectorate bridging the needs of the business society in the region and the needs of the university will be elaborated.

Throughout the book, five short cases on the strategic setting and the strategic approach of companies and organisations in the Rotterdam area are presented: Milgro, Dahlman, Verstegen, Barge Master, and Rotterdam Library. Milgro is a solution provider for waste and resources management. Royal Dahlman is supplier of tailor-made steel filtration systems for the oil and gas industry. Verstegen produces and distributes spices and sauces. Barge Master provides offshore equipment with wave compensation technology. The Rotterdam Library is the public library of the city of Rotterdam. The five cases illustrate the importance and the diversity of strategy. The cases highlight the general theoretical insights described in this book and enriches those theoretical concepts at the same time. In that way, this publication intersperses theory and practice in line with the policy of the Rotterdam University of Applied Sciences.

The day after tomorrow

Strategic thinking and acting is not easy, as all human beings face difficulties thinking in the longer term. In this chapter, our problem with the longer term and its consequences are briefly explained and illustrated from the economic perspective. In addition, the actual need for more attention to the longer run in innovation and business management is addressed.

In 'The Day After Tomorrow', a disaster movie from 2004, ocean currents around the world change as a result of global warming, leading to a catastrophic storm, which wipes out major cities around the world and creates a new ice age. The city of New York transforms into an icy ruin, where only a few people can be rescued and brought to other parts of the country. Indeed, the day after tomorrow appears to be radically different in the movie.

Stressing the importance of a focus on the future, Peter Hinssen (2017) has taken a simple but convincing perspective: how do people divide their time between today, tomorrow and the day after tomorrow? He concludes that our attention is constantly drawn to today. We work, communicate, meet, eat, drive, love, sport, etcetera. Today takes our attention and energy. That holds true for entrepreneurs, managers, students, and all other people. The long-term is not well placed on our mental map. While on holidays, people promise themselves to focus more on tomorrow once they have returned home. Tomorrow is important to start working on our plans that can improve our hit-and-run life of today. However, we do not have sufficient time for tomorrow. That even holds true for the day after tomorrow. The day after tomorrow is where we find our real ideals, hopes, plans, and dreams. According to Hinssen, those dreams and plans potentially represent much value, much more than today's activities. Disruptive innovations and moon shots, such as Elon Musk's SpaceX, arise from focussing on the day after tomorrow. From an economic viewpoint, it is a good investment to put more time into the day after tomorrow, instead of today. The window of opportunity may be behind the horizon. 'I am going to wait for the next big thing', said Steve Jobs on the question what the strategy of Apple was (Rumelt 2011).

That long-term orientation pays out, was also the conclusion of the McKinsey Global Institute (Barton et al., 2017). Long-term companies outperform short-term orientated companies. The consultants of McKinsey took that conclusion on the basis of the performance of 650 listed companies in the United States from 2001 'till 2015. McKinsey had an eye for, among other things, long-term investments (ratio of capital expenditures to depreciation) and stability of margin development (difference between earning growth and revenue growth). The companies that scored well on those indicators, showed higher performance in terms of profitability, market capitalisation and job creation. It appeared that companies in knowledge-intensive industries (such as biotech and IT) can be classified as long-term companies, whereas capital-intensive industries (such as automotive and chemicals) are short-term companies. McKinsey acknowledges that the orientation can be connected to the stage and character of the industry - a mature industry might go along with a short-term orientation due to heating competition. An important conclusion of the study is that the short-term orientation of companies has increased over time.

Of course, companies need short-term actions, to quickly deal with crisis or rapid change. Benefits and costs appear soon and are easy to measure. Companies need long-term actions, when they seek significant or even transformational change. Those investments take longer to pay off and can be difficult to quantify in advance. Even though short-term and long-term actions are both necessary, most companies emphasise the short-term. Entrepreneurs and CEOs are, after all, just human beings.

At the stock market the preference for the short-term is visible. Many listed companies steer their business (at least partly) on quarterly results acting under pressure of shareholders and analysts. They are rashly slashing costs, cutting staff and severing ties with vendors. The incentive system for long-term investment seems broken (Semuels, 2016). Even institutional investors only hold shares for months instead of years. The ultralow interest rate of today gives another impulse to short-termism: corporate raiders have billions of euros of cheap capital available to buy companies, forcing those companies to improve short-term results and to increase dividends in order to prevent a hostile take-over. Akzo-Nobel and Unilever are recent Dutch examples of this tendency.

Besides listed companies, SMEs are another category of short-term companies. Here, the cause is lack of time and capacity. Family businesses are considered to be an exception to the short-term orientation in business. They often prefer continuity over profitability and many family-owned companies have the financial strength with their patient capital to invest in long-term projects even during economic downturns. However, with the heating competition in many markets,

family businesses cannot afford a heavy focus on the longer term anymore and have to give priority to short-term actions as well. In addition, when family businesses depend on external lenders, they have to operate with shorter time horizons since the financial crisis.

Behavioural economics has sought to demonstrate people's focus on the short-term in a number of ways. For example, we excessively discount the future (hyperbolic time discounting), making us value an impulse purchase today over a secure retirement decades later (EY, 2016). The hedonistic consumption culture of today - 'just eat' - and the abundant availability of information make the long haul ever less attractive. Neurological studies have proved that a person's brain treats his or her future-self like a stranger, diminishing the likelihood that the person is likely to make pro-social choices that pay out in the long-run (McGonical, 2017). Another reason for the focus on short-term is fear of the unknown (Govindarajan and Faber, 2016). People favour the comfort zone of the short-term and have a natural resistance against uncertainty and change. The further away in the future, the more unknowns. Unknown unknowns or 'black swans' play a disproportionate role in history, science, finance, and technology. They come as a surprise, have dramatic impact and are often inappropriately rationalised afterwards with the benefit of hindsight (Taleb, 2007).

The rationalisation afterwards of black swans triggers actions to prevent recurrence that do not stimulate long-term thinking and risk-taking per se. It illustrates the world of today. Rising expectations seem to be replaced by fear of falling; 'people assess downward risk higher than upward potential' (WRR, 2013). Consequently, there is an urgent appeal on the government for protection and less readiness among entrepreneurs to think ahead. The defence mechanisms to restore stability in a period of unrest indicate a paradox. The more turbulence, the more fear, the stronger is the short-term orientation; that whereas turbulence requires a longer term perspective to steer through the dynamics, exploiting opportunities, and turning threats.

The paradox of 'short-termism' in society and business life is getting attention, as challenges - such as jobless growth, migration, and global warming - can only be solved with long-term solutions. Opinion leaders, scientists and business leaders warn for the short-term orientation in business and politics, as it may worsen long-term problems in the world.

As the long-term can open substantial benefits, individuals and organisations should find ways to embed the future in their thinking. Turning the switch to long-term orientation is not easy, given human nature and present economic reasoning. It demands conscious action and realignment of present routines. Short-term incentives should be limited, analysis of long-term needs of the

company and its stakeholders should be promoted, uncertainty should be accepted, and an attractive vision on the future should be communicated. According to Govindarajan and Faber (2016), leaders have to tame fear for uncertainty and change by addressing it, refuting it to their people and showing commitment to a chosen strategic direction. The message of Taleb (2007) is not to attempt to predict black swans and other events that are unpredictable, but to build robustness against negative events and uncertainty: entrepreneurs and managers have to work from a broad and future orientated perspective and maintain various options.

To keep an eye on the longer term, every innovation portfolio of a company should contain opportunities for the short and long run (Nagji and Tuff, 2012). So-called horizon 3 innovation contains disruptive ideas that can fundamentally transform a company (and its market) and can lead to exponential growth of sales and profits in the long run. Horizon 2 innovations are adjacent concepts, next to existing products and services. They can generate substantial results as well, that materialise at mid-term. Horizon 1 innovations are incremental improvements of the present offer. Their impact is at short notice, but limited in result. As an example, an improved Discman can be classified as horizon 1 innovation, the iPod as horizon 2 and Spotify as horizon 3.

More balanced thinking between short-term and long-term seems to be on the rise in society. The Rhineland economic model, the economic model prevalent in the northern and western European countries, is once again getting more appreciation versus the Anglo-Saxon model. In the Rhineland economic model, companies work on the long-term for the benefit of all stakeholders and not only for self-interested shareholders, as in the Anglo-Saxon model. A signal of more balance between short and long-term, is that the UK's biggest institutional investors demanded listed companies in 2016 to stop quarterly reporting as a part of a radical shake-up of how shareholders interact with their investments (Quinn, 2016). Dutch Minister of Finance, Jeroen Dijsselbloem, pleaded for the same (Dijsselbloem, 2016).

To conclude, although the longer term pays off, most of the entrepreneurs and managers are short-term orientated. Consequently, they miss high-value opportunities and face threats at high costs. Therefore, the day after tomorrow should get more attention. Preparing for the day after tomorrow is what is called strategy.

Milgro was started 25 years ago by Laurens Groen, present CEO and owner of the company. It was his personal ambition to reduce the amount of waste in the world and to change the economic model behind it. In those days, incineration of waste was said to be one of the causes of acid rain. The company started with small waste reduction initiatives in the food industry. Now, the company is in stage '5.0': Milgro has developed into a knowledge company that helps to optimise the use of materials for its clients. On the basis of in-depth expertise on materials and their alternative value and a self-developed management system, the company reduces spoiling of materials in production, distribution and consumption and optimises the allocation of rest materials. In addition to the food industry, Milgro's activities are in automotive, retail, logistics and construction. Nowadays the company serves large corporates like Royal Friesland Campina, DHL, Total and Tesla.

In the early days, Migro was 'abused' by traditional waste companies to provide a reliable solution to complex waste flows, that were too complex to manage themselves. Based on that experience, Laurens Groen believed that independent waste management, directing waste companies on behalf of producers of waste, could help to reduce waste flows. Waste companies had only one goal: secure sufficient waste volumes to fill their incineration and landfill capacity. After this stage '2.0', Milgro offered performance management contracts to clients, helping them reduce waste volumes and realise cost savings. That was the start in focussing on material savings: when you see and analyze the output, you can also see its cause - spoilage of materials. "As input has a much higher value than the output, the financial return on our advice for the client increased dramatically", according to Groen. Based on Milgro's knowledge on material flows of their clients, the company has built an information platform that helps to forecast flows and to make combinations for re-use, re-cycle and re-make. With this step into digitalisation, the company has established a scale-able business model and has reached the present stage. More is expected to come.

Looking back at the development of the company, the personal conviction of the owner that the waste market should change and his company would play a key role, has been crucial. Being right, but not being credited, gave him energy to continue and to persuade others. In the early stages, strategy formulation and implementation was foremost a personal activity, as were the phone calls with clients on Friday afternoon about their satisfaction with Milgro. The transition from one phase to another was triggered by changing market conditions that called for a response. For the most part, the transitions went gradually; a renewed business approach appeared later on, but the decision to change was always a deliberate one.

The development of the company is visualised in figure 1. The figure does not only reflect the way Milgro has grown through the years. It also presents the approach to customers with lower and higher order value added services: still, customer contacts start on the level of becoming 'in control of waste' and gradually grow into 'in control of spoilage' and 'in control of resources'.

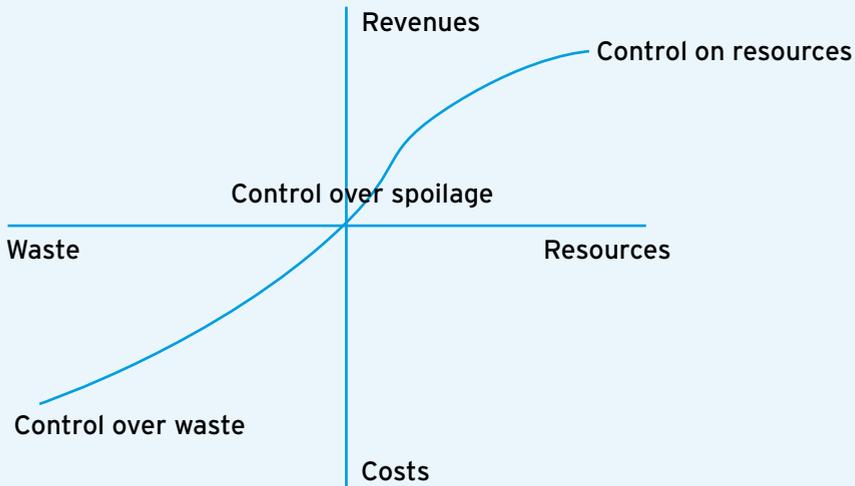


Figure 1 Development of Milgro and the customer approach

With a unique proposition and a maladroit vision, it was difficult to reflect on strategy with others. Only in recent years, have all employees regularly been informed about strategy and progress. One reason is that the scale of the company now demands serious strategy communication, another is that new employees seems to be even more committed to Milgro and like to take an active role in the success of the company. The Milgro Academy will start soon, with training in the various parts of the company's service package but also to share the vision and strategy with the employees. In the development of the company, making time for strategy was crucial. Laurens Groen: "An entrepreneur without time doesn't often have a strategic vision either". Today, strategy is discussed at least every quarter in the management team - looking backward and forward. In the past decades, due to their innovative approach, it was hardly possible to forecast for more than half a year. Increasingly, it is now possible to look forward for a longer period of time, a signal that the company is reaching a (first) phase of maturity. The company has a strategy document to communicate with stakeholders and employees. It is not a blue print: it gives a clear long-term direction, but at the same time contains a lot of loose ends on purpose - to anticipate new development and to stimulate internal discussion.

With the growth of the company, Laurens Groen has consciously appointed a managing director. Being Milgro's owner, it was hard for him to delegate, decelerating ideas and initiatives of employees. Groen can now focus on innovation and new business once again. The new management team has started a culture programme. With the expansion of the company, preserving company values and principles is getting more important. "To offer, not to demand" defines the service mentality of the company. In addition, Milgro serves a social goal, but seeks for a healthy profit at the same time: people and profit should be balanced in the attitude of the workforce.

The market potential of the company is enormous, being an agent in making the transition towards a circular economy. The value proposition and track record of the company give Milgro a leap on competitors, even though their number is very limited. Unfortunately, according to Groen, as more players could help the market to develop faster. In order to remain independent, investors that seek a share in the company or want to take-over the company are kept outside for the time being. The regional investment agency Innovation Quarter has provided funding to spur further international growth. With the large potential, strategy remains crucial, as it helps to be selective. "In all those years, we only took deliberate decisions and we will continue to do that in the future".

What is strategy?

In this chapter, strategy and strategic management are introduced as a framework for the rest of the book. A snapshot has been made from the overwhelming available literature. First, the origin of strategy is explained and a definition is derived. Then, the process of strategic management is described. Finally, the balanced score card is explained as a framework for strategy effectuation.

Strategy has been borrowed from the military. The word 'strategy' comes from the Greek *strategos*, referring to a military general and combining the words 'stratos' (the army) and 'ago' (to lead): what generals do. In the battlefield, there are usually two handicaps: there is a lack of information and communication is unreliable. A plan helps to neutralise those handicaps and thus forces can be deployed in the best possible way. Von Clausewitz was the first modern author writing on strategy. He defined strategy as 'the art of employing military means to fulfil the ends of policy' (Von Clausewitz, 1832).

In the 20th century, the military approach to strategy was translated for the business world. The history of management thought began with Frederic Taylor's concept of scientific management and Fayol's four management functions: planning, organising, controlling and communicating (Taylor, 1911). During that time period, Harvard Business School began the case study method (Candy and Gordon, 2011). Long-term planning was especially popular between the 1950s and 1970s. In the aftermath of the Second World War, former military leaders had a high profile and the economy followed a stable growth path. With the development of the multinational and multidivisional organisation, long-term planning was helpful to align unit plans and budgets. The typical format was a five-year plan that forecasted economic trends, described a single best future, set goals and objectives, projected sales and costs, established priorities, and allocated capital expenditures (Grant, 2016). This classical strategy approach was merely a linear one.

Strategy in the business world has got many definitions and meanings, broad agreement about the concept is lacking (Steiner, 1979). The ambiguity is caused by the fact that strategy is both a process as a product. Strategy refers to, among other things, directional decisions, visions, goals, plans, policies, sets of actions, deployment of resources, and value disciplines. There are organisational, corporate, business and competitive strategies. Organisational strategy is the framework of actions deploying resources to realise future goals of any (public or private) organisation. Corporate strategy refers to the planning of the portfolio of businesses in which a large corporate want to compete. Business strategy defines the basis of competition for a given business. Competitive strategy is creating unique customer value through a different set of activities from those used by competitors. Mintzberg (1994) considers four dimensions in strategy, acknowledging that there is ambiguity about the relevance of each dimension among scholars and practitioners:

Strategy is perspective: the vision and direction to steer into the future.

Strategy is plan: the deployment of resources to realise a goal.

Strategy is pattern: the evolution of actions over time.

Strategy is position: the way in which a product is offered in a market.

In his book 'good strategy, bad strategy', Richard Rumelt (2011) defines strategy in three elements:

1. A diagnosis that defines or explains the nature of the challenge. A good strategy simplifies the overwhelming number of trends into a small number of key issues. A strategy is about making choices. That can be painful and risky, it therefore requires leadership. This element refers to 'perspective' in the dimensions of strategy listed above.
2. A guiding policy for dealing with the challenge. This is the bridge between now and then. It is the overall approach for overcoming the obstacles and exploiting the opportunities identified in the diagnosis. A guiding policy contains vision and method. This corresponds to 'plan' in the overview of Mintzberg.
3. A set of coherent actions that are designed to carry out the guiding policy. These steps are coordinated with one another to work together and to reinforce each other. Strategy formulation cannot be considered without strategy implementation. A good strategy must contain action. This is 'pattern'.

In the definition of Rumelt, the element of 'position' is missing. Competitive position comes from 'different activities compared to rivals or similar activities in a different way' (Porter, 1996). To find and optimise its competitive position, a company has to make trade-offs: not all configurations of its activities (and underlying skills, competences and resources) attribute optimally to a unique

position. Activities should cumulate and reinforce each other. As any strategy of a company seeks to create value and the competitive position of a company is a reflection of its value generating capacity, position should be included in strategy. It is the most direct and concrete outcome of strategy.

