

**Global Hidden Champions:
Key Success Factors and Challenges in the Pandemic Era**

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ABSTRACT

This study looks at hidden champions, the unknown market leaders in the business world that capture unimaginable levels of market share, and how they found success during the during the COVID-19 pandemic. This study will approach hidden champions from a new angle, as it will look at case examples and their key success factors from a global, and more specifically, Canadian, standpoint. The effectiveness of several pandemic-era key success factors for hidden champions will be highlighted with the aim of disseminating a set of generalizable recommendations. The key success factors will be discussed using dynamic capability theory, specifically its three stages of sensing, seizing, and reconfiguring, and they are applied to international capabilities, innovative capabilities, and business pivoting capabilities. The data collection for this project was conducted using interviews and targets homegrown hidden champions in Newfoundland and Labrador with humble beginnings and evolved into industry dominating hidden champions. These hidden champions, MYSA and Verafin, validate the key success factors with the aim of disseminating to other SMEs with humble beginnings, the target demographic. The significance of COVID-19 on hidden champions and other SMEs is the primary focus for this study, with a specific focus on the change in industry landscape, business models, market focuses, and how hidden champions succeeded despite the pandemic's challenges. The businesses that have survived and prospered have been the ones that were the most flexible, the ones willing and capable of innovating and adapting aspects of their business to better succeed, while many of those that did not practice these strategies, unfortunately, were not so successful.

Table of Contents

1.	INTRODUCTION	1
	1.1 Background	1
	1.2 Research aim & Objectives	7
	1.3 Contributions	8
	1.4 Thesis Structure	9
2.	OVERVIEW OF HIDDEN CHAMPIONS	10
	2.1 Refinement of the concepts	10
	2.2 Regional Overview	13
3.	THEORETICAL AND ANALYTICAL BACKGROUND	21
	3.1 Business Pivot	21
	3.2 Crisis Management	22
	3.3 Analytical Framework: Dynamic Capabilities	23
4.	DATA AND METHODOLOGY	24
	4.1 International Capabilities (Global Visibility – sensing capability)	27
	4.2 Innovative Capabilities (Agility – seizing capability)	27
	4.3 Pivoting Capabilities (Flexibility – reconfiguring capability)	28
	4.4 Firm Resilience & Performance	28
5.	SECONDARY DATA FINDINGS	29
	5.1 Overview	29
	5.2 Research Case	30
	5.3 Successful Global Hidden Champions	31
	5.4 Pandemic-Era Key Success Factors	37
	5.5 Key Challenges	46
	5.6 Industry Scenario	48
6.	PRIMARY DATA FINDINGS	51
	6.1 Overview	51
	6.2 MYSA	53
	6.3 Verafin	59
	6.4 Takeaways	65
7.	IMPLICATIONS & CONCLUSION	66
	7.1 Implications	66
	7.2 Limitations	72
	7.3 Conclusion & Future Research	73
	REFERENCES	75
	APPENDIX	85

1. INTRODUCTION

1.1 Background

1.1.1 Research Context

Large multinationals have been the subject of countless reports, analyses, and studies, as well as being a primary focus of analysis in literature and in the real world (Simon, 2009b).

Unlike large multinational corporations, like Amazon, Wal-Mart, or Microsoft, hidden champions are hidden gems in the world of international business. Hidden champions are relatively underexplored and publicly unknown, but they are strong sources for new and unexplored knowledge (Simon, 2009b). Rather than simply focusing on large multinational corporations (MNCs) known to the public, these hidden champions are highly successful global leaders in their own industry and warrant more attention in the literature.

Research focusing on the key success factors and challenges of hidden champions globally has proven especially important considering the patterns of globalization and the global impact of the COVID-19 pandemic. The idea of key success factors here is presented based on the concept of Critical Success Factors in strategy literature. Daniel Ronald (1961), who was a McKinsey consultant at that time, first invented the concept of Critical Success Factors (see also Rockart, 1979) and the concept generally focuses on when one highlights the few specific factors that are necessary to find success in a given situation (Boynton & Zmud, 1984). It is often found that the lack of inclusion of these factors can be directly responsible for failure in a specific endeavor (Zwikael & Globerson, 2006). The critical success factor approach has widespread use in business literature, including studies looking at the COVID-19 pandemic, as well as the use of SME samples, therefore it is a proven and legitimate approach for the research of factors influencing business success or failure (Alqahtani & Rajkhan, 2020; Moeuf et al., 2020). The

