Evolution of Strategies and Dynamic Capabilities in the Auxiliary Private Education Sector During the Coronavirus Pandemic

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Preface

This master's thesis was written during the fourth semester of MSc. Entrepreneurial Engineering study program at the Aalborg University. It conveys the research process, collection and analysis of data on how small and medium enterprises in the auxiliary private education sector have evolved their strategies and Dynamic Capabilities throughout the Coronavirus pandemic.

Using this opportunity I would like to express sincere gratitude to my supervisor Yariv Taran who provided support and posed key questions throughout the process of writing this thesis which allowed me to gain crucial insights on what was the most important in this academic pursuit.

Moreover, I would like to sincerely thank interviewees that agreed to donate their time and participate in conducted interviews which were crucial to constructing business cases in this master's thesis.

Executive Summary

Coronavirus pandemic has caught the world unprepared and businesses throughout the globe were left to scramble for solutions as they witnessed customer behaviour becoming significantly more conservative. This rapid transformation posed many opportunities to study multiple theories and frameworks presented in business literature and observe how they are manifested in real-life situations during the period of the health crisis. Therefore, the subject of understanding how Small and Medium Enterprises (SMEs) have developed their strategies and gained learning as well as transformational capabilities was deemed highly relevant and worth investigating.

To reflect how SMEs have dealt with the challenges brought by the pandemic it was decided to center this master's thesis around introspective and retrospective analysis of qualitative data collected during in-depth semi-structured interviews as well as various types of secondary research. Based on initially collected and analysed information the final research question of this master's thesis was set: How small and medium enterprises in the auxiliary private education sector have evolved their strategies and Dynamic Capabilities throughout the Coronavirus pandemic and what can be learnt from it?

To understand multiple perspectives and put together a more detailed outlook on how businesses have transformed during the pandemic it was chosen to conduct comparative multiple case study with main focus on discovering how SMEs in the auxiliary private education sector have developed their Dynamic Capabilities, formed strategies under uncertainty and demonstrated capabilities of foresight as well as risks and crisis management.

As the research was mostly focused on understanding each case by conducting in-depth interviews and analyzing them rather than developing a theory - content analysis was chosen as the primary approach on data analysis. While analyzing collected data it was focused on noticing patterns within multiple businesses as well as understanding how real-life strategies reflect theoretical frameworks about Dynamic Capabilities and operating under uncertainty.

To pursue answering this question three semi-structured interviews were conducted with auxiliary private education enterprises based in Lithuania. To keep consistency of data collection, analysis and comparison, a set of prerequisites was established. By doing so it was assured that the cases were exposed to similar dilemmas and market conditions in order to observe and analyse most pronounced processes of customer behavior transformation and business alignment to it.

Gained information during conducted interviews was condensed into cases in order to provide a clear overview and present what were each business' performed actions and executed strategies. After primary analysis of each case was done, these cases were compared and analyzed within a broader scope of the whole sector. To make parallels of similarities and differences that these enterprises demonstrated it was aimed to provide equal amount of time and significance for each analysed enterprise.

Following these analyses, the Discussion section was put together to use previously made findings and interpret them in a broader context. This way it was sought to utilize data gathered not only to provide analysis based on chosen theories and frameworks, but also to present broader insights about the sector of auxiliary private education and its development. For this purpose

three main topics were covered: 1) External factors' influence on SMEs in auxiliary private education and their response to these circumstances, 2) Links of produced cases with covered theory and how well it applies in the context of global health crisis, and 3) What trends in the auxiliary private education sector could be expected in the near future?

Based on all collected information and analysis performed it was concluded that interviewed businesses in the auxiliary private education sector changed their strategies by shifting their approach of providing educational services from direct (physical) to remote (digital). This required enterprises to further develop their Dynamic Capabilities and adapt to existing conditions by proactively gauging rapidly shifting customer needs. It was learnt that businesses enjoying well developed competitive advantage can be challenged greatly and even possessing attributes of Dynamic Capabilities cannot provide complete immunity in the environment where customers' behavior is shifting rapidly and unpredictably. Finally, strategic parts of Risk and Crisis Management were mostly approached in an Ad Hoc manner and bears the question if proper Foresight activities could have prepared these businesses for the health crisis and softened its impact or did the Coronavirus crisis was the unforeseen factor that unpredictably reshaped the sector enabling digital transformation which has formed a new path of how auxiliary private education will evolve in the future.

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1 Introduction

Coronavirus pandemic has caught the world unprepared and businesses throughout the globe were left to scramble for solutions. Enterprises in almost all sectors throughout the planet had to witness customer behaviour becoming significantly more conservative while seeking to adjust to rapidly changing restrictions. This situation left almost no business unimpacted as a significant drop in demand made it necessary to reduce capacity or completely suspend all performed activities.

Global health crisis has created a unique low probability - high impact event where some businesses were not capable to change their business models enough to survive the pandemic whereas others provided persevering value offers that enabled these enterprises to thrive in the environment filled with uncertainty. In the middle of these two groups were those organizations that had to demonstrate high flexibility and agility in order to change their approach of conducting business to overcome challenges posed by the pandemic.

1.1 Relevance of the subject

The global health crisis has created a unique situation that rapidly formed an environment demanding businesses to act fast, evolve their strategies and gain agility. This rapid transformation of the entrepreneurial landscape posed many opportunities to study multiple theories and frameworks presented in the business literature and observe how they manifest themselves in real-life situations during the period of the pandemic. Therefore, the subject of understanding how SMEs have utilized or developed agility, learning and transformational capabilities was deemed highly relevant and significant.

Furthermore, it was noted that studying Small and Medium Enterprises (SMEs) poses greater probability of generating significant data on understanding developed dynamic capabilities in the setting of the pandemic. Unlike larger corporations, SMEs usually do not possess large-scale organizational structures and are less complicated to research as causal relationships and decision-making processes are significantly clearer.

Moreover, during this time of distress the European Union is focusing on SMEs as more than half of jobs in Europe are generated by these entities. Even though studies are not completely certain whether Small and Medium or Large enterprises are more important to national economies, it is believed that SMEs are less vulnerable to global crises and experience the effects of economic slowdown in a less drastic manner [1], [2].

Finally, at the time of writing this thesis the Coronavirus pandemic still has most of the countries in the grip of varying severity lockdowns; thus, conducted research is bound to reflect cases of studied businesses in the most authentic and recent manner where presented experiences are relatively new and rationale or emotions behind taken decisions were still remembered.

1.2 Scope

To reflect how SMEs have dealt with the challenges brought by the pandemic it was decided that this master thesis should be centered around introspective and retrospective analysis of qualitative data collected during in-depth semi-structured interviews with businesses in the most impacted industries.

This approach was chosen in order to create detailed cases and to learn about each business' strategy before and during the pandemic as well as to understand predicted developments after the pandemic is over. In order to capture this information and grasp how SMEs had to pivot their approach in conducting business, few industries were considered due to unique traits they possess.

- Businesses within HoReCa (Hotels, Restaurants/ Cafés and Catering) sector Governments across Europe have imposed severe restrictions on these businesses once the lockdowns began in March of 2020 as these enterprises require direct physical interaction with their customers and gather larger groups of people into close proximity.
- Enterprises in the field of auxiliary private education These businesses were built on providing direct attention to those students or adults that wanted to improve their academic performance or better their career prospects. Therefore, customers expected direct physical interaction which was viewed as the most effective way of learning. Thus, private educational services were provided in classrooms and online lessons were almost not used as a service.
- Newly established businesses Entities that chose to begin their operation just before or during the pandemic as well as enterprises that had their significant growth period during the pandemic. These types of businesses had to evolve in a considerably different entrepreneurial environment than older market players and therefore demonstrate extreme flexibility to establish and grow their business during the Coronavirus pandemic.

At the beginning of the master thesis it was assumed to analyse enterprises in all three mentioned categories and provide separate analysis of these sectors in order to understand how businesses providing different services or products managed to deal with the pandemic. Furthermore, it was expected to compare them within their industries and at the end of the master's thesis do a brief comparison of all collected cases and seek to understand how SMEs managed to develop their strategies as well as transformational capabilities and was it enough to enable them to sustain or even grow during the global health crisis.

After some interviews were collected and initial analysis of data was conducted, it was decided to stop pursuing the research on the category of new businesses. Gathered information showed that these entities have rather different dynamics than established businesses and theories as well as frameworks considering startups would have to be used which would not apply to other two previously mentioned sectors.

Secondly, businesses in HoReCa sector were chosen to be not analysed as well. This choice was done after interviews were collected and initial analysis of the cases performed. The decision was driven by the need to provide this thesis with more consistency and focus on a specific industry rather than trying to cover multiple sectors.

Therefore, the final master thesis scope was settled on analysing small and medium enterprises in the auxiliary private education sector while seeking to understand how they have evolved their strategies as well as capabilities of sensing, transforming and learning. To further increase accuracy and comparability of collected data, all interviewed businesses in this sector were based in Lithuania.

As there are no strict definitions on what constitutes auxiliary private education business, main aspects that were considered while choosing businesses to interview were set:

- Enterprises that are privately owned; therefore, public schools as well as other governmental and nonprofit organizations in the sector of education were not considered;
- Businesses that are focused on providing learning services in the fields of STEM (Science, Technology, Engineering, Mathematics) and languages;
- Enterprises that could not sustain the whole educational processes defined by the governmental organizations on its own (therefore, private schools were not considered);
- Classes provided by these businesses were conducted fully (or almost fully) in person before the Coronavirus pandemic.

1.3 Public and private education overview in Lithuania

This section is focused on enabling the reader to understand Lithuanian educational system and what relations auxiliary private education businesses have to it. For this purpose Porter's Diamond Theory of National Advantage (also referred as Porter's Diamond) [3] framework was used which is covered in the literature review subsubsection 3.1.1. This framework was chosen to be used as it captures the importance of influence when it comes to governmental organizations which is significant and complicated in the case of the auxiliary private education sector.

Government

Lithuania has a comprehensive public education system that provides publicly available services which envelop most of the person's developmental stages - from pre-school education to universities along with other forms of non-formal education. Therefore, most of the education is publicly funded with the exception of tertiary education where only a limited number of students with the best academic performance receive state-funded education [4]. This whole process is visualized in figure 1.

Therefore, auxiliary private education businesses have a unique relationship with the governmental organizations as they can act as:

- **Legislator** Governmental organizations define rules and regulations that set the entrepreneurial environment for these businesses.
- **Competitor** All education in Lithuania is almost public; therefore, most students choose it as the phenomenon of private education is still relatively uncommon [5]–[7].

• Partner - Auxiliary private education businesses are not structured in a way to conduct and follow full schooling processes set by the government as shown in the figure 1. Therefore, these enterprises rely on public education institutions to provide systematic educational services and only focus on providing additional support for the students to overcome their specific academic challenges while learning in the public education system.

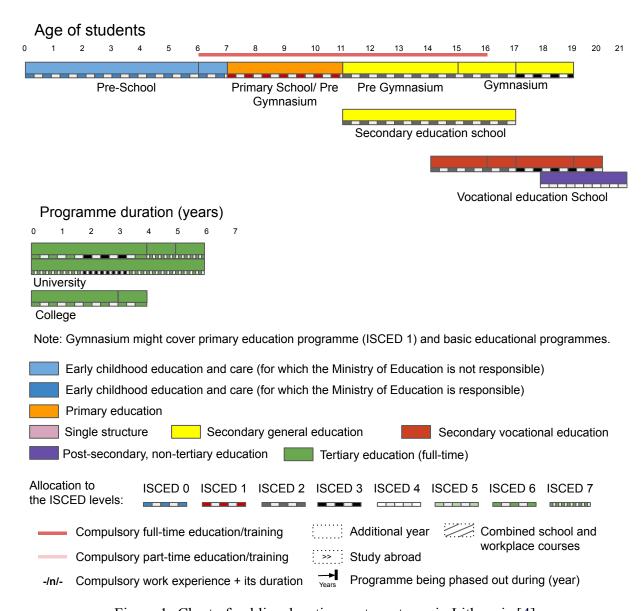


Figure 1: Chart of public education system stages in Lithuania [4]

Although, Lithuanian public education system is rather extensive, experts consider that it is underperforming. In 2018 Lithuania's educational system was rated slightly below average by Programme for International Students Assessment (PISA) [8]. Moreover, a study produced by Lithuanian Ministry of Education, Science and Sports has noted that the public education system lacks a clear strategy on how the national education system should evolve and be constantly improved [9]. This is followed by a belief of some experts that Lithuanian educational system lacks funding to tackle its root issues and solve them efficiently as the budget allocated towards public education has been shrinking on average 0.3% per year in the period of 2001 - 2017 [7],

[10].

Due to these reasons, the satisfaction of public education has been affected considerably. Master's thesis written in 2018 by Raminta Maselienė titled 'Service Quality Assessment Of General Education Schools' conducted 146 interviews with parents of students that are in primary or secondary stages of education. It showed that 45% of parents were very dissatisfied and 17% were somewhat dissatisfied with the school their child or children were attending [11]. In another study performed by multiple organizations titled '(Re)searching for Quality of Life of Young People in Baltics' where 2377 people from 15 to 25 years old were interviewed in Lithuania, Latvia and Estonia. 35% of interviewees in the group of 21-25 years old and around 25% within age group of 15 - 20 have expressed dissatisfaction with educational system [12].

Furthermore, study conducted by the government strategic analysis center of Lithuania named Strata has interviewed almost 8000 respondents (1068 pupils, 1051 teachers, 4567 students and 1154 professors) and concluded that 44% of undergraduates choose to use tutoring services as they feel that they cannot properly learn the subject during the time allocated in public schools. Moreover, a third of the students have expressed dissatisfaction with their teachers in the public high school system and stated that their teachers are not capable of explaining given subjects appropriately [13].

On the other hand, only 1% of teachers in the public education system have stated that educators in public institutions are not able to conduct classes efficiently. 44% of them believe that tutors are hired due to inability to attentively follow given classes and efficiently understand provided information. Moreover, 20% of teachers believe that students start using tutors due to pressure from their parents or other people in their immediate social circle [13].

Finally, the problem is made more acute due to the fact that the teacher's profession in Lithuania is not considered as a prospective career choice due to the one of the lowest salaries in the EU and lack of career growth possibilities [4]. Therefore, only 3 - 5 % of teachers in Lithuanian public education system are below 30 years old.

Government's response to Coronavirus pandemic in regards to the sector of education

During this health crisis imposed restrictions applied to private and public education organizations equally; therefore, further presentation of chronological developments will mention public education institutions only [14], [15]. Furthermore, to provide a more detailed chronological overview on how the Coronavirus pandemic has affected the sector of education, a full timeline was put together in appendices subsection 9.3.

As the Coronavirus pandemic started to pose a serious threat to the society, from March 12th, 2020 all educational services were recommended and from March 16th, 2020 were mandated to suspend their physical services and use remote learning options to continue classes. During this time students were given holidays while schools prepared for conducting classes online and on March 30th, 2020 remote learning began [14]–[17]. This process was unprecedented as previously remote learning was considered an exception for individual students or small groups; therefore, prior to 2020 there were only a few schools in Lithuania that had their own online platforms and were capable of conducting full-scale educational activities online [18].

During this period each school was assigned an IT specialist to aid with the transitioning towards digitization and parents as well as students were instructed on how to approach remote learning in the most efficient manner. Besides that, it was assessed that around 35 thousand students were not be able to attend remote classes due to not having an appropriate electronic device to do so. To combat this, necessary devices were bought and distributed. Furthermore, private internet service providers agreed to give complimentary internet connection access to these students as well [4], [18].

During the period of late spring and summer 2020 imposed lockdown due to Coronavirus was softened and educational activities were able to continue with relatively little restrictions [19], [20]. On May 25th, 2020 primary schools were allowed to resume physical classes [21] which was followed by lower secondary and upper secondary education students being allowed to have classes in person on May 25th. Counseling of undergraduates preparing for the State Matura exams (examination that assesses 12th graders suitability to apply for colleges and universities) was allowed as well if necessary safety measures were taken [17]. On June 1st all educational services were allowed to be conducted physically while following necessary safety precautions [17]. The decision to resume physical classes or to continue working remotely was left for municipalities and 75% of them decided to keep the classes to be conducted remotely. Finally, due to these disruptions and their impact on the educational system it was decided that testing of 2nd, 4th, 8th and 10th graders will not take place and State Matura exams for 12th graders were delayed until late June, 2020 [17].

During the summer the Ministry of Education, Science and Sports approved standards for conducting online classes and assessed what strategy should be taken based on epidemiological forecasts. This information was shared with municipalities and most schools decided to start a new academic year on September 1st by conducting classes in person with certain restrictions in place [17]. During the first half of the autumn, constantly increasing rates of recorded Coronavirus cases were seen and at the end of October lockdown was put in place [22].

Due to ever increasing cases of Coronavirus on December 15th, 2020 restrictions were imposed that suspended provision of educational services and all students were sent on early winter (Christmas) holidays. With the resumption of educational services after the holidays in 2021 students were allowed to continue studying remotely with the exception of students whose parents were legally allowed to work in a physical workplace and could not take care of them. In this case students were allowed to attend school in person and join remote classes there [17].

In order to return to physical classes a pilot project was launched in one pre gymnasium to assess what impact could bear reopening of schools on the rate of the Coronavirus infections and evaluate if the proposed model of 'Safe Return' is viable [17], [23]. As it proved to be feasible, schools were allowed to use this model where students that presented negative Coronavirus tests were allowed to return to contact classes from March 22nd, 2021 [17]. On April 28th of 2021 all schools were allowed to conduct physical classes from May 10th; however, in municipalities that have a high number of Coronavirus cases it was required to regularly issue Coronavirus tests for students attending contact classes [24].

All these changes have affected education quality and satisfaction with it. However, this is yet to be recorded to a greater extent. Thus, only few publications and researches have been per-

formed within this context so far. A study conducted by Lina Kaminskienė et al. "Coping with the pandemic and the school lockdowns: The perspective of Lithuanian school principals" has interviewed 406 principles of public schools and explored what measures schools have taken to counter the obstacles posed by the pandemic [25]. In this study problems of students' responsiveness, students' performance evaluation and assuring equal opportunities for students were marked as the most serious during the health crisis.

In the review made by OECD (Organisation for Economic Co-operation and Development) it was shown that European schools have endured many difficulties when it comes to transitioning to digital education. Teachers had difficulty to assess if conducted classes were effective and issues such as students' lack of access to digital devices, difficulty to maintain students' motivation and increased workload as well as stress levels were listed [26].

Firm strategy, structure and rivalry

To provide an overview on actors which are operating in Lithuania when it comes to the auxiliary private education sector a chart based on their scope of services (Focused or Wide range of services) and type of engagement chosen (Private or Group lessons) was made (figure 2).

As mentioned before, the government can be considered as a competitor to the private auxiliary education sector [5]. Moreover, although private schools are not a common phenomenon, their number is constantly growing and more students choose private education due to perceived better quality or different approach to learning [6], [27]. As both public and private schools provide a wide array of services and focus on teaching classes of average 26 children [5] as well as providing services for more special needs students, it could be considered that these organizations take 1st and 4th quadrants of the produced chart (figure 2).

From the chart it is seen that most of the businesses in auxiliary private education focus on fewer subjects such as languages, IT skills or just a few disciplines that are taught in accordance with public education requirements. Furthermore, a significant portion of them focus on providing individual or small group lessons. Finally, there are independent tutors who work with private worker permits. They provide educational services that are usually focused on one or few subjects and the classes are conducted for one or small groups of students.

During the Coronavirus pandemic this sector was entered by only one new business successfully named 'DigiKlase', which was established at the beginning of 2020 with the main focus of providing completely remote services of education [28], [29]. This enterprise provides subscription based webinar classes where teachers conduct classes online while an unlimited number of students can join and watch the class as well as comment and interact with the teacher.

It was also noted that more teachers and other trained professionals during the pandemic have chosen to work in auxiliary private education enterprises or as independent tutors to have an additional source of income. This is also influenced by the growing demand of auxiliary private education as children have been under a quarantine for an extensive period of time and parents are fearful that the gaps in their children's education will become too serious and almost impossible to amend [30].

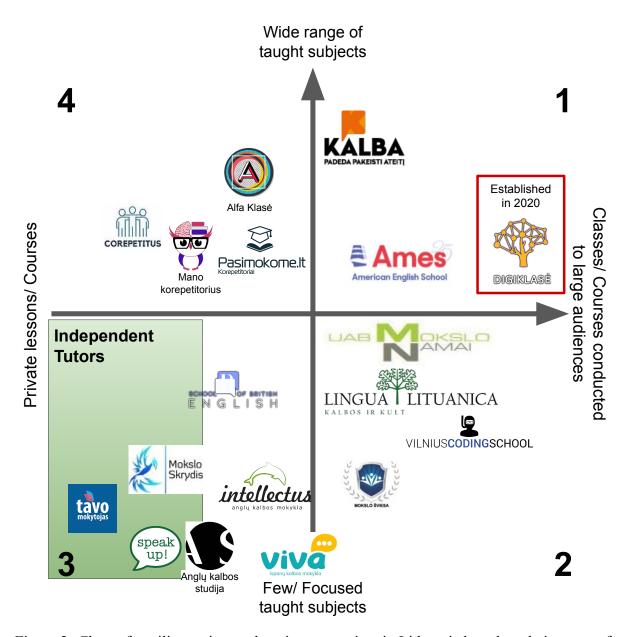


Figure 2: Chart of auxiliary private education enterprises in Lithuania based on their scope of services and group size of serviced students

Factor conditions

General infrastructure such as roads, public transportation or similar could be considered important as they enable freedom of movement and availability to access provided services physically. These rank as 14th in Europe with most of the factors being rated averagely [31]. However, when it comes to connectivity to the internet - Lithuania in the European Union (EU) is 3rd when it comes to 4G connection and 1st when it comes to publicly available WiFi connection [32].

Furthermore, in Eurostat's regional yearbook published in 2020 Lithuania's capital region of Vilnius was listed first in the EU in regards to percentage of people having tertiary education (70,4% while in EU the average is 40,3%) with employment rate of 80% of recent graduates [33]. Usually auxiliary education enterprises hire young professionals that are still studying

or have recently finished their studies; however, based on current trends, the amount of new students entering the market in Lithuania is constantly declining [34].

Demand conditions

The demand for auxiliary private education was shown to be consistent and prevalent by the governmental strategic analysis center conducted survey in 2017. It has uncovered that 40% of undergraduate students in their final year of schooling have used tutoring services to prepare for the exams necessary to apply for universities and colleges in Lithuania or abroad. Services of private education were chosen more often by students from wealthier families than from economically disadvantaged households; however, the need for auxiliary education services was expressed by a similar amount of students in both demographic sections [13]. Compared with a similarly structured study conducted in 2015, there were no significant changes noticed in the demand for auxiliary private education services [13].

Moreover, the public education system is not obligated to prepare students for academic contests and international exams. Usually this is also a driver for students to choose auxiliary private education services as a solution to perform better or pass necessary entrance exams (i.e. applying to foreign universities) [13]. However, the tendency of students in earlier stages of public education to use private teachers is noted as well. Parents of students in 8th grade or even in primary schools start to use private tutors as they need to prepare for standardized tests [13].

However, due to emigration and lower birth-rates Lithuania has seen a significantly reduced number of students from 563 thousand in the 2004-2005 to approximately 322 thousand in 2018-2019 [4]. The United Nations project that population decline should normalize and slow down as in all developed nations; however, fewer birth rates will result in a more aging population. In the year 2050 it is predicted that Lithuania's population will drop from current 2.7 million to 2 million inhabitants [35].

Finally, prior to the Coronavirus pandemic, the demand for remote learning services was relatively small [36]. Therefore, public and private educational organizations had extremely limited or no structurally embedded capabilities to deliver educational services via online communication platforms.

Related and supporting industries

Businesses in the auxiliary private education sector are rather independent and do not require much supporting industries to enable their operation. Such rather basic entities as office space renters and internet connection providers are the main supporters of these businesses. During the pandemic online communication tools providers (Zoom, Skype, Microsoft teams, etc.) could be considered as a supporting industry as well.

Furthermore, auxiliary private education enterprises are focused on bridging the gaps of students' knowledge or providing more support on preparation of academic competitions or other exams. Therefore, public or private schools can be deemed as a related industry that allows auxiliary private education businesses to focus on providing specialized support rather

than conducting robust educational processes defined by the governmental organizations (figure 1).

Chance

Although the recorded history of structured education in Lithuania spans back to the 14th century [37], one of the most important recent events that greatly formed Lithuania's educational system was regained independence in 1990 [38]. It left the country with an educational system that was built on Soviet Union educational model [39]. Throughout the years reforms were imposed to reduce strict hierarchical structures and provide more independence to each educational institution [4], [39].

Moreover, when it comes to economic development and crises that were endured by the Lithuanian economy, they were relatively similarly to what other European Union countries have endured as Lithuania has joined the EU in 2004 [40] which has brought its economy closer to the European market and in 2015 Lithuania has joined the Eurozone [41] which has even greater integrated this country in the European economy [42], [43].

Furthermore, during the development of the educational system, various non-governmental and nonprofit organizations have been established to aid the public education system. One example would be a project by Center for School Improvement (*lt. MTC - Mokyklų Tobulinimo Centras*) named 'I choose to teach!' (*lt. Renkuosi mokyti!*). This initiative allows citizens in various professions to volunteer as teachers in schools that have shortage of educators and to convey their knowledge to public school students [4]. Other non-profit project of Lithuanian Natural Science Olympiad Association (*lt. Lietuvos Gamtos Mokslų Olimpiadų Asociacija*) named 'Not to take but to give' ("*lt. Ne imti, bet duoti*") has one of its key objectives set to find students or other professionals that would like to donate their time and volunteer teaching children in the most vulnerable families or foster care homes [44].

Finally, the most recent Chance factor is the Coronavirus pandemic which started in 2020 and has dealt great challenges to all businesses in the education sector. Impact of it was mentioned in the Government section of this overview and analysis of these effects was continued throughout this master's thesis.

1.4 Problem statement, research question and research objective

Coronavirus pandemic has changed consumer behavior and pushed SMEs into a high level of uncertainty. This situation required SMEs to look for solutions that would enable them to continue their operations. As it was chosen to research this problem in this thesis, SMEs in the sector of auxiliary private education were interviewed and analysed in order to understand their development in areas of strategy, Dynamic Capabilities and management under uncertainty.

Based on prerequisites that were discussed in the Scope subsection (subsection 1.2) a research question was formulated:

How small and medium enterprises in the auxiliary private education sector have evolved their strategies and Dynamic Capabilities throughout

the Coronavirus pandemic and what can be learnt from it?

By answering this question while following established methodology, case studies of multiple businesses were formed and analyzed. Therefore, it was aimed to provide the reader with a solid grasp on what actions were taken by enterprises in the auxiliary private education sector, how businesses in it managed to develop Dynamic Capabilities, evolve their strategies and what effects external factors had on these processes.

1.5 Limitations

During the process of performing research, few limitations were encountered that could not be overcome. Therefore, it was important to discover them as soon as possible and understand if another research path could be taken to avoid them or they must be accepted and reflected accordingly in the thesis' methodology.

First limitation was the time constraint set by Aalborg University. Period given to write the thesis was from February 1st, 2021 to June 3rd, 2021. This was a non-negotiable limitation and during the planning of the project it was necessary to allocate time accordingly in order to complete data collection and analysis processes in time.

Secondly, interviews were taken during the months of March and April; therefore, analysis of the pandemic effects on the sector of auxiliary private education could only be conducted up to April 2021. Therefore, the research horizon was chosen to stop at the date of April 30th, 2021. Thus, analysis of data beyond this point was not taken into consideration and any future insights or forecasts were made on data published up to that point.

Third limitation lies in the scope of research. As it was chosen to pursue quantitative data collection with conducting extensive interviews which take a considerable amount of time to perform and analyse, only three cases were chosen to be researched. This allowed the thesis to be more focused and explore interviewed businesses in greater depth. However, as there are significantly more businesses in the auxiliary private education sector, it would be safe to assume that analysed cases uncover only a part of entrepreneurial evolution tendencies and transformational patterns manifested by this type of organizations.

Final limitation was posed by limited author's knowledge. Due to lack of experience of conducting case studies, a considerable portion of time was used to learn how to conduct this process in the most efficient and accurate manner. Due to this reason the final goal of the master thesis had to be shaped and adjusted to achieve greater academic focus which in turn would significantly increase research's reliability and validity.

1.6 Structure of the thesis

Based on set prerequisites a framework on how the master's thesis should be conducted was constructed (figure 3). During this process it was sought to set a clear path on what steps need to be taken in order to collect the most significant data and provide the most comprehensive insights.

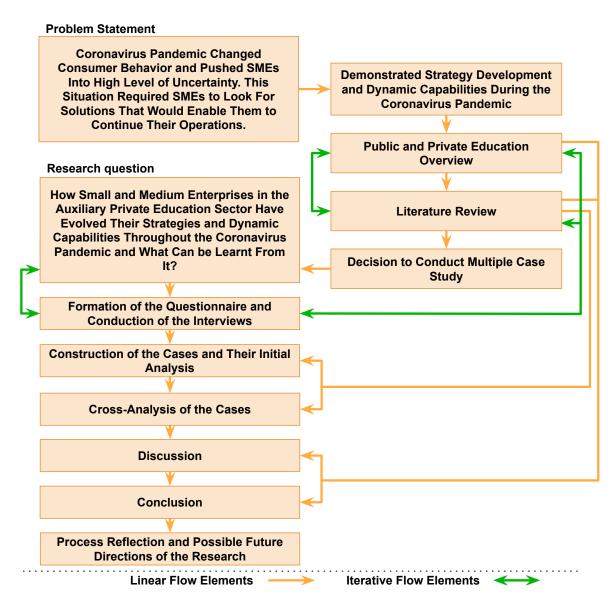


Figure 3: Conceptual framework of the master's thesis

After setting the problem statement, initial literature review was performed to reflect most relevant theories and frameworks. As this process was completed it was chosen to conduct a study of multiple cases as it was deemed the most efficient approach for collecting data which reflects detailed stories of researched businesses and provide a broader overview on how they have dealt with the challenges posed by the pandemic. Moreover, to provide more insights and enable a more expansive discovery process, a framework proposed by Robert K. Yin [45] was used. This iterative framework was used in the first half of the master's thesis to enable greater capacity to learn and adjust research structure in order to discover which theories and frameworks as well as enterprises are most promising to pursue.

Once the final research question was posed and all data deemed necessary was collected, the analysis of it continued without any further adjustments to the methodology in order to preserve consistency and research credibility. The analysis consisted of constructing cases based on information gained during conducted interviews, performing initial analysis of these cases and finally these three cases were cross-analysed to uncover business transformation patterns

and understand which decisions were the main drivers of success.

At the end of this master's thesis, a discussion section based on collected and analysed data was written. During it, findings made previously were considered through perspectives of external factors' influence on analysed businesses, links with covered theories and frameworks as well as what trends could be expected to emerge in the near future within the auxiliary private education sector.

Finally, conclusion and process reflection took place where it was answered to the posed research question and reflected how conducted research could be improved and scaled in the following research projects inspired by this master's thesis.

2 Methodology

At the time of writing this master's thesis the Coronavirus pandemic was a relatively new phenomenon; therefore, produced research and collected data, especially when it comes to Small and Medium Enterprises was rather limited. Therefore, the need for primary research was established. To conduct primary research and to better understand how businesses have adjusted their strategies and demonstrated their Dynamic Capabilities, multiple data collection methods were considered. At the beginning, most quantitative methods of data collection were rejected due to their rather limited ability to provide nuanced information about each individual business and decisions that it made. Furthermore, it was decided that extensive analysis of a single business would not be sufficient in providing a comprehensive overview on how enterprises have evolved throughout the pandemic. Therefore, qualitative approaches on data collection were considered.

Based on these prerequisites further methodology of this master's thesis was constructed. As qualitative research methods were considered, primary focus was placed on conducting comparative study of multiple cases. This approach was chosen as it enables in-depth analysis and comparison of multiple enterprises. To collect significant data, properly structure cases and analyse them in the most efficient manner a book written by Robert K. Yin's named 'Case Study Research and Applications: Design and Methods (Sixth Edition)' [45] was chosen and a proposed process on how to conduct case studies was used (Figure 4).

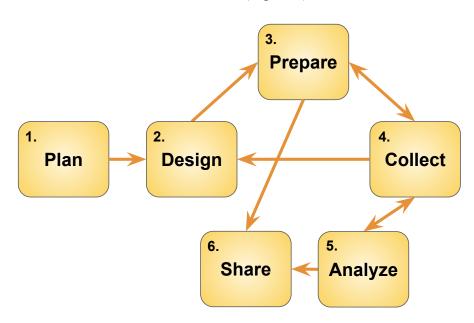


Figure 4: Flowchart of a case study proposed by Robert K. Yin [45]

2.1 Research design

To reflect how businesses have dealt with the pandemic and how have they evolved their strategies a Descriptive (Non-Experimental) approach was chosen as there were no prior hypotheses made on these events. Based on posed research question further investigation took place by producing cases, following their analysis and discussion on gathered findings.

To understand multiple perspectives and put together a more detailed outline on how businesses have developed their strategies during the pandemic it was chosen to conduct multiple case (comparative) study with main focus on:

- 1. Dynamic Capabilities and how they have been demonstrated;
- 2. Entrepreneurial strategy evolution under uncertainty;
- 3. Capabilities of demonstrating Corporate Foresight, managing Risks and Crises.

As multiple factors were chosen to be considered within each case, it was chosen to apply Multiple-Case Embedded case study design (Figure 5). Furthermore, it was decided to focus on multiple businesses in one particular industry by performing data collection once rather than throughout an expanded period of time; therefore, a cross-sectional (rather than longitudinal) research approach was chosen.