Throughout this book, strategy is defined as the vision and actions to deploy the means of a company in a coherent way in order to achieve an unique competitive position. In the four dimensions of strategy: perspective, plan, and pattern serve position. In chapter 9, another dimension will added to the four P's of strategy, in order to effectuate the strategic capacity of SMEs.

Traditionally, the belief is that the inner strengths and capabilities of a company will make it prevail. This is the inside-out approach of strategy. The outside-in approach is instead guided by the idea that customer value creation, customer orientation and customer experiences are the keys to success. These two paths to strategy (Day and Moorman, 2010) are different means of creating value in the end. The outside-in approach has become more popular in the last decades: the ideal organisational culture is market-oriented and the customer is the source of inspiration. However, rapid technological development and volatile customer behaviour, makes it increasingly difficult to build on needs addressed by customers. That once again might give more room for inside-out strategies.

Successful strategies exploit a wave of change. Waves of change are technological, social, political and economic trends. Such changes can upset existing structures, erase old advantages and enable new ones. Successful companies make use of waves through the time, like a surfer. This style comes forward in the case study on Milgro at page 17 of this book. One step further are companies that create waves themselves and follow an inside-out strategy. Apple's iPhone is an example. Anticipating a new wave implies that the company has to deal with the edge between the known and the unknown. Only on new waves are there opportunities to keep ahead of rivals. A good strategy, therefore, is a conscious hypothesis about what will work. It stimulates internal discussion and learning.

Strategic management comprises the process of analysis, strategy formulation (including values, vision, and objectives), implementation and monitoring. The steps have a formal character and are supposed to be conducted on a regular basis (once a year or every four or five years). Various models for strategic management have been set up, suited to the nature, needs and planning capacity of an organisation. The conventional model contains eight elements (De Ruijter, 2011). The first element is formulating the mission of the organisation, second the exploration of the environment. Based on the analysis, scenarios and options are formulated. Fifthly, a vision on the future is formulated. The sixth element contains

the strategy in narrow sense - the steps to be taken to arrive at the future. Element seven is taking the plan into action. The final element is monitoring and controlling the implementation. This model is suitable for organisations that have sufficient resources to pursue ambitious visions and goals, operate in environments that are relatively stable, and do not have a large number of specific issues to address. The conventional model comes forward in the case of the Rotterdam Library at page 73 of this book.

The words 'strategic management' and 'strategic planning' are used randomly in practice. That illustrates the emphasis on planning in conventional strategic management. This phase has been elaborated on the most in the literature, as the basis of corporate strategy was in forecasting and planning. Even today, strategy centres around planning in many organisations. A lot of tools for planning have been developed, such as SWOT-analysis, growth matrix, and strategy canvas. Annex 1 contains an overview of strategic planning tools. The tools help to reflect on a company's market position, its resources, its business model and its organisation. Herewith, the company has possible choices for strategic alignment, but not concrete answers.

Approaches to guide the implementation of strategy are less well developed than the planning tools, while strategies are only effective when properly implemented and monitored. In reaction, the balanced score card has been developed by Robert Kaplan and David Norton in 1992. It is a framework to translate strategy into objectives, indicators and actions. The balanced score card cascades learning and development, internal organisation, finance and customer value. Cause and effect relationships visualised in the balanced score card help to understand the business model and the impact of strategy. To make their model more effective, Kaplan and Norton propose a strategy map (Kaplan and Norton, 2004). This map describes the relationships between all factors that contribute to the strategic goal(s). An example is pictured in annex 2. The strategy map is a helpful mental and verbal frame of reference for addressing the strategic development of a company. Learning and development is considered to be the fundament of the strategy map, because intangible assets such as knowledge, networks, culture and intellectual property are key value drivers in today's markets.

To summarise this chapter, since strategy arose as a managerial discipline in the 1950s, entrepreneurs and managers have made use of strategy concepts to make decisions on how to grow and manage their organisations. A whole canon of definitions on strategy has become available. Many concepts especially support strategic planning. The conventional approach is best applied in stable, known marketplaces that allow sequential strategy development and roadmaps. In addition to perspective, plan and pattern, position is a crucial element in strategy, given its linkage to value creation.

Criticism on strategic management

Central to this chapter is the criticism on strategic management: is it possible on the basis of a plan to steer a company into a single future? On the basis of the literature, ten arguments are listed why conventional strategic management is considered to be ineffective in the development of companies and organisations today.

The terms strategy and strategic management have been problematic for years. While at some time they were considered to be the crowns on the discipline of management and the well-known authors on strategy all work for famous business schools, strategy and especially strategic management has encountered scepticism and criticism since the 1990s.

One reason is that the 'strategy industry' has grown tremendously and the concept has been overstretched. In the early 1960s, there were only a dozen of books and articles on strategic management. These days libraries can be filled with strategy handbooks, tests, self-do videos, and articles. Thousands of consultants work in the field. The concept has been stretched towards all disciplines of management. Management tactics get confused with strategy. Strategy is probably the most overused word in business. Consequently, strategy and strategic management are taken less seriously today in language; it scores high on the list of management speak or 'jeukwoorden' in Dutch.

In addition to the inflation of the concept, the most heard criticism is that strategic management is too much paper work. The P of Plan in the overview of Mintzberg dominates in strategic management. Many strategists favour abstract concepts and extensive research to bring coherence into a complex and ambiguous future. The outcome is often a comprehensive plan. However, plans produce paper, not better decisions. Even worse, in some cases strategy remains a plan.

The comment on paper work is gaining importance as markets are changing ever fast. Plans made for a single future will soon be obsolete. This third criticism states that strategic management is old-fashioned. It worked well during the decades of stable growth when companies could make projections (that also came true). In the present time of hyper competition and disruptive changes, strategy is worthless. No one besides venture capitalists and the late Soviet Union requires five-year plans to forecast complete unknowns (Blank, 2013). The case on Barge Master (page 57) illustrates that markets indeed can change fundamentally, making the original plan of the company infeasible for the moment.

Strategic management is also considered to be too rational and technocratic. 'Too often, strategic management is strategic programming', according to Mintzberg (1994). That has its origin in the early days of strategic planning, when it was influenced by Taylor's ideology of scientific management. In scientific management, there is only one best way forward, 'solving' uncertainty by detailed quantitative projections. In addition to this mathematical approach, in many organisations strategic planning is a calendar-driven bureaucratic process: plans are made on a regular basis, sometimes as an aim in itself. 'People groan when they hear that the strategic planning season is at hand. Frankly, they have good reason. Strategic planning, in most cases, is 10 percent strategy and 90 percent planning - number crunching, forecasting, and budgeting' (Pietersen, 2010). All this does, is to generate thick binders full of data that end up collecting dust on the shelf.

The fifth comment is the hegemony of top management. For long, the formulation and execution of strategy was the exclusive domain of top management. Consequently, strategic management was a top down exercise, eventually with the assistance of dedicated staff. The drawback of this approach was that crucial information from lower levels in the organisation could be missed and, more important, strategy could miss the supportive basis of the organisation. That support is crucial for successful implementation of every strategy.

'An organisation's biggest strategic challenge isn't strategic thinking, it is strategic acting'. This statement, made by Peter Bregman (2017), draws attention on strategy implementation. In 'The fractal organisation', Patrick Hoverstadt (2009) claims that a majority of strategic plans are never implemented at all. Problematic implementation of strategies is the sixth annotation on classical strategic management. A well-described strategic plan is often seen as sufficient to motivate effective execution, but not effective communication and a lack of alignment are reasons for strategies to run aground on different interpretations and different interests throughout an organisation (Barrows, 2014). Generally they fail more as people do not favour change.

At point seven, strategic management is commented to be focused too much on sales growth. The proposition that growth itself automatically creates new value is deeply rooted in management thoughts and originates from 17th century's Mercantilism. Nearly all companies follow a growth strategy. Some companies engineer growth by mergers and acquisitions, often without much success. Profitable growth, however, is the outcome of growing demand in the market or a superior product offer (Kotler and Caslione, 2009). It is the reward for efficiency, creativity, and innovation.

In the last decades strategists have generally assumed that there is a durable advantage in well-defined and relatively stable industries comprising homogeneous competitors. In their opinion market positions can be shielded by scale economies and other entry barriers. However, business systems are becoming more fluid and dynamic. Persistent superior performance is over. 'New combinations', considered to be as engines for dynamic economic growth by Joseph Schumpeter (1942), occur rapidly one after the other and create hyper competition (Wiggins and Ruefli, 2005). Rather than A-to-B change, the central challenge facing business leaders today is to create adaptive enterprises (O'Donovan and Rimland Flower, 2013). This is the eighth comment on strategic management. Instead of static competitive advantage, more adaptive advantage should be sought (Reeves and Deimler, 2009). That can be derived from dynamic capabilities. The dynamic capabilities approach sees competitive advantage stemming from specific routines, skills, values and other soft assets of a company. Capabilities cannot easily be bought, but when built they can make a company highly adaptive in dynamic environments (Teece et al., 1997).

Related to the previous point is the comment that the concept of strategic management was in its origin focused too much on existing competition. That ninth comment was stated by Kim and Mauborgne (2013) in their book on blue oceans. Described in a military way, classic strategy is about confronting an opponent and fighting over a given piece of land that is both limited and constant. The result has been a fairly good understanding of how to compete in red oceans of existing markets, such as benchmarking competitors and choosing a strategic position. According to Kim and Mauborgne, the only real way to beat the competition is to stop trying to beat them in the existing market and to create a new market or blue ocean. The creators of blue oceans follow a different strategic logic of value creation instead of 'zero sum' competitive strategy from Mercantilism. The authors state that blue ocean strategy appears to be far more profitable. For the Netherlands, some evidence of effective blue ocean strategies has been found in the retail sector; despite strong competition, there appears to be sufficient incentive to innovate and to make attractive returns (Burke et al., 2016).

Innovative start-ups often develop their strategies in an iterative way - learning from trial and error in their markets, close to customers, with experiments and rapid prototyping (Martin, 2009). Those start-ups tend to be successful without having a formal strategic plan and without working along the lines of conventional strategic management. That observation is the tenth and final comment on traditional strategic management: if you can be successful without a strategic plan, why should you write one? However, the start-ups might not follow the steps of conventional strategic management, but they do have a long-term orientation. In fact, their work is 'strategic' every single day.

The criticism on strategic management is strong. Plans are ineffective, when they only focus on red oceans, static competition, and causal relationships. Plans lack support, when they are the exclusive domain of management. Plans are useless, when they are not properly implemented and monitored. Innovative start-ups seem to be successful without a formal strategic plan. The criticism on strategic management can be summarised in the proposition that conventional strategic management is not effective in the present turbulent world, as it centres too much around the present reality.

Frank Egas started at Dahlman as a trainee. He is now CEO and main shareholder, since a management buy-out in 2003. Royal Dahlman is a supplier of tailor-made steel filtration components for oil refineries, petrochemical industries and other markets. At the time of the MBO, Dahlman was a diversified company with a lot of unrelated activities in sheet metal works. It has grown, through various stages, since the precursor of Egas established a technical trading company in 1886. Established in Rotterdam, the company now has headquarters in Maassluis and subsidiaries in Elsloo (Limburg province) and Aachen (Germany). Dahlman employs some 80 people.

"In the last fifteen years our strategy can be summarised as active portfolio management", says Frank Egas. "Next to filtration, we have had a second business line in components for the gas turbine power market." In that market, Dahlman was a preferred partner for General Electric for manufacturing first series of components for new types of turbines. From the perspective of know-how and relationship, it was an attractive activity. However, price erosion made it necessary to decide: to further expand in the market (investing in scaling-up production) or to divest. Egas: "We are currently in a process to withdraw. With mixed feelings, that must be said." Next to gas turbines, the company is also stopping the activities in technology components for gasification. Together with ECN, Dahlman developed a technology for waste to energy in the last ten years. Clean gas is a key prerequisite for efficient waste-to-energy production, therefore the filtration know-how of Dahlman was very valuable. In the last few years, the business was scaled-up together with a US investor. Word-wide commercialisation will take time, and investments as well as risks are high. After a careful evaluation, Dahlman has recently sold the activities to the American partner.

"Literally, we are now waiting for the money from that sale, laughs Egas. "Again, this was not an easy decision for us, as some people of Dahlman are dedicated to the gasification business. They will start working for our previous partner. As a small company, we have to carefully weigh off opportunities and possibilities. At the moment the main market for this technology is in Asia, is complex and will take time to expand. We preferred a very attractive offer to sell the technology at this stage and to invest our money in developing new filtration technologies rather than realising large scale plants at the other side of the world."

For the portfolio management, the CEO intensively reflects with the CFO of Dahlman. In addition, they have good contacts with the bank that can bring in relevant expertise. With the divestment of the two business lines, the company will further focus on filtration. Traditionally, the company works for EPC contractors, they have the contract with the end-user such as a chemical company or oil major. Egas strives to position Dahlman high on the list of preferred suppliers of end-users to save guard the market position. In addition to selling products that they have

manufactured on the basis of their own technology, the company sees a new market in selling only technology licenses, basic engineering and critical components. Then, the EPC contractor can manufacture the components itself. In certain countries, like India, this can be an attractive alternative for both parties.

With that new service model, Dahlman is increasingly being positioned as a smart company. In the coming years, the strategy is aimed at optimisation of project and process management in order to defend price competition and to improve delivery speed and flexibility. The company strives for selective growth. The CEO will not close his eyes to opportunities, however. "But opportunities have to fit in our present business and operating model and should have an acceptable risk / return. Next week, I am going to see an algae farm, as you need filters to get algae out of the water. Maybe there is work for us."

Frank Egas understands that many SMEs stagnate after preliminary growth. "It's about structure", he analyses. "When the organisation grows, the entrepreneur runs the risk to be at a distance from the market and the working floor. It can be very difficult to find the right managers for the daily management to create sufficient time for the entrepreneur to stay in business development. In addition, new growth takes capital and risk. You should be careful in any case." Another reason why growth can be difficult is, what he calls, cannibalisation of the organisation: you need your most skilled people and a lot of management attention on innovative projects, this can be a threat to smooth daily operation of the normal business.

Next to engineering and manufacturing, Dahlman is wholesaler for specific filter components in the Netherlands and Germany. Frank Egas: "A couple of years ago, we already expected a tendency toward online sales in this market. However, up to now our clients want to meet a sales representative at their office or to make a simple telephone call". Especially Germany is very traditional in this respect. The problem is not so much the complexity of the products; it is foremost culture as well as integration with the business processes of clients that prevents digitalisation up to now.

Dahlman is working on a strategic plan for the coming years. Egas: "That serves a couple of groups: the management team itself, all employees and the stakeholders of the company". The plan is especially relevant for the employees. According to Egas it is important to take them into the future of the company and to present the context of management decisions. For the new strategy, some new key performance indicators will be introduced, such as sales of technology licenses to EPC contractors. The new strategy will also give room to enhancing knowledge development in the company. "We already stimulate that everybody with a good idea gets the opportunity to work on it. However, everybody is busy with operations. We are going to invest in some additional people to create some slack capacity in the organisation. Then we hope to stimulate bottom-up knowledge development and operational improvement.

Looking back to the previous years, it was a wise decision to further focus the company, according to Frank Egas. A lot has been learnt. One thing is that stopping a business is not easy. It's about emotion, given the long history of certain activities and people involved. The risk is that divestment occurs too late. Another experience is that innovation, such as in gasification, is very interesting and attractive. "We would like to apply that to our core market of filtration once again, if possible", says Egas. "Our business is capital intensive and goes along with high risk. The key message in our new strategy is, therefore, to be a smart, highly specialised filtration company with a realistic view on market opportunities compared with our capabilities and responsibilities".

The dynamics in the business environment

This chapter sets out the intense turbulence in the business environment of today. The dynamics are summarised in five megatrends around technology, climate, consumer behaviour, demography and finance. The shifts can change the fundamentals of business, such as values, factors of competition, and balance between competition and cooperation.

Management scientists and consultants present their theories and concepts commonly in a context of change, often with the advice for companies that they can only survive when applying their prescription. 'We live in an age of discontinuity'. That phrase is by Peter Drucker in 1969, describing the dynamic market environment of that time (Drucker, 2008). Twenty years later, Tom Peters concluded that excellence is not sufficient to thrive on chaos: companies should become more flexible to survive (Peters, 1988). Looking at today's environment, Drucker and Peters have got it completely right. Indeed, change is a constant factor in business, but today's environment is changing faster than ever, fuelled by technological, social, political, economic, geopolitical, and demographic changes. Shifts with a disruptive character that would have seemed unimaginable a few years ago. Chaos seems the new normality (Kotler and Caslione, 2009).

Hundreds of changes, trends, and examples of disruptions have been described over the recent years. As a summary, an unrestrictive list of five megatrends is presented here. These shifts can be considered to be the root causes of change in many industries.

1. **Technology.** Internet is changing business processes fundamentally. It enhances the productivity of organisations, changes supply chains and transforms client interaction. The internet of things is the next wave of

digitalisation. Data is the new oil: data constitutes the foundation for the economy of the future, as oil did in the 20th century (and like oil, the power of data also might call for measures against threatening monopolies). Virtual and augmented reality are becoming part of our world. Artificial intelligence promises to be even more revolutionary. Digitalisation is affecting jobs of many blue and white collar workers; robots are replacing tasks of humans, new tasks and jobs take shape. Thanks to digital technology, barriers to entry markets are fading away as production and communication are becoming much cheaper. Industries are converging – cars will become batteries on wheels for instance. Additive manufacturing or 3D printing is becoming a mainstream engineering technology for rapid prototyping, specialist components, and short-run parts to clients' specifications. The transparency that goes along with online business puts prices under pressure, thus limiting the profitability of conventional vendors. Many SMEs are lagging behind the adaptation of new technology; they have to embrace available technologies and must prepare themselves for the next wave of new technology (OECD, 2017).