distinction of key success factors originates from *The Mind of the Strategist* by Ohmae (1982), and in short, highlight the point that every industry has a (a set) of key success factors that businesses must be aware of. To define key success factors in this research I combine the ideas of both these concepts by considering factors valuable both at the organization and industry level and highlight the most important elements required for a company to compete successfully in its target market during, and moving past, the COVID-19 era. Business environments in international markets have been described as volatile, uncertain, complex, and ambiguous (Ambrosini & Brown, 2009), and international economies and markets vary so much from one country to another, so it is important to recognize these factors and ensure their validity in these extremely different environments. Research on these global hidden champions can give insight into more generalizable hidden champion takeaways and may uncover insightful differences from those in other parts of the world, as well as uncover novel but proven strategic management tools to deal with constant change, which is invaluable to small and medium sized enterprises (SMEs) trying to achieve success internationally.

A thorough examination of the literature makes it clear that Canadian companies are typically absent from lists of hidden champions. As it is discussed at greater length in the accompanying case study, this lack of recognized hidden champions is believed to be the result of two factors, both a lack of research into the Canadian setting and the original structural differences between Canada and somewhere like Germany. There is little to no research into Canadian hidden champions in the literature, but even though many of these rankings omit Canada, it is extremely hard to believe that Canada does not possess even a single hidden champion; this has been proven by the several discovered in Newfoundland and Labrador alone from this project. The structural differences are explained later, and in great detail in my case

study, but the overall the Canadian economy just does not operate with the same structure or focus as hidden champion powerhouses like Germany, who have a remarkably high rate of manufacturing-oriented family-run SMEs, many of which fit the exact criteria of hidden champions laid out by the scholar who coined the term in the first place. This lack of a Canadian development of hidden champions leaves a significant gap in the proven knowledge and strategies for globally oriented Canadian SMEs. This gap is filled by a qualitative data-based analysis of Canadian hidden champions, which is used to test the validity of the propositions regarding pandemic-era key success factors. On top of the pandemic-era focus of this study, there is also a gap in the literature when it comes to studies looking at hidden champions globally, as most studies focus solely on the German context. This is the focus of a part of this report, as well as the entirety of the accompanying case study, which provides a comprehensive analysis of global hidden champions from several main areas around the world (Canada, USA, Europe, and Asia), how they differ, how they are similar, and examines specific case examples of how hidden champions in these areas found success during the COVID-19 pandemic.

The sample for the data collection of this study is centered around small-town, homegrown businesses here in Newfoundland and Labrador with humble beginnings that turned into very successful hidden champions of their industry. It is therefore groups of small, humble beginning SMEs that this study aims to generalize its findings to. Not only can these be applied to Newfoundland-based businesses who often start very small but can also be generalized to other small businesses around Canada or other parts of the world that have started out very small, with limited resources and only a couple of employees, in an effort to teach them the methods to grow and find great success despite many challenges faced. Based on these criteria, the two hidden champions that were identified in this study were MYSA and Verafin, two tech-based

hidden champions who started from nothing and turned themselves into market leaders. These two companies have several factors in common that led me to chose them for my sample. Both businesses are tech companies headquartered in St. John's and were determined to be hidden champions based on my extensive preliminary research. The tech industry is a popular choice in the Newfoundland and Labrador landscape, so this makes them a great choice in order for their findings to be more generalizable to the local start-up business landscape there. Despite being relatively underrepresented in hidden champion literature in the past, technology inclined companies have mad astronomical strides over the last ten to fifteen years and have proven to not only be a strong player in hidden champion landscapes, but often to be the future of businesses everywhere. The huge level of importance of tech companies to the global business landscape, their huge role in the Newfoundland and Labrador business environment, and their potential in helping to revitalize the Newfoundland and Labrador economy are the primary reasons for the focus of tech companies in this study. They are also both rooted in humble beginnings, as both started out with next to no resources and only a couple of employees, and through their innovative technology were able to grow and find great success. On top of demonstrating my key success factors using these two companies, I also wish to demonstrate the importance of being technologically proficient during these challenging times and show how not only is it important right now, but it is the way of the future for business. This is also a main motivating factor for choosing two hidden champions in the tech industry. The theoretical-oriented aim of this study is to contribute to the hidden champion literature using the data from these tech companies with humble beginnings and disseminate this knowledge to other new and upcoming small businesses who started with nothing, because Verafin and MYSA have demonstrated it is possible to find great success despite how small or isolated you start out as. This will provide vital lessons for

SMEs everywhere, but especially in Newfoundland and Labrador, as it has been shown that strong SME success and hidden champion presence can help stimulate economies (Audretsch, Lehmann, & Schenkenhofer, 2018; Hosoya, 2009). In addition, research in these fields will help enlighten Global and local Canadian SMEs on the strategies, effects, and outcomes of following a hidden champion structure and how these factors can positively influence businesses generally, but most importantly, during times of crisis.