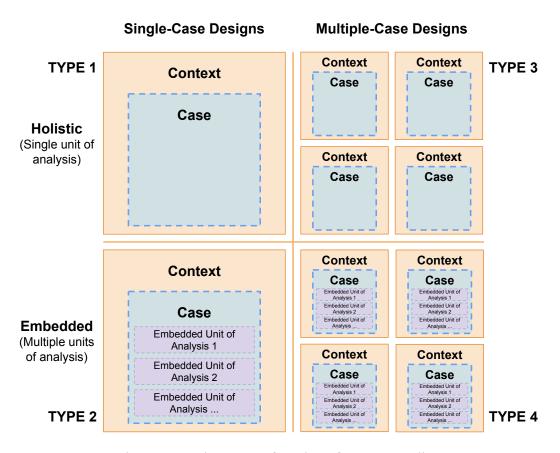


Figure 5: Basic Types of Designs for Case Studies [45]

2.2 Data collection

At the beginning of the methodology construction a need for deep understanding behind few rather than many cases was noticed. For this purpose collection of qualitative data was chosen as it is more suited for inductive analysing of situations that are rather unknown [46].

To conduct primary research while collecting qualitative data an approach of a semi-structured interview was chosen. To conduct these interviews in a constructive and replicable manner, a questionnaire was designed. To provide a broad and detailed overview on the entrepreneurial environment the businesses were exposed to, as well as to inquire about actions taken that would uncover if businesses have used theories and frameworks that were covered in this master's thesis, questions were developed in 7 main categories:

- Questions to reflect business evolution before the Coronavirus pandemic To have a brief overview on how businesses have developed before the pandemic four questions were posed about their growth, their competition, behavior of their customers and strategy pursued.
- Questions to reflect business evolution during the Coronavirus pandemic In order
 to collect significant data about how the business have performed and acted through the
 pandemic ten questions were posed to reflect their current strategy and main successes or
 failures.
- 3. Questions to predict business evolution after the Coronavirus pandemic Four questions were put together to inquire on how interviewees predict their future business' strategy, their expected growth and evolution of their customers' behavior.
- 4. **Change sensing** In order to inquired about business' ability to anticipating changes that are coming to the industry and challenging status quo within the organization, six questions were formed;
- 5. **Seizing opportunities** Six questions were posed to collect data in regards to business' ability to read gathered information in the Change sensing stage and take decisions based on these interpretations.
- 6. **Transformation abilities** In order to reflect how businesses managed to Align themselves with made decisions and impose Learning processes that allow the enterprise to remain agile and improve taken actions, seven questions were put together to reflect its Transformational abilities.
- 7. **General questions based on Porter's Diamond model** To provide a more detailed background on what conditions businesses were exposed to, eleven questions based on Porter's Diamond model were chosen.

After the questionnaire was put together, founders or managers in selected businesses were contacted and interviews scheduled. All interviews were conducted remotely by assigning 45 - 60 minutes of interviewee's and interviewer's time for a video call. Following conducted interviews, notes and other recordings were condensed into summaries and in addition, a business model canvas was created to provide a quick overview on enterprises' core activities and attributes. After summaries were written, they were sent to the interviewees for their validation. During this process interviewees were allowed to add, edit or erase data and assure that the answers are completely aligned to what they wanted to express. After this process was done, the

information provided by the interviewee was used to create a case, analyse and compare it with other cases without their interference.

To complement collected data, secondary research was conducted which consisted of auxiliary information collection (desktop research, literature review, analysis of statistics, etc.) that was necessary to provide a more detailed outlook on entrepreneurial landscape and augment or complete already collected data.

2.3 Data analysis

As this research was mostly focused on understanding each business by conducting interviews and analyzing constructed cases rather than developing a theory - content analysis was chosen as the primary type of data processing [47]. While analyzing collected information it was focused on noticing patterns within analysed cases as well as understanding how real-life strategies reflect theoretical frameworks about Dynamic Capabilities and operating under uncertainty.

Based on these criteria an analytic strategy was developed [45] consisting of 3 parts: 1) Construction of a case; 2) Initial analysis of the case and 3) Comparison of cases within an industry.

Construction of a cases

Gained information during conducted interviews was condensed into cases in order to provide a clear overview for the reader and present what were each enterprise's actions performed and strategies executed. As the subject was deemed to be relatively complex and multifaceted, it was decided that the most appropriate approach while constructing the cases would be descriptive framework in order to reflect collected information from the interviews in the most efficient manner.

Therefore, each case was built on a structure already provided by the created questionnaire, which enabled to smoothly convey collected information and provide the reader with clear overview of each business and its strategy development before and during the pandemic as well as share predictions of their strategy evolution in the near future.

Initial analysis of the case

Following the construction of each case initial insights were made to begin the process of analysis. To avoid inconsistencies and sporadic flow of text it was chosen to provide full cases and only after it analyze them by choosing 'text-by-text' (rather than 'point-by-point') comparison style [48]. For this purpose three main aspects were analyzed:

- 1. Understanding what Dynamic Capabilities each business has demonstrated and which of them were not manifested;
- 2. Analysing business' strategy development under uncertainty;

3. Studying how did the enterprise has approached Risk and Crisis management before and during the pandemic.

Comparison of cases

After construction and primary analysis of each case was done these cases were compared and analyzed within a broader scope of the whole sector. To discuss similarities and differences that these cases have it was aimed to provide equal amount of time and significance for each discussed case. When comparing constructed cases three main aspects were chosen to be analysed:

- 1. Analysis on how external factors have influenced interviewed businesses;
- 2. Main similarities and differences of cases;
- Main successful and unsuccessful decisions taken by analysed businesses in the auxiliary private education sector.

2.4 Data reliability and validity

Reliability is the quality of collected data which measures its consistency over time and accurate representation of the total population in which test subjects were being studied. The validity of collected data determines if it is representing what was intended to be measured and how truthful produced results really are [49]. During the conduction of this master's thesis extensive attention was paid to attain and retain these two traits of gathered and analysed information.

To generate reliable data it was chosen to produce a questionnaire that would be used to conduct semi-structured interviews. After first interviews were conducted, some shortcomings were noticed in produced questions and additional points of information were deemed necessary. Due to this reason the questionnaire was updated 2 times with the first taking away 6 questions that were deemed redundant and the second - adding 6 new questions to provide more insight on enterprises' Dynamic Capabilities. By performing these changes some Stability (keeping the approach of collecting data the same) of collected data was lost [47]. To mitigate it, previously interviewed businesses were contacted again and asked to answer added questions.

Moreover, to achieve more validity enterprises with specific prerequisites set in Scope subsections were chosen to be interviewed and analysed in order to have cases that were exposed to similar conditions before and during the pandemic. This allowed to collect data which can be compared and analysed without compromising research's validity.

Moreover, interview notes and other condensed information was presented to the interviewees after the first interview. At this time the opportunity of augmenting, correcting or erasing information was given to reflect their perspective in the most efficient manner which increases credibility (internal validity) of the data collected [50]. After this step, further research process was conducted without any interference of the interviewees to assure independent data analysis.

These factors assured that chosen approaches of data collection and analysis did not compromise this master's thesis credibility and accuracy of measurement. However, few external factors might have negatively impacted research's reliability and validity.

Firstly, although interviewees were noted that their information will be anonymous, there is still a chance that they had their best intentions in mind to portray their business in a more positive manner. To counter this, key questions were indirectly repeated several times throughout the questionnaire to observe if given information retains consistency [47].

Furthermore, three interviews were conducted within a time span of about one month (on 16th of March, 1st of April and 22nd of April, 2021), which might have influenced observed status of these businesses and information provided by the interviewees as during this period some restrictions due to Coronavirus pandemic were lifted that enabled auxiliary private education businesses to operate in a less restricted environment.

3 Literature Review

This chapter covers literature that was deemed most fitting for the methodology set in the previous section. A non-exhaustive literature review was conducted to assess theories, frameworks, books, papers and articles that were later used to analyze collected data highlighting topics of how businesses achieve competitive advantages, how enterprises develop their strategies and how these organizations handle uncertainty and risks.

3.1 Frameworks focused on attaining competitive advantage

There is a significant number of theories and frameworks that seek to explain what brings competitive advantage to the company. They pursue different perspectives and attribute the source of achieved competitive advantage to different factors inside and outside of the enterprise. Few of them were chosen to be covered in this master's thesis due to their expansive and nuanced overview on what can constitute strategies and conditions bringing businesses competitive edge in the market

3.1.1 Porter Diamond Theory of National Advantage

Porter's diamond theory of national advantage (also referred as Porter's diamond model) is a framework consisting of 6 main factors that influence each nation's ability to provide business conditions that enable enterprises to efficiently compete in domestic and global markets. This model was introduced by Michel E. Porter in pursuit of explaining why one set of nations are extremely competitive and businesses in those countries are constantly pushing for sustained innovation, whereas other nations fail to build an environment where enterprises develop high added value services and products.

By asking "Why does a nation achieve international success in a particular industry?" Porter conducted extensive research with more than 30 team members throughout multiple countries to learn what leading factors define success or failure of a nation to build sustained competitive advantage. At the end of the study it was deemed that the answer to posed question can be found in 6 broad attributes of any nation. These attributes shape the entrepreneurial landscape and can boost or inhibit growth and innovation of businesses (figure 6) [3], [51].

- 1. Firm Strategy, Structure and Rivalry The first factor that defines competitiveness of a nation is entrepreneurial strategies and managerial practices taken by businesses. This is due to organizations constantly changing and adapting their strategies and approaches to management to reflect national policies and domestic conditions. If this frame nurtures healthy competition, businesses will constantly seek to transform by optimizing their strategies to counter domestic competitors and assure themselves a well established position in the market which in turn drives innovation and creates market leaders that are able to perform well domestically and internationally.
- 2. **Factor conditions** By obtaining or possessing various resources a particular country can enable its faster growth and higher competitive value if managed appropriately. Re-

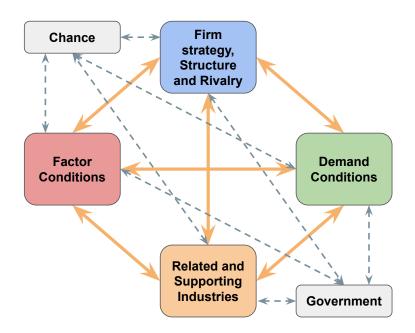


Figure 6: The Complete System of Porter's Diamond diagram [3] [52]

sources such as raw materials, land, climate and other natural resources are considered basic while talent, capital investors, scientific knowledge, infrastructure and other manmade resources are considered advanced [53].

- 3. Demand Conditions The third factor in Porter's diamond model is the size of a particular domestic market and its level of sophistication. Having enough customers to not only provide sufficient demand but also have expectations to receive constantly better products and services drives enterprises to continuously innovate and compete amongst each other for customers' attention.
- 4. Related and Supporting Industries The fourth factor that is a key contributor to national competitive advantage is abundance of well qualified and experienced supporting industries (such as raw material, product or service providers). Readily available supporting industries enable businesses to seek synergies and achieve greater quality, faster production and lower prices of end products in comparison to those that do not have these networked capacities in place.
- 5. **Government** The fifth factor that was added to an extended version of Porter's diamond model (by author referred as 'The Complete System' [3]) is national governing organizations and their efficiency to impose policies that encourages entrepreneurship. Produced policies can significantly affect any business and governmental institutions act as boosters or as obstacles in enterprises development. Furthermore, governments have a direct capability to interact with all of the previously mentioned factors and pose positive or negative influence on them.
- 6. **Chance** The last factor contained in the extended version of Porter's diamond model is occurrences that can significantly affect previously mentioned attributes. Low probability

- high impact events such as natural disasters, crises, rapid technological breakthroughs or conflicts can trigger many challenges or opportunities to national competitiveness [3].

It is important to note that Michael Porter introduced this model seeking to stress that almost none of the previously mentioned factors are inherited by any nation or economy and rather must be developed to sustain tangible competitive advantage. Moreover, this model does not seek to suggest that nations must make entrepreneurship obstacle-free to achieve national competitiveness. Healthy domestic competition and sophisticated customers are just a few factors that push businesses to constantly innovate, compete with other enterprises and maximize their potential [52].

3.1.2 Resource Based View

The Resource Based View (RBV) is a theory that puts emphasis on a company's internal resources as a primary driver of competitive superiority rather than external factors of the entrepreneurial landscape. It states that the driving factor enabling enterprises to mitigate risks and capture opportunities is internal resources that are unique and difficult to imitate [54]. There are three types of resources that are emphasised in RBV [55]:

- Physical resources such as machines, office equipment, raw materials, etc.
- Human resources such as talent, capacity of personnel, etc.
- Organizational resources such as intellectual property, copyrights, collected data, etc.

Resource based view outlines that retaining and acquiring more resources in these three key areas will ensure a company's competitive advantage. However, to achieve this competitive advantage each acquired or retained resource has to be valuable, rare, difficult to imitate and the organization should be focused on extracting value from these resources. These four requirements are called VRIO attributes. Only if all of these four attributes are achieved the company can have sustained competitive advantage. Otherwise, achieved superior position in the market will be challenged by competitors in the near future.

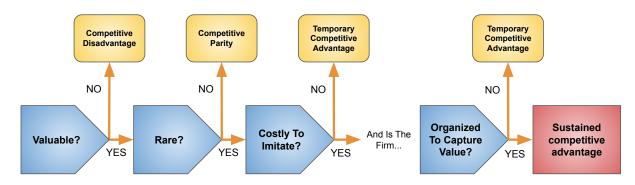


Figure 7: VRIO flowchart [56]

By using already acquired resources businesses should leverage them in order to pursue external opportunities rather than seeking to acquire new assets for each new opportunity. This

way the company manages its resources more efficiently and follows the approach of using internal resources to seek competitive advantage.

Based on RBV internal assets can be divided into two categories - tangible or intangible assets:

- **Tangible assets** Physical objects such as machinery, buildings and capital. These types of resources can be acquired relatively easily and rarely possess VRIO attributes alone.
- **Intangible assets** Anything that is not defined as a physical object yet holds value to the company (brand name, intellectual property or trade marks). These resources are difficult to acquire and possess some if not all VRIO attributes.

Furthermore, beside these requirements RBV also addresses the need that assets must be heterogeneous and immobile:

- **Heterogeneous assets** Combinations of resources that enable a company to utilize them in a unique manner and pursue different strategies from their competitors even though competing enterprises might have similar separate resources.
- Immobile assets Tangible or intangible resources that are not transferable or movable (at least not in the short-term perspective). Due to this property immobile assets are difficult to obtain or replicate.

If a resource contains these traits together with VRIO attributes then it is considered by RBV as an asset that is bringing sustained competitive advantage to the business [57].

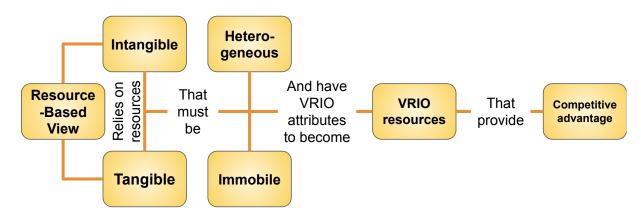


Figure 8: Resource-Based View flowchart [57]

This model has theoretical extensions to provide a more comprehensive overview of why companies are able to develop and sustain competitive advantages. Such models as Knowledge-Based View (KBV) introduced by Edith Penrose [58] or Firm-Level Value Creation and Capture proposed by Richard Priem and John Butler [59] were created to augment proposed RBV model and bring more differentiated view on the subject of competitive advantages [60]. However, theories of High-velocity Environments and Dynamic Capabilities have attracted ever increasing attention as they offer a more dynamic outlook on what assures companies to be competitive and successful [60].

3.1.3 Dynamic Capabilities

To complement and expand on the Resource Based View framework the Dynamic Capabilities theory was proposed by David Teece, Gary Pisano and Amy Shuen [54]. It has many definitions [54]; however, the general essence of the framework states that; although, company's resources are important - enterprise's ability to sense upcoming trends and threats, approach them in a feasible manner and solidify gained progress in the corporate structure by reconfiguring or augmenting it (sensing, seizing and transforming) are the primary drivers of acquiring sustained competitive advantage [61].

This new approach emerged and received wide recognition as it satisfied a need to introduce a more dynamic model that can more accurately reflect what traits and capabilities companies have to pursue to sustain a long-term competitive advantage in an entrepreneurial landscape that is becoming ever more dynamic and fast-paced. For these conditions in literature an acronym *VUCA* is usually used, meaning Volatile, Uncertain, Complex, and Ambiguous [62].

This framework became a successful successor of RBV and since its introduction considerable amount of articles were written exploring this concept; however, as it is a broad subject - it has brought mixed terminology and definition on what really is Dynamic Capabilities [63]. As a paper written by Catherine L. Wang and Pervaiz K. Ahmed states - Dynamic Capabilities needs to be viewed not only as a set of processes, but an approach that is integrated into enterprise's processes. Therefore, unlike processes that are easily described and mapped, Dynamic Capabilities are more holistic and more difficult to apply or transfer.

It is worth noting that literature points out to the fact that Dynamic Capabilities are best expressed in entrepreneurial environments that are moderately competitive and evolving consistently. Within markets that are developing rather quickly Dynamic Capabilities take a different shape and can be maintained most efficiently only by the companies that are consciously choosing to engage in the activities of Sensing, Seizing and Transforming [54]. Furthermore, some literature proposes that increased market volatility and dynamism can induce sudden acquisition of Dynamic Capabilities in the face of a true crisis [63].

Literature distinguishes three main stages of Dynamic Capabilities [62]:

- Change sensing (Anticipating and Challenging) The first stage of adopting and applying Dynamic Capabilities takes place before any solid idea is known or is ready to be applied. Businesses that seek to develop their competitive capabilities should constantly look for impactful ideas that are beyond the boundaries of status quo.
 - Moreover, challenging the existing status quo is equally important to reframe already existing problems and re-examining established ideas to uncover biases and other hidden presuppositions.
- 2. Seizing opportunities (Interpretation and Deciding) At the second stage of Dynamic Capabilities businesses have to remain agile, be able to interpret spotted trends and discovered opportunities in the first stage. Although Anticipation and Challenging the status quo is extremely valuable, they cannot be utilized efficiently without appropriate analysis of collected data in the first stage.

By noticing patterns and filtering out the most important ideas, entrepreneurs and managers are able to pick concepts that hold the most potential while not allowing their biases to affect their judgement. As soon as these challenges are dealt with, the decision making process needs to take place which requires balancing swift decisiveness while not compromising organization's operational capacity.

3. **Transformation abilities (Alignment and Learning)** - The third stage of Dynamic Capabilities focuses on post-decision activities where Alignment processes occur as open dialogue between main stakeholders needs to take place to understand diverse agendas and how they can be unified under a common strategy.

Finally, learnt information must be documented, shared and used to remain agile and correct the pursued path to capture selected opportunities.

Furthermore, it is stressed that these three pillars and their key activities do not form a tightly defined path that any business can follow strictly and achieve sustained competitive advantage. These activities that propel enterprises to achieve Dynamic Capabilities must be linked together in complex relationships. Building these networked connections is called Strategic Framing and it has four key elements [62]:

- 1. **Reference Points** An element that focuses on understanding the bigger picture when it comes to competitors and overall shifts in the market. Only the leaders that can see upcoming market events 'beyond the horizon' can shift their strategies and leverage these changes to their advantage.
- 2. **Boundaries** Second element underlines the importance of examining and challenging people's worldviews and mental models. This allows to break existing patterns in order to innovate and achieve unique and highly valuable solutions.
- 3. **Highlights and Shadows** Third element suggests forming an organizational culture that embraces long-term view and promotes each team member to keep company's future goals in mind while performing routine tasks. This allows the team to focus on activities that truly matter while shadowing less important projects and notions.
- 4. Yardstick And Metrics Final element focuses on having the ability to analyze already obtained data, forecast future demand and entrepreneurial environment evolution to develop the right set of metrics that guide each team member to work towards tangible and long-term goals rather than trying to pursue short-term gains at the expense of sustained growth.

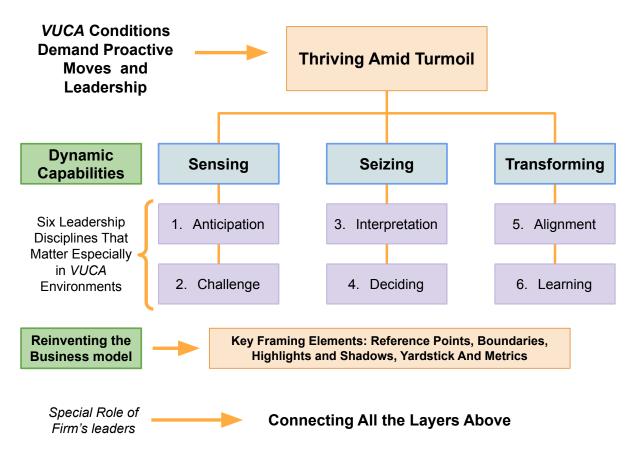


Figure 9: Flowchart of Dynamic Capabilities and its components [62]

3.2 Business strategies and development stages

This sub section seeks to cover literature regarding how businesses develop their strategies throughout their growth and how they evolve their long-term plans to prepare for future changes.

3.2.1 Growth stages of small businesses

Although business growth processes in various industries at first impression might appear to have little in common, their developmental patterns are relatively similar and can be categorized. Each company throughout its evolution changes managerial style, organizational structure and strategy in rather predictable phases that each must take place in order for the enterprise to enter a new stage [64].

Understanding in which stage the enterprise is, allows to have a better grasp on what general strategy the business is trying to pursue and what types of issues might be plaguing it. For this purpose the 'Five phases of growth' framework was introduced by Larry Greiner [65].

The framework states that there are five stages that each company must go through to achieve maturity and efficient operation. Moreover, to transition to other phases business must go from 'evolutionary' to 'revolutionary' period where more decisive actions are being taken to accommodate new boundaries of the enterprise.

1. **Creativity** - A phase where the business is found and a service or a product is introduced to the market. At this phase structure is completely or almost completely horizontal and

the decision making process is rather informal. As the business progresses through the creativity stage, informal managerial solutions that enable agile growth start to stifle it as more knowledge and structure needs to be acquired in order to scale the business. During the 'revolutionary' period of this stage the business pursues clearer organizational structure and leadership.

- 2. **Direction** At the second phase the business undergoes structural changes and corporate hierarchy starts forming to provide clear directions as each team member becomes more specialized. In this stage enterprises usually see sustained growth; however, the crisis of autonomy arises where employees start feeling restricted and have to adapt to a newly formed more formal organizational structure. To solve this problem leaders need to start delegating more workload to lower level managers.
- 3. Delegation As the business moves into the third phase it acquires more decentralized organizational structure and each manager assumes significantly greater responsibility. As the top-level executives are left with less direct control over each business unit they might start feeling as if they are losing the ability to control the enterprise. Due to this reason, a crisis of control ensues where the top management tries to regain control and reintroduce a centralized management model that is ineffective at this point due to the large scale of the company. Therefore, new approaches for coordination of activities need to be adopted.
- 4. **Coordination** If the company succeeds in implementing new coordination solutions it enters the fourth phase where the enterprise's organizational structure is reviewed and upgraded to suit the needs of the business better. Therefore, processes and standard operational procedures are established as well as auditing of key performance indicators take place to assure most effective operation of each business unit. This more efficient structure allows the business to invest its limited resources more efficiently; however, the business structure usually becomes too cumbersome and the 'red tape' crisis follows where managers and employees find themselves in processes that stifle innovation and agility as they take too long to be completed due to bureaucracy.
- 5. **Collaboration** The final fifth phase is achieved when the company manages to optimize and make processes more efficient to avoid too much bureaucracy. In the fifth phase organization demonstrates more flexibility and ability to quickly solve problems by rapidly and efficiently allocating appropriate amount of resources and talent.

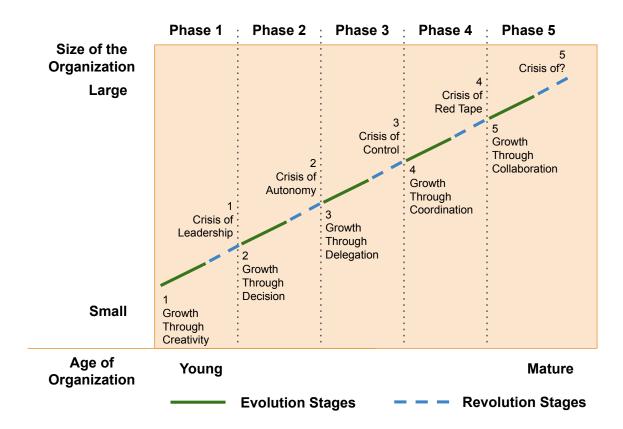


Figure 10: Characteristics of growth phases of a business [65]

To expand on these phases and to retrofit them better for small businesses authors N. Churchill and V. Lewis in their article 'The Five Stages of Small Business Growth' for Harvard Business Review proposed an augmented version of these growth phases. The need for this augmentation was justified as Greiner's framework focused more on bigger enterprises and covered topics that are more suitable to analyze for accountants or consultants. Therefore, 5 stages were proposed that build on the five growth phases framework to reflect how small businesses go through their developmental processes [64].

- 1. **Stage I: Existence** When the business is newly established it struggles with acquiring enough customers and satisfying their needs. Direct supervision is usually done by the founder and organizational structure is minimal or non-existent.
- 2. **Stage II: Survival** As the business manages to reach enough customers and satisfy their needs to remain operational it enters a survival stage where a pursuit of greater sales takes place to ensure long-term profitability. The organizational structure at this point is still relatively simple and the corporate structure is mostly horizontal.
- 3. **Stage III: Success** At the third stage business achieves sustained successful operation to keep the company stable and profitable. At this point top managers and founders need to decide how to approach following business development.

- **Substage III-D** If the owners of the business want to pursue other ventures or take other activities, a business enters a Disengagement substage where the owners distance themselves from the enterprise or sell it completely.
- **Substage III-G** If the enterprise's owners seek to remain with the business and keep expanding, the company enters a Growth substage where an additional line of managers is hired to reduce direct involvement of leaders in supervising basic activities and it is aimed to shift their focus to strategy formation and business development.
- 4. **Stage IV: Take-off** During this stage business' main strategy is completely centered around growth and optimizing existing processes. This stage is marked by an intensive delegation of responsibilities to provide autonomy and flexibility for mid-level managers. During this stage the business can achieve unsustainable growth where the organization's resources are stretched too thin and cannot sustain existing levels of expansion.
- 5. **Stage V: Resource maturity** At the final stage of Resource Maturity the business is focused on consolidating its tangible and intangible assets gained throughout the growth phase and to manage them in the most effective manner. Furthermore, flexibility and agility are sought after as the previous stages bring cumbersome organizational structures that slow down organizational processes and innovation.

Table 1: Characteristics of small business development stages [64]

	Phase 1 Existence	Phase 2 Survival	Phase 3-D Success - Disenga- gement	Phase 3-G Success - Growth	Phase 4 Take-off	Phase 5 Resource Maturity
Management Style	Direct Supervision	Supervised Supervision	Functional	Functional	Divisional	Line and Staff
Organization						
Extent of Formal Systems	Minimal to non-existent	Minimal	Basic	Developing	Maturing	Extensive
Major Strategy	Existence	Survival	Maintaining Profitable Status Quo	Get Resources for Growth	Growth	Return on Investment
Business and Owner*						

^{*} Smaller circle represents the owner

Larger circle represents owner

3.2.2 Corporate Foresight and Future-oriented Technology Analysis

Businesses activities posed to research trends, statistics and other data points to predict possible scenarios of future developments to preemptively mitigate forthcoming risks or capture arising opportunities is called Corporate Foresight (also referred to as Foresight). Usually it is performed inside organizations where managers or other specialists interpret and discuss which trends and threats could emerge in upcoming months or years [66].

Some literature links this range of activities with Sensing ability in Dynamic Capabilities framework as it encourages leaders to survey opportunities that are hidden beyond the perceivable event horizon. Both of these concepts recognize uncertainty created by external factors and importance of anticipating as well as capturing value of developing market patterns by sensing weak signals of their emergence. Therefore, these frameworks intertwine and Corporate Foresight could be considered as one of the attributes of Dynamic Capabilities [67].

However, other sources of literature argue that Corporate Foresight can be discerned from Dynamic Capabilities as although both of the concepts focus on understanding how companies should form their strategies to meet future opportunities and dangers more prepared, Corporate Foresight is noted to be more focused on insight generation activities that takes place after initial Sensing process and it does not specifically push for transformation of the organizational structure [66].

Furthermore, in some literature Corporate Foresight is also referred as Future-Oriented Technology Analysis (FTA) as most of the corporate foresight in current enterprises seek to leverage future technological advancements in order to achieve competitive advantage. Moreover, inevitably acquired or desired technological advancements push companies to augment or change their strategies and organizational structure based on these insights.

Activities that take place in order to pursue corporate foresight vary greatly based on a vast array of circumstances. Projects seeking to analyse market trends, assessing filed patents or carrying out surveys are just a few of the measures to engage in FTA. These Foresight activities can be categorized into four broader sections based on what goal the company seeks to achieve [68]:

- 1. **Foresight for strategic planning** One of the most common reasons why corporate foresight activities are being carried out is to build long-term strategy that will be able to leverage upcoming technological advancements. By having analyzed data and other insights companies can place priority on organizational changes, research and development (R&D) projects and other activities that will capture the value of emerging trends.
- 2. Foresight for marketing Besides technological advancements, organizations use fore-sight to predict social changes and emerging trends in societal values. By using this information companies can position their brand to be viewed as a 'responsible partner in the society' and gain more support as well as customers from this marketing approach. Furthermore, Corporate Foresight for marketing provides insights about trends in consumer behavior; although, it changes relatively fast and can be used only as a short-term advantage. By understanding what customers will like and dislike, enterprises become capable

of not only launching effective marketing campaigns, but guiding their R&D projects to develop customer-centered products or services.

- 3. **Foresight for organisational change** Another reason companies pursue corporate foresight is to evoke structural change that will bring additional value to the business. It is noted that using FTA for organizational change requires a specialist with a deep understanding of internal company's culture and therefore it is ill-advised to outsource this activity to an external consultant or specialist.
- 4. **Foresight for innovation** Final reason organizations pursue Corporate Foresight is to ensure their competitive advantage through innovating towards products or services that hold high potential. These activities do not only include understanding what type of technologies will be used in the future, but also see the bigger picture on how they will be applied in various markets.

3.3 Enterprise's strategy development and management in irregular entrepreneurial environments

Businesses focus most of their efforts on operating within normal economic and societal conditions. However, low probability - high impact events pose a constant threat to the enterprises' structure and in some cases their existence all together. Therefore, this subsection covers frameworks and theories on how uncertainty affects businesses as well as risk and crisis management approaches.

3.3.1 Uncertainty and its effects on business strategy

Firstly, it is important to note that risk and uncertainty are not necessarily identical entities. They might be the cause of each other; however, in literature they have different definitions and should be managed accordingly [61]. Usually, these two words are conflated and dealt with as one; however, risks are known, can be assessed and prepared for. On the other hand, uncertainties are unknown, difficult to measure and businesses cannot fully brace for their impact.

Therefore, it is common for enterprises to consider potential risks and discuss up to a certain extent on how to avoid, mitigate or absorb these potential future threats. However, uncertainty plays just as important a role in the long-term strategy development and evolution. To manage it effectively it has to be recognized and classified in order to properly assess it. Hugh G. Courtney et al. in a paper named "Strategy under uncertainty" proposes to label uncertainty into four levels: Clear enough future; Alternative future; Range of futures; True uncertainty [69].

1. **Clear Enough Future** - First level of uncertainty is when the near future is relatively predictable without any major changes seen on the event horizon. In this case uncertainty is manageable by traditional frameworks of Porter's Five Forces, Discounted Cash Flow or similar. During this situation businesses that are trying to change the status quo and pursue to bring more uncertainty to the system by innovating and seeking to set trends.

2. **Alternative Futures** - Second level proposes several scenarios that are possible with certain probability. Moreover, the probability of these scenarios in most cases is directly reliant on the strategies adopted by business' competitors. Each developed scenario might require different frameworks and approaches of analysis as they might wary in complexity and outcome significantly.

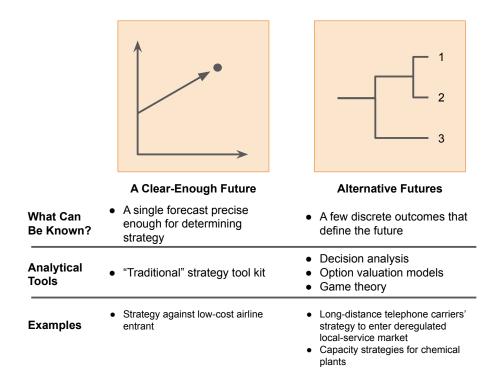


Figure 11: Characteristics of the first and second stages of uncertainty [69]

- 3. **Range of Futures** Third level of uncertainty is considered when there is a range of plausible futures. In this situation many significantly different variables have to be considered that cannot be defined with a single value, rather a range of probable answers. Just as in the second level, managers have to assess various scenarios that have certain probabilities of outcome. However, in this case construction of scenarios is not so clear; therefore, analysts should focus on few probable futures with the most unique implications.
- 4. True Uncertainty Fourth level of uncertainty is a truly unpredictable future that holds an unmanageable amount of variables and some of them cannot be adequately evaluated or even discovered. These situations are relatively rare and tend to de-escalate towards one of the previous three levels. In this case the person analyzing the situation is not able to create a sufficient amount of scenarios to cover all possible outcomes. However, mapping activities should still take place by writing down indicators, key events, variables or similar triggers that could shape the future entrepreneurial landscape.