- 2. Climate.** As a result of the greenhouse effect, the average global temperature is increasing at the fastest rate in recent history. Climate change and its effects are adding burdens on people, society and economy. Inaction will be extremely costly in the longer run; taking measures is costly as well, but it also creates opportunities for innovation and new business. Industries based on conventional energy have to change. New energy from solar, biomass, water and wind is on the rise, demanding a complete makeover of the energy infrastructure. Raw materials, including fresh water and air, are getting scarce and prices more volatile. At the same time, the use of many resources produces extensive emissions; for instance, world cement production has a carbon footprint of 6% of all global greenhouse gases per annum (WBCSD, 2017). Inefficient production will become costly and producers will switch to alternative (bio)materials or re-use materials. That will drive the circular economy. Climate change is a major concern for SMEs, according to Zurich Insurance Group's (Zurich, 2016): three out of four SMEs in Europe see climate change posing a risk. While more and more multinationals are believed to be looking into business opportunities related to mitigating climate change, virtually none of the SMEs surveyed consider climate change as offering any business opportunities – they did not yet see avenues for profiting from climate change.
- 3. Consumer behaviour.** Consumers are becoming hybrid. They increasingly set demands at extremes: low price, high quality, fast, experience, online, offline, etcetera. Many different aspects can be sought by a single customer throughout the day (Rabobank, 2014a). Customers expect to be understood

and served instantly. Products and services are personalised. 'The consumer' does not exist any longer and mid-market is disappearing. The centre of gravity for most companies has tilted downstream (Dawar, 2013). Upstream activities, such as production and logistics, are commoditised and outsourced. Downstream competitive advantage is embedded in the process of interaction with customers. Digitalisation of business processes gives customers direct access into the operations of a vendor, making them producers and consumers at the same time. New incentives are developed to steer customer behaviour, on the basis of algorithms reading data about many aspects of people's lives. The use of data meets with resistance, although new services based on data are welcomed with enthusiasm at the same time. Personalised and data-driven offers are commonplace in business-to-consumer markets; business-to-business markets are expected to follow. Peer-to-peer transactions at platforms are growing rapidly. Underutilised assets are more optimally deployed, changing industries like automobiles (Snappcar) and hotels (AirBnB). Social changes, such as the revaluation of communities and commons, are supporting this trend. The share economy will not be restricted to consumers, but will expand to industrial markets as well; sharing spare parts is an example.

- 4. Demography.** Europe is rapidly changing with more elderly people and fewer young ones. In the Netherlands, the number of people of 65 years and older will grow from 2.6 million to 4.6 million in 2040 (from 15% to 26% of total population). The dependency ratio - older people relative to the labour force - will increase from 20% in 2000 to 46% in 2050 (CBS, 2017). Despite greying in Europe, total world population will grow to 10 billion later in the twenty-first century; then, the population will be 10 times larger than in 1800. Population growth and climate change set high demands on efficient and sustainable food production in the world. The relatively high birth rates in Africa and Asia will continue to put pressure on migration. Immigration to Europe might help the continent's labour market to some amount. The social costs of greying are tremendous, in terms of health care costs and costs of adapting houses and other facilities. The higher social costs and retirement benefits will lower welfare per person substantially. The burden will stimulate innovation, for instance in health prevention. Innovation will also be fostered in other industries, as a lack of young people results in shortages at the labour market. The progressive ageing of society is bringing about shifts in consumption. The 'consumption footprint' of those in retirement is expanding. For SMEs, demographic changes can offer opportunities, although the turnover expectations deriving from demographic change differ significantly from sector to sector. Opportunities are especially strong in the services industry.

5. Finance. Through its enormous size and its orientation on short-term profit, the global financial system has become a destabilising factor for the world economy. Structural imbalances, such as the trade between USA and China and high sovereign debts, can only be resolved at high (political) costs. The Eurosystem struggles with significant problems, such as the difference between North and South and a lack of democratic control (Varoufakis, 2017). While oversupply of capital was a cause of the financial crisis, the crisis was solved with even more capital. Cheap capital can result in speculative investments and unproductive takeovers, adding to financial instability. Nowadays, the global economy is fuelled by 217,000 billion of debt (IIF, 2017). This burden can hardly be carried, as it equals 3.3 times the gross product of the world (in 2007, before the financial crisis, it was 2.7 times global GDP). The world debt clock (www.nationaldebtclocks.org) is still ticking, with the threat that some debt cannot be repaid at the moment when interest rates will increase or economic growth will hamper. The payment infrastructure is becoming increasingly efficient and transparent - and unlocked from traditional banks - by fintech innovations. Digital peer-to-peer transactions and bit coins are examples. Alternatives for borrowing from banks arise as well, such as crowdfunding and credit cooperatives. They broaden the financial system and provide capital to those that banks cannot help any longer. Despite these innovations, funding has become less easy so far for SMEs; they have to invest in financial knowledge and prepare funding for investments more strategically.

Some experts consider the present changes in society and economy to be the Third Industrial Revolution (Rifkin, 2011), but others disagree as the present dynamics have not (yet) resulted in substantial productivity growth as the First and Second Industrial Revolutions did (Gordon, 2015). Nevertheless, there is broad consensus that the economic system is changing fundamentally and the 'Next Economy' is to arise. Rivalry and structure are changing in many industries. In the past, industry structure and rivalry could be compared to a chess board: black and white positions, a limited number of players, and a well-defined set of rules. Driven by digitalisation, the squares on the board are blurring, new players are entering the market, the game is becoming complex and erratic, and a new set of rules is not (yet) available. According to Rotmans (2012), the shifts have reached a tipping point. They cannot be turned back and their impact is becoming increasingly big. The tipping point represents a 'system crisis' - the present way of living, working and managing do not have effective answers to the ecological, economic and social imbalance in the world. Traditional business values, such as short-term financial return, economies of scale, competition, and growth, no longer work. The same holds true for the traditional interplay between market, society and government.

The unprecedented data and technological capabilities give possibilities for new product-market combinations, supply chains and business models (Porter and Heppelmann, 2015). A significant characteristic of many new business models is cooperation. The fundamental changes feature a new era of cooperation, according to Steve Case in his book on the third wave of technological advancement (Case, 2016). For one reason, digital technologies facilitate new cooperation thanks to ubiquitous connectivity. For another, the challenges in society that result from the fundamental trends ask for higher order solutions, on the basis of open innovation. This is true for circular business, food production, smart mobility, water management, decentral energy infrastructure, and many other challenges. It is not only about cooperation among private partners, but also new constitutions between public and private parties.

The conclusion of this chapter is that the rules of the business game are changing rapidly due to fundamental shifts. Strategies decay faster than ever. Companies should be more concerned with creating, managing and adapting to change versus managing their business as usual. Whichever company can harness the changes the quickest, will create the advantage. Companies need to understand what's going on within and beyond their competitive environment and adapt.

Too many SMEs are stagnant

A substantial share of SMEs in the Netherlands is hardly growing. Given the importance of SMEs for the economy, this situation needs attention. This chapter explores eight reasons behind the stagnation. The lack of strategy can be considered one cause.

SMEs have been recognised as being critical to the economic and social development of countries and regions. They are important for their role in job creation, regional development, as suppliers to large corporates, and innovation of new products and services. According to the International Finance Corporation (IFC, 2012), more than 90% of companies globally are SMEs, accounting for more than half of all employment. In the Netherlands, their share is 90% in number of enterprises, 70% in employment and 60% in added value (EZ, 2016). Researchers of Panteia have distinguished four categories of SMEs: self-employed people, young companies (< 5 years old), innovative companies or scale-ups (> 10% growth of labour force per year), and mainstream or established companies (> 10 years old) (Span et al., 2015; EZ, 2016). Young and innovative companies foster economic dynamics, while established SMEs and self-employed people are especially relevant for their contribution to employment.

Entrepreneurship is 'hot' and the number of start-ups has grown strongly. However, in the Netherlands and other western countries many SMEs are stagnant. SMEs in Europe show growth in added value once again since 2014, but they hardly create new jobs (EU, 2016). Established companies lack resources for growth, self-employed people do not strive to hire other people, and young companies appear unable (or unwilling) to catch up for further expansion after their first growth phase. Numerous SMEs make use of new technologies, but especially to lower costs of their current business and not to develop new business in terms of products and markets.

In the Netherlands, the share of low growing or stagnating SMEs (defined as companies that have sales growth less than 10% per year) has grown to 70% of the total (Jansen and Roelofsen, 2017). The distribution of growth among SMEs is specified in figure 1. Besides 6,400 SMEs with a strong job growth between 2011 and 2015, there are 12,500 SMEs with strong cuts in employment (EZ, 2016). Research of ING Bank (ING, 2015) also confirms that a part of SMEs is lagging behind. The bank developed a model to test the vitality of companies in the Netherlands on the basis of strategy, financial situation and flexibility. It appears that 40% is weak and stagnant. Those companies are mostly occupied with survival. According to the bank, only 3% of these companies apply a strategy. Finally, stagnation can also be signalled from innovation activity: only 17% of SMEs in the Netherlands can be classified as champions and developers, whereas 23% are laggards that are not involved in innovation at all (Span et al., 2015).

	2008	2011	2014	2015
Fast growing companies	10,6%	6,9%	5,4%	5,6%
Growing companies	32,7%	32,1%	25,5%	16,3%
Stable and stagnating companies	56,7%	60,0%	69,1%	78,1%

Source: Jansen and Roelofsen, 2017

Figure 2 Distribution of SMEs in terms of turnover growth in the Netherlands

The stagnation among SMEs can be attributed to various causes. The erosion of productivity by increasing labour costs is a major cause (Ott et al., 2013). Large corporates can better limit wage costs by shedding labour and shifting production abroad. Since the economic recovery, SMEs have made less progress reversing productivity losses than large corporates and high labour costs put pressure on their profitability (SRA, 2017). In the Netherlands, the productivity - specified as turnover per full-time equivalent (FTE) - is 57.000 euro for small businesses and 85.000 euro for medium-sized companies. Corporates realise a turnover per FTE of 103.000 euro on average (ING, 2015). In other countries as well, SME productivity appears lagging; in Germany the 'productivity gap' between SMEs and the aggregate economy has grown to 80,000 euro per employee between 2003 and 2016 (KfW, 2016). For a part, the lower productivity is caused by the dominance of SMEs in labour-intensive services, for another reason it is affected by limited application of new technologies.

A second cause is insufficient owner motivation for growth (Wang et al., 2007): entrepreneurs can be satisfied with the present situation and can be risk averse. They do not pursue stringent profit/growth maximising goals. Their efforts are on fulfilling the needs of today rather than building for tomorrow. That situation has been illustrated by research of Research Centre for Business Innovation among manufacturing companies in the Rotterdam Region (Bauwen et al., 2016). The majority of the fifteen entrepreneurs that were interviewed have their focus on operational and tactical issues. They accept their present situation, partly as they are satisfied with their performance (sometimes for good reason) and partly as they lack resources for future thinking.

Another factor is limited access to finance. The financial crisis has fundamentally changed the finance market. The role of banks for SME finance, traditionally the largest source of capital for SMEs, has diminished. New regulations make credits and loans for SME relatively costly and risky for banks (KfW, 2016). A new supply of business finance has come to development in reaction to the withdrawal of banks in the last five years. However, alternative finance like crowdfunding, credit cooperatives, and private placements do not fulfil the need for risk-bearing funding in innovative growth of SMEs in many cases.

A fourth cause is that SMEs generally confine their activities to domestic or regional markets. Only 25% of European SMEs export to another country (EU, 2015). That implies that growth opportunities for the majority of SMEs are restricted. Internationalisation is a difficult job that many entrepreneurs leave to others. Internationalisation goes hand in hand with risks; it takes time, requires working capital and demands specific knowledge and networks. Moreover, it requires legitimacy and reputation to serve clients abroad in competition with local suppliers. That demands distinctive customer value, which not all SMEs are able to deliver.

A fifth cause of stagnation is the process of greying among business owners. The average age of entrepreneurs in the Netherlands is 47 years, in 2010 it was 45 years. Older entrepreneurs are in general less focussed on growth and renewal: there is a negative correlation between the age of the entrepreneur and the growth of turnover of his company (Ruis, 2012). Absence of strategic perspective will make business succession even more difficult, while succession is already a challenge for many companies.

Lack of up-to-date knowledge is another cause of stagnation of SMEs. Knowledge on general management practices, like innovation management and export management for example. It especially holds true for knowledge on new technologies. The Online Marketing Monitor 2017 - an inquiry among 1,646 Dutch SMEs - shows that many entrepreneurs do not know how to use internet effectively

for marketing. Consequently, half of the respondents generate less than 5% of turnover via online sales. Of the respondents 31% do not have a company website, 38% is not present at social media, and 45% considers online marketing not to be important (DTG, 2017). When there is knowledge on new technologies, the problem is in the application within existing business processes.

A seventh cause of stagnation is that SMEs are relatively unsuccessful in translating innovation into business compared to large corporates (Bauwen, 2014). Many SMEs lack a structured business development policy. They have insufficient skills to bridge technology and commerce and to combine exploitation and exploration. Conditions for smooth daily operations (exploitation) differ from conditions for research and development (exploration). Managing exploration and exploitation is a complex and paradoxical process (Lavie et al., 2010). Companies should be ambidextrous. That combination is difficult for all companies (O'Reilly and Tushman, 2013), but it is a bottleneck especially for SMEs where the two orientations are competing directly for limited resources. The case of Dahlman shows that management consciously allots time for exploration to make it happen.

Last but not least, stagnation can be attributed to a lack of strategy. Without a strategy, companies cannot direct efforts to growth and transformation in an effective way. Many SMEs lack a long game. SMEs are foremost reactors in the strategic typology of Miles and Snow (1978). They drift with external developments without a distinctive strategy (Sexton and Auken, 1985; Wang et al., 2007). Research by the Kent Business School concluded that only 1 out of 20 SMEs could present an actual strategy upon request (Raby, 2015). The missing of strategy can be attributed to the above-mentioned general causes of stagnation. Five specific reasons can be added:

1. Formal planning is regarded as not being applicable in SMEs, with their informal and personal nature. Strategy is foremost ad hoc and unstructured (Kraus, et al., 2007). Strong personal influence gives space to intuition and, sometimes, irrationality. If there is a strategy, it often is an implicit one. Moreover, some people are convinced that real entrepreneurs do not plan.
2. SMEs focus on operational contingencies. They hit and run. Entrepreneurs have a chronic lack of time and face difficulties with setting priorities. They are restricted in their ability for systematic strategic planning (Jannek and Burmeister, 2008). Moreover, they face problems with ambidexterity. The case of Versteegen (page 45) makes this struggle clear.
3. Many SMEs lack a healthy divergence of views, a precondition to come to distinctive visions on the future and sound strategies. Owners dominate in decision-making. Employees tend to think along the same lines as the owner, given close relationships and family culture in many smaller businesses (Nyuur, 2015).

4. Many SMEs operate in regional markets. They maintain long-lasting relationships with suppliers and customers. The goodwill factor is important and does not trigger strategic thinking. Protected markets shows this phenomenon as well, as the case of the Rotterdam Library in this book shows.
5. Some SMEs, especially in manufacturing, are integrated into the supply chain alongside large corporations. Those SMEs only serve one or a very few customers. That might limit their attention for strategy and make them vulnerable. Raymond and St-Pierre (2004) found that more dependent SMEs have relatively fewer sales per employee and lower profitability.

The lack of strategy is a cause of stagnation, but scientific research has not found an univocal relationship between strategy and performance in the case of SMEs. Rosenbusch et al. (2013) found that SMEs that engage in strategic planning are more likely to achieve higher sales growth, higher margins, higher employee growth and are less likely to fail. However, Gibcus and Kemp (2003) concluded that there is hardly any correlation between strategy and performance. They constructed groups of companies categorised to five generic strategies based on Porter and Miles and Snow. Only in the class of 'market differentiators' there was some correlation between strategy and profitability. The above and other studies on this issue are troubled by the sporadic application of conventional strategic concepts by SMEs, making a comparison on the basis of those concepts problematic. In addition, the high flexibility of SMEs supports their performance, neutralising the lack of strategy at short notice to some extent.

Although many SMEs do not have a strategy, entrepreneurs and managers are often aware of the necessity to have one. In various recent inquiries among entrepreneurs about their challenges, the importance of strategy comes forward. In the years after the financial crisis, entrepreneurs and managers had to focus on the short-term. Now economic circumstances have improved, they see strategy as a top priority. In a survey among 961 entrepreneurs in the Netherlands in 2015, strategy is considered by 45% as the most important challenge, next to product and service innovation and team performance. At the same time, 36% of the respondents has insufficient time to work on strategy (Synpact, 2015).

What is to be done with all those stagnating businesses? In essence, they have two options: expire or adapt. Ongoing muddling through is an often applied option in practice as well. From socio-economic point of view, letting companies die is not advantageous - SMEs offer the majority of jobs in the economy and starting new businesses is often less efficient than expanding existing businesses. That asks for more attention for adaptation. Policy makers are increasingly aware of SMEs that underachieve. They understand that attention should be paid to grown-ups, besides start-ups. The 'growth agenda' of the Dutch employers' associations is an

example (Van Straalen, 2015). The agenda sees substantial potential for growth among established SMEs. It makes a plea for better management of SMEs and asks for government action such as lower taxes and shorter procedures. 'The state of SMEs 2016' calls for resilience and agility among SMEs to anticipate fundamental changes in their markets (EZ, 2016).

To summarise this part, many established SMEs lack a growth perspective while renewal can help them to become more adaptive to external turbulence and to find new growth opportunities. How can SMEs break out of the stagnant cycle? In essence, it starts with the willingness and ability to think ahead and to turn new strategic perspectives into action.

With a history of 131 years, Verstegen Spices & Sauces is indeed an established company. The company produces a broad range of spices and sauces for both the retail market and the professional market (restaurants, hospitals, food industry). It serves both large customers, such as supermarket chains and food processors, as well as small ones. The company has a fully integrated model of operation: it sources spices from local farmers and traders, arranges sea transport, produces final products, and distributes them with company trucks to warehouses of the customers. The company produces under a private label as well as under the quality label of Verstegen. As far as the Dutch market is concerned, "you will find at least one product of Verstegen in every kitchen". The company is also active in Belgium Ireland, France, the United Kingdom, and Spain. It has exports to the rest of Europe, United States of America, and, recently, China. Verstegen employees some 450 people.

The company is family owned. It was established by Mr. Verstegen. After a split, the spices business was continued by the general manager. In 1939, the grandfather of the present owner Michel Driessen, started as sales representative. After the war, he took over the company. Since 1964, the company's head office and production facilities have been located in the Spaanse Polder, Rotterdam. In 2007 Michel Driessen took over as CEO of his farther. With him, the third generation of the Driessen family is now represented in the Board.

In its history, the company grew organically and step-by-step along with the market. That applies to the production premises in Rotterdam, but also for the way the company is organised. Increasingly, the organisation is diverging from market dynamics. The company has a broad range of products, produced on-stock and on-demand, made from materials of over 700 suppliers (spices and other raw commodities, but also packing materials) from all over the globe. The rhythm of supply chains differ and the supply speed is increasing ever faster. The power of customers in the professional segment has become stronger and competition in terms of price and delivery conditions is heating up. In the consumer segment, the power is fragmented. As the product is considered to be a commodity by many consumers, it is not easy for the company to create a differentiated position. In addition, food safety and sustainability are big issues these days, requiring extensive quality control and supply chain visibility. Increasingly, Verstegen has to rely on data.

At present, the flexibility of production at Verstegen is moderate. Activities are mechanised and automated, but not optimally integrated. There are some legacy systems, as a result of the long history of the company. Consequently, to react to

sudden changes in demand, can be a challenging job. Orders are processed in an ERP system, but in some cases rescheduling is conducted manually and different departments (such as purchase, sales, production, packaging) have to come to solutions together. With the broad range of products, getting all inputs together just-in-time and just-in-place is the core of Verstegen's production organisation. That holds true for specific ingredients in the processing department and for pallets and labels at the packaging site. Sometimes, production is delayed as components are lacking or information is incomplete. Then, hard work is necessary to bring the order to the finish in an appropriate way.

It is clear to the management and the work floor that Verstegen is to make a next step. Generally, it is clear to Michel Driessen that the strategy of the company should be further elaborated. "We need to anticipate an ever-more demanding customer and more sustainability, with the help of a lean production process", he says. There is a need for further automation and digitalisation. Older equipment should be replaced and automated to make shorter production runs at lower cost possible. The information organisation needs a make-over; processes and procedures should be simplified when possible. Finally, the company is to elaborate their vision on online business further.

The future goal may be clear, the road ahead is comprehensive. It is not just about automation and digitalisation, first and foremost the company needs a new approach to organisation development. Room for innovation should be created, together with more delegation of power to people to speed-up decision-making and foster creativity. A careful balance should be sought between Verstegen's core values of stability, respect and reliability on the one hand and room for experiments and renewal on the other. The change is complicated as the interconnectedness within the company is substantial, and product quality and production reliability should be guaranteed under all circumstances. It seems wise to create a 'lab' environment to work on the company on the basis of new vision, culture, routines and automation. Here, people can learn and create best practices for other parts of the company. The approach to changing the company is yet to be determined. It is clear to Michel Driessen that the remake of his company won't be easy, but there is no alternative. "While I am getting older, the company should be refreshed as soon as possible".

The future of the Rotterdam-The Hague metropolitan region

This chapter introduces the economy of Rotterdam and the Rotterdam-The Hague metropolitan region and describes the changes in the economy in the last decades.

In addition to history and present, the agenda to make the region more competitive and sustainable is introduced.

The challenge is to connect SMEs in the region to this so-called 'Roadmap Next Economy'.

Rotterdam is one of the economic core areas of the Netherlands. It is the location of the largest seaport of Europe and one of the largest industrial areas of the continent. At the same time it is a service centre covering the south-western part of the country in health care, education, culture and shopping. The city of Rotterdam is part of the Rotterdam region, with 15 municipalities. The metropolitan region Rotterdam-The Hague is another scale of public administration and covers 23 municipalities.

Rotterdam has grown into a port city during the 19th and 20th century on the basis of industrialisation of the Ruhr area (coal and iron ore) and the port itself (oil and chemicals). The containerisation stimulated further growth since the 1970s. The port has been able to create economies of scale: deeper quays, more infrastructure and larger plots of land resulted in more vessels, more throughput and more economic activity. The strategic plans that were developed by the Rotterdam Port Authority since the late 1960s relied merely on causation: projections were made on detailed forecasts with low, medium and high growth scenarios. More often, reality overhauled projection, reconfirming the orientation on volume growth. The latest Port Vision 2030 contain four scenarios that all expect growth; the 'low growth scenario' envisages some stagnation in economic development and energy use, but it still foresees a growth in throughput from 430 million tons in 2010 to 475 in 2030 (PoR, 2011).

Since the 1980s, Rotterdam and its region have been in transition from a port city towards a city with a port (Van Klink, 1995). In the port, thousands of jobs have been lost as a consequence of mechanisation and automation of terminals and plants. Between 1995 and 2008 urban services, like health care, retail, business services and education, have shown substantial growth and have diversified the regional economy. In those years, the regional economy grew with 3.2% per annum. Between 2008 and 2015, only wholesale appears to have grown, other urban services in general and knowledge-intensive services in particular have not grown (Manshanden and Koops, 2017). In that period, annual growth of the regional product (-0.4%), per capita growth (-1.1%) and employment growth (-0.5%) were all negative and the unemployment rate (9.0%) was higher than average in the Netherlands (6.9%) (RNE, 2016). Annex 4 summarises the dynamics in the employment structure of the city of Rotterdam and the Rotterdam-The Hague metropolitan region.

According to the company register South-Holland, 55% of all registered companies in the city of Rotterdam is SME, 44% is self-employed business and the remainder 1% is large corporate. The Hague has a comparable structure; the other municipalities in the metropolitan region have slightly less self-employed people and relatively more SMEs. Between 2000 and 2015, the number of self-employed businesses have grown substantially due to the economic crisis - unemployed people started their own business. In that period, the absolute number of SMEs has declined somewhat, due to closures related to the economic crisis and the greying of owners. In the Region Top 40 of Rabobank, the Rotterdam region takes position 14 and Greater The Hague has place 33 (Rabobank, 2014b). The Region Top 40 ranks forty regions in the Netherlands on the basis of the performance of SMEs in the regions. The moderate position of both regions has been caused by a relatively weak financial performance of regional business. Meanwhile, the city of Rotterdam has a little more innovating SMEs compared to the Dutch average (Kok et al., 2015).

Economic diversification has been focus of the Rotterdam municipality's strategy for the last three decades. The city has invested substantially in its economic conditions, like infrastructure, housing, business locations, education, and culture. It has led to positive results. For instance, the share of higher educated people has grown from 26% in 2002 to 37% in 2015; the latter figure is above the national average (34%), but below Utrecht (60%) and Amsterdam (54%). Another economic spearhead is improvement of the innovation climate in the city and region. Incubators have been established and innovation platforms have been organised. Examples are the Erasmus Centre for Entrepreneurship (ECE), the Cambridge Innovation Center (CIC), PortXL and iTanks. Those initiatives have added to the innovation ecosystem in the city and have brought forward various new companies. The reach of those initiatives towards established SMEs is rather limited, however.

The Rotterdam-The Hague metropolitan region is one of the regions in the world that is hit most seriously by the global changes. Its location surrounded by water, the large number of lower educated people, and the energy-intensity of its industries make the region vulnerable. That holds true especially for the petrochemical industry, the transport sector and the horticultural industry. Those businesses increasingly face resource limitations, heating competition and new regulation. Stricter climate regulations will hit petrochemicals heavily and give opportunities to new smart industries. Horticulture is confronted with new consumer demand, based on quality, sustainability, and variety, and it competes with low-cost competitors from Africa. Companies in transport compete heavily one to one on price, whereas shippers consolidate and become even more demanding on integral logistics control and sustainability. In addition, world trade will grow less strongly compared to the pre-crisis period, hampering the scale economies model of transport.

According to a study of the OECD, the Rotterdam-The Hague metropolitan region is underperforming compared to other regions and compared to its potential (OECD, 2016). The potential of the region is strong as it has the knowledge, skills, young population, infrastructure and institutions to seize new economic opportunities. However, the region does not sufficiently harvest this potential and turn it into economic profit and societal value. To make the regional economy more resilient, is not easy given high investments in existing infrastructure. Organisational and cultural path dependency also blocks renewal; the case of Versteegen illustrates this phenomenon. The transformation of the economy will not take place automatically and positive outcomes for regional welfare are not granted beforehand.

Strategist Jeremy Rifkin has developed a vision for the Rotterdam-The Hague metropolitan region how to step into the Next Economy. The 'Roadmap Next Economy' sketches five transition paths: smart energy delta, smart digital delta, circular economy, entrepreneurial region and next society (RNE, 2016). Figure 3 gives a summary of the five transition paths. The Roadmap considers two areas as precondition for economic transformation along the five transition paths. Firstly, digitalisation of the economy: a new digital infrastructure is required, faster, more flexible and more secure than anything that is available now. Digitalisation helps to increase productivity and reduce transaction costs in regional industries such as transport and health care. Secondly, a new energy network centred around renewable sources and smart grids is to be developed. Together, the new digital and energy infrastructures require substantial investments and new partnerships for their development and exploitation.



Source: Roadmap Next Economy, 2016

Figure 3 Roadmap Next Economy

The Rotterdam-The Hague metropolitan region is now preparing the implementation of the Roadmap Next Economy. A new entity will be established to coordinate its elaboration and implementation. A new public-private constellation is aimed for. To break through traditional patterns does not seem to be easy, as the region already has a high density of public entities involved in economic policy and traditionally the business community is not directly involved in implementation of regional policy. There is one stick in reserve: the metropolitan region can become a pilot for a new distribution of European funds. The European Commission and European Investment Bank would like to organise a regional investment platform that is

going to bundle all kinds of financial means from Europe for the region. In that way, it would not be necessary to apply for individual funds. It requires of the region to organise itself in another, integral way.

In addition to financial, legal and institutional impulses, the implementation of the Roadmap Next Economy requires mental impulses as well. Change will cause inconvenience, uncertainty, and disruption. Citizens, employees, managers and entrepreneurs need to embrace the urgency and necessity of change and they need to become more flexible, entrepreneurial and future-orientated.

The Roadmap Next Economy has got limited attention from the side of the business community right now. Some large corporates have indicated their interests; that especially holds for those companies active in digital and energy infrastructures. For SMEs, the Roadmap seems too abstract yet and out of their normal business range. Only very few SMEs are connected to the present first projects of the Roadmap. To make impact and to transform the regional economy in line with the Roadmap, many more SMEs have to step in. It is of crucial importance to pay attention to the way in which SMEs can connect to the regional economic agenda and how the plan can be elaborated on to the business context of SMEs. They have to translate the Roadmap into their own vision on the future. That is where strategic management comes in and more effective strategy-making is appropriate.

This chapter can be summarised in three points. The Rotterdam-The Hague Metropolitan Region in particular faces the global shifts, given its geography, economy and demography. On the basis of the Roadmap Next Economy, the region is to invest in long-term renewal and resilience. SMEs have to play a role in that transformation, but they are relatively absent in the present settings.

University and strategy

This chapter sketches the role of universities in regional economic development. The message is that universities should develop into 'third places' and that more coordinated interaction between the universities and the business community is desirable. This is getting attention in the new strategy of the Rotterdam University of Applied Sciences.

Some years ago, the Netherlands Scientific Council for Government Policy published a study on the future earning capacity of the Netherlands (WRR, 2013). The authoritative report has worked through in policy in some extent, although its pleading for a joint strategy does not fit well in the Dutch constellation with many actors and interests. The report states that knowledge circulation is key to enhance competitiveness, resilience and responsiveness of the economy in the perspective of global changes. Knowledge circulation is the creation of knowledge, but even more the application of knowledge. That demands improvements in the way the business community applies new knowledge, the relationship between working and (life-time) learning and the way regional innovation systems are organised. It also demands a revision of the roles of education and research institutes and better coordinated interaction between universities and the business community.

Universities have considerably contributed to life in cities. The growth of cities in Europe since the medieval times and the development of science were closely related to each other. On the basis of the book of Richard Florida about the creative class (Florida, 2011), many cities are investing in conditions to nurture, attract and sustain talent like meeting spots, housing, cultural amenities and international accessibility. In a recent literature study, the Dutch Bureau for Economic Policy Analysis concluded that universities contribute to regional economic development through enhancing human capital (students, new work force, university staff), innovation (patents) and new business (spin-offs and investments of existing companies). The impact varies among universities and regions (Braam et al., 2017).

The economic contribution of universities will not diminish when everybody can find every piece of information via internet, as information is not the same as knowledge. Even knowledge is not enough. These years of rapid change demand imagination in order to find feasible and attractive pathways to the future (Hajer, 2016). That asks for universities to open up to their surroundings. It requires lecturers, researchers and students to ask questions to entrepreneurs, visitors, citizens and policy-makers in order to discover the future with them. Personal interaction - online, but also face-to-face - appears to be very relevant. Universities have to open living labs where students, lecturers and practitioners challenge each other to the benefit of society, economy and education. In that way, universities can become 'third places'. A third place is the social surroundings separate from the two regular social environments of home ('first place') and office ('second place'). Third places are considered to be anchors of community life and facilitate creative interaction (Oldenburg, 1991).

Especially universities of applied sciences are considered to exploit the potential of imagination and open innovation, as they traditionally have had close relationships with the professional practice. SMEs lack capacity for knowledge development themselves. Moreover, employees need assistance in lifelong learning. Universities of applied sciences need practice as up-to-date context for education and they can provide infrastructure for lifelong learning. A strong interaction between SMEs and universities can stimulate economic growth (AWTI, 2015). In some countries, such as Germany, universities of applied sciences indeed play a central role in knowledge development and dissemination with regional businesses. In other countries, including the Netherland, the potential is not yet optimally utilised (Bauwen, 2016). SMEs have difficulty articulating their problem and to get access to the right knowledge within universities. Universities are not spots for open innovation yet.

To become more valuable for the business community, and for the transformation of the economy, higher education should be changed fundamentally. Today education programmes are not flexible. Consequently students, lecturers and researchers cannot work with companies on demand. Moreover, education is relatively inside-oriented and subjects are taught in silos. Even more problematic is the observation of Jan Rotmans that 'education is teaching discipline, not creativity and development' (Verheijden, 2017). Schools are anxious that education in the setting of practical ambiguity might interfere negatively with their accreditation. As a result, 'business education has become more akin to a factory line than to the transversal learning opportunity it should be' (Tse and Esposito, 2014). Finally, academic research and publication in academic journals is highly valued in universities, but that research often is not directly relevant to what managers and entrepreneurs actually do and need.

The Rotterdam University of Applied Sciences operates in a turbulent environment. From the general megatrends in technology, economy and demography, the school faces the multi-ethnic population of the Rotterdam region, the changing labour market, and new (private and digital) competitors as key strategic challenges. The Executive Board of the Rotterdam University of Applied Sciences admits to the urgency of change, to adapt to the dynamics in the environment, to address the diversity of students and to improve study success. Therefore, a new Strategic Agenda was formulated in 2016. In the elaboration of the Strategic Agenda, 'New Business' has been addressed as one of the areas of development in order to explore and exploit the above-mentioned potential in relationship with the business community.

The working group that has reflected on New Business states that the Rotterdam University of Applied Sciences has a unique advantage over its new private and digital competitors: the surrounding region as a domain for learning and development. The working group has made several recommendations (*Werkgroep Nieuwe Bedrijvigheid, 2017*). Firstly, the interface between the university and practice should be strengthened. The present situation is too fragmented for building strong relationships and developing knowledge. Secondly, the school should develop 'field labs', where students from various disciplines work on strategic issues in line with the Roadmap Next Economy. Thirdly, curricula should become more flexible and allow more room for experimentation, in order to give attention to the latest developments and to tie to the ambiguous real world. Fourthly, all students should get in touch with entrepreneurial skills. Finally, the possibilities for students to start their own business as part of their education should be enhanced. The recommendations has been put in a broader perspective in the paper '*Een adaptieve hogeschool*' (meaning 'towards an adaptive university of applied sciences') written by Winnie Sorgdrager and Farid Tabarki commissioned by the Executive Board of the Rotterdam University of Applied Sciences (Sorgdrager and Tabarki, 2017).

Within the strategy of the Rotterdam University of Applied Sciences, the new Business School needs specific attention. The executive board has decided to merge the four institutes for business and management into one Business School. The four institutes have to find a way forward in the rapidly changing business environment, the turning labour market perspectives for economists, and the potential for open innovation with the business community. The Business School should be a valuable partner for the region, delivering well-educated people and meaningful new knowledge. The following would be necessary: breaking down silos between the institutes, stimulating cooperation among lecturers, investing in digital learning, and bridging education and research as well as school and professional practice. Rumelt (2011) and others conclude that business schools teach strategy, but

rarely apply the concept to themselves. In Rotterdam, there are now good opportunities to apply a bottom-up strategy process to build the new Rotterdam Business School.

The scepticism on traditional strategic management, as elaborated before, has downgraded the topic of strategy in education and research at the Rotterdam University of Applied Sciences during the last few years. Some lecturers consider strategic management to be too academic for their students. However, with the turbulence in the outside world and the need for new strategy concepts for SMEs, the subject should be given more priority once again. More attention for strategy fuels new competences, such as applying theoretical models in a flexible way, fostering creativity, thinking broader than one's own discipline, and taking another perspective on risk. In addition, strategy is holistic, challenging students to integrate their knowledge.

Most current strategic management textbooks cover classic theories and tools. Some lecturers, in Rotterdam as well, use case studies from Harvard Business School and Ivey Business School to help the application of theories and tools. That is definitely helpful for students. However, those international case studies can be too academic and too far removed from the mind set of students. That criticism can be counteracted by real-life cases from the business community in the region itself. Only few universities apply learning on the basis of real-life cases from companies in their communities (Hoffman et al., 2017). With a large business community rich with strategic issues at a short distance, the Rotterdam University of Applied Sciences has a great potential for case-based learning. Applied research can play a role in case development.

The conclusion of this chapter is that universities should open their window to the community, as they are a rich factor in enhancing economic development and innovation in their regions. The Rotterdam University of Applied Sciences recognises the potential: students learn more effectively and the region can be supported in its development. There is a need for a more structured interaction with the business community and for new learning methods to grasp the potential.