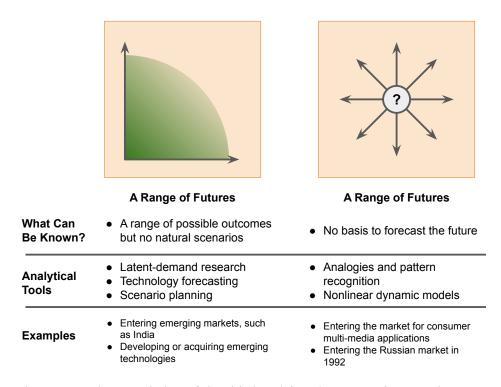


Figure 12: Characteristics of the third and fourth stages of uncertainty [69]

Based on the uncertainty level businesses should approach the situation with a certain strategy or at least 'posture'. In any level of uncertainty authors recognize three 'postures' that can be taken while constructing enterprise's strategy under uncertainty [69]:

- 1. **Adapting** A posture that seeks adoption of upcoming changes by acting fast and decisive in order to be the first one to capture emerging opportunities.
- 2. **Shaping** By assuming a leader's position in the market businesses can set trends and standards to create their own opportunities.
- 3. **Remaining flexible** Also called "reserving the right to play" is a posture that seeks to leverage organization's flexibility and agility. By keeping track of developing changes the entity can invest in most promising opportunities while retaining the ability to pivot.

First two approaches are recommended on first or second levels of uncertainty as the general situation is easier to assess and adjust accordingly. On levels of 'Range of Futures' and 'True Uncertainty' authors outline more benefits of remaining flexible and retaining the ability to improvise while more information is gained. Entrepreneurial environment on these levels is highly unpredictable; therefore, changing or conforming to it can be costly or all together inefficient.

3.3.2 Risk management

Risk management is an activity performed by a business that seeks to survey and control a wide range of unexpected events that might manifest themselves as an external or internal disruption of the enterprise. By assessing and measuring these risks an enterprise can plan for them and set its risk appetite [70], [71].

Committee of Sponsoring Organizations (COSO) has proposed a Risk Management Integrated Framework. This framework seeks to extensively cover all stages and aspects regarding Enterprise Risk Management (ERM) and sets four categories of responses to discovered risks (table 2) that are selected based on risk's probability and its impact to the organization [72]:

- 1. **Risk avoidance** An activity that seeks to avoid direct contact with the risk generating entity by preparing contingency plans and other procedures to stop it from manifesting. This move is mostly taken with risks that are large in magnitude and would pose a significant threat to the enterprise's assets or operations.
- 2. **Risk acceptance** If risks are unavoidable and relatively small in scale they can be accepted as otherwise their mitigation would cost more than absorbing them in the case of it happening. However, even accepted risks should be constantly monitored and understood if they have not evolved and require different approaches.
- 3. **Risk mitigation** To soften the threat of the risk organizations can take proactive actions to reduce probability of a risk bearing event or to lower its cost on the organization if it manifests itself.
- 4. **Risk transfer** An activity that moves risks from one entity to another or within one organization to different parts of it. This is most commonly achieved by acquiring insurances or other instruments that cover expenditures, losses or damages.

Table 2: Set of responses to approach risks based on their probability and impact [72]

Probability	Impact	Response
High	High	Avoid
Low	High	Mitigate
High	Low	Transfer
Low	Low	Accept

Furthermore, Enterprise Risk Management Integrated Framework has 8 key components to approaching discovered risks. If business seeks to effectively manage risks it should pursue excellence in these key areas:

- 1. **Internal environment** A component enveloping all factors that make up corporate culture of the organization and its approaches on how to handle risks.
- 2. **Objective setting** By setting clear objectives and goals enterprises can start comprehensive analysis of what risks might be endured throughout the process of conducting activities to reach desired targets.

- 3. **Event identification** Both external and internal events that might have an impact on activities set up to reach organization's goals should be identified and assessed in order to label them as opportunities or risks.
- 4. **Risk assessment** Based on probability and scale of the impact it should be decided how it should be approached.
- 5. **Risk response** based on collected data and insights made, one of the four responses towards risk (avoidance, acceptance, mitigation or transfer) should be applied.
- 6. **Control activities** Based on the decisions made in the previous step, business should reflect them in its organizational and operational structure.
- 7. **Information and Communication** Propagation of information on selected approaches towards particular risks should take place within the organization to enable all team members to proactively work towards their implementation.
- 8. **Monitoring** Constant track of discovered and assessed risks should take place to produce insights if any changes are necessary to adopted strategy in order to manage these risks in the most effective manner.

3.3.3 Crisis management

Crises are defined as low probability and high impact events posing imminent danger to business' survival [73], [74]. These situations are highly unpredictable in their occurrence and development; therefore, in order to attempt controlling them, planning and sense-making is paramount. This is done by making flowcharts or mapping these events in order to understand how to interpret and mitigate signals given by these events before they even occur. This process can take place in simulated situations and produce insights on how the company should behave in a certain crisis situation; however, usually most of the possible hazardous events remain undiscovered and only real crisis situations expand the view on what is really possible. On the other hand, the discovery process requires acting and performing actions with limited (or no) knowledge. This might induce the crisis to escalate even more as usually entities are interlinked and produce cascading events (especially in complicated organizational or technological structures) [75].

Contingency planning and enactment are key elements when it comes to effective crisis management. And even though most of the crises are unique and nearly impose to be fully prepared for, planning appropriate sets of actions for these events is necessary in order to avoid completely uncontrolled crisis development [73].

Although, crises vary in their scale and nature, their management should usually follow a set of stages where appropriate actions are taken to discover and evade or mitigate unfolding critical events [70]:

1. **Signal Detection** - Sensing weak signals of significant events that can result in a crisis.

- 2. **Preparation and Prevention** engaging in activities of developing contingency plans and allocating physical or talent resources to be available in case of a crisis.
- 3. **Damage Containment** As the crisis is happening an enterprise needs to focus on keeping it from spreading to unaffected parts of the business and do not allow the situation to escalate uncontrollably.
- 4. **Recovery** Implementation of short and long term solutions should take place as soon as possible to return to business' nominal operating capacity.
- 5. **Learning** After the crisis has passed business has to evaluate actions taken to mitigate it and document gained experience to be able to share it internally and with other organizations.

Although crisis situations pose a threat to enterprises as they come with reduced demand, geopolitical instability and other issues, they can also be a prime driver of entrepreneurial growth and learning if the approach to the situation is appropriate. This phenomenon is called 'crisis induced learning' and it can bring a new level of standard in operational procedures, best practices and organizational structure that otherwise would not have been discovered [75].

4 Data collection, construction of cases and initial analysis

After methodology was established and questionnaire for data collection was created, interviews took place with founders of businesses or people in high managerial positions that could provide a broad and in-depth overview of their companies' history, how they have adapted their strategy to endure the pandemic and how they are planning to evolve their organization in the future.

To produce sufficient amount of significant data on how businesses have shifted their strategies and demonstrated their Dynamic Capabilities, business sectors that were impacted the most were considered. Therefore, businesses in technology, digital services and similar industries were not chosen as their business models do not rely on constant physical interactions with their customers. Thus, it was assumed that analysing these types of businesses' evolution would not produce high contrast data on how imposed restrictions created major obstacles and forced enterprises to quickly maneuver to stay operational.

Based on previously set criteria the sector of auxiliary private education was selected. Businesses in this field were built on providing direct physical attention to their customers because it was viewed as the most effective form of learning. Thus, educational services were conducted in classrooms and online lessons were almost not used as a service [18].

During the conduction of the interviewees few of the interviewees required their data to be made anonymous. Therefore, to keep consistency and avoid stricter conditions of data use, all taken interviews were depersonalized. For this purpose, to refer to each case a list of interview keys was created.

Table 3: Table of interview keys

Interview key	Position of the interviewee	Description of the business
PE1	Founder	An additional private education company that seeks to provide services for students in high schools and adults that seek to better their academic performance, prepare for exams or better themselves as specialists. The founder of the company began as a private teacher and as the demand grew, it spawned a need to create a business and scale it's activities. At the time of the interview (16/03/2021) the enterprise was operational for more than 5 years and had more than 160 contracted teachers conducting routine classes throughout two biggest cities of Lithuania.
PE2	Manager of Marketing and Communications	A private education business that provides additional educational and coaching services such as language courses, personality development coaching or organizing workshops for team building activities. The business has been operating for more than 28 years and was firstly established as a public institution but it was privatized during the starting years of the organization. At the time of the interview (01/04/2021) the business had 71 full-time and approximately 130 contracted employees throughout the country.
PE3	Co-Founder	A private education business that provides private and group classes for students from 7 to 18 year old in academic areas of science, mathematics and languages. Enterprise was established in the summer of 2019 by two co-founders. Since establishing the company it has been growing steadily and in the first year the newly assembled team has successfully helped over 100 students to achieve their goals. At the time of the interview (22/04/2021), The enterprise has been operational for more than one and a half years and has 2 full-time employees with more than 100 contracted teachers conducting routine classes.

Further subsections will cover the cases of these three businesses and provide analysis on their strategy evolution as well as demonstrated abilities to cope with the challenges created by imposed restrictions due to the Coronavirus pandemic.

4.1 PE1 Case

Introduction

First business interviewed in the auxiliary private education sector was an enterprise that is operational since 2016 and has more than 160 contracted teachers conducting classes on routine basis throughout two biggest cities in Lithuania.

The founder of the company began as a private teacher. As workload grew it was deemed necessary to expand and create a business that can invite more teachers, serve more students and scale it's activities efficiently. For this reason the founder reached out to his friend and later a few other previous study friends and invited them to join his cause. This formed an initial team that started as a business and after 4 months of work formed the necessary organizational and legal base for scaling the organization.

Over the years more classrooms were leased and demand for private education services grew steadily. Therefore, more teachers joined *PE1*. Business expanded from operating beyond one city and as the scale of the business grew, additional managerial positions were hired to allow the founder to focus more on business development activities.

Taken answers from the interview were used to produce a Business Model Canvas (figure 13) and gained information was presented in a case with three sections of how business has evolved before and during the health crisis as well as how the founder forecasts the business to evolve in the future. This is followed by an initial analysis of the case and how it reflects examined theories and frameworks.

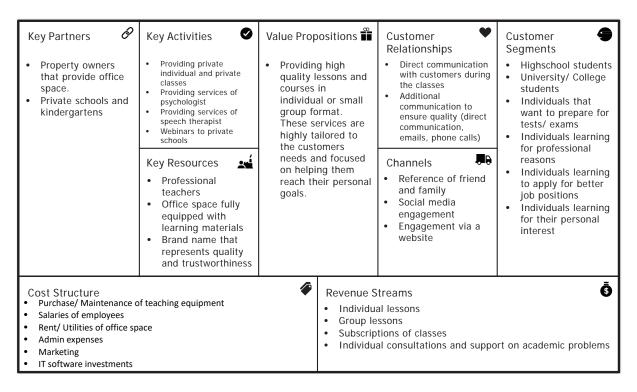


Figure 13: Business model canvas of PE1

Business evolution before the Coronavirus pandemic

From the establishment of the business as an entity, the growth of *PE1* was moderate and steady based on how many live lessons could be provided. Therefore, this number could only be increased by having three factors satisfied simultaneously:

- 1. Having more classrooms;
- 2. Having more customers that are relatively close to those classrooms and have free time when the teachers and the classrooms are available;
- 3. Having more available teachers that are qualified, live relatively close to the leased class-rooms and have a schedule that is suitable for new customers.

As the demand for auxiliary private education was growing, there was a sufficient number of new customers and skilled teachers were relatively easy to hire as well. The main bottleneck was having enough classroom space to take in new customers. This problem was mitigated by acquiring new spaces in strategic locations which were expected to be convenient for students and teachers to meet.

During this growth period perceived competition was limited to three enterprises in the auxiliary private education sector. However, these businesses provided services that differed considerably from what was offered by *PE1*; therefore, they were not viewed as direct competitors.

During the first three years of the business operation, innovation as well as discovery of new technologies and opportunities were limited due to the core team being focused on growing the business, defining its processes and developing a well established organizational structure. After this period, a routine task of searching for new opportunities and technologies was established. Innovation scouting was performed throughout the year and implementation was done during the season of summer when the demand was usually lower.

Finally, *PE1* team has developed their first crisis management plans to a relatively limited extent in January, 2020 (before Coronavirus was addressed as a serious threat). A list of risks was generated and the team has put together scenarios of how these threats should be avoided, mitigated or dealt with. However, they were not extremely elaborate and these plans did not allocate financial or organisational resources towards managing risks as investments into business development were prioritized.

Business evolution during the Coronavirus pandemic

During the pandemic *PE1* placed the focus on balancing physical and digital classes. It was chosen to continue live classes when the restrictions allowed it, especially as it was deemed essential to younger pupils. Although more efforts were allocated towards conducting virtual classes as their demand has grown from 2% to 25-30% and offered greater freedom to students and their teachers.

Overall, 2020 growth tendencies were not significantly slowed down compared to previous years. However, the month of March for *PE1* usually brings the peak demand as most of the students are preparing for their exams or tests that will take place during spring. However, the

first lockdown was imposed at this time and significantly reduced the peak of new students acquired. Furthermore, at the start of the pandemic a significant portion of customers did not believe that digital classes could be effective and presented in an engaging manner. That has led to a considerable amount of customers canceling their subscriptions or stop attending classes.

This situation was made even worse as a considerable portion of teachers did not believe that the quality could be maintained in a digital format as well. To mitigate it, the core team of *PE1* has conducted extensive internal communication with hired teachers and kept them up to date about latest developments and decisions made by the business. This allowed to ease the situation, persuade the teachers and enable smoother transition to conducting classes online.

During this time one new auxiliary private education business entered the market and became significantly successful. It has grown considerably during the pandemic due to its completely digital approach where all classes were conducted to a large number of students remotely or by giving access to pre-recorded classes. This competitor entered the market with a good marketing strategy utilizing influencers, advertisements and similar marketing tools; however, the founder of *PE1* considers that due to its focus on quantity - quality of provided services by this competitor was rather inconsistent.

Moreover, during the Coronavirus pandemic *PE1* has received direct financial support provided by governmental organizations which included subsidies for rent and other business related expenses; although, it was noted that provided amounts of money were relatively small. Furthermore, due to reduced workload that was caused by the pandemic, compensations to the employees, supplementing their incomes to reach minimum wage, were provided. However, some of the requests for state support were rejected due to the company being profitable and it was noted that application processes were slow and rather inefficient.

Predictions of business evolution after the Coronavirus

At the time of the interview, the future strategy of *PE1* was defined as keeping both physical and digital formats of classes operational. Furthermore, expansion plans to other countries seems to be more viable due to digital platform that will be developed as it will enable to test foreign markets with digital services first and then invest more assets into having physical presence in the country. This will allow the company to be more agile and move faster into the new markets while retaining ones it is already operating in. This will give the ability to the business to scale in an almost frictionless manner; therefore, a fast growth period is predicted.

When it comes to future development of competition, it was noted that the amount of well qualified teachers is rather limited and the growth of competition in the near future will be constrained to companies being able to attract these talents. Finally, it is believed that growing competition will take place for customers that choose to learn remotely as *PE1* plans that 30-50% of all classes provided will be digital, even when all lockdowns are lifted as customers have started to appreciate flexibility and time saved while choosing this option.

4.2 Initial analysis of the case

From collected data it appears that the business is in the third out of five business development stages - Success. The business enjoys a sustained influx of customers as well as rather defined organizational structure. As there is a core team formed, it supports the founder and enables that person together with the core team to pursue strategy and organizational development oriented projects. Moreover, the founder is not disengaging from the business and pursues its growth with implementing new approaches and technologies. Therefore, the business falls into a Growth subcategory of Success.

It can be predicted with relative confidence that *PE1* is close to transitioning to the fourth stage of Take Off where more structure will be ushered in with newly developed digital platform and growth will be placed as the main strategy of the enterprise. Furthermore, it appears that this transition was rather greatly accelerated by the pandemic as it enabled to consider providing digital classes by developing a privately owned platform which will provide greater scalability of the business.

Dynamic Capabilities demonstrated throughout evolution of the business

Based on gathered information *PE1* demonstrates rather strong attributes of Dynamic Capabilities as the business has a routine task to scout for new technologies and implement them during the periods when the customer volume is lower. This structured approach enabled the business to Anticipate upcoming innovations in the educational sector and Challenge their current business practices.

Furthermore, attributes of Interpretation and Deciding were in place before the pandemic and were accelerated by it when it was necessary to take action and make the transition of conducting classes online. However, the customers perceived online classes as lacking quality; therefore, not only the business but also the customers had to expand their perception on what constitutes good quality of provided educational services. Based on collected data this reframing process had to happen naturally and could not be accelerated significantly by pro-active business' actions.

Final pillar of Dynamic Capabilities of Transforming was slightly less pronounced before the pandemic as the business was focused mostly on establishing proper organizational structure and radical transformation was not pursued. This pillar of Dynamic Capabilities was also boosted by the health crisis as the aligning and learning processes had to be performed in a short period of time. Alignment process for *PE1* was comparatively difficult as at first some teachers were not convinced to pursue digital solutions and wanted to wait out the pandemic in order to return to their usual way of conducting classes. Later this notion changed as both teachers and customers have understood the convenience of online classes as well as teachers have gotten used to online communication platforms.

However, the transitioning period was rather decentralized and each teacher was allowed to discover their most convenient way of conducting classes. Each of them have experienced minor difficulties and had to learn how to overcome these challenges individually. Therefore, these individual learning processes were not shared regularly within the team of teachers. This

created a situation where the proper Learning process was slowed down due to *PE1* choosing not to standardize how the classes are provided and what digital communication platforms should be used.

Evolution of strategy under uncertainty

Auxiliary private education businesses were placed in the third tier of uncertainty - Range of Futures as the first lockdown was declared in March, 2020 for upcoming two weeks. This uncertainty was even more exacerbated and moved closer to tier four - True Uncertainty as further extensions of the lockdowns were introduced and their length depended on developments of the pandemic.

PE1 had more difficulties adjusting to these uncertain measures as at the beginning it was not believed that a full closure of public events and spaces could take place. Moreover, although some contingency plans were prepared by the core team of the enterprise, these scenarios were prepared for financial crises where the demand is gradually decreasing due to the fact that customers have less buying power. This scenario was completely unexpected where the demand was reduced to almost non-existent just over a period of a few days.

After the first months the business and the teachers managed to align themselves with the new remote approaches and the uncertainty was lowered again to the Range of Futures. During this period it can be seen that the business chose to adapt to the changes by conducting online classes and trying to reach their customers remotely. Moreover, some traits of flexibility are being noted as physical classes were taking place whenever governmental restrictions allowed them to happen. To conduct this irregular activity while not settling to work completely online allowed *PE1* to capture more customers and assure higher customer satisfaction especially with parents of younger pupils' to whom direct physical interaction was perceived to be crucial for their social development and academic success.

Risk and Crisis management

As Coronavirus pandemic was truly the low probability - high impact event for a business that falls in the category of SMEs, it appears that this type of crisis was too improbable to be considered. Therefore, normal Risk Management processes that were prepared to some extent by *PE1* could not be implemented efficiently and this enterprise was caught relatively unprepared for the first lockdown. Due to this, *PE1* was pushed into quickly assessing the threats and deciding what responding actions should take place. Most of the actions taken were focused on Controlling the impact and mitigating its negative effects on the business.

Therefore, forecasting and preparation activities were practically not in place as it was not believed that full lockdown could take place. However, the enterprise was engaged relatively well in the following steps where it was quickly responded to the crisis event and controlling activities were established. Activities of Information and Communication were stressed by the interviewee as one of the success factors that allowed the business to transform relatively fast and conduct digital classes.

Overview

To conclude initial analysis a table was made to give a quick overview of how each researched framework has manifested itself in the case of *PE1*.

Table 4: Overview of *PE1* initial analysis

Framework	Overview
Porter's Diamond model	 Firm strategy, Structure and Rivalry - Business appears to be at the third developmental stage - Success with clear indication of near future transformation to fourth - Take Off stage; Business strategy due to Coronavirus pandemic shifted from providing physical classes to mixture of physical and remote learning services; Perceived competition by PE1 was and still is minimal to none. Factor Conditions - Access to talent, infrastructure and other resources was not impacted due to the pandemic. Demand Conditions - Demand was reduced at the initial announcement of lockdowns; however, when remote approaches were adopted and customers understood that the remote learning can be just as engaging the demand started growing again. Related and Supporting Industries - No significant supporting businesses were used before or discovered during the pandemic. Chance - Before Coronavirus no significant crises or other low probability - high impact events were incurred. Government - Business has received subsidies although some requests were rejected due to the business being profitable.
Dynamic Capabilities	Business had mostly developed Sensing and Seizing attributes of Dynamic Capabilities as routine innovation scouting was done and their implementation was performed regularly. During the pandemic challenges in the Transforming attribute of Dynamic Capabilities was faced and effort had to be put in place to align employees; however, Learning process was slowed down as teachers were rather decentralized and it was not chosen to standardize how educational services were provided.
Resource Based View	Business in the lens of RBV assures its competitiveness with such intangible resources possessing VRIO attributes as well developed organizational structure, talented teachers and few unique services that are more rare in the market.
Corporate Foresight	PE1 had demonstrated relatively little Corporate Foresight activities as it was not observed pursuing broader forecasting of future market developments.
Strategy Under Uncertainty	Enterprise moved into the fourth then reduced to the third level of uncertainty. To combat it, it was chosen to take Adaptivity and Flexibility postures.
Risk management	Strategic plans to certain extent were developed. However, the global pandemic was not considered as one of the risks.
Crisis management	Although proper assessment and prevention was not performed, when the crisis ensued, Communication and Damage Containment were performed relatively well.

4.3 PE2 Case

Introduction

The second business that was interviewed in the auxiliary private education sector was an enterprise established in 1993 as a public institution; however, it was privatized and turned into an auxiliary private education enterprise. At the time of the interview the business had 71 full time and approximately 130 contracted teachers throughout major and smaller cities in Lithuania.

In order to provide the reader with a more comprehensive overview of the enterprise, a Business Model Canvas was made (figure 14). Based on collected data a case was constructed to depict businesses evolution before and during the pandemic as well as to portray what developments of the business are forecasted in the near future.

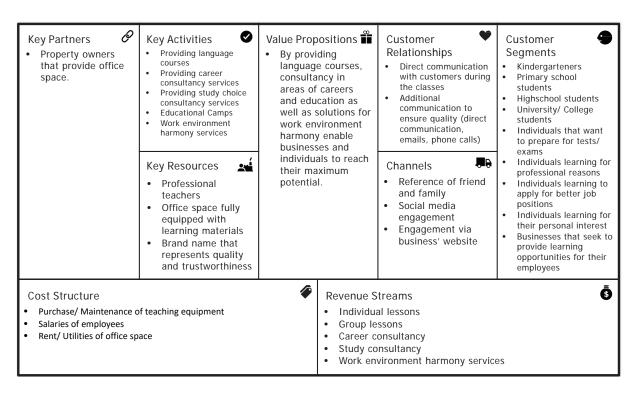


Figure 14: Business model canvas of PE2

Business evolution before the Coronavirus pandemic

The business strategy before the pandemic was based on retaining and developing existing services, introducing new ones that show potential and aiming to enter new countries with already market-proven services. For this purpose, the enterprise hired a considerable amount of employees in newly formed positions and pushed forward with an optimistic growth strategy. This enabled *PE2* to expand significantly in the Lithuanian market by focusing towards unique services that are rarely offered by other well renowned auxiliary private educational companies. Few of these services are:

- Language courses for private and business clients;
- Personality development coaching services that are focused on building professionals and teams;
- Workshops to understand if new team members in a company will be a good fit for the position.

Due to these multiple services that bring unique value to the customer, *PE2* was growing at a substantial pace and plans of expanding to two new countries were developed. However, this growth has brought more uncertainty into organizational structure and standard operational procedures as well.

Before the pandemic certain competitors in the auxiliary private education sector were known by *PE2*; however, it was perceived that their offered services were either too superficial or too theoretical unlike *PE2*, which seeks to have a balance of practicality and theory. Therefore, no

significant pressure was felt by these businesses and they were not considered as direct competitors.

Main customers of the provided services were Business to Business (B2B) clients that bought previously mentioned services during periods of economic growth for employees that had unique skills and were only missing language knowledge or personal development. Moreover, another customer segment was private customers that were driven to learn languages primarily for their leisure or prestige.

Due to this *PE2* was focused on providing premium services and close attention was paid by the quality managers on tracking and providing suggestions how to improve the experience of offered services as well as searching for new opportunities and technologies that could accelerate this process. Therefore, innovation scouting was set in *PE2* as a routine task and performed about once a month.

Finally, before the pandemic in-depth analyses of previous financial or health crises were not made as there was a set attitude that each crisis is different and will require completely unique approaches to counter it. Therefore, no significant contingency plans were prepared and a position of reacting to crises when they come and more information is discovered was taken.

Business evolution during the Coronavirus pandemic

When the Coronavirus pandemic forced governmental organizations to impose nation-wide lockdown, all businesses had to cut their expenses; therefore, *PE2* lost almost all business clients that purchased subscriptions and other more premium options of services. Due to this, the enterprise has shrunk and reduced its capacity in 2020 by half.

At the time of the interview, the strategy of *PE2* was shifted mostly towards private customers that want to improve professionally and better their career opportunities. The classes were started to be conducted remotely where larger groups were formed to share the costs and make offered services more affordable which in turn would attract more new students.

During the Coronavirus heath crisis the competition for *PE2* has changed considerably as many businesses have moved to digital space or new businesses have been established that were launched with business models that focus on providing services remotely and did not have to go through the transformation phase of digitization. *PE2* business has observed these competitors and learned how they approach remote education. As most of the businesses are moving towards digitization this has placed *PE2* into a significantly more competitive environment.

Quality managers that performed routine tasks of scouting for new opportunities and technologies once a month have increased their efforts and started doing this activity every week. Furthermore, the processes put in place by the quality management team were efficient and provided necessary support when the need to 'go digital' emerged. Framework on how classes should take place in digital format was already tested and approved before the pandemic and it was only necessary to implement it. Implementation was fast and without significant difficulties as all employees understood the necessity of these changes; although, it required people working in *PE2* to be patient and learn these new approaches.

At the beginning it was feared that digital classes would not be met with much approval.

Therefore, feedback forms and calls were made after the classes to understand how clients are feeling about this transition. Moreover, first classes were attended by quality managers to learn about the dynamics of online classes and make discussions with students after on how did they went.

Furthermore, in 2020 *PE2* was ready to participate in one of the biggest expo events on educational services in the country. However, the event was postponed and finally canceled. Therefore, *PE2* organized their own online exposition that was structured like a live event with many presentations and discussions. Overall, the event turned out to be a huge success with a high number of visitors that drove a considerable amount of attention as well as new customers to the business.

Finally, during the pandemic the company has received standard financial support measures from the governmental institutions. These support measures would include salary compensation for teachers that lost their work-load due to the pandemic or compensations for certain business expenses. However, provided support was only monetary and no workshops or consultancy was provided by the governmental organizations.

Predictions of business evolution after the Coronavirus

When restrictions due to Coronavirus are lifted it is planned to go back to normal operation as some of the services provided by *PE2* bring desired learning efficiency only by conducting them physically; however, it is agreed that retaining digital presence will be important as well. However, at the time of taking the interview there was no clear action plan set in place on how this process will take place.

In the near future it is expected that customers will expect to get the best quality in the most convenient way. Consumers will want services that are more tailor made for them and meet their personal needs. Therefore, lessons learned during the pandemic will enable *PE2* to provide premium services that reflect customers' needs and this in turn will give the ability to the enterprise to regain its capacity that was lost during the pandemic.

Finally, although near future competition is difficult to predict, it is forecasted by *PE2* that businesses providing basic auxiliary education services will shrink and those that have more unique educational services will grow slightly. It is believed that *PE2* business will retake its market share as its offered services are unique and difficult to replicate.

4.4 Initial analysis of the case

The second enterprise in the auxiliary private education sector has long experience in the market and diverse portfolio of services that are unique and difficult to replicate. However, the business model was not sufficiently resistant to the global health crisis. As most of the unique services were targeted towards B2B clients their demand has reduced significantly as other businesses have become extremely conservative due to the high uncertainty.

Due to its longer operation in the market *PE2* is a more mature company reaching forth out of five phases of business development - the Take Off phase. It is reflected by a clear organizational structure and defined departments that are specialized towards a specific area of

operation. However, it seems that it is still in its evolutionary stage as expected Red Tape crisis or at least some signs of it is not seen yet because the business model enables teachers to act rather autonomously and freely providing their services to the end users.

Dynamic Capabilities demonstrated throughout evolution of the business

With a long track record of operation *PE2* is the only business interviewed that has endured financial and health crises, and has gained the experience of operating through them. However, it seems that although some Learning processes took place, they were not deeply rooted into the business and the approach of Ad Hoc reaction was chosen instead. This decision was rationalized by the attitude that all crises are completely different and require a unique set of solutions to counter them.

Due to the Coronavirus, the business model of *PE2* has seen rather significant changes in regards to services that were provided. Main focus shifted from B2B clients towards Business to Customer (B2C) segments as *PE2* has lost most of enterprises that provided a significant amount of revenue. However, this organization has successfully realigned towards B2C customers which enabled it to continue its operation and secure another source of reliable revenue.

As the business had quality managers that focused on improving the quality of provided services and conducting activities of innovation scouting, the first pillar of Dynamic Capabilities consisting of Anticipation and Challenging was rather well pronounced. The business managed to offer comprehensive packages of services that were valued by the customers and brought significant profits. However, business was caught unprepared to counter a crisis where B2B clients became conservative and stopped buying these types of services almost completely. Therefore, these attributes of Dynamic Capabilities were well developed for conditions of market growth, yet they demonstrated rather limited success when it comes to countering challenges posed by the pandemic.

Furthermore, the Seizing pillar of the Dynamic Capabilities was better equipped to capture value in pre-Coronavirus conditions as well. Due to this reason the business managed to seize unique opportunities and offer services that had little to no competition; however, demand for these services got severely impacted during the pandemic and a significant portion of them were not successfully adaptable to the new market setting.

Finally, Transformation pillar seems to be adapted the best to both 'normal' and crisis situations as *PE2* managed to efficiently shift focus on what services it is providing and the way they were being conducted, as well as efficiently adapting to the needs of B2C customer segments and carry out a smooth Alignment process which united the team to perform under uncertainty.

Evolution of strategy under uncertainty

Although business was operational during a few economical and smaller health crises, it did not develop significant plans to counter them as it was deemed that each crisis is unique in its own right. This could be considered as the assumed position of Flexibility and Retaining the right to remain playful. However, this pandemic created a situation which exceeded *PE2* capacities of Flexibility and required to approach the situation with more Adaptiveness.

As mentioned in the previous case analysis - auxiliary private education enterprises were pushed to almost True Uncertainty as the initial lockdowns were extended in April of 2020. *PE2* has shifted more from Flexibility to Adaptivity as it managed to pivot rather quickly and the team has quickly aligned themselves with the implemented changes. However, even with these capabilities in place its main revenue streams were significantly reduced and market traction lost.

Risk and Crisis management

Based on collected information, *PE2* had relatively little plans on how to manage Crises and Risk assessment was done on a superficial level. This was justified as it was deemed more appropriate to have the ability 'To Reserve the Right to Play' and deal with each crisis as it becomes more pronounced and more detailed information could be collected about it. By this approach the business enabled itself to be agile in the face of a crisis and allocate its resources where it was deemed most necessary.

Unfortunately, as it was seen in this case, lack of Foresight brought the business to a situation where their service portfolio was not adaptable enough in case of a major crisis and has lost a significant portion of its demand when Coronavirus was announced to be a global health crisis. And although *PE2* underperformed in the preparation for these types of low probability - high impact events, the following stages of the Crisis Management followed swiftly and the business managed to contain damage already incurred without allowing it to fully envelop the business' operations. Therefore, transition to different customer segments was relatively smooth and at the time of the interview the business was on a steady recovery path with reduced capacity.

Overview

To provide a short overview on conducted initial analysis and outline how researched frameworks have manifested themselves, a table was put together (figure 5).

Table 5: Overview of *PE2* initial analysis

Framework	Overview
Resource Based View	Business has a well developed organizational structure, experienced employees and services that are unique and difficult to replicate. These resources have VRIO attributes and the company is focused on extracting value from them. Therefore, it would constitute a sustained competitive advantage which was achieved during the period of market growth, yet it was disrupted due to the Coronavirus pandemic.
Corporate Foresight	Enterprise was performing Foresight activities to some extent as plans for providing services remotely were planned before the pandemic.
Strategy Under Uncertainty	As the restrictions were imposed and then extended, PE2 moved into the fourth, which was later reduced to the third level of uncertainty. As sold services were unique and targeted specific market segments, a pivot had to be done where focus for B2C clients were given. This required the business to assume Adaptivity posture.
Risk management	No considerable risk management patterns were noticed as it appears that an Ad Hoc approach of dealing with them was taken.
Crisis management	No significant crisis management approaches were adopted as it was deemed that each crisis is unique and different sets of approaches will be necessary to be taken as it develops and new information is uncovered.

Framework	Overview
Porter's Diamond model	• Firm strategy, Structure and Rivalry - ∘ No direct competition was perceived before or during the pandemic as it was assumed that offered services by PE2 were unique and difficult to replicate. ∘ From the data collected it seems that the business is in the more mature forth out of five phases of business development - the Take Off phase. However, further evolution in the near future seems unlikely. • Factor Conditions - Access to talent, infrastructure and other resources was not impacted; however, higher than usual turnover in junior positions were noted. • Demand Conditions - Due to B2B customers becoming considerably more conservative, the demand was reduced and B2C customers had to be targeted with reduced capacity. • Related and Supporting Industries - Almost no supporting businesses were used or discovered before or during the pandemic. • Chance - Business has endured the financial crisis of 2008 and other smaller low probability - high impact events; however, clear plans on how to tackle these situations were not developed. • Government - Subsidies to compensate business expenses and employee salaries were issued to PE2.
Dynamic Capabilities	Business had developed Sensing and Seizing attributes of Dynamic capabilities that were better suited for the pre-Coronavirus conditions as it managed to find unique offers that were highly appreciated by their clients. Attribute of transforming seems to be the most adapted to both 'market growth' and crisis conditions as PE2 managed to efficiently shift focus on B2C customers and enable service provision on online communication platforms.

4.5 PE3 Case

Introduction

The third interviewed enterprise in the auxiliary private education sector was established in 2019 by two co-founders that were previously working as tutors for mathematics individually in parallel to their main professions for several years. As the demand for their services grew, co-founders have decided to form a team and get additional talented members to join them.

Thus, *PE3* was established in the summer of 2019 with a focus on providing auxiliary education on the subject of mathematics. In the first year (2019 - 2020) the team has successfully helped over 100 students to achieve their goals and as parents of these students started inquiring about other educational subjects, co-founders chose to invite additional team members in STEM, languages and other academic fields. This has led to significant growth in capacity while maintaining the focus on providing high quality services and enabling children to reach their best academic results.

At the time of the interview taken, the enterprise had 2 full time employees that managed the business with more than 100 contracted teachers conducting routine classes.

To provide a clearer overview of the enterprise a Business Model Canvas was produced (figure 15) and information obtained during the interview was used to comprise a case on how *PE3* has evolved before and during the pandemic as well as to depict what co-founder predicts to be the near future evolution of *PE3*.

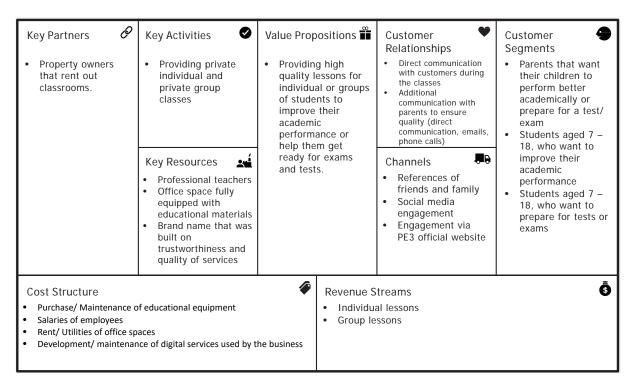


Figure 15: Business model canvas of PE3

Business evolution before the Coronavirus pandemic

Before the pandemic the primary goal of the business was to grow and increase its capacity by hiring skilled teachers and leasing more classroom spaces. This growth was steady and mostly linear. As the demand for private classes was high, it was only limited by the capacity of the business. During this period the enterprise has grown significantly which enabled more than 100 teachers to be contracted and conduct regular classes.

During this period co-founders were always aware about competitors that were offering similar services; however, *PE3* was not focused on outperforming them. It was chosen not to compare themselves with competitors but to focus on building solid organizational structure, improving quality of provided educational services and assuring that the clients are receiving highest quality classes.

As the business was relatively young, *PE3* was constantly seeking ways to improve the speed of processes by digitizing and automating manual work. On the other hand, risk management of unlikely events such as crises and pandemics were not performed. Therefore, no deeper reflections on previous crises were made and all efforts were focused on business growth as well as development of the organizational structure.

Business evolution during the Coronavirus pandemic

During the pandemic restrictions were changing relatively fast; therefore, it was chosen not to close and to reopen physical capacities each time restrictions were altered, but to conduct only remote classes and avoid additional operational costs due to these adjustments. This approach allowed *PE3* to save on costs of renting classrooms and enabled it to reach more students

remotely effectively and scale provided services in a faster manner. It was compared by the cofounder that to maintain current capacity while conducting lessons in person 20-30 additional classrooms would have to be rented.

During the period of the pandemic more businesses saw the opportunity to capitalize on remote learning and started providing similar services as *PE3*. However, these businesses were new in the field and lacked the experience. Therefore, it was predicted that they will most likely not grow fast enough to become direct competitors. Furthermore, these young businesses were more focused on acquiring clients fast and raising their profits which usually negatively impacts quality of provided services in the process.

To assure high quality of services while transitioning to digital format constant communication with students and their parents was maintained. For this reason a manager was tasked to call parents and collect their feedback about the quality of received educational services. Due to this approach customer needs were mapped relatively accurately; although, the main need of students and their parents was simple - to have quality remote classes with a more approachable price list.

Adopted remote approach of conducting classes has offered greater flexibility that was enjoyed by the teachers and the students. Besides this, other improvements were sought after as in the past smaller volume of customers did not require a significant amount of technologies to manage it - manual work was not so tedious. However, the business has scaled up and required more automated and integrated solutions to run smoothly. Therefore, the search and adoption process of new technologies has intensified considerably.

Finally, *PE3* was growing during the period of the pandemic which made it mostly unsuitable to apply for any financial state-provided support. Furthermore, co-founders did not see the necessity to apply for it as it was deemed that other businesses needed it more. No indirect support from governmental organizations such as consultations or workshops was received as well.

Predictions of business evolution after the Coronavirus

Future strategy of *PE3* is mainly focused on establishing a solid organizational structure and growing business capacity to provide more services. Going back to physical classes is not emphasized so greatly and at the beginning of Summer of 2021 some live lessons will be restarted if it will be deemed to be financially feasible.

The co-founder noted that the public opinion of public education has worsened as more aged teachers due to their lacking IT skills had difficulties adapting to digital transition and could not conduct classes with equal quality as they did with physical ones. Due to this situation, the demand for auxiliary private education will grow to mend academic shortcomings of students that were left by the sub-par learning experience provided by public education organizations during the pandemic. Although, this will increase the demand, it will also usher more competitors entering the market with varying levels of scale.

Moreover, the co-founder assumes that technologies will become a growing part of everyday child's life. Therefore, they will be less focused and develop varying degrees of attention disorders that will require even greater need for auxiliary private educational services to bridge the gaps that public education will not have the capacity to do.

Finally, before the pandemic remote classes were viewed as lacking quality and not as engaging. Coronavirus health crisis allowed customers to understand that they can have a more convenient digital experience without compromising quality. Therefore, in the future it is expected that 20-30% of lessons will be conducted remotely and the rest in physical classes.

4.6 Initial analysis of the case

From the data collected it seems that the business is in the late second stage of organizational development called Survival. Although the business has overcome the obstacle of struggling to have enough customers, there are still relatively few managers to enable further structuring of the organization and pursuing accelerated growth. This leads to a business being heavily dependent on the co-founders to maintain the core business activities operational. However, with the newly adopted online platform and optimistic expectations for growth it should be expected that *PE3* will enter the third stage of development Success and impose a greater line of command and form more structured teams

Dynamic Capabilities demonstrated throughout evolution of the business

As the business at the time of the interview was operational just for less than two years Sensing attributes manifested themselves as Ad Hoc research to optimize business operations and accommodate its growth. During the pandemic this approach was maintained to implement changes that would allow the business to continue its operation under a lockdown. This activity required challenging the existing status quo where physical classes were perceived as almost the only way to learn efficiently.

Attributes of Seizing were rather dormant in the pre-pandemic period as well. Although this period saw the start of private online educational platform development, Dynamic Capabilities in this pillar were manifested stronger during the pandemic as *PE3* quickly decided to switch their approach of providing educational services from physical to digital. This drastic change was followed with good organizational alignment as all members of the team had little difficulties adapting to newly established operations. Therefore, this information points out that the third pillar of Dynamic Capabilities was the most developed in *PE3* as the Alignment process was carried out with no issues and the enterprise managed to successfully pivot toward providing services remotely.

Evolution of strategy under uncertainty

At the beginning of the pandemic *PE3* just like other businesses was pushed into an almost True Uncertainty environment where lockdown and other imposed restrictions made it difficult to predict how the entrepreneurial environment will develop in the near future. However, the organization was quick to adjust to the situation along with its young teachers that had relatively little difficulties adopting new approaches of conducting classes online. Therefore, the

uncertainty level rather efficiently was reduced to the third level where Range of Futures was possible.

Finally, as the business chose not to conduct any physical classes until Summer of 2021, it has set its own rules on how to approach the pandemic. Therefore, it demonstrates a mixture of Adoption and Shaping postures which allowed *PE3* to reduce the uncertainty surrounding the enterprise to the second level of Alternative futures.

Risk and Crisis management

As the business at the time of the interview was running for less than two years, it had little Risk and Crisis management techniques and approaches in place. Therefore no crisis identification or risk assessment activities took place that could have prepared the enterprise for the pandemic as all focus was put towards growing the business.

Although the initial steps of risk management were not followed, when it comes to Crisis Management, the Damage Containment activities were performed swiftly and efficiently with all teachers being aligned to chosen strategy and not allowing the pandemic to disturb the organizational operational capacities to a greater extent.

Overview

To summarize initial analysis conducted on the *PE3* case a table was constructed. It provides the reader with the outline of researched frameworks and how they have been observed.

Table 6: Overview of *PE3* initial analysis

Framework	Overview
Porter's Diamond model	• Firm strategy, Structure and Rivalry -
Dynamic Capabilities	Sensing attributes of Dynamic Capabilities manifested themselves as Ad Hoc research to optimize business operations and accommodate its growth. Moreover, the attribute of Seizing was rather dormant before and manifested stronger during the pandemic. Transformation pillar of Dynamic Capabilities was the most developed as the Alignment process was carried out with no issues and the enterprise managed to successfully pivot toward providing services remotely.

Framework	Overview
Resource Based View	Business has an organizational structure that is centered on efficiently providing services for their customers and talented teachers who can conduct classes efficiently. These two resources possess VRIO attributes.
Corporate Foresight	PE3 had demonstrated relatively little Corporate Foresighting activities as it was not observed pursuing broader forecasting of market development.
Strategy Under Uncertainty	Just like other interviewed businesses, PE3 at the beginning of the pandemic was pushed into an almost True Uncertainty environment. However, the organization was quick to adjust to the situation and reduce it to the third level. Finally, as the business chose not to conduct any physical classes until Summer 2021 it has set its own rules and reduced the uncertainty surrounding the enterprise to the second level of Alternative futures. This demonstrates assumed Adoption and Shaping strategic postures.
Risk management	As the business at the time of the interview was operating for less than two years, it had little Risk management techniques and approaches in place. Therefore no risk assessment activities took place that could have prepared the enterprise for the pandemic.
Crisis management	Although Prevention and Preparation for this type of crisis was not done, Damage Containment of the crisis was performed swiftly and efficiently with all teachers being aligned to chosen strategy and not allowing the pandemic to disturb the organizational operation capacities to a greater extent.

5 Cross analysis of cases

After all cases for auxiliary private education business were constructed and primary analysis was made, these cases were compared in order to learn what similarities and differences are between these researched enterprises. Moreover, as previous initial analyses were focused on discovering and pointing out how selected theoretical frameworks were demonstrated by the interviewed businesses, following cross-analysis was composed to compare these attributes and seek to understand how they enabled enterprises to successfully combat challenges posed by the Coronavirus pandemic.

5.1 External factors' influence on interviewed businesses

The Coronavirus pandemic caused lockdowns of varying severity; however, it seems that all three interviewed businesses had little to no challenges when it comes to accessing necessary services and products to keep businesses operating. As these businesses are not significantly reliant on any service or product provider they can run relatively autonomously and even if there would be more serious disruptions of global supply chain, it seems that these businesses' operational capacities would be affected comparatively little. This was in turn made easier by the fact that Lithuanian government applied considerably less restrictions for larger retailers as well as other large-scale commercial trade of goods.

Furthermore, access to talent was not stifled during the Coronavirus pandemic as well. While many businesses in other sectors were reducing their capacities, auxiliary private education businesses have transitioned to conducting classes online and were able to take in new qualified personnel to scale their operations. This advantage was further increased as the screening and hiring processes could be performed remotely which saved time and presented a wider selection of candidates to managers responsible for management of human resources.

Thirdly, monetary governmental support was extended to these businesses that were encountering more difficulties and negative growth. And although it seems that these subsidies were not sufficient to cover a larger portion of the losses incurred during the pandemic, this financial support allowed interviewed businesses to remain operational and pursue solutions that would allow them to deliver their services in the most adaptive manner.

These conditions allowed auxiliary private education enterprises to not be concerned about a significant portion of external factors that could affect their business and in turn they had a rather advantaged opportunity compared to other sectors to focus most of their efforts on how to solve the problem of greatly reduced demand.

5.2 Main similarities and differences of cases

To begin with, some similarities were prerequisite to interviewed businesses. All three businesses focused on providing their auxiliary private education services live as direct teachers' attention in physical classes was valued the most whereas remote teaching was viewed as sub par and not as engaging.

Although the pandemic caused significant challenges for all three of the interviewed businesses, two of them managed to regain their traction by re-engaging with their main customer segments by providing remote learning services. Moreover, before the pandemic these businesses were bound to how many classrooms they own or rent. As the pandemic re-framed customers' aversion to remote learning, it became possible to conduct classes online which enabled businesses to scale faster, easier and with less resources.

All three businesses, once chosen to pursue conducting classes remotely, guided their transformation by actively collecting customers' feedback and focused on knowing if newly adopted approaches provide services with similar or even higher quality. Therefore, quality managers or people in similar positions were assigned the task of communicating with customers and learning their experiences. Based on the collected data, all businesses managed to adjust their strategies and successfully transition towards conducting online classes while not compromising quality of provided auxiliary educational services.

Thirdly, none of these businesses perceived direct competition before or during the Coronavirus health crisis and did not believe that it will grow significantly in the near future. This leaves a question if these businesses trust their quality and uniqueness of provided services and do not perceive other enterprises as direct competitors or do they have limited information in regards to what other competitors are working on and how they are infringing on their market share. In the author's opinion the latter is the case as there is a finite amount of teachers and students that could be acquired by a specific auxiliary private education enterprise. It seems that businesses are not focused much on outperforming or outmaneuvering their competitors and rather seek excellence in their provided services.

This phenomenon could be also caused by ever growing demand for private education as Lithuanian society has an increasing amount of disposable income to invest in their education due to growing GDP per capita [76]. With this economic growth expectations for public education are also getting higher and the general public over the years has expressed lower satisfaction with these services [77]. During the pandemic this sentiment was pronounced even greater and parents of the educational aged children started looking for solutions to this problem. Therefore, it might be the case that auxiliary private education businesses have not experienced a significant shortage of customers that would put their focus on how to compete with other businesses and attract their customers.

The final similarity lies within their customer behavior and predictions on how they will behave in the near future. Although it is predicted that bigger half of the customers will be willing to return to physical classes and enjoy live interactions with the teacher and other students, about 20-50% of them is expected to not resume contact learning and continue their additional education process solely online as they have started enjoying the comfort and saved time that remote learning services provide. Therefore, all of the interviewed businesses expect to retain capabilities developed during the pandemic to conduct online classes and on some level it will serve as an asset-light tool to scale the business without requiring additional classroom space.

On the other hand, the main difference between these companies is the complexity of provided services and how teachers are hired to meet this demand. While *PE3* has the most traditional service package with sole focus on students that are in primary and secondary public

schooling system, *PE1* has more services that are not only targeted towards students, but also young specialists and other professionals that seek more academical achievements whereas even though *PE2* has services for students in primary and secondary education stages, main effort was placed on professionals and businesses that seek team development and coaching services along with language courses.

5.3 Main successful and unsuccessful decisions taken by businesses in the auxiliary private education sector

Firstly, all three interviewed businesses adopted digital communication platforms to continue their classes online and this decision could be considered as the first necessary successful move during the pandemic that allowed them to continue operating under imposed lockdowns. Each business guided their transition by closely monitoring and collecting feedback from their customers which played a key role in enabling businesses to steer their transformation in an effective manner.

Furthermore, it was noted that extensive internal communication was the key element that allowed *PE1* and *PE2* to alleviate tension created by these changes and achieve better alignment with their employees and reduce friction while transitioning towards providing auxiliary educational services remotely.

Moreover, all three interviewed businesses have demonstrated attributes of Dynamic Capabilities and were able to execute actions in pillars of Seizing and Transforming relatively well. However, the first pillar of Sensing was developed to certain extents in each business and was more adapted to pre-Coronavirus conditions, yet was relatively unsuccessful in preparing plans or approaches that would effectively combat effects imposed by the restrictions.

Interviewed businesses in the auxiliary private education sector had varying experience in the market and varying levels of preparation when it comes to Risk and Crisis management. However, even if these capabilities were developed, they performed relatively poorly due to their main focus placed on countering financial crises. Therefore, initial steps to manage risks and prepare for crises of this scale were not taken and businesses did not have proper resources allocated to combat it. However, further crisis management steps were taken relatively well and all businesses managed to find solutions, contain the impact of the crisis and regain their ability to function steadily.

Having all these successes and failures in mind, it seems that private education businesses that are focused more on providing services for students in primary and secondary stages of education, were more successful than those that had young specialists and business customers as the primary source of revenue. *PE2* was the largest interviewed enterprise with the most experience in the market as well as developed services that were unique and difficult to replicate. This in the perspective of the Resource Based View framework would constitute sustained competitive advantage; however, it was impacted the most as the main targeted customer group of B2B clients almost did not require services provided by this business during the pandemic.

Although each case is relatively different and complex in its own way, in overall perspective it appears that *PE3* was the most successful in dealing with the challenges posed by the

pandemic. Attributes of success were named in the previous analysis; however, as the founder of *PE3* have noted - the success was highly influenced by the fact that demand has grown significantly as public education institutions were slow to adopt to necessary changes and staff of these organizations was less adept when it comes to IT literacy which is crucial to conduct classes remotely.

Furthermore, *PE3* demonstrated great agility and ability to transform relatively fast in order to reflect implemented changes. This was manifested not only by the founder and assisting managers but also by the team of teachers as well. This allowed the business to move in unison towards rapid transformation and not compromise the quality of provided auxiliary educational services.

Overview

To conclude cross-analysis of all three cases and outline learnt information and discovered key insights a table was created.

Table 7: Overview of performed cross-analysis

Aspect	Overview
External factors' influence on interviewed businesses	During the pandemic most of the external factors were not considerably influencing businesses in the auxiliary private education sector; therefore, access to talent, infrastructure, services, products and other necessary resources to keep businesses operational were not noticeably impeded. Therefore, organizations in this sector mainly had to overcome two key obstacles posed by the pandemic - 1) access to customers and 2) greatly reduced demand.
Main similarities and differences of cases	All three businesses, once chosen to pursue conducting classes remotely, guided their transformation by actively collecting customers' feedback and focused on knowing if newly adopted approaches are conducted in the most efficient manner and provide customers with services that reflect their expectations.
	Moreover, all three interviewed businesses have demonstrated attributes of Dynamic Capabilities to a certain extent before the pandemic which were boosted when businesses were placed in the environment of uncertainty. However, more advanced strategic tools such as Corporate Foresight, Risk and Crisis management were underused and an Ad Hoc approach was taken instead.
	On the other hand, the main difference between these companies is the complexity of provided services and how teachers are hired to meet this demand. While PE1 and PE3 focused mainly on providing traditional service packages with sole focus on students that are in primary and secondary public schooling system, PE2 placed its main focus on professionals and businesses that seek team development and language training services.
	The first decision that could be considered as the necessary successful action taken by the businesses in the auxiliary private education sector was the adoption of digital communication platforms to continue their classes. During this period each business conducted feedback collection activities which enabled them to successfully guide their process of transformation from physical to digital.
Main successful and unsuccessful decisions taken by businesses in the auxiliary private education sector	Moreover, internal communication and proper information dissemination was noted as one of the key factors that assured smoother transition to digital service provision and eased the tension within the team tension during this period.
	Furthermore, all three interviewed businesses have demonstrated attributes of Dynamic Capabilities which allowed them to Sense and Seize new opportunities and Transform provided services to adapt to the global health crisis. However, it was noted that these attributes were not as effective during the crisis compared to the 'normal' conditions.
	Finally, initial risk and crisis management steps were not taken successfully; yet, further actions to manage the crisis were conducted relatively well and all businesses managed to contain the impact of it and regain their ability to function steadily.

6 Discussion

To pursue answering the question of how small and medium enterprises in the auxiliary private education sector have evolved their strategies and Dynamic Capabilities throughout the Coronavirus pandemic and what can be learnt from it three interviews were conducted, cases built and cross-analysis of them was performed. This provided a significant amount of data and initial insights on how these businesses have dealt with the Coronavirus caused challenges.

Following these analyses, the discussion section of this master's thesis was written using previously made findings to interpret them in a broader context. This way it was sought to utilize data gathered not only to provide analysis based on theory and frameworks chosen, but also seek to understand broader overview when it comes to the sector of auxiliary private education and its development in Lithuania.

6.1 External factors' influence on SMEs in auxiliary private education and their response to these circumstances

Based on collected data it appears that during the Coronavirus pandemic the quality of public education has decreased considerably; therefore, parents chose to hire private teachers more often due to fears of their children having accumulating deficiencies in their academic knowledge that will be difficult to rectify in the future [30]. This in turn has improved the situation for enterprises in the auxiliary private education sector that were mostly focused on providing services for students in primary and secondary education as more customers chose to buy their services and businesses were presented with an opportunity to grow their customer base. Therefore, this pandemic has created an opportunity to grow while the number of students in Lithuania statistically decreases [4].

Furthermore, it appears that conditions of the pandemic have given auxiliary private education enterprises access to a greater pool of talent as more teachers were looking for additional sources of income as well as more people could allocate their time to conduct remote classes due to the ability to work from home. It created an environment where new teachers for these businesses were readily available despite the trend of slow decline of students and young professionals that choose to work in these types of businesses [34].

From the perspective of Porter's Diamond model, Demand, Firm strategy, Structure and Rivalry as well as Government were the most affected areas while the other three posed little to no effect on these enterprises. Therefore, based on this and previously mentioned factors the Coronavirus pandemic for auxiliary private education businesses has posed only two main challenges - access to the customer and customer retention. These challenges were dealt by enterprises in this sector with varying success and some of them managed to completely regain their traction in the market while others had to struggle more to find the right approach of providing educational services in the backdrop of the pandemic.

At first sight, the conclusion comes into focus that young companies were more nimble in their transformational processes as transitioning to remote learning provided them with more opportunities to reach new customers that were not captured due to limited capacity of the business. On the other hand, businesses that were established earlier had more rigid organizational structure which reduced their agility implementing necessary changes.

However, when analysed further, additional reasons that posed considerable significance to businesses' ability to adapt emerge as well. One of the most important factors that determined the extent of success during the Coronavirus health crisis was what type of services a particular business had offered before the pandemic. Businesses that focused on primary and secondary education students when switched to digital classes managed to grow their businesses (*PE1* and *PE3*) while *PE2*, although having the most experience in the market and delivering more premium offers, suffered as their services were not quite as adaptable to the situation.

Moreover, maturity of *PE2* might explain why search for more demand was limited as this business had already been operational for a considerable number of years and has reached greater market saturation where new customers are ever more difficult to find. Therefore, only two options were available - expanding into new markets (new countries) or reducing capacity. As expanding into new countries was deemed rather difficult and risky even in the period of market growth, the enterprise had little choice but to 'play it safe' and reduce its capacity.

6.2 Links of produced cases with covered theory and how well it applies in the context of global health crisis

Before starting this subsection it is important to note that only three cases were analysed and this amount of information is rather small in scale to propose direct contributions to already well established frameworks and theories. Therefore, general notes were made on used concepts to reflect how they have manifested themselves during the Coronavirus pandemic and how they can be made more adept for the situations of serious crises.

It was noted that used frameworks and theories are adapted the best for market growth environments; therefore, severe disruption in the economy and sudden change of customer behavior was mostly not considered. Thus, further discussion considered if these theories applied to analysed three cases in auxiliary private education to the full extent or do some of them would require augmentation in order to be relevant for analysed businesses in the entrepreneurial landscape that was drastically and rapidly reshaped by the Coronavirus pandemic.

Firstly, from used theories only Porter Diamond Theory of National Advantage specifically addresses customers and their behavior. However, even this framework focuses rather on sophistication and volume of demand and how it drives companies to pursue better and more cost-efficient products or services to compete for customers [3]. Due to this reason an addition of Porter's Five Forces could be considered as it describes in more detail not only customer's pursuit for the best products or services, it also describes customer's buying power and number of buyers that are ready to spend their money to attain them. However, even this model is rather static and a more suitable framework should be used to generate insights with greater detail on how customers change their behavior in exceptional situations and how their frame of understanding shifts with new information gained. Therefore, chosen frameworks are limited in their capability to accurately describe more comprehensively the patterns of highly dynamic customer behavior.

As it was noticed in all constructed and analysed cases, customers deemed remote learning as not engaging and lacking quality. During the pandemic this perspective was changed mostly naturally where customers themselves had to challenge their opinion on online learning and choose to try it. Therefore, to further this research perspectives of psychology, sociology or marketing could be considered, as they could generate more dynamic understanding on what were the main drivers of customers accepting these new paradigms.

Furthermore, actions taken when it comes to risk and crisis management by all three interviewed businesses have shown that it was not prepared for larger scale crises and only *PE1* has made initial contingency plans on some extreme situations that were thought to be possible. However, Coronavirus pandemic was a low probability - high impact event that was extremely difficult to predict. Therefore, most oftenly recommended actions of risk and crisis management were not properly taken and reaction on Ad Hoc basis had to be chosen instead.

As SMEs in the auxiliary private education sector are relatively small in size, they do not have enough resources to consider all these risks and are more willing to invest their capital in business' growth rather than allocating slack resources for crisis prevention. Although new suggestions for SMEs on risk and crisis management were made when it comes to handling financial crises [70], health crises pose a severely more abrupt decline in demand and considerably more disruption in the global economy. Therefore, development of new frameworks for SMEs where risk and crisis management is approached in a more flexible and asset-light manner would bring more relevant and practical approaches for these types of businesses.

Moreover, Dynamic capabilities were discovered within each analyzed business to a certain extent and it appears that all of them were able to pursue Transformational activities relatively well. However, Sensing and Seizing attributes were more adapted to pre-Coronavirus conditions where capturing value based on growing market conditions was paramount. However, businesses that managed to deliver unique and highly valued services which would constitute long-term competitive advantage by such frameworks as Resource Based View, can quickly lose this advantaged position in low probability - high impact events. And even possessing attributes of Dynamic Capabilities cannot provide complete immunity in the environment where customer behavior is shifting in such a rapid and unpredictable manner.

To understand this phenomenon better, Agile or similar frameworks could be considered as another facet to analyse constructed cases to peer deeper on how Flexibility and Speed of these organizations have evolved before and during the pandemic. Agile methodology has many definitions which mostly focus on organizational ability to renew, adapt, remain responsive, transform rapidly and succeed in VUCA environments [78]. Dynamic Capabilities, Foresight and other used frameworks are more focused on Flexibility where allocating slack resources to conduct research and development activities is suggested to achieve competitive advantage. However, in the time of crisis it appears that Speed is more necessary than Flexibility as quick response and swift transformation is vital for businesses to remain operational and regain market traction. Therefore, many companies have demonstrated greater Agility maturity in 2020 compared to 2019 [79].

Finally, Agile encourages organizations to enable all employees to become a part of organizational transformation as well [80]. In analysed cases, contracted teachers are operating rather

autonomously and rely on the core team only to provide legal base for employment, support with means to conduct classes and assure quality monitoring. Therefore, the communication and information dissemination processes are performed mostly on 'Top-Down' principle and potential of employees themselves supporting core team in remaining Agile and boosting business' Dynamic Capabilities is not explored enough.

6.3 What trends in the auxiliary private education sector could be expected in the near future?

Near future will present unique opportunities and challenges to the sector of auxiliary private education in Lithuania. New opportunities were created by the pandemic, while other trends have been accelerated. This in turn has created conditions where enterprises in this sector were pushed into an environment that requires to be more dynamic and further developments are most likely to exacerbate this tendency considerably.

As seen from the introductory Porter's Diamond analysis on Lithuanian education, due to declining birth rates and emigration, the amount of children entering Lithuania's educational system constantly decreases [4], [35]. If this tendency is unchanged, in the next decades lack of students will drive greater competition for ever decreasing amount of customers. If businesses in this sector will want to continue growing, they will need to search for new customer segments by introducing new services or expanding to foreign markets.

Moreover, the number of well qualified teachers is limited and businesses in public and private educational sectors are competing for them as well. Trends show that this number will decrease; however, it seems that at current rates young professional drop rate of around 1 - 2% will not match student drop rate of 3 - 4% per year [4], [34]. Therefore, the main concern in the upcoming future will remain to be customer attraction and retention. However, it would be safe to assume that well qualified professionals will become somewhat scarce as well and retention of them will come more into focus as some enterprises already demonstrate higher than usual employee turnover.

Furthermore, private schools are also growing as a phenomenon in Lithuania and their number is rising considerably [6], [7], [81]. As this service is usually considerably more expensive, parents put more expectations on the quality of this type of education and are less likely to additionally hire tutors. Therefore, competition for students and professional teachers will grow even higher.

Moreover, restrictions imposed by the pandemic have pushed auxiliary private education businesses to develop greater Agility and Dynamic Capabilities. Those that will manage to retain these abilities will have greater scaling capacity and resiliency to similar types of low probability - high impact events in the future. This will also enable them to find new customers not only within domestic but also in foreign markets as these enterprises will be able to make asset-light decisions, pursue expansion with remote services and invest more into physical presence when the market proof is gained.

Finally, as people find more comfort in digital presence and are more adept in living their life online, the perceived line between remote and contact communication will become even more

blurred. Therefore, a trend of moving towards services that are provided remotely has been set and will only continue in the future [82]. This will allow businesses to reach their customers more easily and scale faster. However, it would be safe to assume that physical interaction will still remain important, especially for younger students as direct attention is deemed to be crucial to their social and academic development as well as for more extroverted people who find it necessary to communicate directly to learn more efficiently.

7 Conclusion

The Coronavirus pandemic has created a unique environment for auxiliary private education businesses where customer behavior has changed significantly and a transition to a considerably different approach of providing services was necessary to remain operational. Furthermore, enterprises in the auxiliary private education sector have demonstrated a significant amount of autonomy and had little disruptions in most areas of business operations; therefore, these enterprises placed their focus mainly on two major problems of understanding how to retain existing customers and restore access to them.

All three analysed businesses demonstrated that before the pandemic they possessed Dynamic Capabilities to a certain extent and were searching for new technologies to constantly improve their services and gain greater operational efficiency. During the pandemic they have developed these capabilities to an even greater extent and managed to transition to providing classes online. Although it appears that a significant portion of developments in these businesses' capabilities were made on Ad Hoc basis and pose a question if they will be sustained in the long-term perspective.

On the other hand, the analysis of constructed cases shows that success of businesses in auxiliary private education was not only determined on how fast the enterprise managed to develop its Dynamic Capabilities or other auxiliary capacities, but also what services they were providing before the pandemic. As it was observed, *PE2* was the most mature and largest enterprise with the most unique services developed. However, the pandemic had the most significant impact on it. And even if it was the most developed business with dedicated quality managers that have prepared plans for transitioning to digital platforms the pandemic has still brought significant reduction in demand for this organization. This situation does not align itself with the Resource Based View framework which would assume that possessing all these VRIO resources would secure *PE2* market superiority and it shows that disregarding the rapid change of external factors is impossible in the context of Coronavirus pandemic.

Therefore, some businesses (such as *PE1* and *PE3*) had to adjust their overall strategies and developed capabilities to a lesser extent and when issues of access to customers and customer retention were solved their activities could be resumed without changing their offered services considerably whereas other businesses were not so fortunate (such as *PE2*) and had to adjust their strategies and develop considerably more agility as customer retention problem could not be solved and a shift of focus had to happen in order to pursue other customer segments.

Furthermore, interviewed businesses did not pursue any significant structural change in their organizations. This shows that even though the pandemic enabled businesses to further develop their Dynamic Capabilities, when it comes to core transformation of organizational structure it was significantly less pronounced. Therefore, it appears enterprises have assumed retention and maintenance posture during the pandemic and after the health crisis is over it is expected to grow and develop more robust organizational structures.

However, more advanced strategic activities such as Corporate Foresight and Risk Management were observed in analysed cases yet to a relatively limited extent. SMEs in auxiliary private education are not robust enough to allocate considerable resources towards these activities and

it brings the question if new approaches should be considered to retrofit existing frameworks for SMEs and make them more flexible and asset-light.

In conclusion, interviewed businesses in the auxiliary private education sector during the Coronavirus pandemic have changed their strategies by shifting the approach of providing services from direct to remote. This required enterprises to further develop their Dynamic Capabilities enabling faster transformation to existing conditions by proactively gauging rapidly shifting needs of customers.

From produced observations it can be learned that businesses enjoying well developed competitive advantage can be challenged greatly and even possessing attributes of Dynamic Capabilities cannot provide complete immunity in the environment where customers' behavior is shifting rapidly. To overcome these challenges such frameworks as Agile or more developed Dynamic Capabilities could be put in place. On the other hand, SMEs have relatively scarce resources and business growth is usually prioritized over allocating slack resources for these approaches.

Finally, more advanced strategic activities of Corporate Foresight of Risk or Crisis Management were mostly approached in an Ad Hoc manner and bears the question if proper Foresight activities could have prepared these businesses for the health crisis and softened its impact or did the Coronavirus crisis was the unforeseen factor that unpredictably reshaped the sector enabling digital transformation which has formed a new path of how auxiliary private education will evolve in the future.