As owner of engineering bureau TWD Martijn Koppert is used to puzzle about all kind of issues in the offshore industry and related industries. TWD is specialised in creating custom-designed tools and structures for installation projects. One of those issues is the influence of vessel motions on operations. Even limited waves can generate motions that prevent cranes and other equipment to work. Downtime goes along with high costs. Consequently, the offshore industry's biggest problem is waiting on good weather. Jack-ups can operate independent of waves, but they are very expensive. In 2008, Koppert developed a compensation system for vessel motions of wave-heights up to three meters with the help of the latest technologies regarding electric and hydraulic motion control. The first product was designed as a modular platform to accommodate a crawler crane, that could save a lot of money for maritime operators compared to hiring a jack-up or waiting for a calmer sea.

Unlike engineering for others in the case of TWD, Martijn Koppert decided to introduce the system - that was called Barge Master - in the market himself together with a business associate. The idea was to develop a rental model and to earn a steady cash flow with hiring out Barge Master-systems. The future appeared a different and a more difficult one, however.

The first unit was only rented in 2013, as it took some years of engineering, testing and funding. Moreover, the conservative offshore market had to be convinced about the innovation. Unfortunately, one year later, the offshore market collapsed due to the ultralow oil price: operators cut back their investments and expenses to zero. Since then, the original strategy of Barge Master appeared to be too optimistic. Martijn Koppert: "It took us some time to conclude that the crisis was not to end soon, then we let go the majority of our staff to cut costs. "Our current strategy is cash flow driven, to express it simply", says Koppert in the office of Barge Master in the Rotterdam Science Tower. Fortunately, TWD is performing very well and delivering steady income.

Despite, or maybe better thanks to the crisis, diversification got attention from the management of Barge Master since 2015. Koppert: "We simply had to find new ways to earn money". Offshore wind appeared to be an interesting market as well. Moreover, from a focus on platforms for cranes, the company oriented on other applications of its motion technology. Consequently, Barge Master developed two new products - a crane and a gangway for maintenance support vessels and platform supply vessels - with the compensation technology of the company. The first units of those products are recently sold to two Dutch operators in the offshore wind market.

In terms of strategy, diversification has been the most important new step in the two last years. To arrive at new product-market combinations demands a lot of thinking and engineering, but more importantly, discussion with many people. Martijn Koppert explains: "We are used to exploit our network and have much contact with clients, partners and investors". That is important to keep in touch with the market, to explore possibilities and to test ideas. Diversification started as iterative experimentation. However, in the capital intensive industry of offshore equipment, experiments are very costly and thus risky. To mitigate risks, prospects and stakeholders are to be involved in the earliest phase of an innovation.

In addition to diversification, the development of a network centred production model has been an element in the current strategy. "To maximise flexibility and lower fixed costs, we have decided to outsource the complete manufacturing of our motion compensated gangway to our key partner Bosch Rexroth and to concentrate on engineering and sales", says Koppert. "With that strategic choice, I feel much more comfortable personally, it brings our business model closer to the engineering business that I know."

With respect to monitoring the strategy, the eyes within Barge Master are on financial information only given the tight financial situation. "I do like to steer on more elements. In our company TWD, we also monitor our strategy in terms of non-financial terms, such as progress on new product development. Targets help you to pick up and to set energy on the right aspects", according to Martijn Koppert. Strategy and targets are actively shared with the staff and employees and they are stimulated to come with ideas. "That really means management investing time and attention, as the normal workload often withholds people from creativity".

With Frans van Seumeren, Parcom Capital, and Innovation Quarter, Barge Master has strong financial partners. The company has a written strategic plan, that is frequently updated. Koppert: "I have the plan for my investors, but also to question my own assumptions, to operate in a certain structure, and to keep the company on track". The plan still expects serious opportunities for the original concept in the offshore market. "I make my calculations almost every week. With limited expenses on maintenance, the production of offshore oil and gas is gradually declining. At a certain time, operators have to start investing again. We are in a position to await that moment".

Process is key in Next Strategy

What approach can help SMEs work on effective strategy?

A strategy cycle based on creative thinking and learning is elaborated in this chapter: explore, set goals, build, measure and align with the ultimate objective to create value. The cycle can be run close to other business processes of the company, making strategy better embedded in the normal business of SMEs.

The essence of the critics on strategic management in general is that strategy cannot be 'modelled' or 'planned'. The turbulence of the Next Economy is too complex, variable, diffuse, fast and ambiguous, and characteristics of companies too specific to put strategy into a single model and to plan for a single future. Moreover, a model doesn't solve the problems of strategy implementation in terms of support, speed and flexibility. In addition, the flexible and informal nature of SMEs does not leave sufficient time for dedicated and formalised strategic management.

To overcome the bottlenecks of too much model and too little time, the process should be central in strategy formulation and implementation for SMEs instead of the strategic plan as such. Paying attention to strategy along operations is more feasible and more effective. Strategy should be weaved into business. Considering strategy to be a (ongoing) process helps to live through it in the company and to bridge exploitation and exploration in the organisation.

A strong basis for an effective strategy process can be found in design thinking (Das, 2014; Martin, 2014). 'Design thinking should be at the core of strategy development and organisational change in order to create a new culture of solving problems', according to Lawton Ursrey (2014). The use of design thinking in strategy follows successful innovative start-ups with their approach on strategy. Design thinking was introduced as a tool for solving complex strategic problems by Richard Buchanan (1992). To Martin (2009) design thinking is 'balancing analytical

thinking and intuitive thinking'. Design thinking is a specific way of looking to the world, creative, open-minded, focused on user experience, collaborative and holistic. It starts with forming a deep understanding of the problem outside-of-the box of existing routines. Prototypes are used to explore solutions ('demo or die'). Prototyping is iterative and rapid, making it cost-efficient and a good way to obtain organisational commitment (Brown and Martin, 2015). Failure is leveraged as learning (Kolko, 2015).

Design thinking covers the build-measure-learn cycle of the lean start-up method (Ries, 2011). Innovative start-ups often follow a non-conventional growth path. They start with trial-and-error instead of a full blown strategic plan. Start-ups in Silicon Valley apply their own principles: they think big, they aim for a higher goal, they challenge industry dogmas, they apply validated learning, they network actively and they work closely together with customers (Ester and Maas, 2016). Lean start-up is not only applied for innovation, but also for growth creation in general and thus for strategy. Instead of prototypes of new products, strategy following the lean start-up method is about experiments with, for example, new customer interfaces and foreign market penetration.

Conventional strategic management has been grounded in causation. People work on the basis of a structured analysis with well-described opportunities and threats to realise a predefined goal. This approach is founded in clear cause and effect relationships. Managers are trained to draw on the past and the present to project the future. Designers, on the contrary, are trained to break from the past. Design thinking centres around effectuation. On the basis of on available means, people explore new possibilities with help of experiments and without a fixed goal for the future. This iterative process considers strategy to be a continuous search.

That search should start from the purpose of the company. Purpose is a company's 'why': why do we exist and why do customers choose us? Purpose can align the future of a company, helping with questions on new markets, new products and new channels (Cartisi et al., 2017). A good strategy challenges people and strives for purposive change. Purpose positions the company into society, in line with the shared value approach (Porter and Kramer, 2011). That approach propagates the combination of commercial value with social value, as social issues will drive the next wave of innovation and can create blue oceans. Shared value is not only feasible for large corporates, also SMEs can become purpose-driven. They are often close to their stakeholders and can offer local solutions to social challenges, such as inclusiveness and resource efficiency.

Design thinking is learning and doing. The strategy process is a learning process as well, as it is about collecting insights and reflecting in order to make strategic choices. That fits into the 'learning school' of strategy (Mintzberg, 2003). Strategy as learning requires the ability to sense, experiment and adapt on a continuous basis and on all levels of the organisation. The latter, involving employees in strategy, can be considered the democratisation of strategy (Reeves and Deimler, 2009).

SMEs do learn, but ad hoc and at random. According to Clarke et al. (2006) SMEs are stuck in a cycle of adaptive learning (coping with the current environment in a better way), rather than generative learning (develop new ways of looking at the world). To help SMEs move beyond adaptive learning, action learning is suggested. Action learning is based on the premise that learning comes about through reflection followed by action to solve real problems. Action learning fits in the culture of SMEs. Clarke et al. (2006) suggests a specific focus on access to social networks (learning in dialogue with other entrepreneurs and stakeholders), critical reflection (the entrepreneur as reflective practitioner) and context (learning in the context of the company and its market).

The accent on process instead of plan makes strategy more emergent. Traditionally, strategy is about a planned, intended direction. That deliberate strategy provides a company with a direction for the future. When strategy is learning, strategy is developed when an organisation takes actions, that with time turns into a consistent pattern of strategic behaviour, regardless of specific intentions. Mixing deliberate strategy (the 'Porter School') and emergent strategy (the 'Mintzberg School') is worthwhile (Moore, 2011); it helps companies to sketch their course while encouraging the learning process. Companies may pursue umbrella strategies: the broad outline is deliberate, while the details are allowed to emerge within them. In that way, they mix vision and improvisation (Leberecht, 2016).

Next Strategy is the process of creative thinking, learning and adapting the position of the company, close to its business operations and close to customers and stakeholders. Process is another P next to plan, perspective, pattern and position in the dimensions of strategy, as discussed in chapter 3. While the Dutch Scientific Council for Government Policy pleads for enhancing knowledge circulation at the macro level of the economy, Next Strategy seeks a movement of knowledge circulation at micro level. On the basis of the elements raised above, the concept of Next Strategy is visualised in figure 4. The framework is inspired by the lean start-up method (build-measure-learn). It consists of a core (value creation), conditions (purpose, personal characteristics of the entrepreneur, network, and culture) and a strategy process consisting out of five capabilities (explore, set goals, build, measure and align). Together, the elements of the framework determine the strategic capacity of the company: its ability to steer into the future.

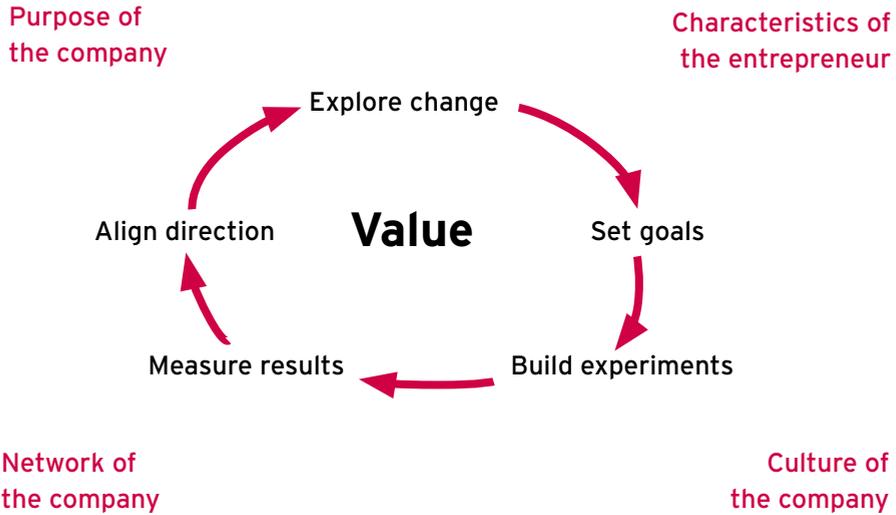


Figure 4 Next Strategy framework

At the core of the framework is the aim to generate value: customer value for clients and financial value for continuity and growth. The strategic question that drives business today is not 'what else can we make?', but 'what else can we do better for our customers?' With the new paradigm of Next Economy, new sources of value can be found in new digital technologies, resource efficiency, new materials, new collaboration with customers and partners, new talents, etcetera. Customer value should be translated in a fair price, leaving sufficient financial value for the company to overcome difficult times and to invest in its business continuously.

At the outer-ring of the framework are four conditions that determine the scope of strategy-making and implementation: purpose of the company, characteristics of the entrepreneur, network, and culture. These elements have a 'sticky' nature and cannot be changed at short-term. They should be taken into account as they can slow down or speed up the strategy process. They read as follows:

- **Purpose.** Purpose centres around the 'why' of the company. A strong purpose resonates with employees and customers in norms and values of the company. It is embodied in the everyday of the organisation, for instance in marketing communication and recruitment. A distinctive and authentic higher goal works as a compass and fuels the strategy process.
- **Characteristics of the entrepreneur.** As concluded in chapter 6, the personal motives of the owner/manager of the company have much influence on the strategy process. Factors are educational level, ambition, experience, and confidence about the future of his company. The case of Milgro shows the impact of the ambition of the owner on the company's development.

- **Network.** This is an inevitable source for information sharing, learning and cooperation. It consists out of various subsets: customers, stakeholders, other companies, governments and knowledge institutes. To organise and activate the network is tough, but definitely pays out. The case on Barge Master shows the importance of network.
- **Culture.** The culture and atmosphere of the company determines the participation of employees in the strategy process. It is about the room for divergent views, the freedom of discussion, the tolerance for failure and the space for experiments. The owner/manager has a strong influence on culture; he can give trust, time, budget and constructive feedback.

Between the conditions of the strategy process and the ultimate objective of strategy are five capabilities that drive the strategy process as such. Those are the buttons of strategic learning and alignment for SMEs. These mechanics can be changed rather swiftly by management. The capabilities are as follows:

- **Explore.** Strategy stands or falls with good diagnosis to explore what is going on outside the company and to prevent inside view. It is about asking questions. Entrepreneurs and managers do talk to others, of course. However, they often fear to go beyond the next transaction and to question business fundamentals. Whereas clients and stakeholders possess relevant information and often like to share their view. People should 'go out of the building' to see the bigger picture (Blank, 2013). This way of information collection does not cost a lot and can be very effective. Curiosity can be fostered by active information collection and collective interpretation. Entrepreneurs and managers should ask their employees questions, breaking with the traditional routine of the all-knowing boss. Customer interviews should be planned regularly. They can serve as an early warning system. Cross-exploration from non-routine sources of information (such as students and members of the golf club) should be sought as well. All employees must be stimulated to explore; sales people should be strongly involved in any case.
- **Set goals.** Setting goals is key to long-term achievement. Goals translate the purpose of the company and the observations from the bigger picture outside into ambitions and results the company aims to accomplish. Goals have a longer term nature, while targets are smaller steps aligned with details and deadlines of larger goals. Setting goals provides the clearest way to measure the success of the company; a deeper understanding of the effects of tactical decisions on the direction of the company can be derived. Goals help to focus efforts and help to engage and direct employees. That is crucial, as employees like to know where the business is going and why. Qualitative goals - stories - might communicate better than pure quantitative expressions of strategy. In line with the difference between exploitation and exploration,

Jacques Pijl suggests that management prioritises present business (run) and future business (change) (Pijl, 2017). That can be made very concrete with two agendas for every management gathering.

- **Build.** To run a company is management of options. Strategy as a process requires experiments to develop new directions (Das, 2014). Experiments are to test and validate good guesses about problems and solutions. Sprints are a way to work on experiments, focused with dedicated time and budget. An example is a new delivery model tested for a selected number of customers. Experiments can serve as a breeding ground for strategic options. By creating strategic options or strategic bets (Stalk and Lyr, 2016), companies gain experience and create possible futures. The case of Dahلمان illustrates options and the necessity to create some 'slack' in the organisation to work on exploration. It goes without saying that every strategy should contain digital initiatives today. Therefore, experiments on digitalisation should be conducted. Customer interface and operational business process are anchors for digitalisation. Mapping options helps to define the scope for a digital agenda and to identify relevant technologies and applications.
- **Measure.** How do you know if your strategy is on track and if experiments do what was expected? The answer is measurement, gut feeling is not enough. New initiatives should be carefully monitored. Measurement starts with understanding how elements of the business influence each other and how activities deliver results. Information should be fully tied to the strategy. The Balanced Score Card can be helpful. Companies should prevent overwhelming data collection, a focus on a set of key metrics is recommended. Those metrics should be more specific than general financial data like turnover or market share. That asks for simplification and filtering relevant and irrelevant business issues. Measurement is important, interpretation and communication as well. To communicate metrics, a strategy rhythm should be planned: when shall progress be discussed and who shall meet?
- **Align.** That is the final step. Turning the result of the strategy process into action to adapt the company's direction: what experiments to be scaled-up, which present markets are to be abandoned, what investments are to be done? There are many reasons in life not to decide: too many uncertainties, not enough time, too many options, too many interests, insufficient information. Strategies should be corner solutions (Rumult, 2011): they emphasise focus over compromise and thus need decision-making. The effectuation of decisions should be carried through in budget and measurement. Priorities should reinforce each other and not conflict. As structure follows strategy, alignment might require a change of organization structure and business process. Finally, employee engagement is crucial once again; any alignment will fail as the organization does not get behind it. That asks for open, constant and fluid communication (De Souza et al., 2017).

The five capabilities encompass the strategy process as a cycle. The cycle can be run as often as necessary and as possible. In the present turbulence, the cycle should be accelerated and get a permanent status. Asking questions, running experiments, creating options and sharing thoughts within and outside the company should become normal business. That definitely holds for exploring, building and monitoring; goal setting and aligning have a different rhythm. Slight adaptations of the strategic direction can be done overnight; fundamental changes take more time. Of course, when monitoring shows that the company is (still) on the right track, goals can be reaffirmed and no alignment is necessary.

When strategy is a process with a close eye on the market and with experiments as major instrument, strategy, marketing and innovation are becoming more interwoven. The triangle between strategy, marketing and innovation is crucial for any company's future. For SMEs it is effective and efficient to bring them together, given restricted management time and limited functional boundaries. The integration helps to prevent innovation to be too technical and marketing to be oriented too much internally or too much focused on the present customer only.

To foster the strategy process, the five capabilities should be enhanced and coordinated. The activities can be efficiently integrated in ongoing business processes, like sales and reporting. Companies should be aware of the influence of the conditions on the strategy process. Those conditions can be adapted as well, but given their fundamental character only gradually. The conditions of the strategy process exist in every company, but often except for a purpose. Many SMEs have not defined a purpose. As the long-term purpose of a company serves as the north star guiding all its strategic actions, it is a prerequisite to start Next Strategy with defining one.

When markets and industries change drastically, not only the strategy of a company but also the conditions might require adjustment. The purpose may be rethought, the network may be changed and the culture may demand revision. Even the entrepreneur may question himself whether his personality optimally fits the new settings or whether adjustment is required - ultimately leading to the question whether he is the right captain to take the vessel on the next voyage.