8 Process reflection

The process of writing this thesis posed significant learning opportunities where many approaches were considered forming the main aim of the research as the global pandemic created a unique and devastating occurrence which was unfathomable before it happened. Thus, the initial objective to capture these events as they develop was posed and introspective analysis was pursuited to provide the reader with a more in-depth and dynamic outlook on what decisions were taken during the evolution of businesses in the context of global health crisis. However, this posed many questions throughout the development of this paper as it had to be chosen which factors were the most important to research within the limited time frame assigned to produce a master thesis. Thus, prior to settling on researching a specific industry it was considered to analyse multiple industries and it took a significant amount of time to clarify how it would be approached and conclude after interviews were conducted that comparing collected data would produce analysis that would be too superficial and negatively impact the consistency of the research. Therefore, although a considerable amount of data was collected to analyse other types of businesses, it was settled to analyse only enterprises within the sector of auxiliary private education in Lithuania.

Moreover, the data collection process posed discoveries that showed shortcomings of chosen methodology; therefore, an iterative approach was adopted at the first half of the thesis to enable greater learning ability and collection of the most significant data. This has led to modifications in used questionnaire as conducted interviews pointed towards a more sporadic and Ad Hoc nature of dealing with the crisis where decisions taken by the government were too unpredictable to form a reliable long-term strategy which is one of the key goals set by most frameworks and theories in the business literature.

Possible future research directions

Prior to defining the final research question it was considered to interview multiple industries and cross-analyse them. Although it was not pursued in the final version of this master's thesis, the collected data and written summaries of all interviews (appendices subsection 9) could be an inspiration for other separate papers of case analyses. Furthermore, this process allowed to understand which difficulties and unique insights this research could pose if it would be chosen to scale it to other industries or other countries.

Countries in the European Union had a relatively similar approach to countering the Coronavirus pandemic as lockdowns started in mid March of 2020 and continued until summer. During the summer the cases were considerably lower and restrictions were softened considerably. However, during the autumn the number of cases has risen and restrictions were imposed in the mid or end of October. The period of December's holidays was most severe and around December - January the vaccination process has been started. At the end of the event horizon of this master's thesis (April 30th, 2021) it is seen that the vaccination process in all of the EU countries is carried out in ever greater scale and restrictions caused by the Coronavirus pandemic are softened (Full timelines can be found in Appendices subsections 9.3 and 9.4).

Therefore, there is a possibility to make comparisons between countries; however, it should be approached meticulously and comprehensive timelines of how each government has dealt with the pandemic and what restrictions it has imposed to combat its effects should be constructed. Moreover, all countries have issued subsidies and other financial support to different industries which were deemed most impacted; therefore, it would be another factor that should be considered when cross-analysing similar businesses in different countries.

Furthermore, enterprises in different industries might have demonstrated similar strategy evolution patterns and developed similar Dynamic Capabilities; however, assuring that collected data would be comparable within different industries, chosen methodology would require even more rigorous approach to data collection and process of investigation to ensure that cross-analysis could take place without compromising research consistency and credibility.

Finally, the framework of Agility could be considered as a concept that would enable deeper understanding on what was more necessary during the pandemic - Flexibility of organizational structure or Speed of performed actions. For this matter, research questions could expand on various subjects or use specific tools that are already developed - for example 'TeamHealth Radar Assessment' proposed by a company named AgilityHealth [83] or 'Domains of Business Agility' developed by Business Agility Institute [84].

Questions to develop further conducted research

At the end of the thesis final reflections were made and it was sought to understand which main pursuits could be taken to inspire further research and foresee which topics could hold the greatest potential to be explored. Thus, four main questions were posed that were deemed the most pressing and would advance conducted academic exploration considerably.

- 1. Would an increased number of interviews conducted in the auxiliary private education sector uncover more unique business behaviour patterns and would they vary significantly in different countries?
- 2. How should the research methodology used for this thesis be augmented in order to be applicable for larger scale research projects suitable to cross-analyse different industries?
- 3. What business behavior patterns would be uncovered by conducting research using the same methodology after the pandemic is over and would interviewed businesses demonstrate retention or even further development of manifested Dynamic Capabilities?
- 4. How businesses have increased their Agility capacity during the Coronavirus pandemic and how it can be boosted in this type of crisis environment?

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9 Appendices

9.1 Final version of the Questionnaire

Here are questions used to collect data from the businesses in the auxiliary private education sector.

Introductory questions

- 1. Name of the business
- 2. Contact email
- 3. Size of the business in employees
- 4. Short history behind the business and its development
- 5. Questions for Business Model Canvas construction
 - (a) What are you Key Partners? (Key Partners)
 - (b) How are your costs structured (What are the most important expenditures?) (Cost Structure)
 - (c) What are your main revenue streams? (Revenue Streams)
 - (d) What would you say are your main activities? (Main Activities)
 - (e) What would you say are your key resources? (Key Resources)
 - (f) What value are you providing to your customers? (Value Proposition)
 - (g) How do you get new and retain existing customers? (Customer Relationship)
 - (h) How do you reach your customers? (Channels)
 - (i) Who are your main customers? (Customer segments)
- 6. Do you consent that your data provided in this form will be used in writing my master thesis? (Consent form was signed before the interview was conducted)

Questions to reflect the business evolution before the Coronavirus pandemic

- 1. What was your business strategy before the pandemic?
- 2. How well your business was growing?
- 3. How would you describe your competition before the pandemic?
- 4. How would you have described your customers before the pandemic?

Questions to reflect the business evolution during the Coronavirus pandemic

- 5. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be successful?
- 6. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be not successful?
- 7. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be successful?
- 8. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be not successful?
- 9. What actions have you taken in the following months of the pandemic (November Now) that you consider to be successful?
- 10. What actions have you taken in the following months of the pandemic (November Now) that you consider to be not successful?
- 11. Could you define your business strategy right now?
- 12. How has the growth of your business been affected?
- 13. How would you describe your competitors now?
- 14. How would you describe your customers now?

Questions to predict business evolution after the Coronavirus pandemic

- 15. How will your business strategy look in the future?
- 16. What would be your prediction of your business growth in the future?
- 17. What are your predictions about future competition growth?
- 18. What will be your customers' behavior and needs in the future?

Change sensing (Anticipating/ Challenge)

- 19. Did you reflect on previous crises and created a plan on how to react to these types of situations?
- 20. If you had some plan on how to act in crises, did it work in the case of Covid-19?
- 21. Did you have a routine task to look for new opportunities and technologies that would provide you with competitive advantage?
- 22. Which technologies/ opportunities were chosen to counter the pandemic and why?

- 23. What was the process of adopting new technologies and approaches in the past? Was it effective in the case of pandemic?
- 24. Where were you looking for support and training to fight challenges posed by the restrictions? Did you develop some solutions on your own? Did you learn from your competitors?

Seizing opportunities (Interpretation/ Deciding)

- 25. How did you react to the previous (if you were operational) financial crises?
- 26. Was it difficult to start implementing changes? Was there a notion that everything will get back to normal and these changes will be unnecessary?
- 27. Have you discovered new supporting businesses or services that enabled you to continue your work efficiently?
- 28. Did adopted changes have pushed you into a market with more or less competition? How did you deal with it?
- 29. Was it difficult to convince yourself and others to pursue proposed Opportunities/ Technologies?
- 30. What kind of difficulties have you experienced during the implementation of new technologies/ opportunities?

Transformation abilities (Alignment/Learning)

- 31. How have you and your employees aligned themselves with new changes?
- 32. How did you collect feedback about implemented technologies/ opportunities?
- 33. Which opportunities/ technologies worked and what did not? How did you adjust to that?
- 34. Would you consider approaches taken by your business to counter the lockdown are unique and difficult for the competitors to replicate?
- 35. Did the pandemic change the process of looking and acquiring new opportunities/ services/ products? Did new corporate learning patterns appear?
- 36. Did the pandemic change the approach on how the team is being led and given tasks?
- 37. How much your organizational structure was changed to reflect new opportunities or services acquired during the pandemic?

General questions based on Porter's diamond

- 38. How was your access to basic products and services (raw materials, non-complex manufacturing components, retail items, etc.) affected?
- 39. How was your access to more advanced products and services (complex manufacturing components, electronics etc.) affected?
- 40. How was your ability to hire junior position (no or basic skills) employees affected?
- 41. How was your ability to retain junior position (no or basic skills) employees affected?
- 42. How was your ability to hire mid-level and senior position (with advanced skills) employees affected?
- 43. How was your ability to retain mid-level and senior position (with advanced skills) employees affected?
- 44. How was your access to digital connection (internet, phones and other technologies) affected?
- 45. If you had any product or service suppliers, how were they affected during the pandemic?
- 46. Have you received direct financial support from the government?
- 47. Have you received indirect support from the government (workshops, guidance, etc.)?
- 48. Would you agree with the measures taken by your government to prevent Covid-19health crisis?

9.2 Interview notes

This subsection contains detailed notes of interviews taken. As information recorded was made anonymous.

To protect interviewees confidentiality and ensure that data will not be used to trace back to them or their businesses - interviews were given

Table 8: Table of interview keys

Industry	Country of Operation	Interview key	Position of the interviewee	Description of the business
Private Education	Lithuania	PE1	Founder	An additional private education company that seeks to provide services for students in high schools and adults that seek to better their academic performance, prepare for exams or better themselves as specialists. The founder of the company began as a private teacher and as the demand grew, it spawned a need to create a business and scale it's activities. At the time of the interview (16/03/2021) the enterprise was operational for more than 5 years and had more than
				160 contracted teachers conducting routine classes throughout two biggest cities of Lithuania.
		PE2	Manager of Marketing and Communications	A private education business that provides additional educational and coaching services such as language courses, personality development coaching or organizing workshops for team building activities. The business has been operating for more than 28 years and was firstly established as a public institution but it was privatized during the starting years of the organization. At the time of the interview (01/04/2021) the business had 71 full-time and approximately 130 contracted
				employees throughout the country.
		PE3	Co-Founder	A private education business that provides private and group classes for students from 7 to 18 year old in academic areas of science, mathematics and languages. Enterprise was established in the summer of 2019 by two co-founders. Since establishing the company it has been growing steadily and in the first year the newly assembled team has successfully helped over 100 students to achieve their goals.
				At the time of the interview (22/04/2021), The enterprise has been operational for more than one and a half years and had 2 full-time employees with more than 100 contracted teachers conducting routine classes.
HoReCa	Denmark	HRC1	Both Co- Founders	A French-themed restaurant that was started in 2019. Co-founders chose to open this restaurant as they both admire French culture and they wanted to have a business that would allow them to stay closer to home. Therefore, a decision was made to bring a little piece of France to their city by starting a restaurant that is authentic, has a menu that is not too complicated and an environment that is calm and cozy.
				At the time of the interview (28/03/2021) the business had 2 full-time and 6 part-time employees.
		HRC2	Founder	A service broker that leverages a growing network of caterers, bartenders, venues and other service providers in the HoReCa sector to provide event organizing and service sourcing services for B2C customers. The business was established in 2019 when the founder noticed the frustration that people have while organizing parties, events or other similar activities as they have to manage multiple service providers and make sure that they deliver on time rather than enjoying their celebration.
				At the time of the interview (15/04/2021) had 6 employees working on a freelance basis and one intern that manages digital marketing activities.
New Businesses	France/ Denmark	NB1	Co-Founder	A business up-cycling used glasses and selling them through various Points of Sale (glasses shops, events, etc.). This enterprise has grown considerably during the Coronavirus pandemic is based in France and Denmark.
				The idea of the business was born around 2016 when co-founders noted how monopolized and opaque glass manufacturing really is. Furthermore, the status quo of the glasses industry does not provide the best prices for the customer, nor is it based on the principles of sustainability. The operation started with refurbishing small amounts of glasses and selling them in various events, fairs or festivals. Later these operations grew and additional Points of Sales were considered: places such as opticians, stores that sell glasses and sunglasses, and similar businesses. The pandemic supercharged this business to establish its presence online and start activities of e-commerce.
				At the time of the interview (15/03/2021) the business consisted of two co-founders and one intern to generate more digital content and perform tasks of social media engagement.
	Lithuania	NB2	Founder	An enterprise gathering dog trainers to organize courses and training material for dog owners on how to train their pets and how to behave themselves around them.
				The founder has started working in the field of dog training in 2016 and started providing the service on private worker permit in 2018. This service was finally registered as a business at the beginning of 2020. The enterprise managed to operate a few months normally before the lockdowns were announced in March.
				At the time of the interview (28/03/2021) the enterprise had 3 full-time employees and additional interns that were learning to become dog trainers and helping with tasks in the business as well.
	Belgium	NB3	Sales Manager	A business producing edible products from exotic ingredients found in Southern America. The enterprise does not take care of sourcing raw materials and purchases them from a supplier. It takes the process from there and manufactures final products, packages them and takes care of logistics operations. After these processes, final products are sold to B2B and B2C clients.
				The business was launched at the beginning of 2020 and the main driver of establishing it was to produce innovative and unique food that is functional and healthy. Rather than producing white label or other solutions that could be bought by other businesses it was decided to develop products under their own brand. This way it is expected to grow it and become well recognized in order to rival top players in the field of healthy food.
				At the time of the interview (24/04/2021) business had 5 employees in the company with a clear plan to expand the team in the near future.

9.2.1 PE1 interview notes

General introduction

The first business that was interviewed in the additional private education sector was an enterprise that is based throughout Lithuania. As all interviews were made anonymous this entity was given a *PE1* interview key. In further descriptions and notes this business will be addressed with this interview key.

The founder of the company began as a private teacher and had his full schedule booked with private lessons. This spawned a need to create a business and scale it's activities. For this reason the founder reached out to his friend and later a few other previous study friends. After 4 months of development an initial operation and legal base was formed.

Currently, The enterprise is operational for more than 5 years and has more than 160 teachers conducting routine classes.

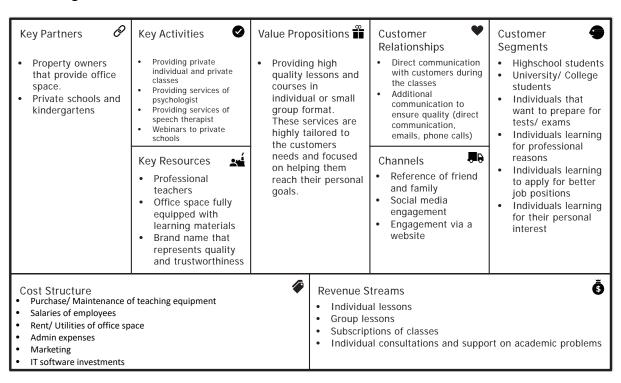


Figure 16: Business model canvas of PE1

Questions to reflect the business evolution before the Coronavirus pandemic

- 1. What was your business strategy before the pandemic? The growth was moderate and steady based on how many live lessons could be provided. Therefore, this number could only be increased by adding additional office space and after it is provided, attracting more customers that are relatively close to that office space. Furthermore, expanding also required attracting more teachers that have sufficient qualification, they were living relatively close to the office space and had a schedule that is suitable for the classes.
- 2. *How well your business was growing?* Moderate and steady based on physical space capacities acquired.

- 3. *How would you describe your competition before the pandemic?* Competition was rather minimal. Although there were additional private education businesses in the market, their provided services differed significantly from what was offered in *PE1*; therefore, no direct competition was perceived.
- 4. *How would you have described your customers before the pandemic?* Customers were focused on physical individual classes as it was perceived as the option giving the most benefit to the student.

Questions to reflect the business evolution during the Coronavirus pandemic

- 5. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be successful? At the beginning there was a long denial period that the country could go into a full lockdown. And then it got announced which was a big hit to the business. After initial response to the first lockdown processes of optimizing expenses and renegotiating contracts (rent contracts) took place rather aggressively focusing on activities that bring profit. Another successful initiative was to keep internal communication extremely active in order to reduce confusion among teachers.
- 6. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be not successful? Client retention was rather unsuccessful due to not being able to convince customers that quarantine will be a long term event and provided classes in digital format will not be inferior in quality compared to physical classes.
- 7. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be successful? Continuing activities.
- 8. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be not successful? A new IT system was scheduled to be launched, however the project was blocked due to a contractor that failed to deliver the expected IT system.
- 9. What actions have you taken in the following months of the pandemic (November Now) that you consider to be successful? No specific events took place that could be considered successful, just the continuation of already existing activities.
- 10. What actions have you taken in the following months of the pandemic (November Now) that you consider to be not successful? No specific events took place that could be considered unsuccessful, just the continuation of already existing activities.
- 11. *Could you define your business strategy right now?* Currently the focus is to balance physical and digital activities. Live classes will continue as it is essential especially for younger pupils. Although virtual classes demand has grown from 2% to 25-30% and offers greater freedom for the students and the teachers.

- 12. *How has the growth of your business been affected?* During 2020 the growth was not that faster compared to the previous years. However, March for *PE1* is the peak business time as most of the students are preparing for their exams or tests that will take place during spring. However, the first lockdown was imposed at this time and significantly reduced the peak of new students acquired.
- 13. *How would you describe your competitors now?* During the pandemic one main competitor became significantly successful as it has grown considerably during the pandemic due to its completely digital approach where classes are conducted to large amount of students remotely or giving the access to pre-recorded classes. This competitor entered the market with a good marketing strategy (influencers, advertisements, etc.); however, due to its focus on quantity quality of the services are rather inconsistent. Therefore, it is not a completely direct competitor of *PE1* as its business model focuses on individual classes and small groups focusing on providing a premium service.
- 14. *How would you describe your customers now?* At the start of the pandemic a significant portion of customers did not believe that digital classes can be effective and presented efficiently. Currently customers see the benefits of digital classes and choose them more often.

Questions to predict business evolution after the Coronavirus pandemic

- 15. *How will your business strategy look in the future?* Currently, the future strategy is to keep both physical and digital formats of classes. However, now expansion plans to other countries seem to be more viable due to digital platforms developed and ability to test the market with digital classes first and then invest more assets in having physical presence in the country.
- 16. What would be your prediction of your business growth in the future? Due to the developed digital platform the company will be more agile and move faster into the new markets while retaining ones it is already operating in easier. Due to this opportunity to scale with relatively low friction a fast growth period is predicted.
- 17. What are your predictions about future competition growth? As the amount of teachers is rather limited, the growth of competition will be constrained to companies being able to attract these talents.
- 18. What will be your customers' behavior and needs in the future? It is believed that 30-50% of all classes provided will be digital, even when all lockdowns are lifted as customers appreciate flexibility and time saved while choosing this option.

Change sensing (Anticipating/ Challenge)

19. Did you reflect on previous crises and create a plan on how to react to these types of situations? Crisis management plans were developed to a relatively limited extent in

January 2020 (before the threat of Coronavirus was addressed as a serious threat). A list of risks were generated and the team has put together scenarios of how these threats should be avoided, mitigated or dealt with. However, they were not extremely elaborate without financial and organisational resources allocated towards managing these risks as it was prioritized to develop the business and invest most of the resources into its growth.

- 20. If you had some plan on how to act in crises, did it work in the case of Covid-19 Developed plans considered a scenario of general global crisis and how reduced global demand can affect the business; however, unlike global financial crises, the shutdown of the economy was not gradual, but sudden and contingency plans developed could not be implemented to their full extent.
- 21. Did you have a routine task to look for new opportunities and technologies that would provide you with competitive advantage? Innovation was limited at the beginning in order to grow the business structure properly. After three years of launching a business innovation scouting was performed throughout the year and implementation was done during the season of summer when the workload is lower.
- 22. Which technologies/opportunities were chosen to counter the pandemic and why? Various digital platforms for group projects, questionnaires, applications and other digital communication platforms such as Zoom, Google Meet amongst others were considered. It was chosen not to standardize digital tools used for all teachers and allow them to perform with tools that they feel most comfortable with in order to be more efficient and reduce stress.
- 23. What was the process of adopting new technologies and approaches in the past? Was it effective in the case of pandemic? Previous adoption process was mostly focused on incremental and structured innovation scouting, trial and adoption. Although, pandemic demanded to speed up this process significantly more.
- 24. Where were you looking for support and training to fight challenges posed by the restrictions? Did you develop some solutions on your own? Did you learn from your competitors? Activities of adjusting to the situation were done completely internally. No outsourcing or consultancy was sought after. Tracking of parliament decisions and changes to the laws was done by the founder.

Seizing opportunities (Interpretation/ Deciding)

- 25. How did you react to the previous (if you were operational) financial crises? No financial or health crises were endured before.
- 26. Was it difficult to start implementing changes? Was there a notion that everything will get back to normal and these changes will be unnecessary? Yes. It was difficult to accept that full lockdowns were possible and when they came, major changes were needed to be made extremely fast.

- 27. Have you discovered new supporting businesses or services that enabled you to continue your work efficiently? Multiple digital services (applications and platforms) were chosen to facilitate and augment digital classes.
- 28. Did adopted changes have pushed you into a market with more or less competition? How did you deal with it? Becoming digital moved the company to be exposed to more competition due to lowered threshold to entry (lower investments necessary to conduct classes and provide quality content). And it is believed that this competition will increase due to similar platforms or services being launched constantly.
- 29. Was it difficult to convince yourself and others to pursue proposed Opportunities/ Technologies? The core team of managers was pretty okay with the changes as they saw the necessity and was rather used to operating digitally already.
- 30. What kind of difficulties have you experienced during the implementation of new technologies/ opportunities? The main difficulties came not from lack of technical knowledge, but how it affected employees at the beginning implementation of changes has created some friction and caused emotional stress/ frustration. Teachers had well defined structures on how to conduct physical classes and all of them had to be reinvented to fit the digital format.

Transformation abilities (Alignment/Learning)

- 31. How have you and your employees aligned themselves with new changes? At the beginning the shift was significant and a fraction of teachers did not believe that the quality could be maintained in a digital format. Later concerns grew into questioning governmental policies and their approach towards businesses and employees. After initial push back the adoption process began which was made smoother by extensive internal communication.
- 32. How did you collect feedback about implemented technologies/ opportunities? The process of collecting feedback was already in place before the pandemic. Collecting feedback was done by calling and directly communicating with customers. Additional Human Resources and Quality specialist was put in place that strives to contact each customer at least two times a year.
- 33. Which opportunities/technologies worked and what didn't? How did you adjust to that? There were no major technological acquisitions that were unsuccessful only individual discovery processes of teachers understanding which technologies do they prefer.
- 34. Would you consider approaches taken by your business to counter the lockdown are unique and difficult for the competitors to replicate? The challenge was in the coordination of the whole shift, however the means could easily be replicated, especially in lower scale environments.

- 35. Did the pandemic change the process of looking and acquiring new opportunities/services/products? Did new corporate learning patterns appear? Yes, since the perception of current clients changed towards online education, all plans to focus on rather easily scalable remote solutions were given a green light.
- 36. *Did the pandemic change the approach on how the team is being led and given tasks?* This aspect did not change at all.
- 37. How much your organizational structure was changed to reflect new opportunities or services acquired during the pandemic? Neither the organizational structure, nor the task assignments change.

General questions based on Porter's diamond

- 38. How was your access to basic products and services (raw materials, non-complex manufacturing components, retail items, etc.) affected? No effect was felt as online shops were fully functional and provided with all necessary basic products.
- 39. How was your access to more advanced products and services (complex manufacturing components, electronics etc.) affected? No effect was felt.
- 40. How was your ability to hire junior position (no or basic skills) employees affected? It became a bit easier to hire junior position employees as the qualification process got digitized and required less time to perform.
- 41. How was your ability to retain junior position (no or basic skills) employees affected? No effect was felt.
- 42. How was your ability to hire mid-level and senior position (with advanced skills) employees affected? No changes on ability to hire mid-level and senior position employees were incurred.
- 43. How was your ability to retain mid-level and senior position (with advanced skills) employees affected? No effect was felt.
- 44. How was your access to digital connection (internet, phones and other technologies) affected? No effect was felt.
- 45. If you had any product or service suppliers, how were they affected during the pandemic? Business didn't have any direct service or product suppliers.
- 46. *Have you received direct financial support from the government?* Business has received direct financial support provided by the government. However, some of the applications were rejected due to the company being profitable. Furthermore, the application process was slow and rather inefficient.

- 47. *Have you received indirect support from the government?* Subsidies for rent and other expenses were provided by the government; although, they were not so significant. Finally, due to reduced workload that was not caused by the company, the government provided compensations to each employee to supplement their income to minimum wage.
- 48. Would you agree with the measures taken by your government to prevent Covid-19 health crisis? It was noted that more direct financial support would have been better as it was necessary. Furthermore, the process of governmental support was rather prone to exploitation and legal loopholes. Therefore, companies with good lawyers managed to capture more of the financial support.

9.2.2 PE2 Interview notes

General introduction

The second business that was interviewed in the additional private education sector was an enterprise that is based throughout Lithuania. As all interviews were made anonymous this entity was given a *PE2* interview key. In further descriptions and notes this business will be addressed with this interview key.

The business operates for more than 28 years and was firstly established as a public institution; however, it was privatized and turned into an additional private education enterprise.

Currently, the business has 71 full time and around 130 contract employees throughout the country of operation.

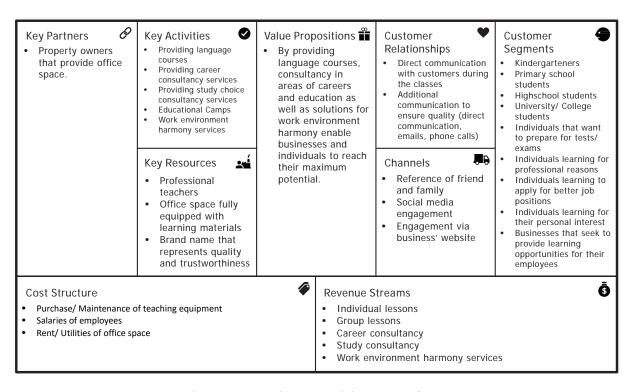


Figure 17: Business model canvas of PE2

Questions to reflect the business evolution before the Coronavirus pandemic

- 1. What was your business strategy before the pandemic? The business strategy was to retain existing products, develop them further and enter new countries with already market-proven products. For this purpose, the enterprise hired many employees in positions that were newly developed and pushed forward with an optimistic growth plan (as it was called the year of 'growth'). This solidified few main focuses towards each unique product offered by the company. For example: few of them being:
 - Language courses for business clients;
 - Personality development coaching that is focused on building professionals and teams;

• Having workshops to understand if new team members in a company will be a perfect fit for the position;

Unfortunately, the plan of expanding to two new countries was canceled due to its complexity and uncertain potential of success.

- 2. How has the growth of your business been affected? Growth of the business has been steady, both in terms of revenue and employees hired. New products were developed and new markets were considered. The growth was rather fast and it brought more uncertainty and less structured workflows.
- 3. *How would you describe your competition before the pandemic?* Although competitors are always there, our business didn't worry about them too much as it was considered that they are not our direct competitors. Our offered services and products are unique, and difficult to replicate. Therefore, no significant pressure was felt by these competitors.
- 4. How would you have described your customers before the pandemic? Main customers of the provided services were employers that bought these courses during the period of economic growth for employees that had unique skills and were only missing language knowledge. Moreover, private customers that used these services were people that were driven to learn languages primarily for their leisure or prestige.

Questions to reflect the business evolution during the Coronavirus pandemic

- 5. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be successful? Physical activities transitioned to webinars as it was focused on younger audiences.
- 6. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be not successful? It was believed that accessing foreign markets with remote services will be easier as now establishing physical presence is not necessary. However, it was discovered that it requires sustained and significant marketing and brand awareness campaigns.
- 7. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be successful? Customer care and support services were centralized. Before, each branch had their customer support services and redirected the customer to the nearest branch to her/ him. During this period this activity was consolidated into the hands of one team. This reduced reaction time and friction while assisting clients throughout the country.
- 8. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be not successful? Summer camps for children were believed to be extremely crowded as it was thought that parents would be eager to get their children out of

the house and 'catch a break'. Therefore, effort was directed towards planning and organizing these summer camps. However, when the time came, the demand was relatively low and not comparable to what was expected.

- 9. What actions have you taken in the following months of the pandemic (November Now) that you consider to be successful? PE2 company was ready to participate in one of the biggest expositions in the country in the field of education. However, the event was postponed and canceled. Therefore, PE2 organized their own exposition that was not trying to replicate a traditional exposition. It was structured in the lines of a live event with many presentations and discussions. Overall, the event turned out to be a huge success with a high number of visitors and provided great value to them.
- 10. What actions have you taken in the following months of the pandemic (November Now) that you consider to be not successful? Mentioned in the previous question. One of the biggest education expositions was planned to take place. The event was postponed several times and then canceled. In previous years this event was one of the main drivers of attention and customers to the business.
- 11. *Could you define your business strategy right now?* When the pandemic came, all businesses had to cut their expenses; therefore, almost all business clients were lost. Currently, the strategy has switched towards private customers that want to improve professionally. The classes were migrated to digital format and small groups were formed to share the costs and make offered services more affordable.
- 12. *How well your business is growing?* During a pandemic *PE2* has shrunk. The amount of classrooms has been reduced as well as staff numbers have fallen. Not redundancies, but turnover due to teachers leaving for more stable and profitable positions in other markets. Due to this profits have fallen as well.
- 13. *How would you describe your competitors now?* The competition has changed significantly as many businesses have moved to digital space or new businesses have appeared that were 'born' digital and did not have to go through the transformation phase of digitization. *PE2* has observed these competitors and how they approach digital learning. For example, having private remote classes, having only a few video calls throughout the course and providing learning material to learn individually or have pre-recorded classes.
- 14. *How would you describe your customers now?* As mentioned before, as most of the business clients were lost the main focus now is put on individual clients. These clients want to work in groups to split costs and are taking these courses in order to evolve professionally and get a better job.

Questions to predict business evolution after the Coronavirus pandemic

15. *How will your business strategy look in the future?* It is planned to go back to normal operation as some of the services provided only work efficiently in a physical form.

- However, it is agreed that retaining digital presence will be important as well. However, currently there is no clear action plan on how this process will take place.
- 16. What would be your prediction of your business growth in the future? The market share that was lost will be regained slowly but surely. It is believed that it will take more than a year to get back to pre-pandemic level of operation.
- 17. What are your predictions about future competition growth? It is difficult to predict but businesses that provide regular education services will shrink and those that have unique selling propositions will grow a bit. However it is believed that *PE2* business will retake its market share and grow as services offered by it are unique and difficult to replicate. Furthermore, it was pointed out that most of *PE2* competitors are either too superficial or too theoretical. Unlike *PE2* that has a balance of practicality and quality.
- 18. What will be your customers' behavior and needs in the future? Customers will expect to get the best quality in the most convenient way. Consumers will want services that are more tailor made for them and meet their personal needs. For example, introverts are doing better in online classes as they can focus more on the subject and do not experience much contact. On the other hand, extroverts are doing worse as they are used to learning by communicating and interacting with other people.

Change sensing (Anticipating/ Challenge)

- 19. *Did you reflect on previous crises and create a plan on how to react to these types of situations?* In-depth analysis of these crises was not made as there is an understanding that each crisis is different and will require a completely different approach. Furthermore, internal approach on crises is more focused on the willingness of employees to react and pursue a solution rather than giving 'top-down' plans and orders in hopes to efficiently react to the crisis.
- 20. If you had some plan on how to act in crises, did it work in the case of Covid-19 No specific plans were made.
- 21. *Did you have a routine task to look for new opportunities and technologies that would provide you with competitive advantage?* Yes. Quality managers are responsible for tracking and providing suggestions on how to improve the quality of services provided as well as searching for new opportunities and technologies that could accelerate this process. This routine task was performed about one time a month; however, during the pandemic it was done every week.
- 22. Which technologies/ opportunities were chosen to counter the pandemic and why? 'Zoom' application for remote communication was chosen; although, alternatives are constantly sought after. Furthermore, online applications that increase engagement during the classes were adopted. Finally, the online exposition event was hosted to replace a physical one.

- 23. What was the process of adopting new technologies and approaches in the past? Was it effective in the case of pandemic? The processes put in place by the quality management team were efficient and provided necessary support when the need to 'go digital' appeared. Framework on how classes should take place in digital format was already tested and approved. It was only necessary to implement it.
- 24. Where were you looking for support and training to fight challenges posed by the restrictions? Did you develop some solutions on your own? Did you learn from your competitors? As services provided by PE2 are rather different from other similar businesses, there was no learning from the competitors.

Seizing opportunities (Interpretation/ Deciding)

25. How did you react to the previous (if you were operational) financial crises? During the previous financial crisis *PE2* had to adapt as the number of both business and private customers has dropped significantly. Due to this groups were smaller with on average 4 people in the groups whereas before the crisis it was common to have 8-10 people.

Furthermore, before the crisis, prices were charged only for the full course, but after the crisis it was allowed to do monthly payments or individual payment plans. Levels were combined.

Previously, language learning groups consisted of 3 smaller levels (A2.1; A2.2; A2.3) of 50 academic hours each. After the crisis these groups were united into 2 levels (A2.1 and A2.2) of 64 academic hours. This way, it was possible to have bigger groups of people without losing quality.

- 26. Was it difficult to start implementing changes? Was there a notion that everything will get back to normal and these changes will be unnecessary? It was difficult to implement changes but it was not difficult convincing people to work towards these changes. The whole team was united due to these difficulties and worked tirelessly to make necessary changes. There was no frustration although it was really difficult and employees voluntarily worked additional hours.
- 27. Have you discovered new supporting businesses or services that enabled you to continue your work efficiently? Just when it comes to digital platforms (Zoom, Google Meets, etc.). More specific businesses or services that became essential to the business were not discovered.
- 28. Did adopted changes have pushed you into a market with more or less competition? How did you deal with it? As most of the businesses are moving towards digitization, PE2 business was definitely pushed into a more competitive environment.
- 29. Was it difficult to convince yourself and others to pursue proposed Opportunities/ Technologies? No, as mentioned before, the team was united and worked without much frustration towards implementing necessary changes.

30. What kind of difficulties have you experienced during the implementation of new technologies/ opportunities? The source of most issues were miscommunication rather than the digital platforms themselves. Discussing how to delegate and manage processes and projects became more difficult while doing it remotely. Furthermore, although implementation of changes was swift, not all teachers were sufficiently technologically literate or didn't feel comfortable enough working on digital platforms. Therefore, they had to be trained. The process was difficult, but really successful as employees genuinely grasped the value that these technologies are bringing.

Transformation abilities (Alignment/Learning)

- 31. *How have you and your employees aligned themselves with new changes?* As mentioned before, all employees were on board the processes of changing; although, it was difficult and required additional training.
- 32. How did you collect feedback about implemented technologies/ opportunities? At the beginning it was feared that digital classes would not be met with much approval. Therefore, feedback forms and calls were made after these classes to understand how the clients are feeling about this transition. Moreover, first classes were attended by quality managers to learn about the dynamics of online classes and make small discussions after classes on how did they went.
- 33. Which opportunities/ technologies worked and what didn't? How did you adjust to that? As mentioned before, digital platforms for online communication were adopted. As implementation plans were already prepared by the quality management team, their adoption was rather swift and no significant failures were incurred.
- 34. Would you consider approaches taken by your business to counter the lockdown are unique and difficult for the competitors to replicate? Methods used were not unique, yet their execution is hard to replicate by competitors because *PE2* has more resources.
- 35. Did the pandemic change the process of looking and acquiring new opportunities/services/products? Did new corporate learning patterns appear? No new learning patterns were developed. Existing learning processes were just applied for the search of new solutions and opportunities online.
- 36. *Did the pandemic change the approach on how the team is being led and given tasks?*PE2 has a flat corporate structure where teams are grouped by projects, not departments.

 This structure was not changed, only new projects were started that are led more by IT specialists rather than by course developers.
- 37. How much your organizational structure was changed to reflect new opportunities or services acquired during the pandemic? The corporate structure remained unchanged.

General questions based on Porter's diamond

- 38. How was your access to basic products and services (raw materials, non-complex manufacturing components, retail items, etc.) affected? It was not affected.
- 39. How was your access to more advanced products and services (complex manufacturing components, electronics etc.) affected? It was not affected.
- 40. *How was your ability to hire junior position (no or basic skills) employees affected?* The ability to attract and hire junior staff was not impeded significantly.
- 41. *How was your ability to retain junior position (no or basic skills) employees affected?* People in junior positions were not particularly loyal and would leave quickly if they were offered a higher salary by other businesses.
- 42. How was your ability to hire mid-level and senior position (with advanced skills) employees affected? Attracting and hiring mid-level and senior staff was not affected significantly by the pandemic.
- 43. How was your ability to retain mid-level and senior position (with advanced skills) employees affected? Mid-level staff in certain departments, who were younger, changed jobs during the pandemic as they simply feared for the future prospects of their departments. Therefore, more emphasis was placed on retaining existing staff than attracting new employees.
- 44. How was your access to digital connection (internet, phones and other technologies) affected? It was not affected.
- 45. If you had any product or service suppliers, how were they affected during the pandemic? Company didn't have any key partners in supplying any services or products.
- 46. *Have you received direct financial support from the government?* Yes. The company has received standard support measures from the governmental institutions. These support measures would include: salary compensation for teachers that lost their work-load due to the pandemic, compensations for the business expenses, etc.
- 47. *Have you received indirect support from the government?* No. Assistance from the governmental entities was in the form of direct monetary support
- 48. Would you agree with the measures taken by your government to prevent Covid-19 health crisis? Many businesses were not satisfied with the initial reaction to the pandemic as the measures taken were highly unpredictable. Moreover, currently there are some support mechanisms for the businesses to 'stay afloat' but it is feared that after the pandemic all subsidies and financial support will have to be repaid and businesses will not be able to get back to normal fast enough. Finally, the government should have taken more drastic decisions, to completely stop the virus rather than controlling it. However, it was not done due to what seems to be the fear of public reaction.

9.2.3 PE3 interview notes

General introduction

The third business that was interviewed in the additional private education sector was an enterprise that is based throughout two biggest cities in Lithuania - Vilnius and Kaunas. As all interviews were made anonymous this entity was given a *PE3* interview key. In further descriptions and notes this business will be addressed with this interview key.

Both co-founders of before starting the company were individually working as tutors for mathematics in parallel to their main professions for several years.

As the demand for their services grew and their schedules were completely booked, they have decided to form a team and get new young talented members to join them.

Thus, *PE3* was established in the summer of 2019 with a focus on providing math classes with the attitude that mathematics can be understood by everyone.

In the first year of *PE3* (2019 - 2020), its team has successfully helped over 100 students to achieve their goals and as parents of these students started inquiring about other subjects, co-founders over summer added additional team members in STEM, languages and other fields.

This led to significant growth in capacity of the business maintaining the focus on providing high quality services and enabling children to reach their best results.

Currently, The enterprise is operational for more than 1 year and has 2 full time employees with more than 100 teachers working part-time and conducting routine classes.

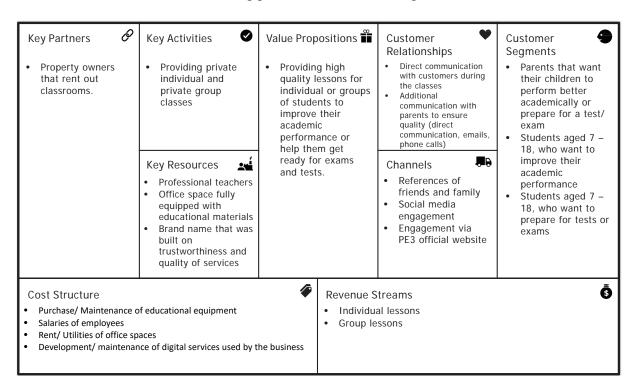


Figure 18: Business model canvas of PE3

Questions to reflect the business evolution before the Coronavirus pandemic

- 1. What was your business strategy before the pandemic? The primary goal of the business was to grow and increase its capacity by hiring skilled teachers and acquiring office space for conducting the classes.
- 2. *How well your business was growing?* The growth of the business was steady and mostly linear. As the demand for private classes was high, it was only limited by the capacity of the business. During the period from establishment to pandemic it has grown to more than 100 teachers working part time and conducting regular classes.
- 3. How would you describe your competition before the pandemic? Although the businesses was always aware about competitors that were offering similar services it was not directly engaged on how to outperform them. Co-founders did not compare themselves with competitors but focused on building solid organizational structure, improving quality of provided services and assuring that the clients are receiving highest quality services.
- 4. How would you have described your customers before the pandemic? Main customers are parents that want to help their children to improve their academic performance or prepare for tests and exams.

Questions to reflect the business evolution during the Coronavirus pandemic

- 5. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be successful? The demand for private classes was not reduced by the lockdown significantly. As the teachers were ready to conduct classes remotely they quickly adapted and allowed the business to capitalize on the transition to digital format while most of other competitors lagged behind.
- 6. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be not successful? No significant events took place that could be considered unsuccessful. However, as the business is rather young it didn't have the capacity to fully meet the high demand.
- 7. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be successful? Summer period was considerably slower due to lower demand and no significant business actions were taken during this period.
- 8. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be not successful? No significant failures were incurred during this period.
- 9. What actions have you taken in the following months of the pandemic (November Now) that you consider to be successful? As the new study year began in September the demand picked up and the business once again reached its maximum capacity.

- 10. What actions have you taken in the following months of the pandemic (November Now) that you consider to be not successful? As PE3 is a young company it lacks the organizational structure to scale fast enough based on the increasing demand.
- 11. *Could you define your business strategy right now?* It was chosen to conduct only remote classes no matter the changes of restrictions as they are highly unpredictable and can inflict additional operational costs. At the beginning of the Summer it will be considered if physical classes should take place again with reduced capacity.
- 12. How has the growth of your business been affected? (How was your business growth affected during the pandemic?) Pandemic pushed all classes to be conducted remotely which saved the costs of renting the office spaces, allowed to reach more students more effectively and scale in a faster manner.
 - Furthermore, as all classes were conducted remotely, operational costs were reduced significantly as there was no need to rent office spaces. To maintain current capacity with physical lessons 20-30 additional classrooms would have to be rented.
- 13. *How would you describe your competitors now?* During the period of the pandemic more businesses saw the opportunity to capitalize on remote learning and started providing similar services as *PE3*. However, these businesses are new in the field and lack the experience. Therefore, they will most likely not catch up. Furthermore, these young businesses are more focused on acquiring clients fast and raising their profits which usually means that their quality of provided services suffer in the process.
- 14. *How would you describe your customers now?* As there was constant communication with students and parents, their needs were mapped relatively accurately. Main need is simple to have remote classes that have good quality and cost a little bit less.

Questions to predict business evolution after the Coronavirus pandemic

- 15. *How will your business strategy look in the future?* In the beginning of Summer 2021 some live lessons will be restarted if it will be deemed feasible. Furthermore, as more teachers will be hired, co-founders will be available to focus more on solving issues that are slowing down the growth of the business, developing organizational structure, defining standard operational processes and developing core strategy.
- 16. What would be your prediction of your business growth in the future? Within 3 years it is planned to solidify business processes, hire more teachers to increase the capacity of the enterprise and focus more on group lessons to increase the amount of students each teacher can reach.
- 17. What are your predictions about future competition growth? The quality of public education has worsened significantly as more aged teachers due to their basic IT skills had difficulties adapting to digital transition and could not conduct classes with equal quality as they did with physical ones. Due to this situation, the demand for additional private

education will grow to fill in the gaps left by sub-par learning experience during the pandemic. This will introduce even more players to the market with varying levels of quality and scale.

18. What will be your customers' behavior and needs in the future? Before pandemic remote classes were viewed as lacking quality and not as engaging. Coronavirus health crisis has taught customers that they can have a more convenient digital experience without compromising quality. Therefore, in the future it is expected that 20-30% of lessons will be conducted remotely and the rest in physical classes.

Moreover, as technologies will become a growing part of everyday children's life, they will be less focused and develop varying degrees of attention disorders. Therefore, it will create an even greater need for additional private education to bridge the gaps that public education will not have the capacity to fill.

Change sensing (Anticipating/ Challenge)

- 19. *Did you reflect on previous crises and created a plan on how to react to these types of situations* No deeper reflection on previous crises were made as the business was established in 2019. Furthermore, co-founders were focused on business growth and not risk management of these rare events.
- 20. *If you had some plan on how to act in crises, did it work in the case of Covid-19* No risk management and mitigation plans were made in regards to health or financial crises.
- 21. Did you have a routine task to look for new opportunities and technologies that would provide you with competitive advantage? Yes. It was always sought to improve the speed of processes by digitizing and automating manual work. To pursue that, an online platform was started to be developed and currently it is nearing completion. This platform will connect teachers, parents and product managers enabling them to share information and give feedback with relatively little friction.
- 22. Which technologies/opportunities were chosen to counter the pandemic and why? At the beginning of the pandemic a swift adoption of digital communication services such as Microsoft Teams, Zoom or Google Meet took place. And as mentioned in the previous question, an online platform will be launched soon to create a single touch point for all involved parties.
- 23. What was the process of adopting new technologies and approaches in the past? Was it effective in the case of pandemic? In the past a smaller volume of customers did not require a significant amount of technologies to manage it manual work was not tedious. However, now the business is scaling up and requires more automated and integrated solutions to run smoothly. Therefore, the search and adoption process of new technologies has changed significantly.

24. Where were you looking for support and training to fight challenges posed by the restrictions? Did you develop some solutions on your own? Did you learn from your competitors? There was no consulting or advice sought from outside professionals. All solutions to counter the pandemic were developed 'in-house'.

Seizing opportunities (Interpretation/ Deciding)

- 25. How did you react to the previous (if you were operational) financial crises? Business was not operational during previous financial or health crises.
- 26. Was it difficult to start implementing changes? Was there a notion that everything will get back to normal and these changes will be unnecessary? Implementing necessary changes to provide digital classes was not difficult as the team is young and agile.
- 27. Have you discovered new supporting businesses or services that have enabled you to continue your work efficiently? Mentioned digital communication services that allowed to conduct classes remotely.
- 28. Did adopted changes have pushed you into a market with more or less competition? How did you deal with it? Remote teaching is a relatively new market that has a growing number of competitors and it will remain highly competitive after the pandemic.
- 29. Was it difficult to convince yourself and others to pursue proposed Opportunities/ Technologies? It was not difficult to convince employees to switch to remote classes as everyone understood that it was necessary to continue working during the lockdown.
- 30. What kind of difficulties have you experienced during the implementation of new technologies/ opportunities? No significant difficulties were endured while acquiring new technologies.

Transformation abilities (Alignment/ Learning)

- 31. *How have you and your employees aligned themselves with new changes*? New changes brought in more flexibility that was enjoyed by pretty much everyone.
- 32. *How did you collect feedback about implemented technologies/ opportunities?* Currently a manager calls parents and collects their feedback about the quality of classes. In the future it is planned to collect feedback on a private online platform.
- 33. Which opportunities/ technologies worked and what didn't? How did you adjust to that? As no significant technological changes took place, no huge failures were incurred. Small improvements such as automatizing of issuing invoices, sending email responses more efficiently were adopted relatively successfully.
- 34. Would you consider approaches taken by your business to counter the lockdown are unique and difficult for the competitors to replicate? No, as pretty much everyone can

- conduct remote classes. However, the business structure and processes that assure quality is difficult to replicate within a short period of time.
- 35. Did the pandemic change the process of looking and acquiring new opportunities/services/products? Did new corporate learning patterns appear? The pandemic created a new entrepreneurial environment where customers have seen benefits of online classes. Therefore, even more focus was placed on developing business structure and processes to enable stable and scalable growth as well as adopting digital solutions that reduce friction and automate some parts of manual work.
- 36. *Did the pandemic change the approach on how the team is being led and given tasks?*Team management approach did not change significantly. Now teachers are rather autonomous and keep contact with the management to adjust their agenda and request other types of support. In the future it is expected that teams will be formed for better organization, accountability and quality of the services provided.
- 37. How much your organizational structure was changed to reflect new opportunities or services acquired during the pandemic? Organizational structure had to be expanded and efforts had to be put in place to define standard operational processes in more detail. However, this was more influenced by the growth of the company and not the pandemic.

General questions based on Porter's diamond

- 38. How was your access to basic products and services (raw materials, non-complex manufacturing components, retail items, etc.) affected? No impact on access to basic products was felt.
- 39. How was your access to more advanced products and services (complex manufacturing components, electronics etc.) affected? No purchases of more complex products were made.
- 40. *How was your ability to hire junior position (no or basic skills) employees affected?* The ability to hire junior positions employees was affected more by the amount of students that were seeking additional private education services rather than the pandemic itself. Furthermore, skilled and well qualified teachers were more difficult to find even before the pandemic.
- 41. *How was your ability to retain junior position (no or basic skills) employees affected?* This factor was also affected more by the demand rather than the pandemic.
- 42. How was your ability to hire mid-level and senior position (with advanced skills) employees affected? No mid-level or senior positions were hired during the pandemic.
- 43. How was your ability to retain mid-level and senior position (with advanced skills) employees affected? No changes occurred in the business' core team.

- 44. How was your access to digital connection (internet, phones and other technologies) affected? Some days the internet network was overloaded and some difficulties (such as losing the signal, not being able to share visual presentations, etc.) were incurred while conducting remote classes or having meetings.
- 45. If you had any product or service suppliers, how were they affected during the pandemic? PE3 had no direct suppliers of services or products.
- 46. *Have you received direct financial support from the government?* No, as the business was growing during the period of the pandemic which disqualified the business to apply for any support. Furthermore, co-founders did not see the necessity to apply for it as other businesses need it more.
- 47. Have you received indirect support from the government (workshops, guidance, etc.)? No indirect support from governmental organizations was received.
- 48. Would you agree with the measures taken by your government to prevent Covid-19 health crisis? It is expected that the government is taking all measures that it sees necessary at the moment. If these actions taken were correct we will see in the upcoming 5 years.

9.2.4 HRC1 interview notes

General introduction

The first business that was interviewed in the Hotel, Restaurant/ Cafés and Catering (HoReCa) sector was a restaurant that is based in Denmark. As all interviews were made anonymous this entity was given an *HRC1* interview key. In further descriptions and notes this business will be addressed with this interview key.

HRC1 is a French-themed restaurant that was started in 2019. Co-founders chose to open this restaurant as they both admire French culture and would like to move there one day. Meanwhile, an idea came about to bring a piece of France to their city by starting a restaurant that is authentic, has a menu that is not too complicated and an environment that is calm and cozy.

Currently, the business has 2 full-time and 6 part-time employees.

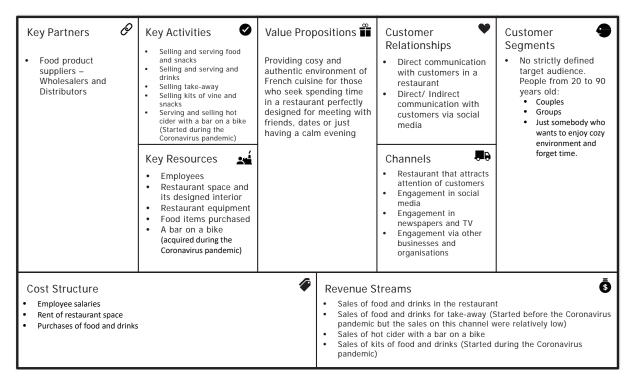


Figure 19: Business model canvas of *HRC1*

Questions to reflect the business evolution before the Coronavirus pandemic

- 1. What was your business strategy before the pandemic? Before the pandemic the main focus was to create a cozy atmosphere and high quality of service while not pursuing fast growth and expansion.
- 2. How well your business was growing? The restaurant turned out to be a big success to the point that there were concerns of growing too fast. Due to this reason, co-founders were more reactive than proactive when it comes to steering the business. They have invested their earnings back to the business to increase their capacity when it comes to storage and other equipment.

- 3. *How would you describe your competition before the pandemic?* There was no competition as there were no French-themed restaurants or bars in the city.
- 4. *How would you have described your customers before the pandemic?* Customers were extremely various. People from 20 to 90 years old, couples, groups, men, women. Just somebody who wants to enjoy a cozy environment and forget time.

Questions to reflect the business evolution during the Coronavirus pandemic

- 5. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be successful? During this period the restaurant was closed completely. Closed it all. Not much thought. It was a good decision. Moreover, it was agreed with the landlord to hold paying rent.
- 6. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be not successful? As the restaurant was closed, not many important decisions were taken.
- 7. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be successful? During the second lockdown it was chosen to be more open and interact with customers. This drove more sales on takeaway platforms and other points of sale.
- 8. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be not successful? Most of the actions taken were successful and cofounders do not see much that could have been changed.
- 9. What actions have you taken in the following months of the pandemic (November Now) that you consider to be successful? Packages of cheese and other kits were created that sold out rather quickly during the Christmas season.
- 10. What actions have you taken in the following months of the pandemic (November Now) that you consider to be not successful? After the Christmas period these kits didn't sell that well and co-founders had to figure out other ways to drive sales.
- 11. *Could you define your business strategy right now?* When pandemic came the business was pushed into survival mode the situation was rather complicated. As other restaurants and cafes have switched to making take-away food and deliveries, it was a bit more difficult to package this business experience into take-away boxes. *HRC1* started selling bowls of cheese and other snacks along with wine bottles to recreate the restaurant experience at home. This offer was doing extremely well in some days, but did not sell in others. Furthermore, more engagement on various forms of media was pursued. Followers on Facebook and Instagram were receiving more content from *HRC1* about their offers. It was focused that this content should not be pushy. As well as, working with other organizations: tourism center, newspapers, television, etc. Finally, the business started selling hot apple cider on a Christiania bike. By going around the city's hot spots,

co-founders were able to attract the attention of people that had little to do during the lockdown (except walking around). Some days this idea was doing really great, others not so much. These patterns were difficult to predict as it was not only affected by such basic things as weather, holidays or similar.

- 12. *How has the growth of your business been affected?* The business was doing enough just to survive. The situation was made more difficult due to uncertainty of changing restrictions and unpredictable customer behavior.
- 13. *How would you describe your competitors now?* Now all restaurants and cafes that are doing take-away are competitors as they are competing for customers' attention.
- 14. *How would you describe your customers now?* Loyal fans of the business are still there and more new people were reached organically through various channels. One thing that was noticed was that when shops were closed the customers had time and money to visit their restaurant. When all shops were open people went out in the city to buy what they needed and go back not having time and money to visit their restaurant.

Questions to predict business evolution after the Coronavirus pandemic

- 15. *How will your business strategy look in the future?* In the near future it is expected to open outside seating at the end of April and fully open in May. In the future it is hoped that people will be able to go back to normal and go out without any restrictions. For this reason it is planned to add more space outside. Furthermore, managing functions will be redefined to make each position in the restaurant more efficient.
- 16. What would be your prediction of your business growth in the future? As the business will be expanded and positions will be reorganized it is expected to see significant growth.
- 17. What are your predictions about future competition growth? French culture is becoming more popular and other businesses will appear with similar themes. For example French delicateses shop has opened up recently in another part of the city.
- 18. What will be your customers' behavior and needs in the future? It is expected that customers will go back to their 'normal' behaviour enjoying diners and evening meals in their restaurant.

Change sensing (Anticipating/ Challenge)

- 19. *Did you reflect on previous crises and create a plan on how to react to these types of situations* No similar situations were experienced before as the restaurant was started in June 2019. Therefore, no contingency plans were made.
- 20. If you had some plan on how to act in crises, did it work in the case of Covid-19 No specific plans were set in place to counter major crises. However, owners have a specific limit that they choose to invest in the restaurant and if it is exceeded, they would choose to close it.

- 21. Did you have a routine task to look for new opportunities and technologies that would provide you with competitive advantage? A routine of discovering new opportunities or technologies was not in place. It was conducted on an Ad Hoc basis for example, when the pandemic started various takeaway platforms were considered. Furthermore, the learning process of how to be more present in digital space took place. This helped to be more noticed by blogs, TV and other influential entities.
- 22. Which technologies/opportunities were chosen to counter the pandemic and why? To counter restrictions imposed by the lockdown take-away and digital media platforms were used.
- 23. What was the process of adopting new technologies and approaches in the past. Was it effective in the case of pandemic? The process was rather smooth as new ideas are always welcome. The team is rather diverse and had many great suggestions on how to approach this situation.
- 24. Where were you looking for support and training to fight challenges posed by the restrictions? Did you develop some solutions on your own? Did you learn from your competitors? HRC1 was not looking at and copying what their competitors were doing to remain unique and gain an advantage.

Seizing opportunities (Interpretation/ Deciding)

- 25. How did you react to the previous (if you were operational) financial crises? The business was not operational during other health or financial crises.
- 26. Was it difficult to start implementing changes? Was there a notion that everything will get back to normal and these changes will be unnecessary? No. New ideas are welcome in the business and the team is good at generating ideas and implementing them.
- 27. Have you discovered new supporting businesses or services that enabled you to continue your work efficiently? Besides take-away and social media platforms, there were no new businesses or services discovered that supported the business during the pandemic.
- 28. *Did adopted changes push you into a market with more or less competition? How did you deal with it?* Entering take-away platforms pushed *HRC1* business into a more competitive environment. This increased competition was dealt with by having more channels of engagement in digital platforms and having an additional point of sale Christiana bike.
- 29. Was it difficult to convince yourself and others to pursue proposed Opportunities/ Technologies? No, the team is rather flexible when it comes to new ideas; moreover, the situation 'required' to take action.
- 30. What kind of difficulties have you experienced during the implementation of new technologies/ opportunities? Not that many difficulties were experienced during implementation of new approaches as co-founders love bringing changes to the business.

Transformation abilities (Alignment/Learning)

- 31. *How have you and your employees aligned themselves with new changes?* Pretty much all employees were sent home due to reduced demand. Only co-founders were left in the restaurant.
- 32. *How did you collect feedback about implemented technologies/opportunities?* Surveys were made on what customers would like to buy. Based on this information new bundles of food and drinks were made.
- 33. Which opportunities/ technologies worked and what didn't? How did you adjust to that? Boxes for takeaway were bought from neighbouring restaurant that had too many of them. Moreover, a community of 57 Restaurants and cafes became even more active in communicating with the local government and sharing their needs, concerns and suggestions.
- 34. Would you consider approaches taken by your business to counter the lockdown are unique and difficult for the competitors to replicate? Although starting a "Bar on a Bike" is relatively easy, it requires a business to be ready to change its concept from being a restaurant to endeavoring towards new solutions.
- 35. Did the pandemic change the process of looking and acquiring new opportunities/services/products? Did new corporate learning patterns appear? There were no significant changes in regards to the process of how new opportunities or technologies were acquired.
- 36. *Did the pandemic change the approach on how the team is being led and given tasks?*No significant changes were made on how the team was organized.
- 37. How much your organizational structure was changed to reflect new opportunities or services acquired during the pandemic? Organizational structure was not changed during the Coronavirus pandemic.

General questions based on Porter's diamond

- 38. How was your access to basic products and services (raw materials, non-complex manufacturing components, retail items, etc.) affected? Same vendors were affected by the initial quarantine as businesses were ordering just products. Therefore, it was focused on procuring products that have longer shelf life.
- 39. How was your access to more advanced products and services (complex manufacturing components, electronics etc.) affected? There was no effect. Quite the opposite many sales people have reached out to them offering many products to their business.
- 40. How was your ability to hire junior position (no or basic skills) employees affected? No hiring took place during this period.

- 41. *How was your ability to retain junior position (no or basic skills) employees affected?*Due to lockdown demand was reduced dramatically and almost all employees were sent back home with some monthly compensation.
- 42. How was your ability to hire mid-level and senior position (with advanced skills) employees affected? No hiring took place during this period.
- 43. How was your ability to retain mid-level and senior position (with advanced skills) employees affected? No higher position employees besides co-founders were in the restaurant.
- 44. How was your access to digital connection (internet, phones and other technologies) affected? There was no effect.
- 45. If you had any product or service suppliers, how were they affected during the pandemic? At the beginning food suppliers were affected due to changed demand but after a few months everything has normalized.
- 46. *Have you received direct financial support from the government?* Yes. Employees that were sent home received a salary that was 90% covered by governmental support. Some business expenses were covered as well and the business has received compensations for lost revenue.
- 47. *Have you received indirect support from the government?* Most of the support from governmental organizations was provided in the form of direct financial support.
- 48. Would you agree with the measures taken by your government to prevent Covid-19 health crisis? Yes. Actions taken were necessary even though the created situation was complicated and difficult to compare with other crises. In retrospect some things might have been done differently, but that might have led to having more deaths. Closing to prevent hard lockdowns is better than having another wave of pandemic.

9.2.5 HRC2 interview notes

General introduction

The second business that was interviewed in the Hotel, Restaurant/ Cafés and Catering (HoReCa) sector was a service broker for events and catering that is based in Denmark. As all interviews were made anonymous this entity was given an *HRC2* interview key. In further descriptions and notes this business will be addressed with this interview key.

The business was started in 2019 by a founder that has previous experience working in bars and events. Founder noticed the frustration that people have while organizing parties, events or as they have to manage multiple service providers and make sure that they deliver on time rather than enjoying their celebration. Thus, the founder decided to start a company that consolidates these services and leaves only one contact person for the end customer to deal with. By encompassing all activities - from catering to transportation, from cleaning to security *HRC2* can offer 'all-included' packages for customers that are trying to avoid complicated organization of an event.

At the time of the interview the business has 6 - 7 employees that are working on a freelance basis and one intern that manages digital marketing activities.

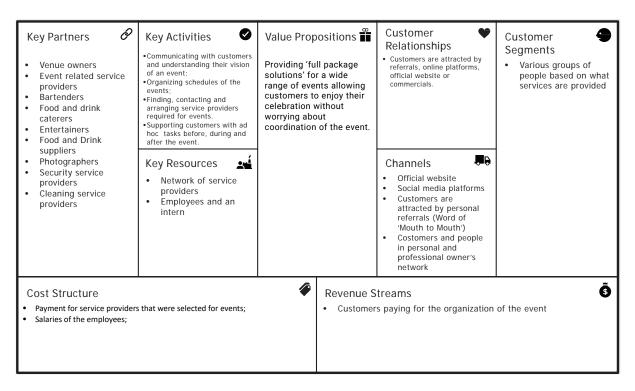


Figure 20: Business model canvas of *HRC2*

Questions to reflect the business evolution before the Coronavirus pandemic

1. What was your business strategy before the pandemic? Before the pandemic the main goal was to seek collaboration with as many as possible service providers and key people in the field and grow the network that the business has. In addition to that few owners of

the businesses were contacted to seek advice and knowledge that would help to grow the business.

- 2. *How well your business was growing?* During the first year of operation business was formed and reached around 200 thousand DKK in revenue.
- 3. How would you describe your competition before the pandemic? When it comes to services themselves almost all cocktail bars, bars and pubs, restaurants and caterers would be considered as competitors. On the other hand, service of providing complete support on event organization was rather unique and did not have any significant equivalents in the region.
- 4. How would you have described your customers before the pandemic? Customers varied significantly depending on the service requested. Younger audiences seek bartending and venue services that are relatively inexpensive and more aged people are focused on getting the full experience and care more about saving time rather than money.

Questions to reflect the business evolution during the Coronavirus pandemic

- 5. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be successful? During the months of January and February the demand was high and requests of services were frequent. When the first lockdown was announced all of the activities were stopped. There was not much to be done with restrictions imposed
- 6. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be not successful? Restrictions prevented from operating completely.
- 7. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be successful? At the end of May first service request was made since the lockdown was announced. After 2 3 weeks another one was placed. Finally, demand picked up speed at the end of June. Then the demand was surpassing pre-corona levels and required to work hard to satisfy the demand.
- 8. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be not successful? No significant failures were endured during this period
- 9. What actions have you taken in the following months of the pandemic (November Now) that you consider to be successful? The boom of summer and Autumn events was stopped by following lockdown and from the start of December no new events were booked. There was a possibility to take a few requests; however, they would be too complicated to execute and would have required more work than it was worth. One virtual event was hosted with 190 participants and it was a big success.

- 10. What actions have you taken in the following months of the pandemic (November Now) that you consider to be not successful? Although the previously mentioned digital event was successful in regards to fulfilling customers expectations the organization and effort required was too much in comparison to the finances that was there to be worked with. Therefore, further digital events were not pursued.
- 11. *Could you define your business strategy right now?* Focused more on catering and trying to host events when the restrictions allow it to happen. Furthermore, online advertisement and other digital marketing activities were started to become more visible on the digital domain.
- 12. *How has the growth of your business been affected?* As mentioned before, months of January and February were quite successful; however, were followed by lockdown when it was not possible to conduct events. From June to November lighter restrictions allowed to catch up for the lost time and reach bigger revenue than in 2019.
- 13. *How would you describe your competitors now?* Competition has decreased significantly as some businesses in HoReCa are doing take-away, but most are temporarily or permanently closed.
- 14. *How would you describe your customers now?* Intern hired for digital marketing activities such as developing an online strategy and generating online content brings more attention on social media; however, people are still reserved and are waiting to see how the government will decide to apply restrictions in the near future. It will take some time before customers regain full confidence in organizing and participating in events.

Questions to predict business evolution after the Coronavirus pandemic

- 15. How will your business strategy look in the future? When lockdowns will be lifted it is expected to go back to 'normal' operation. Moreover, people will be missing events; therefore, increased demand for the services is expected as well. This period will be used to catch up and earn money that was not earned during the period of pandemic. When the initial surge is exhausted the focus will turn towards online strategy in order to attract more customers. For this reason website and social media profiles will be grown as well as advertisements will be purchased. Finally, more collaborations will be sought to increase the size of the network and enable more opportunities of providing unique services and experiences.
- 16. What would be your prediction of your business growth in the future? After pandemic restrictions are removed the surge of people that are missing events and parties will enable the business to grow quite fast. Following that, the wave will slow down and so will the growth of the business.
- 17. What are your predictions about future competition growth? In the near future it is not expected to encounter major competition as some of the competitors have closed and most of them have lost a lot of money; thus, will require a significant amount of time to recover.

18. What will be your customers' behavior and needs in the future? After the pandemic customers will want to go back to 'normal' lifestyle and enjoy their events. Therefore, it is expected that the demand will spike drastically. However, after this boom the demand will slow down as people will try to get back to a healthy lifestyle.

Change sensing (Anticipating/ Challenge)

- 19. *Did you reflect on previous crises and create a plan on how to react to these types of situations?* Some thoughts on how to behave during the financial crisis were there. However, during the financial crisis demand is just reduced whereas during the pandemic the demand was completely paralyzed.
- 20. *If you had some plan on how to act in crises, did it work in the case of Covid-19?* No pre-prepared plans to counter the pandemic were applied.
- 21. *Did you have a routine task to look for new opportunities and technologies that would provide you with competitive advantage?* Yes, constant search for new collaborations is conducted as it is a key driver of *HRC2* that enables it to provide unique experiences and services. Furthermore, hired intern is focused on online strategy to generate more content and increase business' visibility in the digital domain.
- 22. Which technologies/opportunities were chosen to counter the pandemic and why? As mentioned, during the lockdown an online event concept was tested and it was concluded that the business is capable of hosting them, but it requires too much time to prepare. To become more unique and attractive during times when the lockdowns are milder, new collaboration and services were formed additional food preparation courses, launching party bus service, etc.
- 23. What was the process of adopting new technologies and approaches in the past? Was it effective in the case of pandemic? There was no strict approach on how to implement new technologies or opportunities. During internal discussions team members brought up ideas and suggestions to be considered. As the team is small and welcoming new opportunities it is easy to develop and implement ideas. During the pandemic this approach was not changed and it was relatively effective in acquiring new opportunities and technologies.
- 24. Where were you looking for support and training to fight challenges posed by the restrictions? Did you develop some solutions on your own? Did you learn from your competitors? Most proposals were made by an internal team but communication with the network of suppliers and service providers gave some insights as well.

Seizing opportunities (Interpretation/ Deciding)

25. How did you react to the previous (if you were operational) financial crises? Business was not operational during any health or financial crises.