To summarise, Next Strategy encompasses perspectives derived from design thinking and 'the lean start-up' that can be helpful for SME strategies. It is not the plan, but the process that is central - explore, set goals, build, measure and align. That creates flow and engagement in the company, helping SMEs to effectuate their strategic capacity. The framework outlined in this chapter is merely a hypothesis, to be elaborated and tested by research from the lectorate on Next Strategy.

Next Strategy Scan

The Next Strategy Scan has been developed to assess the strategy capacity of SMEs in the context of the Roadmap Next Economy and to stimulate applied research by business students on this theme. The first results are presented and discussed in this chapter.

The Next Strategy Scan is a first research tool of the lectorate on Next Strategy. The scan is for collecting insights into the strategic capacity of SMEs in the Rotterdam region. Those insights can help companies improve their strategic thinking and to prepare them for the next economy. In addition, the scan is a way to conduct applied research by business students, as students interview entrepreneurs with the help of the scan and analyse the outcomes.

In this chapter, the first edition of the scan is presented together with an initial series of interviews with entrepreneurs on the basis of the scan. While the framework in the previous chapter distinguishes dynamic capabilities for SME strategy and their conditions, the first edition of the scan does not yet differentiate in this and has a slightly different set-up. The scan comprises 40 questions divided into eight themes. All questions have been grounded in literature. Annex 3 presents the complete questionnaire. The eight themes are as follows:

- General information about the company. This is about number of employees, turnover, ownership structure, industry, and orientation on business to business or business to consumer.
- Industry dynamics. On the basis of the Porter Diamond, the dynamics in the industry of the company is assessed: rivalry, power of suppliers, power of customers, substitution, and new entrance.
- Characteristics of the entrepreneur. In SMEs, the entrepreneur has a dominant influence. Thus, his personality, his ideas about the company and his feelings about strategy are important to take into account.
- Value proposition. How the company generates value and earns money, reflects its position in the market. In addition, the more precise the entrepreneur can explain the proposition, the more conscious value creation is as a strategic objective.

- Culture. Strategy is about making decisions, therefore the decision-making culture of a company is relevant. Ingredients are sharing information within the company, orientation on change and opportunity, and decisive actions.
- Strategic resources. What means are available to formulate and implement a strategy? It is about time, participation in networks, reflection with customers, suppliers and other stakeholders, attention for weak signals, room for experiments, and budget for learning.
- Quality of strategy. Does the company have a strategy and, if so, is it effective? The answer to this question is related to whether the company has a distinctive vision, the strategy has been made explicit, the strategy is updated and monitored frequently.
- Alignment with the next economy. Is the company anticipating fundamental changes in economy and society in its strategy? Does the entrepreneur know the Roadmap Next Economy and is the company already involved in projects of the Roadmap?

Between February and May 2017, third-year management students interviewed and analysed seven SMEs. The SMEs were invited by MKB Rotterdam, on request of Rotterdam University of Applied Sciences. Seven teams of four students interviewed one entrepreneur; each interview took about one and half hours. First, a workshop was organised to present the Roadmap Next Economy to the students and to explain the survey. In the explanation, attention was not only paid to the (academic and practical) background of the questions, but also on how to interpret answers of the respondents and how to translate answers into scores. A five-point score was used for the survey (1: very weak, 5: very strong). The quantitative scores were only used as an aid to assess and compare answers, not for benchmarking. The observations and outcomes were discussed at school and reported to the individual companies. The research project was supervised by Joris van Haagen and Arjen van Klink (Van Haagen and Van Klink, 2017).

The profiles of the companies in the Next Strategy Scan are as follows:

- A. Food company. They process and distribute meat, to restaurants, shops and some corporate clients. The success of the company depends heavily on the network of the entrepreneur. He wants to double the turnover in a few years and sell the company afterwards. There is no specific strategy. The company has 10 FTE and has been in business for four years.
- B. Logistics company. On the basis of an internet platform, the company organises international transport using existing carriers and couriers. It has realised substantial growth in the past years and employs 15 FTE. The year of establishment is 2001. They are investing in information technology, adding new services to their platform and exploring new markets.

- C. Event services bureau. This company organises events and hospitality and was established in 2006. Customer relations are long-lasting. The owner is personally involved in all projects, her dedication is crucial for success. The company has 6 employees and hires students as hosts per project. There is no strategy and no time for product development.
- D. Service platform. The company, established four years ago, exploits a digital platform that connects vendors with consumers in different product lines. The company earns from fees of both sides. Up to now, the services are related to housing. The growth strategy of the company is foremost a list of financial goals. The company employs 5 people.
- E. Notary company. The company was started over a century ago. They strive for high quality and personal service. The company counts 30 FTE. The owner is satisfied about the performance, there is no explicit strategy. Every year the management devotes a day on developing a strategic outlook, but the conclusions are not always translated into action.
- F. Bailiff company. The company serves both SMEs as well as a couple of corporate clients. They began in the 1970s. The approach is traditional, with a relatively low level of automation. The company has a written strategy, that is updated every year and shared with all staff. They seek expansion, autonomously and by acquisition. The company employs some 25 FTE.
- G. Marketing agency. The company is active in online marketing and loyalty and was established in 2000. They have a stable customer base and have 6 FTE. They invest in new concepts. The owner is dominant with respect to decision-making. She opts for international expansion, but arguments to do so are not clear and a roadmap to arrive abroad is not yet present.

The survey confirms the general finding that many SMEs do not work on the basis of a distinctive and explicit strategy and that they do not use conventional tools for strategy formulation, implementation and monitoring. All companies score 'weak' to 'moderate' on the quality of strategy and the resources of strategy.

The alignment with the Next Economy is minimal. Quality of the entrepreneur, decision-making culture and value proposition show spread results. Figure 5 summarises the scores of the seven companies.

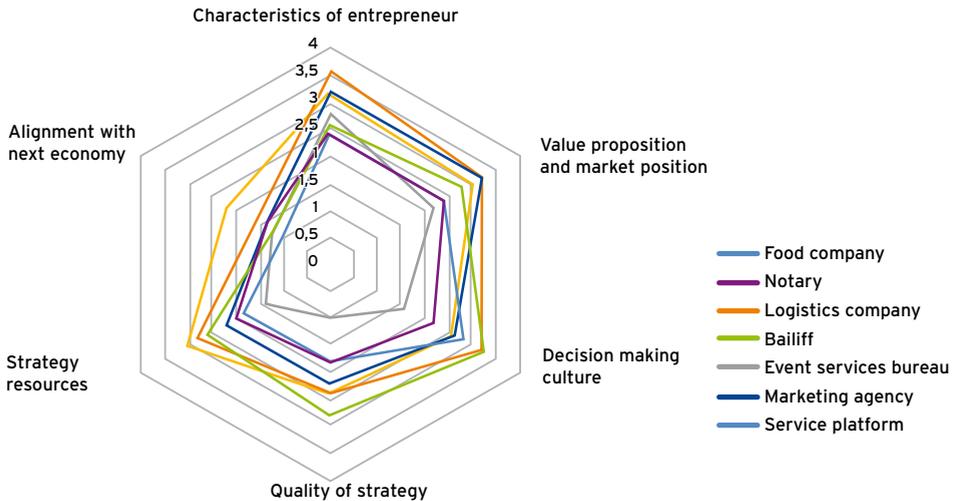


Figure 5 Scores of companies on the Next Strategy scan

On the basis of the individual answers more specific observations can be made:

- Two of the respondents have a written strategy document. Two others do not have a strategy. One is preparing a strategy document and the final two follow an implicit strategy (in the mind of the entrepreneur).
- In the case of a strategy, one entrepreneur says that he can change the strategy if necessary every quarter (and he admits that he often does that). Others have a 'strategy meeting' every year.
- The majority of the respondents act reactively. They lack time and resources for proactive policy. They react swiftly on new demands or when a lagging turnover requires new projects. They improvise and work on intuition.
- In all cases, strategy is foremost a set of financial goals or targets on client relationships. In some cases, the strategy seems to be a moving object: it is frequently 'refreshed' in terms of future goals without changing current activities at all.
- Half of the companies are satisfied with the present level of activity. They do not strive for growth, especially because the entrepreneurs do not want to expand their management scope. The others like to grow, but they do not have a concrete plan to realise this ambition.
- Growth implies serving larger customers in some markets. Some entrepreneurs do not like that. They favor smaller customers, as they operate with more personal touch, less complicated contracts, and better margins. So they have a logic not opting for growth per se.
- The majority of the companies operate with a traditional value proposition, being described in general terms by the entrepreneurs. They manufacture products or sell services. It is foremost about delivering quality and flexibility, in line with the client demand.

- The success of at least half of the companies directly depends on the owner. This dependence is a strength and a weakness at the same time. Some respondents do not seem to recognise this dependency in full.
- All companies offer a high service level. Several respondents never say 'no' to their clients. To be responsive and flexible is the greatest competitive factor for their companies. The effectiveness of this service model is not measured and evaluated, the optimum is unknown.
- All entrepreneurs indicate that knowledge is important. They invest in the knowledge of their employees. It seems, however, that the focus is on operational knowledge (knowledge that is directly applicable in the job) and not so much on new fields of knowledge.
- The bailiff and notary firm operate in a relatively protected market, that gives comfort to the companies. The entrepreneurs admit that disruption can take place nevertheless, especially with respect to digitalisation of basic services. Both companies do not anticipate this threat.
- All companies use key performance indicators (KPIs). The focus is on sales related indicators and financial data. KPIs are regularly discussed with the employees. None of the companies have KPIs monitoring the strategic direction of the company.
- The companies hardly consider their customers as a source of strategic information. There are no regular customer interviews about expectations for the future and ideas for new products. The respondents 'feel' what customers want.
- The level of innovation is relatively low. One company invests in digitalisation, in addition to the present business model. One company works on the basis of the scrum method on innovation and one has a limited portfolio for innovation. There are no experiments conducted.
- In all cases, the companies seem to be 'one-trick ponies' and stick in the product-market combination that laid at the basis of their start. They hardly undertake product and market development.
- The companies do not focus on fundamental developments to create new opportunities. The entrepreneurs feel at a distance of those developments. They do not consider them relevant and they are of the opinion that it is not feasibly to anticipate those trends.
- Only one entrepreneur knows about the Roadmap Next Economy. The others do not and they question whether it is useful to know. They do not see any relationship with the regional transformation paths and do not consider the pathways as business opportunities.
- The entrepreneurs are, generally, curious to know more about strategy. They feel the lack of a strategy as a shortcoming. Only one considers it not to be relevant, his company has 'sufficient success right now'.

On the basis of the last observation, the scan itself makes entrepreneurs think about strategy. That might be not sufficient for stimulating strategic thinking. Therefore, in future editions of the Next Strategy Scan, the scores will be translated into recommendations and practical tools to enhance strategic capacity of the entrepreneurs. Those aids will be derived from the Next Strategy framework and elaborated on in chapter 9 of this book.

Accomplishing the scan has brought considerable learnings to the students. For many of them, it was the first time to discuss strategy with a 'real' entrepreneur. It was not easy for them to take a critical attitude and to produce a well-balanced evaluation of the answers of the entrepreneurs. For that reason, the quantitative scores in figure 4 should be read with some caution. All teams were surprised about the operational attitude of the entrepreneurs and the lack of strategy capacity. They did not only conclude that there was a lack of strategic capacity, but also that the strategy tools they had learnt in class were not well applicable to the companies they visited. That created some struggle, as the e-mail below illustrates.

Dear mister Van Klink,

We (team 1) have had our interview. Our observation is that the company does not have a strategy. They live in the day and react on changes. Of course, anticipating on the basis of a well thought strategy would be preferable. We as students know that strategy is important, also for realising higher sales and profit. However, the entrepreneur is not convinced. He operates without strategy for years, making good money. We have sought evidence in simple language that strategy is important and how it works. We did not succeed unfortunately. Mister Van Haagen advised us to contact you. We have sufficient material to finish the assignment, but we would like to convince the entrepreneur. We are looking forward to hearing from you!

*Best wishes,
Team 1 BKVR 301*

To conclude this chapter, the Next Strategy Scan underlines the general finding that many SMEs operate opportunistically without a strategy. In this first edition of the Next Strategy Scan, it appeared that the future is far away for most of the respondents. They do not have plans for growth and do not align to the Roadmap Next Economy. They rely on their entrepreneurship and their responsiveness instead of a strategy. Apparently with success, but without grasping the future sufficiently.

On January 1, 2013, the Rotterdam Library was split off from the municipality of Rotterdam and was established as a foundation. Still, the municipality is the main source of subsidy. The Rotterdam Library has 16 branches; the Central Library is across from the Markthal. The library is the most visited cultural provision in Rotterdam, with 3.4 million visits per annum and is as such an important public space for the city. It has a collection of 670,000 books and other materials; 2,3 million items are lent out every year. Like in other public libraries in the Netherlands, books can only be borrowed by members. The Rotterdam library has over 100,000 members. It has a staff of 190 FTE. The library has five core functions given by law:

1. To present knowledge and information.
2. To offer possibilities for self-development and education.
3. To stimulate reading and to offer access to literature.
4. To stimulate that citizens meet each other and to organise gatherings for debate.
5. To connect to culture and art.

Like libraries all over the world, the Rotterdam Library suffers from a structural decline of people reading books and borrowing books. People spend their free time on other activities than reading, paper books are replaced by e-books, and traditional relationships (membership) are replaced by ad hoc transaction models. At the same time, local governments are more critical about subsidies and seek effective performance from their partners. In metropolitan areas like Rotterdam the public function of the library - facilitate reading capacities and promote culture among the population - is still valid and still meets with political support. One reason is that the share of low literate people in the city is relatively high (19% compared to 12% for the Netherlands).

The gradual decline of the core activity was a reason to reduce the number of branches of the Rotterdam Library from 26 to 6 during the previous planning period. The rationalisation appeared to have a negative effect: even fewer people visited the library; for these people short distance to the facility appeared to be important. In 2015, the new management, under the direction of Theo Kemperman, changed the distribution policy radically. Instead of closing branches, management strives to expand the network of the library. Kemperman: "In order to do that in a cost-effective manner, we seek colocation and coproduction with other social and cultural organisations in the city, flexibility in rental contracts, collections and activities in the branches tailor-made to local needs and deploy volunteers for simple tasks".

Expansion of the network of branches is one goal in the strategic plan 2017-2020. The plan has been written after consultation with stakeholders, clients and staff members. It has been written in the conventional way: from external analysis to vision, mission and midterm goals. The plan has been approved by the municipality; annual subsidy is made

available on the basis of a set of ten key performance indicators. The mission of the library, laid down in the plan, is to give access to library services to as many inhabitants of Rotterdam as possible and to enable them to participate in Rotterdam's society in a conscious, critical and active way. In addition to the expansion of branches, means to realise this goal are improvement of library services to schools, building knowledge on clients via digital information, positioning the library as an attractive 'third place' and developing new business with existing and new target groups.

A part of the strategy centres around digitalisation. As the Royal Library in The Hague is in the lead as far as providing a platform for e-books on behalf of all public libraries, the Rotterdam library is focussing on digitalisation of internal processes. Customer relationship management will get special attention, in order to make a better connection to the library's members and users.

It appears not to be easy to set the library in motion. The culture of the library is open and constructive, but not yet entrepreneurial. With the decline of borrowed books and members, the business model may come under pressure in the future. However, many employees believe in going concern. The organisation needs more urgency. "When we develop projects, we need more focus on clients - that does not directly imply that the client has to pay, but at least that we know that an event is in the interest of a client", says Kemperman. The new customer centrism also implies that the library strives to focus on value: for whom does it offer an activity, what does it cost and is the beneficial party prepared to pay the bill? A focus on value is not only necessary to enhance own income independent from subsidy, but also to illustrate the value of the library to the community. Theo Kemperman: "This way of thinking is really new for our library and all others. We have to seek new insights and new skills".

In order to change the approach radically, Theo Kemperman has started a discussion on free membership for all citizens for basic services. This freemium model may lower barriers to enter the library for many people and lower administrative costs at the same time. However, the big question is whether there are enough people that would to pay for additional services and whether the membership is indeed the largest barrier for visiting the library. Kemperman: "We are planning an extensive study on customer needs and, even better, on specifications of their future demand together with the Library of Amsterdam that is also interested in the new model".

There is commitment of municipal subsidies until 2020 and the organisation has a positive image among Rotterdam politicians and citizens. Theo Kemperman is confident about the future. "We are in the midst of an information age and 'alternative facts' are increasingly thrown out. We should find a position in providing trustful information and culture that makes you think. Moreover, many entrepreneurs like to work in meeting places, like students do. That offers opportunities as well". The main challenge is to combine exploitation and exploration: running a traditional library and developing a new one together with sufficient urgency for change among the employees.

Research agenda

The previous chapters have sketched the scene. This chapter summarises the research programme of the lectorate Next Strategy for the years to come. Which questions will be focused on and which approaches will be used to find answers?

There is a need to adapt and align concepts of strategy formulation and implementation for SMEs on their path towards the Next Economy. Strategy as a process has elements in common with agile and scrum practices in software development. In comparison to those methods well laid out by many authors, there is an absence of similar specificity in strategic management literature and in business practices (Davidson and Klemme, 2013). Given the hampering growth of established SME, Jansen and Roelofsen (2017) plea for a toolkit for established companies to identify new growth opportunities, develop new business models, and monitor transformation. Applied research can help to fulfil this need.

Therefore, the lectorate on Next Strategy has been established. The aim of the lectorate is threefold. Firstly, the applied research on Next Strategy has to give students relevant and attractive possibilities to learn in practice, to expand their knowledge and to strengthen their research and consultancy skills. Secondly, the research is to help SMEs in the Rotterdam region to enhance their strategic capabilities and to adapt to the Next Economy. Finally, the research outcomes have to contribute to the (scientific) knowledge base on strategy. In that way, the research also gives input to curricula and stimulates knowledge circulation.

The following questions are central in the research programme on Next Strategy:

1. How do SMEs perform with respect to strategy?
2. What strategy process can be effective for SMEs?
3. How can SMEs adapt themselves to the Next Economy?

The first research question is about analysing and evaluating the present strategic capacity of SMEs. With the present strategy capacity of SMEs, and on the basis of theoretical insights, improvements in the strategy process will be developed. This is the second research question. Strategy tools will be introduced to entrepreneurs and their effectiveness in the practical context of SMEs will be studied as well. The third question is about the connection between the Roadmap Next Economy and SME's strategy: what elements of the regional economic strategy can be applied by SMEs and how can they be facilitated to anticipate the Next Economy?