- 26. Was it difficult to start implementing changes? Was there a notion that everything will get back to normal and these changes will be unnecessary? No, as the team is small and understood that lockdown is something that will not go away in a short period of time.
- 27. Have you discovered new supporting businesses or services that enabled you to continue your work efficiently? As the business model is based on wide network of service providers, it was grown during the pandemic as well to facilitate events hosted during this period.
- 28. Did adopted changes have pushed you into a market with more or less competition? How did you deal with it? As most competitors were not able to adapt, they stopped their activities during the pandemic. Therefore, the situation created an environment of lower competition.
- 29. Was it difficult to convince yourself and others to pursue proposed Opportunities/ Technologies? Business has a small team; therefore, it is flexible and able to innovate easily. Same focus different time. Have to feel the right time timing is key.
- 30. What kind of difficulties have you experienced during the implementation of new technologies/opportunities? As mentioned before, online events proved to be not feasible to host. Moreover, most important ideas were developed during the pandemic and currently are being refined. Their implementation will take place later.

Transformation abilities (Alignment/Learning)

- 31. *How have you and your employees aligned themselves with new changes?* During hard lockdowns all activities were stopped and employees were left with no jobs. When the restrictions were lifted employees had to work hard to satisfy demand for requested services; however, everybody was happy to be operational and making revenue.
- 32. How did you collect feedback about implemented technologies/ opportunities? Questionnaires or direct surveys were not conducted but the general feedback from the clients was positive. Positive feedback was also received on social platforms as well. On the other hand, there was some constructive criticism that pointed towards matters that needed improvement.
- 33. Which opportunities/ technologies worked and what didn't? How did you adjust to that? Question was answered in previous answers.
- 34. Would you consider approaches taken by your business to counter the lockdown are unique and difficult for the competitors to replicate? New opportunities and technologies were not specifically unique, but the business model itself is unique enough to be flexible and react to the lockdowns.
- 35. Did the pandemic change the process of looking and acquiring new opportunities/services/products? Did new corporate learning patterns appear? The process changed as

- the approach on how the services are provided changed. Now more focus is placed on providing customers with unique experiences rather than casual events.
- 36. *Did the pandemic change the approach on how the team is being led and given tasks?* Due to the lockdown rules changing rather quickly employees had to be managed more flexibly and a certain level of stability could not be provided.
- 37. How much your organizational structure was changed to reflect new opportunities or services acquired during the pandemic? Main organizational structure did not change throughout the evolution of the business. Although, to make slight adjustments a digital marketing intern was hired to boost business' visibility.

General questions based on Porter's diamond

- 38. How was your access to basic products and services (raw materials, non-complex manufacturing components, retail items, etc.) affected? Easy to get necessary goods in regular supermarkets.
- 39. How was your access to more advanced products and services (complex manufacturing components, electronics etc.) affected? No purchases of more complex items were made.
- 40. *How was your ability to hire junior position (no or basic skills) employees affected?* It was really easy to find junior position employees as there were a lot of people who wanted to have some work.
- 41. How was your ability to retain junior position (no or basic skills) employees affected? Most of the hired people were working on a freelance basis and worked on a flexible schedule.
- 42. How was your ability to hire mid-level and senior position (with advanced skills) employees affected? No hiring of mid-level or senior position employees were made.
- 43. How was your ability to retain mid-level and senior position (with advanced skills) employees affected? No core team members left the team during the pandemic.
- 44. How was your access to digital connection (internet, phones and other technologies) affected? No issues were incurred when it came to internet or other digital connection.
- 45. If you had any product or service suppliers, how were they affected during the pandemic? Lots of suppliers were really hurt. Big distributors and wholesalers had to shrink down. On the other hand, local markets and liquor shops grew as communities supported them throughout the pandemic.
- 46. *Have you received direct financial support from the government?* Governmental institutions provided compensation for lost income. Application for it was done only during first lockdown. Other types of support were not pursued as the process was extremely complicated and prolonged. These measures covered less than 20% of expected revenue.

- 47. Have you received indirect support from the government (workshops, guidance, etc.)? During the period of relaxed restrictions governmental organizations have started offering different courses; although, it was not particularly applicable to the business.
- 48. Would you agree with the measures taken by your government to prevent Covid-19 health crisis? Some of the measures were great others bad. It took too long for the governmental institutions to distribute relief funds. The government was focused on keeping supply chains not breaking. This approach was successful but to a limited success. The delay resulted in businesses running out of finances and prematurely closing down or taking other drastic financial measures.

9.2.6 NB1 interview notes

General introduction

The first young business that had a considerable growth period during the Coronavirus pandemic is based in France and Denmark. As all interviews were made anonymous this entity was given an *NB1* interview key. In further descriptions and notes this business will be addressed with this interview key.

The key focus of this business is to up-cycle used glasses and sell them through various Points of Sale (glasses shops, events, etc.).

The idea of the business was born around 2016 when co-founders noted how monopolized and opaque glass manufacturing really is. Furthermore, the status quo of the glasses industry does not provide the best prices for the customer, nor is it based on the principles of sustainability. Therefore, an idea was pursued to up-cycle glasses. Meaning, buying or acquiring for free used glasses, refurbish them and sell to the end customer with a friendly price tag. The operation started with refurbishing small amounts of glasses and selling them in various events, fairs or festivals. Later these operations grew and additional Points of Sales were considered: places such as opticians, stores that sell glasses and sunglasses, and similar businesses. The pandemic supercharged this business to establish its presence online and start activities of e-commerce.

Currently, the business consists of two co-founders and an additional intern to generate more digital content and perform tasks of social media engagement.

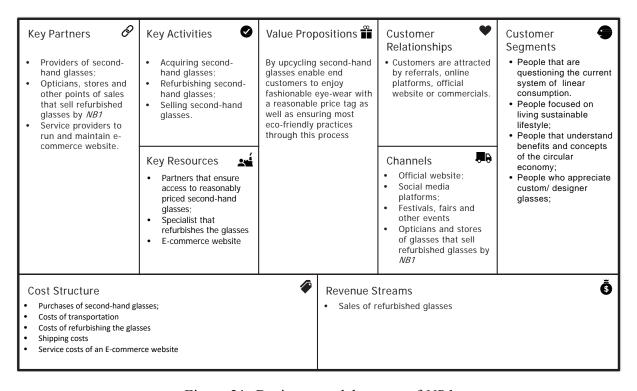


Figure 21: Business model canvas of *NB1*

Questions to reflect the business evolution before the Coronavirus pandemic

- 1. What was your business strategy before the pandemic? The main strategy was to sell refurbished glasses mostly through physical interaction with customers. Therefore, marketing and sales activities were mostly done in various events (markets, festivals, etc.). Besides that, the process of introducing up-cycled glasses to more Points of Sales were pursued. Therefore, before the pandemic NB1 has started distributing refurbished glasses to fifteen stores. However, sales were highly dependent on the season and required sustained efforts during the months of spring and summer as this is the period of various events and festivals. It was also a good opportunity to collect live feedback from customers on what they expect from the future developments of the business.
- 2. *How well your business was growing?* The business was mainly grown by having physical interactions with customers and the growth was slow but fully organic. By contacting B2C and B2B customer bases was grown and brand awareness raised. The biggest growth was seen in the season of events (Spring and Summer).
- 3. *How would you describe your competition before the pandemic?* Competition was rather limited as activities performed by *NB1* are quite niche. When it comes to direct competition little upcycling companies were known but not significant to consider them as threatening competitors. Secondly, big manufacturers of glasses and accessories are constantly there but they are too different from what *NB1* is offering; therefore, these businesses were not considered as direct competitors to the main value proposition.
- 4. How would you have described your customers before the pandemic? Customer base consisted of people questioning the way the current system of consumption works and they were interested in the circular economy. Perfect customer was sustainable lifestyle oriented and able to quickly decide what he/ she wants as the products were presented to them in a physical form.

Questions to reflect the business evolution during the Coronavirus pandemic

- 5. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be successful? At the beginning of 2021 planning for festivals and other events took place. Marketing plans were made for these occasions. In March lockdowns were announced and in April business partners stopped their activities as well. Therefore, an e-commerce website was started and refunds from festivals were required.
- 6. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be not successful? No clear examples of actions taken that were unsuccessful.
- 7. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be successful? Continuation of being more engaged in social media and improving e-commerce website.

- 8. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be not successful? No clear examples of actions taken that were unsuccessful.
- 9. What actions have you taken in the following months of the pandemic (November Now) that you consider to be successful? Continuation of being more engaged in social media and improving e-commerce website.
- 10. What actions have you taken in the following months of the pandemic (November Now) that you consider to be not successful? No clear examples of actions taken that were unsuccessful.
- 11. *Could you define your business strategy right now?* Due to a lockdown all activities and stores were closed in the month of March. This pushed co-founders to launch an ecommerce website in three weeks. This defined a strategy of complete digital presence with newly opened online shop, posting more content on social media platforms such as Instagram, Advertisement and collaborating with other people and brands. This enabled the business to conduct 40 sales in 5 months. Moreover, an approach of getting to opticians directly was adopted to enable them to put their lenses in the refurbished frames provided by *NB1*.
- 12. How has the growth of your business been affected? 2020 Summer was bad as it was planned to be a period of intense sales. However, the online platform brought more visibility to the business and created a foundation for scalable sales. Therefore, in the near future, a growing amount of sales is expected. Due to greater digital presence more people are discovering the business and engaging with it significantly more by asking questions, commenting and sharing their content.
- 13. *How would you describe your competitors now?* During the growth period more competitors were discovered and their businesses were understood better. However, significant increase in direct competition was not noticed as small opticians will remain based physically and new startups will enter the market completely digital; therefore, there will not be something in the middle a business that has physical interaction and connection as well as being present in digital space with social media and e-commerce.
- 14. *How would you describe your customers now?* The targeted customer base is still people who are focused and changing the patterns of classical consumption models. However, few new properties of a perfect customer were added someone that shops online, knows about the benefits and concepts of circular economy and the customer is capable of accurately assessing which size glasses he/ she needs to avoid returns.

Questions to predict business evolution after the Coronavirus pandemic

15. *How will your business strategy look in the future?* Business will keep it's main focus on digital activities; however, restarting physical event participation and physical sales is

on the list if the conditions allow it. Having live human contact is something that the cofounders love to do; therefore, it would be nice to go back to festivals, markets and other events. Spring and Summer months are still expected to drive a significantly increased amount of sales. Finally, there are plans to intensify collaboration with more websites and brands.

- 16. What would be your prediction of your business growth in the future? Initial prediction is to grow twice or thrice compared to 2020 due to a fully operational e-commerce platform. New partnerships, public relationships and digital marketing efforts will further increase business' visibility and conversion rate.
- 17. What are your predictions about future competition growth? As upcycling is growing in demand and becoming more and more trendy it will push the market to produce more of these types of businesses. In addition, traditional businesses will follow the trends and will adopt mission statements and strategies incorporating social and ecological responsibility. Co-founders see it as a good thing as the market will produce more services and goods that are more eco-friendly. Furthermore, they are working on building a unique brand image that will sustain increased competition.
- 18. What will be your customers' behavior and needs in the future? In the near future it is expected that the customers will be even more sustainable lifestyle oriented, demanding for more information and seeking more transparency and traceability. Furthermore, general market trends point to more personal marketing and providing a story behind the brand and Who is behind it faces and stories. Finally, it is expected that consumers will be more educated and will understand the upcycling concept even better. Therefore less customer education will be necessary.

Change sensing (Anticipating/ Challenge)

- 19. Did you reflect on previous crises and created a plan on how to react to these types of situations There were no such plans in place.
- 20. If you had some plan on how to act in crises, did it work in the case of Covid-19 There were no such plans in place.
- 21. *Did you have a routine task to look for new opportunities and technologies that would provide you with competitive advantage?* Yes. Co-Founders were constantly tracking news and trends in sustainable fashion and upcycling.
- 22. Which technologies/ opportunities were chosen to counter the pandemic and why? Ecommerce website, being more on social media and integrating them with certain applications.
- 23. What was the process of adopting new technologies and approaches in the past? Was it effective in the case of pandemic? When the new idea is spotted it is considered and

- discussed amongst co-founders. If co-founders do not know particular things, they reach out to people with more experience in the field.
- 24. Where were you looking for support and training to fight challenges posed by the restrictions? Did you develop some solutions on your own? Did you learn from your competitors? No significant learning patterns from competitors or search of help from external consultants was sought after.

Seizing opportunities (Interpretation/ Deciding)

- 25. *How did you react to the previous (if you were operational) financial crises?* The business was not operational through any major economic or health crisis.
- 26. Was it difficult to start implementing changes? Was there a notion that everything will get back to normal and these changes will be unnecessary? It was known before the pandemic that digital presence is necessary; however, the health crisis accelerated the process and pushed co-founders to take action with limited experience in the field of digital marketing and e-commerce. Therefore, the decision was swift and its necessity was understood even before the health crisis.
- 27. Have you discovered new supporting businesses or services that have enabled you to continue your work efficiently? Digital marketing and e-commerce platforms were adopted: website hosting, 'Shopify' and it's extensions. Greater care for Facebook, Instagram and their linkage to the shopping page were put in place.
- 28. Did adopted changes have pushed you into a market with more or less competition? How did you deal with it? It can be seen that big manufacturers of glasses are moving into digital space as well and they are able to invest in various technologies such as augmented reality or other customer engagement approaches. However, when it comes to smaller or more environmentally conscious businesses, co-founders noticed more indirect competition but are not sure if there are more companies being established that would directly compete with their business model.
- 29. Was it difficult to convince yourself and others to pursue proposed Opportunities/ Technologies? It wasn't difficult; however, the outcome was not instant and it was necessary to have acceptance of no sales in the first months. It was necessary to embrace the learning process and understand that everything cannot be achieved so quickly.
- 30. What kind of difficulties have you experienced during the implementation of new technologies/ opportunities? As co-founders didn't know much about digital marketing it was a learning experience to apply these tools in business.

Transformation abilities (Alignment/Learning)

31. *How have you and your employees aligned themselves with new changes?* Smoothly. As co-founders are living in different countries, digital technologies were already being

- used. The biggest frustration came not from technological adoption but from undefined plans on how the pandemic will be combated for example not knowing which activities and events will be canceled and which will still take place.
- 32. How did you collect feedback about implemented technologies/opportunities? At first, feedback from family and friends were collected. Later, website insights were used to provide hard data behind the user decision making process. Furthermore, this year a general survey was conducted to inspect what improvements in communication, products and other aspects users would like to see. More than 70 responses were collected.
- 33. Which opportunities/ technologies worked and what didn't? How did you adjust to that? Mentioned technologies worked rather well. However, their integration is still lagging behind.
- 34. Would you consider approaches taken by your business to counter the lockdown are unique and difficult for the competitors to replicate? No answer was provided.
- 35. Did the pandemic change the process of looking and acquiring new opportunities/services/products? Did new corporate learning patterns appear? No answer was provided.
- 36. Did the pandemic change the approach on how the team is being led and given tasks? No answer was provided.
- 37. How much your organizational structure was changed to reflect new opportunities or services acquired during the pandemic?

No answer was provided.

General questions based on Porter's diamond

- 38. How was your access to basic products and services (raw materials, non-complex manufacturing components, retail items, etc.) affected? No effect was felt.
- 39. How was your access to more advanced products and services (complex manufacturing components, electronics etc.) affected? No effect was felt.
- 40. *How was your ability to hire junior position (no or basic skills) employees affected?* As hiring processes did not take place this question cannot be answered.
- 41. How was your ability to retain junior position (no or basic skills) employees affected? No changes occurred in the team's structure.
- 42. How was your ability to hire mid-level and senior position (with advanced skills) employees affected? As hiring processes did not take place this question cannot be answered.
- 43. How was your ability to retain mid-level and senior position (with advanced skills) employees affected? No changes occurred in the team's structure.

- 44. How was your access to digital connection (internet, phones and other technologies) affected? No effect was felt.
- 45. If you had any product or service suppliers, how were they affected during the pandemic? Some stores (Flea market/ collection points) were disrupted due to lockdown.
- 46. *Have you received direct financial support from the government?* The business has not received any direct support from governmental organisations.
- 47. *Have you received indirect support from the government?* The business has not received any direct support from governmental organisations.
- 48. Would you agree with the measures taken by your government to prevent Covid-19 health crisis? Hard to say as business is operating in two different countries and there is not enough information to make a clear judgement.

9.2.7 NB2 interview notes

General introduction

The second young business that had a considerable growth period during the Coronavirus pandemic is based in Lithuania. As all interviews were made anonymous this entity was given an *NB2* interview key. In further descriptions and notes this business will be addressed with this interview key.

NB2 business gathers dog trainers to organize courses and training material for dog owners on how to train their pet and how to behave themselves around it.

The founder has started working in the field of dog training in 2016 and started providing the service on private worker permit in 2018. This service was finally registered as a business at the beginning of 2020. The enterprise managed to operate a few months normally before the lockdowns were announced in March.

At the time of the interview there are 3 full-time employees and additional interns that are learning to become dog trainers and helping with tasks in the business as well.

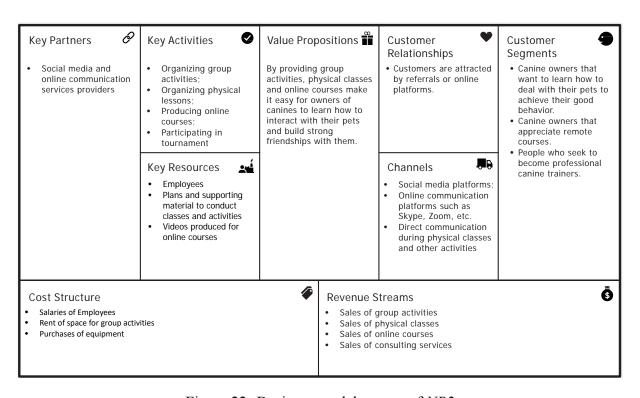


Figure 22: Business model canvas of *NB2*

Questions to reflect the business evolution before the Coronavirus pandemic

1. What was your business strategy before the pandemic? Before the pandemic the strategy of a business was to provide physical classes and training events for dog trainers and owners. Therefore, the enterprise's growth was limited to how many classes could be performed and how many teachers are available at that time.

- 2. *How well your business was growing?* The business was growing; however, the growth was not significantly fast.
- 3. *How would you describe your competition before the pandemic?* Before the pandemic there were a considerable number of competitors with varying levels of competency and offered services. However, only 2-3 other businesses were up to par with *NB2* and directly competed with them for customers.
- 4. How would you have described your customers before the pandemic? Main customers were canine owners that wanted to learn how to deal with their pets to achieve their good behavior. For example how to make sure that their dogs stop excessive barking, jumping on people, etc.

Questions to reflect the business evolution during the Coronavirus pandemic

- 5. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be successful? The most successful thing that happened was to film a high quality course and make it available online before the pandemic started. It has proven that customers want this type of courses and it sparked a quick and assured transition towards operating remotely.
- 6. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be not successful? Due to the failure of the company's accountant, NB2 could not request governmental financial support.
- 7. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be successful? Due to relaxed lockdown participation in physical events could take place. During these events their school showed good results in a tournament which demonstrated that their school prepares well trained professionals. Furthermore, physical courses were taking place as well. They were really successful and did not require any marketing efforts to attract a sufficient number of participants.
- 8. What actions have you taken in the middle of the pandemic (May October 2020) that you consider to be not successful? No significant failures were incurred during this period.
- 9. What actions have you taken in the following months of the pandemic (November Now) that you consider to be successful? Due to the second lockdown new webinars were launched and more content was generated. This decision allowed the company to retain existing clients and attract even more new customers.
- 10. What actions have you taken in the following months of the pandemic (November Now) that you consider to be not successful? As mentioned before, online communication platforms only allow 100 150 participants; therefore, bigger online events could not take place and only a limited number of people could be invited to them.

- 11. *Could you define your business strategy right now?* Before the first lockdown a course of training was filmed with high quality equipment, edited and uploaded online in order to reach more people. When the lockdown was announced these online courses received considerable attention and acted as an indicator of people's need for these types of online courses. Therefore, with this proof it was easy to decide on working online and making more remote courses for their customers. Currently remote courses and generating pre-recorded is the main focus of the business; although, when restrictions are relaxed physical classes take place as well.
- 12. *How has the growth of your business been affected?* At the beginning of the pandemic it was hoped to make enough money to pay rent, cover expenses and pay salaries. However, going completely digital was really successful and business became bigger than before the pandemic.
- 13. *How would you describe your competitors now?* The competitors were slow to adapt to lockdowns and some of them stopped their activities completely. Others only recently managed to enter digital platform and still are rather slow to adapt and provide relative content.
- 14. *How would you describe your customers now?* Currently customers appreciate remote courses as it is safer and conserves time, especially for people who are not living in the same city where the courses take place. However, most of them are missing live interactions and book physical classes months in advance when lockdown conditions allow it.

Questions to predict business evolution after the Coronavirus pandemic

- 15. *How will your business strategy look in the future?* Although the founder really enjoys providing training content remotely as it saves considerable amount of time and is more scalable, main business activities will need to go back to physical format as it is more interactive and customers are missing physical contact and company of like-minded people.
- 16. What would be your prediction of your business growth in the future? It is expected that the business will grow faster due to online content already made.
- 17. What are your predictions about future competition growth? Number of businesses providing canine training will grow considerably due to growing demand for these services. However, most of them will not be able to provide premium quality service due to lack of knowledge of canine training. Therefore, the market will see an increase of competitors but most of them will be indirect. Due to these reasons NB2 business expects to retain competitive advantage over other similar businesses.
- 18. What will be your customers' behavior and needs in the future? Amount of customers will grow as more people become more aware of the necessity to train their canines. Furthermore, during the pandemic customers have learned how to use digital platforms and

how comfortable they are; therefore, it is expected that more people will demand remote classes. Although, training with your pets is a highly interactive activity; thus, physical classes will most likely be more popular than digital ones.

Change sensing (Anticipating/ Challenge)

- 19. *Did you reflect on previous crises and created a plan on how to react to these types of situations?* The business was not operational during previous health or financial crises. Therefore, no plans were made and it was chosen to react to any challenging situation flexibly.
- 20. *If you had some plan on how to act in crises, did it work in the case of Covid-19?* No contingency plans were made to counter financial or health crises.
- 21. Did you have a routine task to look for new opportunities and technologies that would provide you with competitive advantage? There was no routine task finding new technologies or opportunities for the business. All research made was Ad Hoc and specifically directed towards solving issues of how to operate during the lockdown.
- 22. Which technologies/ opportunities were chosen to counter the pandemic and why? Mostly online communication technologies commonly used by many businesses (Skype, Zoom, etc.). At the beginning of the pandemic Instagram platform was started to be used which drove more followers and customers to the business. Currently a private website is being developed that will make training videos available to their customers seamlessly as previously Facebook platform was used for most of the remote training activities.
- 23. What was the process of adopting new technologies and approaches in the past? Was it effective in the case of pandemic? It was irregular but effective as the team is young and sensing necessary changes relatively fast. Moreover, after discussing their necessity there is little friction when implementing these changes. This attitude was perfect for making changes when lockdowns were announced. The team acted quickly and pursued solutions that mitigated or completely solved problems created by the pandemic.
- 24. Where were you looking for support and training to fight challenges posed by the restrictions? Did you develop some solutions on your own? Did you learn from your competitors? Although local competitors were observed, most of the inspiration on what is worth or not worth pursuing came from foreign enterprises and their approaches in providing services.

Seizing opportunities (Interpretation/ Deciding)

- 25. How did you react to the previous (if you were operational) financial crises? The business was not operational during other financial or health crises.
- 26. Was it difficult to start implementing changes? Was there a notion that everything will get back to normal and these changes will be unnecessary? No, as it was understood

- that the lockdown will take place for a longer period of time. The team took fast and swift actions to become available online and retain their customers by offering them to continue their courses in digital format.
- 27. Have you discovered new supporting businesses or services that enabled you to continue your work efficiently? Just online communication platforms that enabled the business to work with customers remotely.
- 28. Did adopted changes have pushed you into a market with more or less competition? How did you deal with it? It appears that necessity to become digital made the market less competitive. Most of the businesses have scaled down or completely stopped their activities and only recently some of them managed to start working remotely and providing their customers with online content. Furthermore, produced content more often than not is somewhat basic, not highly engaging and fails to differentiate from what others are producing.
- 29. Was it difficult to convince yourself and others to pursue proposed Opportunities/ Technologies? No, the team is agile and willing to implement all the changes necessary to make the business better.
- 30. What kind of difficulties have you experienced during the implementation of new technologies/opportunities? Online communications are usually limited to 100 150 participants. This was the reason for some events to have a limited number of participants and some of the people that wanted to join had to be redirected to other future events.

Transformation abilities (Alignment/ Learning)

- 31. *How have you and your employees aligned themselves with new changes?* As mentioned before, the team is rather small and finds it easy to align towards necessary changes that have to be made.
- 32. *How did you collect feedback about implemented technologies/opportunities?* For this purpose feedback forms were given out after courses. The business has received good feedback and constructive criticism that was a driver to make certain changes and allowed *NB2* to provide their customers with even more premium experience.
- 33. Which opportunities/ technologies worked and what didn't? How did you adjust to that? Most of the new technologies or opportunities used were pretty much successful.
- 34. Would you consider approaches taken by your business to counter the lockdown are unique and difficult for the competitors to replicate? Competitors could replicate creation of online courses which is performed by NB2; however, it would most likely take considerably more time as these tasks require well organized team and good organizational.

- 35. Did the pandemic change the process of looking and acquiring new opportunities/services/ products? Did new corporate learning patterns appear? Before the pandemic changes were sought after and implemented when necessary and on Ad Hoc principle. During the pandemic, remote work required employees to be online for greater periods of time which exposed them to more information translated on social media and gave more inspiration on what approaches should be pursued next. Therefore, all team members collect data and brainstorm on what changes should be implemented.
- 36. *Did the pandemic change the approach on how the team is being led and given tasks?* It changed as before the pandemic most communication was done on Facebook platform. During the pandemic, as the scale of operations grew, different communication platforms were adopted which streamlined the way employees communicate, assignments were given out and timetables tracked. Furthermore, Google Drive was started to be used for more consistent data management.
- 37. How much your organizational structure was changed to reflect new opportunities or services acquired during the pandemic? During the pandemic the number of team members grew and each of them brought in their expertise on how to improve organizational structure. Adopted new communication and data management platforms also allowed smoother operation and provision of services during lockdowns. Moreover, briefings and other more structured workflows were adopted; however, it was influenced more by the growth of the company, rather than the pandemic.

General questions based on Porter's diamond

- 38. How was your access to basic products and services (raw materials, non-complex manufacturing components, retail items, etc.) affected? The supply of more advanced products was not affected.
- 39. How was your access to more advanced products and services (complex manufacturing components, electronics etc.) affected? The supply of more advanced products was not affected.
- 40. *How was your ability to hire junior position (no or basic skills) employees affected?* The ability of hiring junior position employees was not affected during the period of pandemic.
- 41. How was your ability to retain junior position (no or basic skills) employees affected? The ability of retaining junior position employees was not affected during the period of pandemic.
- 42. How was your ability to hire mid-level and senior position (with advanced skills) employees affected? The ability of hiring mid-level and senior position employees was not affected during the period of pandemic.

- 43. How was your ability to retain mid-level and senior position (with advanced skills) employees affected? The ability of retaining mid-level and senior position employees was not affected during the period of pandemic.
- 44. How was your access to digital connection (internet, phones and other technologies) affected? There were no significant disruptions to the access of digital connection.
- 45. If you had any product or service suppliers, how were they affected during the pandemic? The business had no direct suppliers of services or products.
- 46. *Have you received direct financial support from the government?* As mentioned before, due to accounting errors it was not possible for *NB2* to request financial support from the governmental organizations.
- 47. *Have you received indirect support from the government?* There was no indirect support received from the governmental institutions.
- 48. Would you agree with the measures taken by your government to prevent Covid-19 health crisis? The rules of lockdown were relatively inconsistent and seemingly favoring larger businesses over Small and Medium Enterprises. For example, small shops were forced to close but big supermarkets were able to remain open and sell the same type of products that could be found in these smaller shops. Supermarkets and other bigger points of sales received an increased amount of customers that not so rarely formed big crowds; meanwhile, smaller businesses that had large spaces to work in were not allowed to operate.

9.2.8 NB3 interview notes

General introduction

The third newly established business that was started in 2020 is based in Belgium. As all interviews were made anonymous this entity was given an *NB3* interview key. In further descriptions and notes this business will be addressed with this interview key.

The business was launched at the beginning of 2020 and the main driver of establishing it was to produce innovative and unique food that is functional and healthy. Rather than producing white label or other solutions that could be bought by other businesses it was decided to develop products under their own brand. This way it is expected to grow it and become well recognized in order to rival top players in the field of healthy food.

NB3 is a business that produces edible products from exotic ingredients found in Southern America. The enterprise does not take care of sourcing raw materials and purchases them from a supplier. It takes the process from there and manufactures final products, packages them and takes care of logistics operations. After these processes, final products are sold to B2B and B2C clients.

The Co-Founders of the company had rather extensive knowledge about the healthy food industry and solid understanding behind food production processes as their parallel businesses were in similar sectors.

At the time of the interview there were 5 employees in the company with a clear plan to expand the team in the near future.

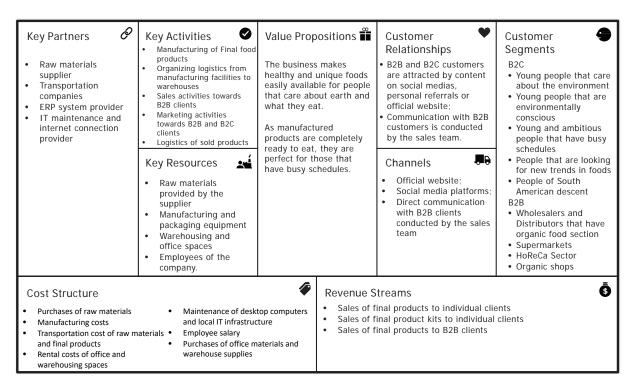


Figure 23: Business model canvas of NB3

Questions to reflect the business evolution before the Coronavirus pandemic

- 1. What was your business strategy before the pandemic? Before the pandemic the business was started with a strategy to sell to direct points of sale. Those would be supermarkets and organic shop chains. Furthermore, HoReCa (Hotels, Restaurants/ Cafés and catering companies) were targeted too as it was expected that offered products would be well received in this sector.
- 2. *How well your business was growing?* Before the pandemic business had just been started and no significant sales of products were made, only some small spot sales. The main growth was seen in the rapid construction of organizational structure and starting commercial negotiations that led to sales during the pandemic.
- 3. *How would you describe your competition before the pandemic?* Although products developed by *NB3* were unique and required specific technologies to produce. These technological approaches were used by a small portion of food producers. This makes the products unique and difficult to be imitated; however, the market of healthy foods and drinks has many well established businesses that have significant marketing and sales budgets to compete for customers' attention.
- 4. *How would you have described your customers before the pandemic?* At the very beginning of *NB3* operation main customers were small independent organic shops and other small businesses. These businesses were found and connected on events or were known from employees' inner networks.

Questions to reflect the business evolution during the Coronavirus pandemic

- 5. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be successful? During this period NB3 participated in one of the biggest organic food fairs in Europe and received good reviews on its products. This has led to more recognition and generated new leads that were eventually converted to sales. Furthermore, as first restrictions were announced, co-founders took no impulsive decisions and kept the focus on the initial strategy that was already developed. This allowed the enterprise to remain steadily growing and achieving their set goals.
- 6. What actions have you taken at the beginning of the pandemic (January April 2020) that you consider to be not successful? Although the established strategy was good for focusing business effort and avoiding panic-induced decisions, it was not the best for the moment as it has focused on active sales for sectors that were receiving new restrictions from the governments. Therefore, targeted sectors started focusing on retaining existing products rather than acquiring new ones and their buying behavior became considerably more conservative.
- 7. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be successful? The strategy that was established initially was corrected

and the main focus of sales shifted from supermarkets, organic shop chains and HoReCa to online retailers. Moreover, it was realised that it is important to work with distributors and wholesalers as they have a wider network of buyers and will assure greater volume of sales.

- 8. What actions have you taken at the middle of the pandemic (May October 2020) that you consider to be not successful? During this period businesses got significantly more conservative and most of them were not interested in receiving samples. As NB3 was focused on reaching more enterprises and spreading the brand awareness, it has led to sending samples without proper qualification of potential prospects and due to this samples conversion to sales were low.
- 9. What actions have you taken in the following months of the pandemic (November Now) that you consider to be successful? At the end of 2020 the strategy was shifted on focusing towards distributors as it is easier to work with them and they assure greater volumes of sales, even though the margin is significantly lower. To pursue this goal more sales people were hired to generate more leads and engage with them. Previously the sales team performed additional tasks in multiple departments of the company. To enable them to excel in sales the team was solely allocated on sales activities which boosted their performance significantly.
- 10. What actions have you taken in the following months of the pandemic (November Now) that you consider to be not successful? During this period digital marketing activities that were set to establish a strong social media presence and brand awareness were not so effective. NB3 put emphasis on organic growth only; however, it takes too much effort and in retrospect ads together with influencers should have been used to boost digital visibility and build a stronger brand name.
- 11. *Could you define your business strategy right now?* Currently the strategy consists mainly of searching for big distributors and wholesalers by showing the potential of products. As the business has been operating for more than a year now, these products were market-proven *NB3* and it is easier to persuade distributors or wholesalers to start collaborating. Finally, the business understood that it is important to operate on a lower margin while working with distributors or wholesalers as it builds sales volume and greater market presence.
- 12. *How has the growth of your business been affected?* During the first year around 30-40 thousand euros in revenue were made. It is estimated that without the pandemic profits might have been at least 4 times higher.
- 13. *How would you describe your competitors now?* No significant changes in competition were noticed during the period of the pandemic. No new considerable entrants and no clear winners that grew considerably more in comparison to other competitors.
- 14. *How would you describe your customers now?* As businesses and society got used to the pandemic, especially in recent months they do understand that business has to continue

and due to this reason they have softened their conservative approach and are more willing to consider new products. Currently, main customers are big distributors that believe the product and are willing to put effort in selling acquired products.

Questions to predict business evolution after the Coronavirus pandemic

- 15. *How will your business strategy look in the future?* The business strategy will remain relatively unchanged with the main focus directed towards distributors and wholesalers. It is planned that sales activities will strongly expand beyond EU borders.
- 16. What would be your prediction of your business growth in the future? In 2021 is expected to reach at least 150 200 thousand euros in revenue. In 2022 this expectation is set around 2 million euros in revenue as the company will launch a branch in the United States of America. In 10 years it is believed that *NB3* is capable of reaching revenue exceeding 10 million euros.
- 17. What are your predictions about future competition growth? In the future NB3 will demonstrate how successful its products are and competitors will try to replicate this success. Therefore, a need to have extensive marketing and brand awareness activities will be necessary to secure a market position.
- 18. What will be your customers' behavior and needs in the future? When it comes to B2C clients, they will be even more educated about nutrition and looking for more organic foods that are unique and functional. When it comes to B2B clients the relationships will be based more on recurring purchases. Therefore, the relationships will be based on market performance and trust in the brand's future potential.

Change sensing (Anticipating/ Challenge)

- 19. *Did you reflect on this crisis and create a plan on how to react to these types of situations?* No reflection on previous health and financial crises were made.
- 20. *If you had some plan on how to act in crises, did it work in the case of Covid-19?* No plans were made to combat various crises of a bigger scale.
- 21. Did you have a routine task to look for new opportunities and technologies that would provide you with competitive advantage? Yes. Research was constantly done trying to improve organizational structure and acquire technological advantages. For example, one of acquired technological advancements in packaging allowed to extend product's shelf life from 12 to 18 months.
- 22. Which technologies/opportunities were chosen to counter the pandemic and why? As mentioned in the previous question, more advanced packaging allowed for more shelf-steady products which was more suitable for B2B clients as they were focused during the pandemic to purchase high convenience products with long shelf life that are easy to consume.

- Moreover, wider adoption of social media platforms allowed the business to be more visible and attract a wider range of B2B and B2C of customers.
- 23. What was the process of adopting new technologies and approaches in the past? Was it effective in the case of pandemic? As the business was just a few months old when the pandemic came, the patterns of adopting new technologies did not change significantly due to this health crisis.
- 24. Where were you looking for support and training to fight challenges posed by the restrictions? Did you develop some solutions on your own? Did you learn from your competitors? No consulting or similar services were used as the company was on a tight budget.

Seizing opportunities (Interpretation/ Deciding)

- 25. How did you react to the previous (if you were operational) financial crises? Business or other businesses of co-founders were not operational during other financial crises.
- 26. Was it difficult to start implementing changes? Was there a notion that everything will get back to normal and these changes will be unnecessary? At the beginning of the pandemic NB3 struggled and the company almost was forced to close. In retrospect, the company did not react fast to the pandemic and was slow to develop the good strategy necessary in order to adapt to rapid changes.
- 27. Have you discovered new supporting businesses or services that enabled you to continue your work efficiently? New partners were discovered in the e-commerce sector that were successfully growing during the pandemic. Collaboration with them provided a considerable boost to the company's revenue.
- 28. Did adopted changes have pushed you into a market with more or less competition? How did you deal with it? Market became more competitive as more businesses have moved into the digital domain. Moreover, healthy foods and immunity boosting products became more trending during this period and producers followed this trend by introducing more products in the category that NB3 is operating in.
- 29. Was it difficult to convince yourself and others to pursue proposed Opportunities/ Technologies? It was understood that there is no choice but to pursue changes to remain operational during the pandemic. Therefore, no convincing was necessary.
- 30. What kind of difficulties have you experienced during the implementation of new technologies/ opportunities? At the beginning of the pandemic NB3 was implementing Enterprise Resource Planning (ERP) system that would connect all business activities. However, the implementation was slower and more difficult than expected, as well as not receiving the proper amount of attention as dealing with problems caused by the pandemic required focus as well.

Transformation abilities (Alignment/Learning)

- 31. How have you and your employees aligned themselves with new changes? Implementing changes were tough at first as employees were reluctant to adjust to the strategy or fully use the implemented ERP system. However, currently these changes are greatly appreciated as they increase productivity and automate some repetitive tasks.
- 32. *How did you collect feedback about implemented technologies/ opportunities?* Employees provided their feedback by communicating directly with HR department. Effectiveness of implemented changes was also measured by assessing employee productivity. For customers feedback forms were sent as well and received feedback was the main driver of changing the package of one of the products.
- 33. Which opportunities/ technologies worked and what didn't? How did you adjust to that? Almost all applied opportunities and technologies worked to some extent but most of them required a longer period of adoption than expected and their implementation took an extended learning process.
- 34. Would you consider approaches taken by your business to counter the lockdown are unique and difficult for the competitors to replicate? No, taken approaches were rather standard and would not be difficult to replicate for the competitors.
- 35. Did the pandemic change the process of looking and acquiring new opportunities/services/products? Did new corporate learning patterns appear? Pandemic has shifted business' focus but not the process of acquiring new technologies or opportunities. Currently new developments take into account that customers are seeking functional products with properties of helping to lose weight, boosting immunity or being full of vitamins.
- 36. Did the pandemic change the approach on how the team is being led and given tasks? There were no significant changes in regards to how the team is being led and activities assigned.
- 37. How much your organizational structure was changed to reflect new opportunities or services acquired during the pandemic? There were no major changes of organizational structure due to the pandemic.

General questions based on Porter's diamond

38. How was your access to basic products and services (raw materials, non-complex manufacturing components, retail items, etc.) affected? Raw materials that were transported from South America took longer to be delivered as supply chains suffered due to lockdowns and other restrictions imposed. From raw material sourcing, to manufacturing and logistical operations - all of these activities suffered by being delayed or completely blocked.

- 39. How was your access to more advanced products and services (complex manufacturing components, electronics etc.) affected? There were no known instances of difficulties acquiring more complex products such as electronics or manufacturing equipment although interviewee was not completely sure as it is rather unfamiliar with this part of the business.
- 40. How was your ability to hire junior position (no or basic skills) employees affected? During the pandemic junior position employees were easier to hire as there was considerably greater supply of them.
- 41. How was your ability to retain junior position (no or basic skills) employees affected? Retention during this period became more difficult as the team is rather international and some of employees in junior positions had more difficult personal circumstances to deal with and left the company to return to their home country when the restrictions were softened.
- 42. How was your ability to hire mid-level and senior position (with advanced skills) employees affected? Supply of mid-level and senior specialists was higher as well and therefore it was easier to choose who to hire.
- 43. How was your ability to retain mid-level and senior position (with advanced skills) employees affected? No mid-level or senior position employees that were hired during the pandemic left the company. The retention of these positions might be even a bit higher than before the pandemic as these specialists want more stability and are more settled in their personal lifes.
- 44. How was your access to digital connection (internet, phones and other technologies) affected? Selected internet provider failed multiple times to provide undisrupted connection which has resulted in most of the department not being able to perform significant amount of activities for 10 20 minutes, sometimes even an hour.
- 45. If you had any product or service suppliers, how were they affected during the pandemic? As mentioned the supplier of raw materials had many difficulties due to the restrictions imposed. Moreover, the internet provider had encountered significantly larger usage of its services and was not able to cope with the growing demand.
- 46. *Have you received direct financial support from the government?* Yes. Direct financial support was provided in reimbursements for marketing activities such as attending online events, printing marketing materials or similar. Funding that is more direct was allocated to other, more impacted businesses in the HoReCa sector.
- 47. Have you received indirect support from the government (workshops, guidance, etc.)? Governmental organizations responsible for supporting businesses were active in connecting *NB3* with buyers in various wholesale and distribution businesses within EU and abroad.

48. Would you agree with the measures taken by your government to prevent Covid-19 health crisis? It is hard to decide as from economical point of view restrictions significantly impacted many businesses and forced them to stop their activities or completely go out of business.

On the other hand, from the public health perspective it was necessary and even though some decisions were not the best, governmental organizations worked with limited information and had taken actions that were the best or seemed like the best at that time.

9.3 Timeline of Coronavirus development in Lithuania

To enable the reader of this master thesis to get full information on developments within a country where the interviews were taken and to make this thesis a stand-alone document a timeline of Coronavirus pandemic in Lithuania was put together.

As pandemic developed these actions were taken by the governmental organizations of Lithuania. As there were many events that took place, only those that were related to businesses and organizations in educational sector will be covered:

Legend:
Restrictions prolonged
Restrictions eased
Restrictions imposed

- January 2020
 - 2020 January 25th Lithuanian airports take temporary preventative measures for passengers traveling from and to People's Republic of China [85].
- February 2020
 - 2020 February 26th Lithuania declares state of emergency due to Coronavirus pandemic as a preventative measure [86].
 - o 2020 February 28th First case of Coronavirus in Lithuania is recorded [86].
- March 2020
 - 2020 March 12th All public and private education institutions were recommended to suspend their physical activities for two weeks and use remote learning capabilities [16].
 - 2020 March 16th Lithuania was placed under quarantine until March 30th. This
 instituted prohibition of all larger indoor and outdoor gatherings as well as severe
 restrictions on traveling to and from abroad. Educational institutions were mandated
 to suspend their activities for two weeks. During this time students were given holidays while schools prepare for conducting classes online [17], [87].
 - 2020 March 19th Quarantine was tightened to ensure its effectiveness and gatherings of more than five people were prohibited [88]
 - 2020 March 24th Border control was extended to April 12th [89]. A recommendation to wear masks was issued [90].
 - 2020 March 30th Remote learning in all educational institutions began [14], [16],
 [17].

• April

- 2020 April 3rd Police were started to be aided by military police and other military units to ensure following of lockdown rules [91].
- o 2020 April 8th National quarantine was extended to April 27th [92]
- 2020 April 10th Mandatory requirement to wear masks in all public settings was issued. Furthermore, travelling restrictions between municipalities were started to be imposed [92].
- 2020 April 15th Four stage exit plan was proposed with re-opening of some businesses that have direct exit to the outside, can assure less than 20 minutes face-to-face contact and can provide 10 square meters of space for each customer [93].
- 2020 April 22nd Nationwide lockdown was extended to May 11th and the second stage of four stage reopening process was initiated [94].
- 2020 April 29th Third stage of reopening was initiated where non-food markets, hairdressers, outdoor cafes and restaurants were allowed to open. As well as some traveling restrictions abroad were softened [94].

• May

- 2020 May 4th Traveling restrictions abroad are lifted if the country of destination is not on the affected nations list [95].
- 2020 May 6th Nationwide quarantine is extended until May 31st [96].
- 2020 May 14th Wearing a face mask outdoors is not mandatory; however, still recommended. Indoors and in places of gathering it is still mandatory and gatherings of 5 people are allowed [21].
- 2020 May 18th All indoor businesses such as restaurants, cafes and entertainment venues are allowed to open while operating on set preconditions. Open air events of less than 30 were allowed [21].
- 2020 May 25th Primary schools are allowed to resume physical classes and high schools along with other educational organizations are allowed to conduct physical classes if they cannot be given online [21].
- 2020 May 27th Quarantine is extended until June 16th [19] 2020 May 30th Lower secondary education and upper secondary education students were allowed to have classes in person. Counseling of graduates preparing for the exams also was allowed if necessary safety measures are taken [17].

• June

 2020 June 1st - Outdoor events up to 300 people and outdoor events up to 100 people are allowed with certain restrictions in place [19]. All educational services were allowed to be conducted physically while following necessary safety precautions. It was recommended to conduct classes outdoors [17]. o 2020 June 17th - National quarantine is lifted [20].

• July

 2020 July 17th - Foreigners arriving to Lithuania from outside EEA are required to self quarantine for 14 days [97]

• August

- 2020 August 1st A mandate to wear face masks indoors is stores and public transport [98].
- 2020 August 17th Ban on arrivals from EU/EEA is lifted with a procedure of testing before arriving to the country being implemented. Passengers from outside EU/EEA are still not allowed without significant reason [99].
- 2020 August 21st Face masks become mandatory for events and visiting indoor and outdoor businesses [100].

• September 2020

o 2020 September 24th - A record number of 138 new cases was recorded [101].

• October 2020

- 2020 October 26th Due to record cases multiple municipalities were put under a lockdown [22].
- 2020 October 28th Biggest municipalities of Vilnius, Kaunas, Klaipėda among others due to record cases were put under a lockdown [22].

• November 2020

- 2020 November 7th National quarantine is imposed until 29th of November. Limitations of gathering for more than five people are imposed [102].
- o 2020 November 25th Nationwide lockdown is extended until December 17th [103].

• December 2020

- 2020 December 15th All non-food and non-basic goods stores were closed and services in essential shops were limited to less than 15 minutes. Meeting and movement between cities and municipalities was restricted. Imposed restrictions also had an effect on educational services as all students were sent on early Winter (Christmas) holidays [17].
- 2020 December 16th Lithuania has a severe outbreak of Coronavirus with a significant death toll. Therefore, more strict measures are implemented to counter the pandemic: contact between two households is forbidden, non-food shops are closed, and all public activities that take longer than 15 minutes are prohibited [104].

• January 2021

- 2021 January 4th Police enforces inner-city travel ban by setting random control check-points [105]. With the resumption of educational services students were allowed to continue studying remotely with the exception of students whose parents are legally allowed to work in a physical workplace and could not take care of their children were allowed to attend school in person. In this situation, children were supervised at school but they attended online lessons together with their classmates [17].
- 2021 January 12th Medics are assigned to screen patients for a new British variant of Coronavirus; however, health workers state that they have little capacity to do so [106]. Lithuania receives the first vaccines produced by Moderna [107].
- o 2021 January 27th The lockdown is extended to until the end of February [108].
- o 2021 January 28th First round of vaccination is completed at care homes [109].

• February 2021

- 2021 February 1st First batch of AstraZeneca reaches Lithuania [110]. First case of British variant of Coronavirus is confirmed [110].
- o 2021 February 5th Teachers are started to be vaccinated [111].
- 2021 February 8th Stricter isolation rules are imposed on all travelers from abroad with a requirement to present a negative Coronavirus test and to self-isolate for 14 days [112].
- 2021 February 15th Self-isolation period for foreign travellers is shortened to 10 days [113]. Small shops and beauty salons with direct street access are allowed to reopen [114].
- o 2021 February 17th Nationwide quarantine is extended until February 28th. [115].
- o 2021 February 24th National lockdown is extended until the end of March [116].
- 2021 February 25th Wearing a face mask outdoors is no longer mandatory as long as 2 meter distance is kept [116]. A pilot project launches as Duke Vilnius Gediminas Progymnasium restarts physical classes to assess the impact of re-open schools to rate of Covid cases and observe if the proposed model of 'Safe Return' is viable [17], [23].

• March 2021

2021 March 6th - Open air venues such as zoos, outdoor museums and outdoor sports are allowed to reopen as long as the groups are maintained below 5 people [117].
 2021 March 10th - All foreign travelers are mandated to present a negative Covid test that was performed within 72 hours [118]. Museums and galleries are allowed to open with social distancing requirements in place [119].

- 2021 March 15th All shops with direct street access are allowed to reopen. More educational institutions restart physical classes [120].
- 2021 March 16th Stricter travel restrictions are imposed due to upcoming Easter holidays [121].
- 2021 March 17th Libraries and primary schools are reopened completely in 45 out of 60 Lithuanian municipalities [122].
- 2021 March 22th Mass vaccination of citizens is delayed due to difficulties in acquiring sufficient amount of vaccines [123]. As the 'Safe Return' model proved reliable, students that presented negative Coronavirus tests were allowed to return to physical classes in the municipality of Vilnius [17].
- 2021 March 23th First case of South African Coronavirus mutation is confirmed
 [124].
- 2021 March 26th Stricter travel restrictions are reinstated due to increased domestic travels over the holidays [125].
- 2021 March 29th Government approves subsidised Corona testing for public and private sector employees [126].

• April 2021

- o 2021 April 6th Domestic travel ban is lifted [127].
- 2021 April 7th Opening of shopping centers is postponed due to increased rate of Covid cases [128].
- 2021 April 12th Major hospitals are running out of hospital beds due to the surge of people sick with the Coronavirus [129].
- 2021 April 13th Foreign travellers are not required to self-isolate if they present documents proving their physical immunity [130]. First vaccines produced by Johnson & Johnson [131].
- 2021 April 14th Use of vaccines produced by Johnson & Johnson is suspended due to suspicion of blood clot formation [132].
- 2021 April 16th 25% of Lithuanians received at least one vaccination against Coronavirus [133].
- 2021 April 20th Undefined strain of Coronavirus is detected in Eastern Lithuania
 [134].
- 2021 April 21st Use of vaccines produced by Johnson & Johnson is allowed as concerns of its side effects are disproven [135].
- o 2021 April 22nd Outdoor restaurants and cafés are allowed to reopen [136].
- 2021 April 26th Gyms, spas and some pools are allowed to open [137]
- 2021 April 28th All schools are allowed to conduct physical classes from May 10th.
 In municipalities that have high Coronavirus cases rate students will be required to take Coronavirus tests regularly [24].

To give an overview of how the Coronavirus situation evolved in Lithuania, main graphs are presented.

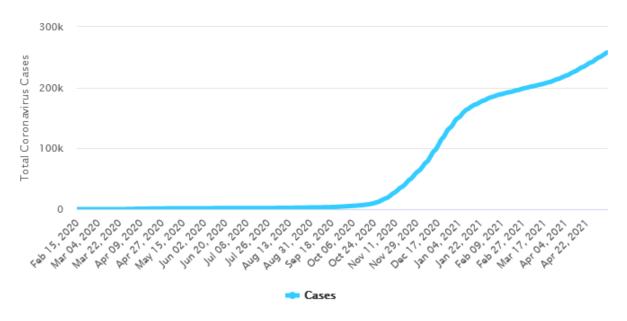


Figure 24: Total cases of Coronavirus in Lithuania [138]

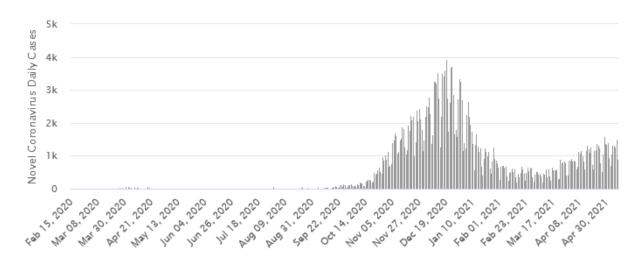


Figure 25: Daily new cases of Coronavirus in Lithuania [138]

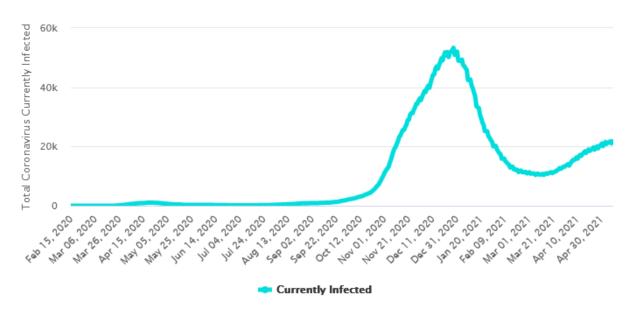


Figure 26: Active cases of Coronavirus in Lithuania [138]

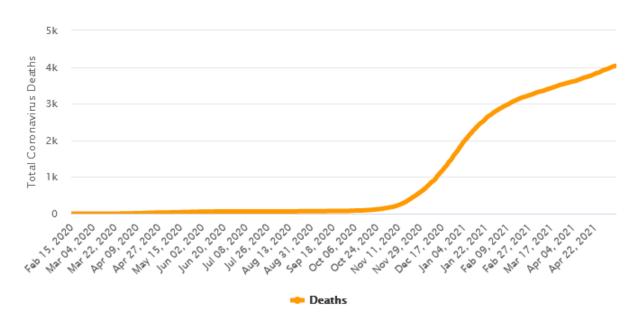


Figure 27: Total deaths due to Coronavirus in Lithuania [138]

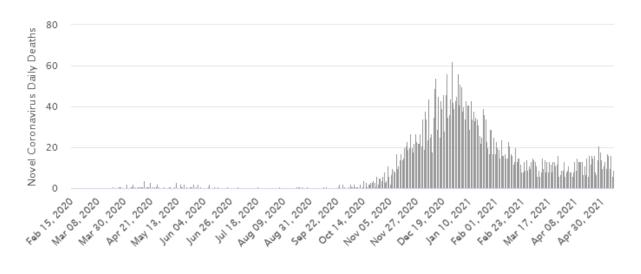


Figure 28: Daily deaths due to Coronavirus in Lithuania [138]

9.4 Timeline of Coronavirus development in Denmark

Legend:
Restrictions prolonged
Restrictions eased
Restrictions imposed

- January 2020
 - 2020 January 12th World Health Organization confirmed coronavirus is a cause of respiratory illness [139].
- February 2020
 - o 2020 February 27th first case of Coronavirus is confirmed in Roskilde [140].
 - o 2020 February 28th second case of Coronavirus is confirmed in Copenhagen [140].
 - o 2020 February 29th third case of Coronavirus is confirmed in Aarhus [140].
- March 2020
 - 2020 March 13th Prime Minister Mette Frederiksen announces initial restrictions to counter Coronavirus spread [141]. Closure of borders until April 14th ensues [142].
 - 2020 March 17th Stricter restrictions are issued due to rising cases. Outdoor or indoor gatherings of more than 10 people are prohibited. Cafés, Restaurants and other leisure venues are ordered to close except offering takeaway options. All major malls and shopping centers must obey stricter distancing and people count rules. Danish citizens returning from abroad must self-isolate for 14 days [142].
 - o 2020 March 23rd Nationwide lockdown is extended until April 13th [142].
 - o 2020 March 26th Denmark's unemployment triples
 - 2020 March 30th During press conference prime minister Mette Frederiksen assures public that taken measures are helping to prevent wider spread of the Coronavirus. It was noted that it is expected to soften the lockdown the Easter; however, it was urged not to take this statement as an excuse to disregard current preventative measures [142].

April 2020

2020 April 6th - first phase of lifting the lockdown is announced. Nurseries, kinder-gartens and primary schools are set to open on April 15th. Restaurants and cafés are set to be closed until May 10th and larger gatherings are postponed until September [142].

- April 14th Reopening of day-care centers and schools is allowed under supervision of local authorities [142].
- April 20th due to lower Coronavirus cases Denmark enters the first phase of reopening [142].

• May 2020

- o 2020 May 7th Phase two of reopening takes place [142].
- o 2020 May 11th All shops are allowed to open [142].
- 2020 May 12th Intensive testing campaign was launched to provide more contact tracing data and allow more effective application of isolation measures [142].
- 2020 May 18th Students of grades 6 to 10 are allowed to attend physical classes.
 Libraries are opened to loan books. Physical activities are allowed to take place with certain precautionary measures in place [142].
- 2020 May 29th all foreign traveling is discouraged except Norway, Iceland and Germany while borders remain closed to Sweden. Travellers from abroad are advised to self-isolate for 14 days [142].

• June 2020

- 2020 June 8th Phase three of reopening Denmark takes place. All indoor sports activities are allowed to take place. Gatherings under 500 people are allowed under certain conditions. Gatherings under 100 people do not have any restrictions [142].
- 2020 June 27th Borders opens up for EU/ EEA countries, except Sweden and Portugal [143].

• July 2020

- o 2020 July 1st Record level of unemployment is recorded in Denmark [144].
- 2020 July 17th Researchers warn that a second wave of Coronavirus is likely due to extremely relaxed restrictions [145].

• August 2020

- 2020 August 6th Multiple municipalities are recording significantly increased number of Coronavirus cases [146].
- 2020 August 10th Prime minister Mette Frederiksen assures that another lockdown is not necessary [147].

• September 2020

2020 September 2nd - One of the biggest companies in Denmark announce that they
are cancelling their Christmas parties and other holiday events due to Coronavirus
concerns [148].

- 2020 September 3rd Denmark registers the highest number of Coronavirus cases since April 2020 [149].
- 2020 September 4th Border control is increased to check due to increased Coronavirus cases [150].
- o 2020 September 7th Restrictions are applied in 18 municipalities [151].
- 2020 September 28th Denmark's authorities recommend wearing Private Protective Equipment in situations where social distancing is difficult to maintain [152].

• October 2020

- 2020 October 6th It was recorded that in September 183 active Danish companies went bankrupt resulting in 1,155 full-time employment losses [153].
- 2020 October 7th Applied restrictions are kept in place until October 31st. Authorities require citizens to wear masks in public transport and in restaurants/ cafes while standing up. Cafes and restaurants must not serve more than 50 people and need to close at 10 pm [154].
- 2020 October 14th Serious considerations to terminate the farmed mink population take place as a new strain of Coronavirus in these animals seed more fear [155].
- 2020 October 22nd Significant increase in Coronavirus cases is recorded with 760 positive tests in one day [156].
- 2020 October 23rd New restrictions are issued. Wearing a face mask in all public settings is mandatory, gatherings of more than 10 people are prohibited and alcohol sales are forbidden after 10 pm. These restrictions are set to be in place for until January 2nd, 2021 [157]. Significant amount of Christmas parties are canceled [158]
- 2020 October 28th new subsidies for businesses and culture are announced of 28 million DKK [159].

• November 2020

- 2020 November 3rd All farmed mink are required to be killed over the fear of spread of a new mutation of Coronavirus [160].
- 2020 November 30th About 90% of Christmas parties are cancelled due to Coronavirus restrictions [161].

• December 2020

- o 2020 December 10th Denmark extends lockdown rules to 31 more municipalities A compensation plan for restaurants is announced where the government pays for up to 75-90% of wages up to 30,000 DKK/ mo. to maintain restaurant workers. Businesses are still permitted to operate takeaway services [162].
- 2020 December 17th all shopping centers are ordered to be closed [163]. Vaccination program is announced to be launched on December 27th [164].

- o 2020 December 21st all schools are closed [165].
- o 2020 December 25th partial lowdown is instated until January 3rd [166].
- o 2020 December 30th Denmark reaches more than 13 thousand vaccinations [167].

• January 2021

- 2021 January 4th Coronavirus restrictions for travelling are tightened due to a new strain of Coronavirus from the United Kingdom [168].
- 2021 January 5th Number of allowed participants in public gathering is reduced from 10 to 5 [169].
- 2021 January 6th Travelling from and to South Africa is banned due to the new South African Coronavirus variant [170].
- o 2021 January 13th Nationwide quarantine is extended until February 7th [171].
- 2021 January 15th More than 129 thousand Danes have received their first vaccination [172].
- 2021 January 18th Vaccination delays are experienced due to delayed deliveries
 [173].
- 2021 January 25th Denmark's national debt reaches its highest levels since 2013
 [174].
- 2021 January 26th Denmark's government considers compensation plans for Mink fur farmers [175].
- 2021 January 28th Travel restrictions are extended until the beginning of March [176]. Nationwide lockdown is also extended until the beginning of March [177].

• February 2021

- 2021 February 1st Danish hospitals reduce the number of hospital beds allocated to Coronavirus patients due to reduced number of cases [178]. Primary schools until 4th grade are reopened [179].
- 2021 February 7th Protests take place to oppose lockdown measures [180]. Foreign and Danish citizens arriving in Denmark have to present a negative Covid test and self isolate for 10 days [181].
- 2021 February 15th Denmark's health authority adjusts expected date to vaccinate all Danish citizens by June 27th [182].
- 2021 February 19th Stricter border controls are imposed for Germany due to an outbreak [183].
- 2021 February 22nd A proposition to ease pandemic restrictions starting February
 28 with lifting the nation wide lockdown [184].
- 2021 February 24th Restrictions to access certain areas in Copenhagen are extended to March 24th [185].

• March 2021

- 2021 March 1st New pandemic law is issued granting certain powers to government to act in order to control the spread of the pandemic [186]. Smaller shops and schools in some regions are allowed to open. Outdoor gatherings of up to 25 people are allowed under certain supervision. Outdoor activities can take place if people present negative Covid test that was done less than 72 hours ago [187]
- 2021 March 14th Denmark reaches 10% of population having at least one vaccine [188].
- 2021 March 15th Festival organizers are allowed to organize summer outdoor events with up to 350 people if they comply with certain provisions [189].
- 2021 March 19th National restrictions are softened as more students are able to go back to school and gatherings can have up to 10 people instead of 5. Organized outdoor activities can have up to 50 participants [190].
- 2021 March 23rd Initial plan of lifting Coronavirus restrictions is proposed with proposed timeline [191]:
 - * April 6th Schools and service industries will be allowed to reopen if the person served provides a valid Corona passport.
 - * April 21st All malls and shopping malls will be permitted to reopen. Libraries, museums, art galleries and similar venues are allowed to open if vaccine passports is presented. Same restrictions apply for restaurants serving customers outside.
 - * May 6th Cinemas, theaters and concert venues will be allowed to open. Indoor restaurant activities will be allowed to restart.
 - * May 21st All additional education and sporting venues will be allowed to open.

• April 2021

- 2021 April 6th Students up to grade 8 are allowed to have physical classes at 50% capacity. Denmark introduces an extension to an existing healthcare system application called 'MinSundhed' that confirms if a person had a negative Coronavirus test no later than 72 hours. This application was called by citizens and 'Corona passport'. Service industries such as barbers, manicurists and similar are allowed to reopen for customers that have this Corona passport [192].
- April 21st All malls and shopping malls are allowed to reopen. Libraries, museums, art galleries and similar venues are allowed to open if vaccine passports are presented. Restaurants can serve customers outside. Restaurants can serve up to 9 customers inside if they have a valid Corona passport. Assembly limit indoors is raised from 5 to 10 people [193].
- April 23rd More doubts over organization of large summer festivals takes place as expert groups set maximum participant number at 10 thousand [194].

o April 28th - Restrictions on municipality level are softened [195].

To give an overview of how the Coronavirus situation evolved in Denmark, main graphs are presented.

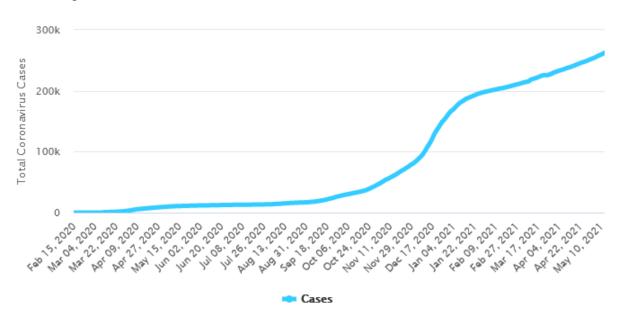


Figure 29: Total cases of Coronavirus in Denmark [196]

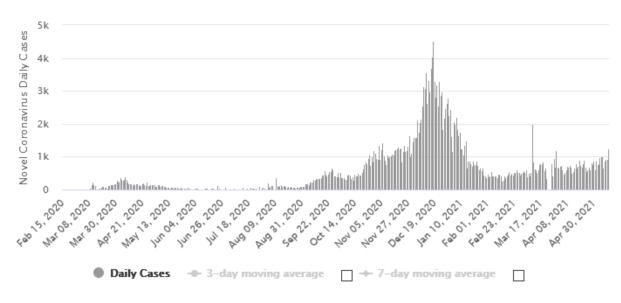


Figure 30: Daily new cases of Coronavirus in Denmark [196]

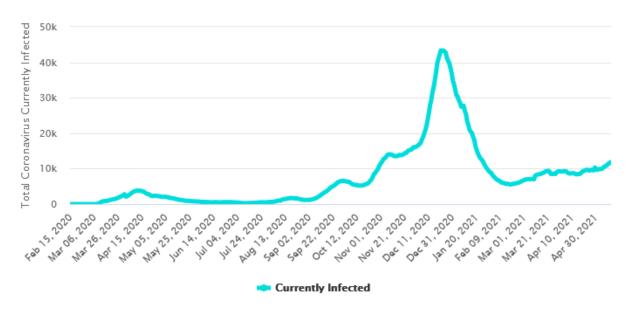


Figure 31: Active cases of Coronavirus in Denmark [196]

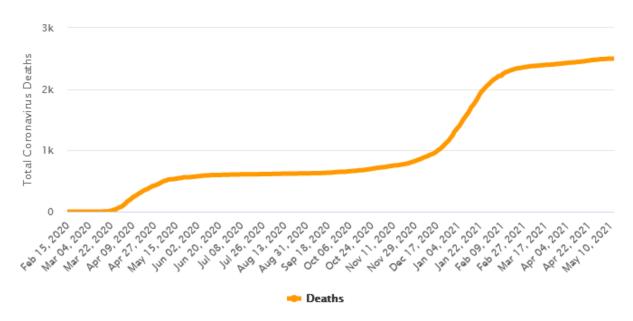


Figure 32: Total deaths due to Coronavirus in Denmark [196]

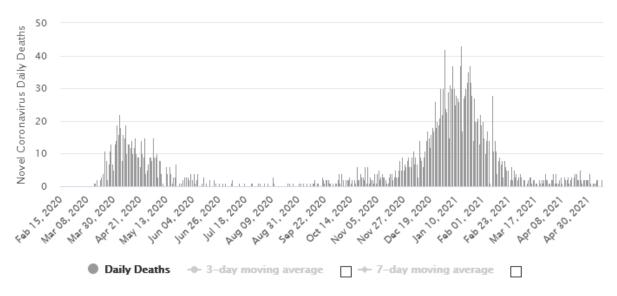


Figure 33: Daily deaths due to Coronavirus in Denmark [196]