On the basis of literature, instruments will be constructed to come to reliable and useful answers and recommendations for each of the research questions. The Next Strategy Scan as described in the previous chapter is a tool to answer the first question. It will be improved on the basis of the feedback of entrepreneurs and students. The framework of the strategy process designed in chapter 9 will be taken as starting point for answering the second research question. Especially the capabilities 'explore' and 'build' can be facilitated and stimulated by tools. A variety of tools is available from literature and practice, such as focus groups to explore the market and A/B testing for experiments. A selection of tools will be made, matching the conditions of SMEs and their needs. For the last research question, guiding tools and other aids are to be developed as well.

The first two questions are of a general nature, but apply to SMEs in the Rotterdam-The Hague metropolitan region, while the third question has a specific focus on the regional economy of Rotterdam and The Hague. The research will focus on industries with a strong need for transformation, such as freight transport, metal works, food processing, horticulture, and professional services. As small and medium-sized companies are extremely diverse in terms of size, applying focus to the research is necessary to come to valid, reliable and useful outcomes. The orientation will be on the category of established SMEs, with 10 to 100 employees. Established SMEs can profit the most well from improved strategy capacity, because they have reached maturity, have a focus on exploitation and offer substantial employment. With those characteristics, they are vulnerable for disruption. The above-mentioned industries have SMEs that fall into this category.

In addition to an orientation on individual companies and specific industries, the research will pay attention to strategy processes in networks of companies and public-private partnerships in the triple helix of business, government, and education. The reason is that addressing the fundamental shifts in economy and society increasingly demands action at a higher scale than individual organisations. SMEs are at present not well connected to that higher scale of policy. The same holds true for universities in addressing challenges of SMEs in their region. Fitting individual and collective interests and organising collective strategy making is difficult, but increasingly relevant.

A practitioner in science strives to describe, order, register, understand and systematically explain phenomena, as an aim in itself and as a means to influence and predict those phenomena. In the case of this research mission, the way SMEs work on strategy is the object of study. As the research is of an applied nature, the focus will be on 'what and how'. The research will foremost have an inductive character: empirical findings will be used to draw conclusions and derive new theoretical and practical insights. That applies to all the research questions. The second and third question go along with deductive research as well: new tools for strategy-making in general and new ways to align to the Next Economy will be derived from general theoretical knowledge and will be tested in practice among SMEs in the region. The research will be conducted with various research methodologies:

- Questionnaires among entrepreneurs to analyse their strategic capacities and their strategies.
- Literature studies to investigate new thinking on strategy formulation and implementation.
- Interviews to understand the iterative strategy process applied by innovative start-ups.
- Scans to assess the effectiveness and usability of new strategy tools in practice.
- Experiments to test tools for exploration and other capabilities in the strategy process.
- Observations to understand how entrepreneurs come to insights and decisions.
- Group discussions among SMEs about strategy and the Next Economy.

The research will take place at Research Centre Business Innovation of the Rotterdam University of Applied Sciences. The research agenda of the research centre includes three research themes: Circular Economy, Digital Economy and Start-up Economy. The research theme of circular economy centres around how companies can improve resource efficiency, by redesigning products, recycling components, valuing waste and improving cooperation in the supply chain. Digital economy focuses on how companies can digitalise their business process, customer interface and supply chain. The research theme start-up economy contains projects that study how entrepreneurship can be stimulated, how start-ups can successfully grow and how established companies can find new growth paths. There are links between the research on Next Strategy and all three research themes of Research Centre Business Innovation. That holds unequivocally for stimulating business growth in the research line start-up economy, but developing circular approaches and digitalising business processes closely relates to strategy as well.

The research will be organised in close interaction with lecturers of the new Rotterdam Business School. Research projects will be conducted together with them and their students in various courses. The students and lecturers of all disciplines of the Business School can reap the rewards of more effective strategy making:

- In the case of financial management, accountants, administrators and bankers have to adjust the business models they use, as traditional models are under pressure. Moreover, those parties have to advise their clients on strategic issues, such as financing circular supply systems or online business. That requires of finance students to have up-to-date knowledge of strategy.
- In commercial management, new markets are appearing in line with fundamental developments. Those new markets are to be served by new approaches, such as communities of producers and consumers, products-as-a-service, and social media to learn from customers and others. Turning innovation into business is an aspect of strategy that is highly relevant for commerce students.
- In business administration, effective strategy formulation and execution is indisputable. Strategy as a learning tool gives new impulses to the domain of business administration. In addition, human resources management has to find new approaches as the labour market is changing. New organisational and legal frameworks have to be developed to guide networks of companies.
- Finally, the field of international management has to take into account that the fundamental changes have a global but diverse impact, requiring strategies that give room to variety and flexibility such as new combinations of offshoring and nearshoring. Internationalisation will require more attention in strategies of SMEs.

To conduct research, the scope will not be limited to the new Rotterdam Business School. Cooperation with other institutes and research centres of Rotterdam University of Applied Research and other universities will be sought as well. Applied research is only possible in close cooperation with practice. Partners are MKB Rotterdam, VNO-NCW West, trade associations, Chamber of Commerce, Rotterdam municipality, Rotterdam Partners, the Metropolitan region of Rotterdam-The Hague, Erasmus Centre for Entrepreneurship, Innovation Quarter, and the new implementation board of the Roadmap Next Economy. Even more important, contacts with individual SMEs in the region will be actively developed.

In terms of research products, the research programme will deliver tools, cases, books, articles, and training sessions. Tools are to be developed that SMEs can use to formulate and execute their strategies for the Next Economy. In addition, case studies are to be described on how companies struggle with strategy and what

strategic perspectives can be found for specific companies and industries. Learnings are to be published in books, and articles and presented at conferences. In order to assist lecturers to use the new knowledge in their courses and to support entrepreneurs to use the knowledge in practice, trainings and workshops will be organised as well.

In January 2017, a start has been made with the lectorate. As reported in the previous chapter, a group of third-year management students have interviewed seven SMEs using a first edition of the Next Strategy Scan. In another project, three students have analysed the strategy of three small businesses; the students concluded that opportunism overshadows strategy. A third project was a scenario-analysis for the *Ondernemersklankbord* (OKB). In a pressure cooker of six hours, eight management students collected a long list of trends and issues relevant for OKB and its clients among small businesses in the Netherlands. The trends and issues were translated into four scenarios for the future, that OKB is able to use for its new strategy. Finally, a research project has been started together with five container trucking companies in the Rotterdam port to develop scenarios and sketch roadmaps for their future. The research is conducted by students of industrial management & engineering.

The preliminary activities of the lectorate on Next Strategy are signalling interesting possibilities, for education, practice and knowledge development. With numerous students and SMEs in Rotterdam, there is much potential. When elaborated and organised further, the lectorate can generate valuable impact on students and entrepreneurs and help them grow towards the future.

To summarise, the research programme on Next Strategy is to challenge students and lecturers putting companies into strategic perspective and to develop knowledge on new strategy instruments for SMEs. Strategy should not be an academic exercise, it should be part of doing business. Within the research agenda, explicit attention will be paid to the way SMEs in the Rotterdam region can adapt to the Next Economy.

Acknowledgement

The 'bigger picture' has been my orientation for long. My interest in strategy grew during my time as a student and was stimulated by my work at Erasmus University Rotterdam. There I learnt how senior researchers put questions into a strategic perspective. In my job as industry analyst for Rabobank International, I often had to review strategies of clients and strategic issues in industries. At Rabobank Rotterdam I worked as strategic council for the board of directors and for relationship management. The former Chairman of the Board once said 'I have around 600 employees working here and one who may look out the window'. I was that one; it was really rewarding work. I thank my previous managers - Leo van den Berg, Peter Spitters and Coert Beerman - for entrusting me with autonomy and responsibility in my work.

In my work I have shared ideas about trends, strategy and innovation with numerous managers and entrepreneurs in order to assess business plans of many different companies. I observed that only a few companies followed a distinctive and compelling strategy. Many start-ups could not state more than 'we are going to offer good quality for a low price'. Many strategies were too general and were missing the real challenge those entrepreneurs should have been addressing. All those experiences stressed my conviction that strategy is undervalued these days and that it is time to pay more attention to it.

With my appointment as Programme Director of Research Centre Business Innovation in May 2016, I was given the opportunity to combine that job with being a lector. For me, it was clear that the research mission had to be on strategy, especially the way in which SMEs can be assisted in developing effective strategies. One reason was my background and interest in the topic. Another my belief that strategy can work as a linking pin to other disciplines, in the case of the research centre to my colleagues working on other fields and to the lecturers of the school. Finally, and last but not least, my belief that strategy is of the utmost importance for organisations today and that it is therefore relevant for, at least, all business and management students.

I express my gratitude to the Executive Board of the Rotterdam University of Applied Sciences for appointing me as lector with the research mission on Next Strategy. Besides, I thank my colleagues of the research centre for the warm

welcome they have given me and for the willingness to work with my way of 'management'. I also thank my colleagues of the teaching institutes to discover the synergy between education and research and to start research on strategy together. Finally, my thanks to the students with whom I have worked together in the last year; your curiosity and commitment gave me a lot of inspiration.

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The private life of a strategist is not very strategic most of the times, fortunately! It's about shopping, cooking, cleaning, gardening, reading, and many other activities. Together with my two children, I run a busy household, but it is definitely our stable home. I thank Max and Vera for their love, interest, cosiness and flexibility. Last but not least, my gratitude is for Marlies, with her subtle balance between expressing interest in my work and asking for my time and attention. There is indeed much more to life than work. To take care of those beloved is the best strategy of all.

References

- AWTI (2015), MKB en Hogescholen, Adviesraad voor Wetenschap, Technologie en Innovatie, Den Haag
- Barton, D., J. Manyika, T. Koller, R. Palter, J. Godsall, and J. Zoffer (2017), Measuring the economic impact of short-termism, McKinsey Global Institute, New York, February
- Barrows, E. (2014), What is strategy execution?, American Management Association, June
- Bauwen, G.A. (2014), Grootmeesters in innovatie - dynamisch innovatief ondernemen, Rotterdam University Press, Rotterdam
- Bauwen, G.A., D. Meurs, en A. Spruijt (2016), Smart industry in Rotterdam, Kenniscentrum Business Innovation, Hogeschool Rotterdam, juni
- Bauwen, G.A. (2016), HEI innovate country review on the Netherlands, European Commission/OECD, Brussels/Paris, November
- Blank, S. (2013), Why the lean start-up changes everything, Harvard Business Review, volume 91, number 5, May, pp. 64-72
- Blom, P. (2017), De opstand van de natuur - een geschiedenis van de kleine ijstijd en het ontstaan van het moderne Europa, De Bezige Bij, Amsterdam
- Braam, A.M, S. Hardeman, T. Kiseleva, en R. van Elk (2017), De regionale impact van universiteiten - een literatuuroverzicht, Centraal Planbureau, Den Haag
- Bregman, P. (2017), Execution is a people problem, not a strategy problem, Harvard Business Review Digital Articles, April 1
- Brown, T., and R. Martin (2015), Design for action, Harvard Business Review, Volume 93, number 7, September, pp. 56-64
- Burke, A, A. van Stel and R. Thurik (2016), testing the validity of blue ocean strategy versus competitive strategy: an analysis of the retail industry, International Review of Entrepreneurship, volume 14, number 2, pp. 123-146
- Buchanan, R. (1992), Wicked problems in design thinking, Design Issues, volume 8, number 2, pp. 5-21
- Candy, V., and J. Gordon (2011), The historical development of strategic planning theories, International journal of Management and Information Systems, volume 15, number 4, pp. 71-89
- Cartisi, C., J. Hemerling, J. Kilmann, D. Meese and D. Shipman (2017), Purpose with the power to transform your organisation, Boston Consulting Group/Bright House, Boston
- Case, S. (2016), The third wave - an entrepreneurial view on the future, Simon and Schuster, New York

- CBS (2017), Old-age dependency, Statline, Centraal Bureau voor de Statistiek, Heerlen (www.statline.cbs.nl)
- Clarke, J., R. Thorpe, L. Anderson, and J. Gold (2006), It's all action, it's all learning - action learning in SMEs. *Journal of European Industrial Training*, volume 30, number 6, pp. 441-455
- Clausewitz, C. von (1832), *Vom Kriege*, Dümmlers, Berlin
- Das, K. (2014), Strategy versus design thinking - underthinking is as just bad as overthinking, *Rotman Management Magazine*, Rotman School of Management, University of Toronto, Toronto, Fall
- Day, G.S., and C. Moorman (2010), *Strategy from the outside-in - profiting from customer value*, McGraw Hill, New York
- Dawar, N. (2013), When marketing is strategy, *Harvard Business Review*, volume 91, number 12, December, pp. 100-108
- Davidson, S., and L. Klemme (2013), How strategic management processes can imitate agile and scrum, December 13, www.scrumalliance.org
- Dijsselbloem, J. (2016), Nederland kan gids voor lange termijn zijn, *Het Financieele Dagblad*, 19 februari
- Drucker, P.F. (2008), *The essential Drucker: the best of sixty years of Peter's Drucker's essential writings on management*, Collins Business Essentials, New York
- DTG (2017), *MKB Online Monitor*, DTG/MKB Nederland/Kantar TNS, Amsterdam
- Ester, P., and A. Maas (2016), *Silicon Valley: Planet Startup*, Amsterdam University Press, Amsterdam
- EU (2010), *European SME's and the environment in the European Union*, Brussels, November
- EU (2015), *Supporting the internationalisation of SMEs*, Brussels, March
- EU (2016), *Annual report on European SMEs 2015/2016*, Brussels, November
- EY (2016), *The upside of disruption - megatrends shaping 2016 and beyond*, EY, London
- EZ (2016), *Staat van het MKB: jaarbericht 2016*, Ministerie van Economische Zaken, Den Haag, november
- Florida, R. (2011), *The rise of the creative class*, Basic Books, New York
- Gibcus, R., and R.G.M. Kemp (2003), *Strategy and small firm performance*, Economisch Instituut voor het Midden- en Kleinbedrijf (EIM), Zoetermeer
- Gordon, R.J. (2015), *The rise and fall of American growth: the US standard of living since the civil war*, Princeton University Press, New Jersey
- Govindarajan, V., and H. Faber (2016), What Franklin D. Roosevelt knew about managing fear in times of change, *Harvard Business Review Digital Articles*, May 4
- Grant, R.M. (2016), *Contemporary strategic analysis*, Wiley & Sons, New York
- Haagen van, J., en H.A. van Klink (2017), *Uitkomsten Next Strategy scan*, Hogeschool Rotterdam
- Hajer, M. (2017), *Universiteit: geef de burger een droom*, NRC Handelsblad, 22 april
- Hinssen, P. (2017), *The day after tomorrow - hoe overleven in tijden van radicale innovatie?*, Van Duuren Media, Culemborg,

- Hoffman, D.L., D. Bechtold, A. Murphy, and J. Snyman (2016), Strategic planning and field based consulting, *Small Business Institute Journal*, volume 12, number 1, pp. 1-9
- Hoverstadt, P. (2009), *The fractal organisation: creating sustainable organisations with the viable system model*, Wiley & Sons, New York
- IFC (2012), *IFC and small and medium sized enterprises*, International Finance Corporation, Washington DC
- IIF (2017), *Global debt monitor*, International Institute of Finance, Washington DC, June
- ING Bank (2015), *MKB 2025 - naar een sterker MKB*, Amsterdam, januari
- ING Bank (2016), *Familiebedrijf in transitie*, Amsterdam, november
- Jannek, K., and K. Burmeister (2008), Organisational foresight in small and medium-sized enterprises, *Foresight*, number 101, pp. 1-4
- Jansen, J. and O. Roelofsen (2017), *Jaarevent NL Groeit 2017 - tweedeling binnen Nederlandse bedrijven neemt toe: gezond groeien en strategisch vernieuwen als antwoord*, Erasmus Universiteit Rotterdam & McKinsey & Company, januari
- Kaplan, R.S., and D.P. Norton (2004), *Strategy maps - converting intangible assets into tangible outcomes*, Harvard Business School Publishing Corporation, Boston
- KfW (2016), *KfW SME Panel 2016*, KfW Group, Frankfurt am Main, October
- Kim, W.C., and R. Mauborgne (2013), *Blue ocean strategy*, Harvard Business Review Press, Boston
- Klink van, H.A. (1995), *Towards the borderless mainport Rotterdam*, Thesis Publishers, Amsterdam
- Kok, R., T. Span and W. Verhoeven (2015), *Het MKB anders bekeken - een nieuwe typologie van het MKB in Rotterdam*, Panteia, december
- Kolko, J. (2015), Design thinking comes of age, *Harvard Business Review*, volume 93, number 9, pp. 66-71
- Kotler, P., and J.A. Caslione (2009), *Chaos - the business of managing and marketing in the age of turbulence*, Amacom, New York
- Kraus, S., B.S. Reiche, and C.H. Reschke (2007), *Implications of strategic planning in SMEs for international entrepreneurship research and practice*, IESE Business School, Barcelona
- Lavie, D., Stettner, U., and Tushman, M. L. (2010). Exploration and exploitation within and across organizations. *Academy of Management Annals*, volume 4, number 1, pp. 109-155.
- Leberecht, T. (2016), *Make your strategy more agile*, *Business Mirror*, November 6
- Manshanden, W.J.J., and O. Koops (2017), *Inzetten op verbreding van economische structuur*, *Economische Verkenning Rotterdam 2017*, www.evr2017.nl
- Martin, R.L (2009), *The design of business - why design thinking is the new competitive advantage*, Harvard Business Press, Boston
- Martin, R.L. (2014), *Strategy is iterative prototyping*, *Harvard Business Review Digital Articles*, June 6
- McGonical, J. (2017), *Our puny human brains are terrible at thinking about the future*, *Slade Magazine*, April 12, www.slade.com

- Miles, R.E., and C. Snow (1978), *Organizational strategy, structure, and process*, McGraw-Hill, New York
- Mintzberg, H. (1994), The fall and rise of strategic planning, *Harvard Business Review*, volume, 76, number 1, pp. 107-115
- Mintzberg H. (2003), *Strategy Process: Concepts, Contexts, Cases*, Prentice Hall, Harlow
- Moore, K. (2011), Porter or Mintzberg: whose view of strategy is the most relevant today?, *Forbes*, Volume 94, number 3, March 28
- Nyuur, R.B. (2015), Unlocking the potential barriers on SME's uptake of scenario planning, *Journal of Strategy and Management*, volume 8, number 2, pp. 139-154
- Nagji, B., and G. Tuff (2012), *Managing your innovation portfolio*, Harvard Business Review, volume 90, number 5, pp. 66-74
- O'Donovan, D., and N. Rimland Flower (2013), The strategic plan is dead - long live strategy, *Stanford Social Innovation Review*, January 10, www.ssir.org
- O'Reilly, C. A., & Tushman, M. L. (2013), Organizational ambidexterity: Past, present, and future, *The Academy of Management Perspectives*, volume 27, number 4, pp. 324-338
- OECD (2016), *OECD territorial reviews: the Metropolitan region of Rotterdam-The Hague*, The Netherlands, OECD, Paris, February
- OECD (2017), *Enhancing the contributions of SMEs in a global and digitalised economy*, OECD, Paris, June
- Oldenburg, R. (1991), *The Great Good Place*, Marlowe & Company, New York
- Ott, J., K. Herling, and C. Karaolis (2013), *Restoring finance and growth to Europe's SMEs*, Bain & Company, Boston, October
- Peters, T. (1988), *Thriving on chaos - handbook for a management revolution*, Pan Books, London
- Pietersen, W. (2010), Strategy as learning, *The European Business Review*, July-August, pp. 24-27
- Pijl, J. (2016), *Strategie = executie*, Vakmedianet, Alphen aan den Rijn
- PoR (2011), *Port Compass - Port Vision 2030*, Rotterdam Port Authority, Rotterdam
- Porter, M.E. (1996), What is strategy, *Harvard Business Review*, volume 74, number 6, pp. 61-78
- Porter, M.E., and M.R. Kramer, (2011), The big idea: creating shared value, *Harvard Business Review*, volume 89, number 12, pp. 62-77
- Porter, M.E., and J.E. Heppelmann (2015), How smart connected products are transforming companies, *Harvard Business Review*, volume 93, number 10, pp. 96-114
- Quinn, J. (2016), UK blue-chip firms told to stop reporting every quarter, *Daily Telegraphy*, March 20
- Rabobank (2014a), *Cijfers en Trends - de hybride consument*, Rabobank Nederland, Utrecht
- Rabobank (2014b), *MKB Regio Top 40*, Rabobank Nederland, Utrecht

- Raby, S. (2015), What is Good Business Strategy? The case of SMEs, Kent Business School, Canterbury, October
- Raymond, L., and J. St-Pierre (2004), Customer dependency in manufacturing SMEs: implications for R&D and performance, *Journal of Small Business and Enterprise Development*, volume 11, number 1, pp. 23-33
- Reeves, M., and M.S. Deimler (2009), New bases of competitive advantage - the adaptive imperative, BCG Perspectives, Boston Consulting Group, Boston
- Ries, E. (2011), *The lean start-up - How constant innovation creates radically successful businesses*, Penguin Books, New York
- RNE (2016), *Roadmap Next Economy*, Metropoolregio Rotterdam-Den Haag, november
- Rifkin, J. (2011), *The Third Industrial Revolution: How lateral power is transforming energy, the economy, and the world*, Palgrave MacMillan, New York
- Rotmans, J. (2012), *In het oog van de orkaan*, Aeneas, 's-Hertogenbosch
- Rosenbusch N., A. Rauch and A. Bausch (2013), The mediating role of entrepreneurial orientation in the task environment-performance relationship: a meta-analysis, *Journal of Management*, volume 39, number 3, pp. 633-659
- Ruis, A. (2012), *Vergrijzing MKB ondernemers zet prestaties onder druk*, Economisch Instituut voor het Midden- en Kleinbedrijf (EIM), Zoetermeer, september
- Ruijter de, P. (2011), *Klaar om te wenden - handboek voor de strateeg*, Scriptum, Schiedam
- Rumelt, R.R. (2011), *Good strategy, bad strategy - the difference and why it matters*, Profile Books, London
- Schumpeter, J.A. (1942), *Capitalism, socialism and democracy*, third edition, George Allan and Unwin, London
- Samuels, A., (2016), *How to stop short-term thinking at America's companies*, The Atlantic, December 30
- Sexton, D.L., and P.V. Auken (1985), A longitudinal study of small business strategic planning, *Journal of small business management*, volume 23, number 1, January, pp. 7-15
- Sorgdrager, W., en F. Tabarki (2017), *Een adaptieve hogeschool - advies voor Hogeschool Rotterdam*, Hogeschool Rotterdam, juli
- Souza de, I., R. Kauffeld, and D. van Oss (2017), *10 Principles of strategy through execution*, *Strategy+Business*, issue 86, Spring 2017, Reprint 17109
- Span T., R. Kok, P. Fris (2015), *Nieuwe bedrijfstypologie MKB: kern- en performance-indicatoren*, Panteia, Zoetermeer, oktober
- SRA (2017), *Branches in zicht*, SRA / BIZ Accountants, Nieuwegein, januari
- Straalen van, M. (2015), *Kansrijk! De groeiagenda voor ondernemerschap in het MKB, VNO-NCW en MKB Nederland*, Den Haag, februari
- Steiner, G.A. (1979), *Strategic planning - what every manager should know*, Free Press, New York
- Synpact (2015), *Nationaal ondernemers onderzoek*, Synpact, Amsterdam, 26 november

- Stalk, G, and S. Iyr (2016), How to hedge your strategic bets, BCG Perspectives, Boston Consulting Group, Boston
- Taleb, N.N. (2007), Black swans - the impact of the highly improbable, Penguin Books, London
- Taylor, F.W. (1911), The principles of scientific management, Harper and Brothers, New York
- Teece, D.J. (1997), G. Pisano and A. Shuen, Dynamic capabilities and strategic management, *Strategic Management Journal*, volume 18, number 7, pp. 509-533
- Tse, T., and M. Esposito (2014), Business schools have lost a staggering amount of credibility in the business community, London School of Economics, Impact on social sciences blog, May 13
- Varoufakis, Y. (2017), Adults in the room - my battle with Europe's deep establishment, Penguin Random House, London
- Verheijden, M. (2017), Jan Rotmans: 'De kern richting een transitie van de samenleving en economie ligt bij het onderwijs', 17 augustus, www.bloovi.nl
- Ursrey, L. (2014), Why design thinking should be at the core of your business strategy development, *Forbes*, volume 97, number 6, June, 4
- Wang, C., E. Walker, J. Redmond (2007), Explaining the lack of strategic planning in SMEs: the importance of owner motivation, *International journal of organisational behaviour*, volume 12, number 1, pp. 1-16
- WBCSD (2017), Circular economy and environmental priorities for business, World Business Council for Sustainable Development, Geneva, May
- Wiggins, R.R., and T.W. Ruefli (2005), Schumpeter's ghost: is hyper competition making the best of times shorter?, *Strategic Management Journal*, volume 26, number 10, pp. 887-911
- Werkgroep Nieuwe Bedrijvigheid, Eindadvies, Hogeschool Rotterdam, 23 mei 2017
- WRR (2013), Naar een lerende economie - investeren in het verdienvermogen van Nederland, R090, Wetenschappelijke Raad voor het Regeringsbeleid/ Amsterdam University Press, Den Haag/Amsterdam
- Zurich (2016), Fourth global SME survey, Zurich Insurance Group, Zurich

Annex 1

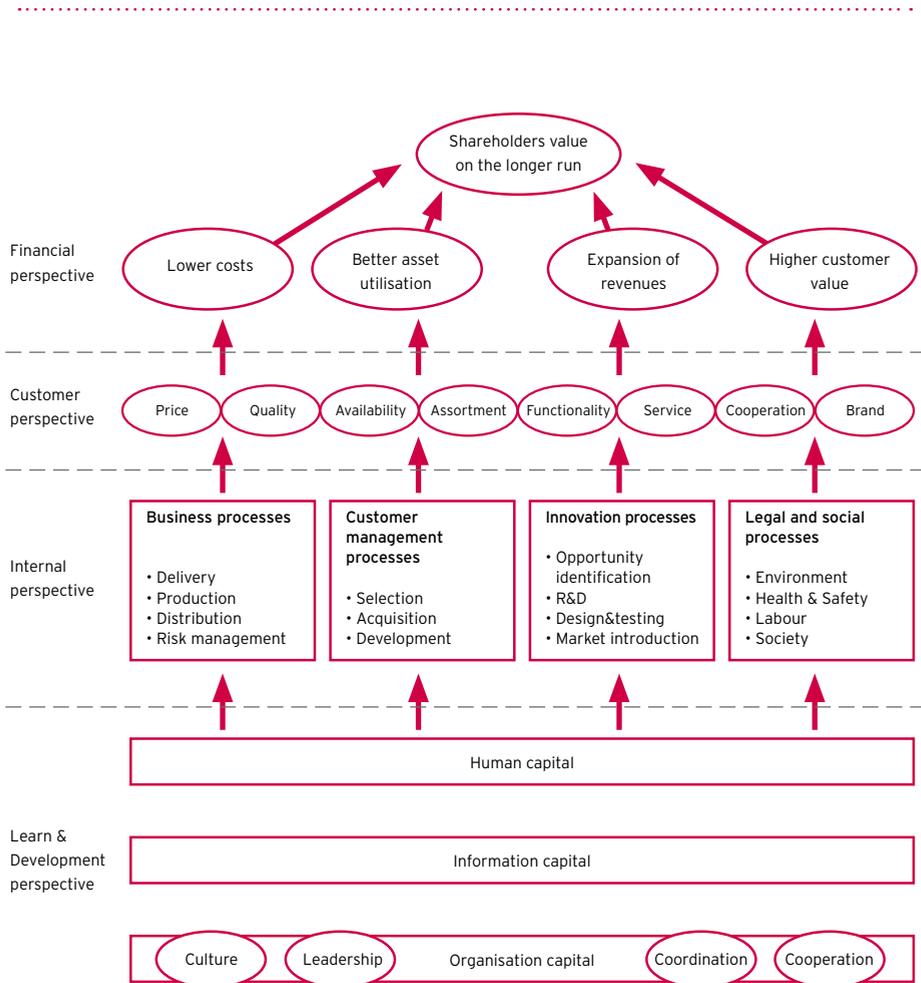
Strategic planning models

- Product-market growth strategies. In 1957, Igor Ansoff described four product-market growth strategies: market penetration, market development, product development and diversification. It is a planning tool to devise strategies for future growth.
- SWOT analysis. The SWOT analysis can serve as a basis for any strategic initiative. It helps to identify areas for decisions in terms of strengths, weaknesses, opportunities and threats. The SWOT method was firstly presented in a book of Edmund Learned in 1969.
- Growth matrix. A team of Boston Consultancy Group developed the Growth Matrix in 1973. The tool assists companies to optimise product-portfolios, on the basis of market growth and market share of the company. Four positions are identified: stars, cash cows, question marks and dogs.
- Business level strategies. Miles and Snow (1978) plotted companies along a continuum depending upon action/reaction to the environment and the intensity of strategic intent. Four strategic orientations are defined: prospector, defender, analyser, and reactor.
- Organisational configurations. Henry Mintzberg (1979) synthesised organisational design literature into five ideal configurations to understand and design organisations: simple structure, machine bureaucracy, divisional form, professional bureaucracy and adhocracy.
- Generic strategies for competitive advantage. Michael Porter published in 1980 his strategies for competitive advantage of companies (latter, the theory was also applied for industries and regions). Companies can opt for low cost strategy, differentiation strategy or focus strategy.
- 7 S model. McKinsey introduced "the seven elements of strategic fit" or the 7 S model in 1981. Strategy, structure, systems, style, staff, shared values, and skills should fit with one another in order to operate a company as efficient and effective as possible in line with its strategy.
- Five forces model. With the help of this model, the attractiveness of industries (profitable growth) can be determined. The forces are power of suppliers, new entrants, substitution, competition and power of customers. The model was introduced by Michael Porter in 1983.

- Core competences. Together with Gary Hamel, C.K. Prahalad developed in 1990 the resource-based view on the firm by stressing the relevance of core competences. Core competences are unique skills, routines and knowledge at the heart of value creation and competitive advantage.
- Value disciplines. Fred Wiersema and Michael Treacy (1993) define three value disciplines that can serve as a basis for strategy: operational excellence (the aim is price leadership), customer intimacy (customer loyalty) and product leadership (innovation).
- Business model canvas. In 2004, Alexander Osterwalder developed the business model canvas. It is a template to develop new or document existing business models. It helps firms to align their activities by presenting a holistic view on relevant factors and illustrating potential trade-offs.
- Strategy Canvas. The method was developed by Blue Ocean Strategy authors Kim and Mauborgne in 2005. The canvas is a line graph that plots product attributes against offers of competitors. With the graph a company can choose a unique combination of factors and create a blue ocean.

Annex 2

Strategy map



Annex 3

Next Strategy Scan

General company characteristics

1. What is the year of establishment of the company?
2. Is it a family business and is the general manager owner?
3. How many employees has the company?
4. What is the industry of the company?
5. Is the company active in B2C or/and B2B markets?

Industry dynamics

6. There are new entrants in the industry
7. There are substitutes for the products of the industry
8. Suppliers have a lot of bargaining power
9. Customers have a lot of bargaining power
10. Competition in the industry is intense

Characteristics of the entrepreneur

11. The entrepreneur has a strong need for achievement (ambitious)
12. The entrepreneur is pro-active
13. The entrepreneur has interactive learning capability
14. The entrepreneur is confident about the company's future
15. He has all competences and knowledge to steer the company into a successful future

Value proposition and market position

16. The company has unique resources, competences and knowledge
17. The company has a distinctive value proposition
18. The company is able sell its proposition against an attractive gross margin
19. The company has a broad customer portfolio and long-lasting customer relationships
20. The company has a strong growth of annual turnover (> 10%) from new business/new customers

Decision-making culture

21. Weak signals and good feeling play a major role in the strategy process
22. Decision-making is not reserved for management only, but takes broad internal support
23. The management of the company favours change
24. Strategy is a emergent process
25. Decision-making is opportunity driven

Quality of strategy

26. The company has an appealing vision for the future and a clear strategy with ambitious goals
27. The strategy is actual and is updated frequently
28. The strategy is known among employees and supported by them
29. The strategy is translated into a change portfolio with a couple of projects and experiments
30. The strategic goals are translated into key performance indicators, that are frequently monitored

Strategic capacity

31. The management of the company pays structural time to strategy
32. The management reflects on market developments with customers, suppliers and stakeholders
33. The management has means to learn and innovate
34. The company participates in networks of other companies and knowledge institutes
35. There is time and budget for experiments

Alignment with the Next Economy

36. The management considers the Next Economy to be relevant for the company
37. The strategy of the company takes the Next Economy as starting point
38. The company invests in renewal and innovation aimed for the Next Economy
39. The company works in the 'triple helix' on projects aimed for the Next Economy
40. The company participates in a project of the Roadmap Next Economy

Annex 4

Employment structure

Rotterdam and Metropolitan Region

	City of Rotterdam			Metropolitan region Rotterdam - The Hague		
	2000	2015*	change 2000-2015	2000	2015*	change 2000-2015
Manufacturing and energy	33.484	29.506	-11,9%	111.833	92.580	-17,2%
Construction	16.434	11.804	-28,2%	54.677	47.553	-13,0%
Trade and retail	45.895	42.657	-6,9%	165.304	163.728	-1,0%
Transport	36.333	31.005	-14,7%	67.656	59.642	-11,8%
Hotels, restaurants and cafes	10.198	11.777	15,5%	32.230	37.846	17,4%
Information sector	9.865	8.023	-18,7%	39.733	37.709	-5,1%
Financial services	19.168	13.380	-30,2%	41.859	29.773	-28,9%
Business services	57.113	48.432	-15,2%	165.528	168.717	1,9%
Local government**	15.756	19.824	25,8%	86.441	87.799	1,6%
Education	22.279	25.259	13,4%	59.438	69.813	17,5%
Health care	42.478	57.037	34,3%	119.488	157.737	32,0%
Other services	9.521	9.640	1,2%	42.614	50.219	17,8%
Total	318.524	308.344	-3,2%	986.801	1.003.116	1,7%

Number of jobs

Source: Bedrijvenregister Zuid-Holland

* Provisional figures

** Changed definition for activities of Rotterdam municipality

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Arjen van Klink

Next Strategy

How SMEs can grow into the future

ISBN 90-5179-971-3



According to some, developing a strategy results in producing a paper report, that does not fit the nature of SMEs. They are used to adapting pragmatically to changes. However, shifts in the economy and society are now so great that neither plans nor pragmatism is sufficient to survive. Many SMEs show limited growth and they are not in touch with new developments. Disruption is looming with a potential negative impact on both employment and welfare, as SMEs are a substantial part of the economy. Traditional concepts and models for strategic management do not apply to SMEs. What are the alternatives that will stimulate strategy among SMEs? This is the central question for the lectorate Next Strategy at Rotterdam University of Applied Sciences. The lectorate will stimulate applied research with lecturers and students together with entrepreneurs and managers.

This book sets the scene for the lectorate Next Strategy. The book describes the criticism on traditional strategic management. It elaborates on the lack of strategy among SMEs and the subsequent stagnation of SMEs. The book sketches a new direction of strategy for SMEs: companies should develop a strategy process on the basis of creative thinking and learning, close to their business operations. In stimulating strategy among SMEs, universities of applied sciences can have much impact given their traditional, strong relationship with the professional practice. The Rotterdam University of Applied Sciences has the opportunity to promote new ways of strategy in its education and research, contributing to the implementation of the Roadmap Next Economy towards the business community in the region.

Dr Arjen van Klink is Programme Director of Research Centre Business Innovation at the Rotterdam University of Applied Sciences. He started his lectorate Next Strategy in January 2017. Arjen van Klink has long working experience in the field of strategy and innovation, bridging theory and practice, developed during former positions in education, research and banking. The lectorate is part of Research Centre Business Innovation.

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