1.1.2 The COVID-19 Context: Dynamic Capability Theory

The primary goal of this paper is to consider how hidden champions have reacted in order to find success during the devastating pandemic. The pandemic has had an immeasurable influence of the global economy, with virtually all industries and regions of the world being affected; some of the industries hit the hardest by the pandemic include airlines, transportation, oil and gas, restaurants, travel, and manufacturing (Haydon & Kumar, 2020; McKinsey & Company, 2020). Consideration is given to various factors such as the industry scenario, company strategy, business model, overall success during the pandemic, resilience in the face of the pandemic-related challenges, and most importantly, the use of my proposed key success factors. These factors are international capabilities, strong innovative capabilities, and pivoting capabilities. The pandemic-era focus of this study is approached through the lens of dynamic capabilities theory, which focuses on the dynamic approach to firm resources when dealing with ever changing environments (Ambrosini & Bowman, 2009), as well the three stages of (1) sensing and (2) seizing opportunities, and (3) reconfiguring aspects of the business based on these to maintain competitiveness (Teece, 2007). Each of these stages will be applied to one of the proposed key success factors, being international capabilities, innovative capabilities, and pivoting capabilities, respectively. While these factors have also been discussed in prior literature

as being methods for success in various situations or contexts, they are positioned in this study as contributing to firm success not only on their own, but together, as a set of factors, that when all applied by the firm can lead to great success during a crisis. While each of these factors can aid the firm, this study proposes the use of these three factors together, which through the application of dynamic capabilities theory, can work together to cover the three main steps of succeeding during a crisis. With the massive damage the pandemic has caused worldwide, the businesses that have survived and prospered can provide invaluable insight to the literature and to managers in their respective nations on what types of approaches, strategies, factors, or attitudes were important to success and survival during these truly difficult times. This study will add a layer to the dynamic capability theory, as it will approach the dynamism of the firm using the pandemic as the dynamic setting and it will use hidden champions as the sample. This can also add to the literature of crisis management, specifically targeting the timely focus of COVID-19, providing great insight to researchers and practitioners on how to best handle the struggles of the COVID-19 pandemic using the hidden champion success strategies. It can also provide new sets of strategies moving into the future, whether it be for preparing for future crises or the digital age of the future.

1.1.3 Pivoting in Times of Uncertainty

Crisis management theory has highlighted the importance of being flexible during times of crisis and how many crises, despite being devastating, can often be a great source of opportunity for businesses (Brockner & James, 2008). It is because of this that many researchers working in crisis management theory have suggested that firms adopt a “crisis as opportunity” mindset within their business, as these opportunities can not only help them survive the crisis they are currently facing but can also help set them up in the long-term future (Brockner &

James, 2008). The COVID-19 pandemic has been absolutely devastating for all types of businesses all over the world and absolutely falls under the category of crisis, highlighting the importance of crisis management theory in this context. Throughout all the challenges faced during the pandemic, one thing that has been highlighted is just how important pivoting has become for business survival (Marr, 2020), and even more specifically, the survival of hidden champions and SMEs (Lee & Trimi, 2020). Pivots can range in type, size and significance, and can include adjustments, changes or reconfigurations to things like the company's business model, strategy, product, supply chain or marketing approach, to name a few. One of the more popular types of pivots that SMEs during the pandemic have made use has been the pivoting of business models, as many industries were forced to make drastic changes to how they operate in order to not just find success, but in order to merely survive the pandemic (ex: Colvin, 2020; Duffy, 2020; Harrist, 2020; Lang, 2020). With proper pre-crisis preparation, proper sensing of the environment and the challenges and opportunities within it, as well as appropriate abilities to seize and act on these factors, SMEs and hidden champions can turn the challenges faced during the pandemic into a more manageable situation that can even be a great source of current and future opportunities.

1.2 Research aim & Objectives

This paper closes several gaps in the literature of hidden champions, SMEs, dynamic capabilities, and crisis management by presenting an explanatory framework on key success factors and challenges in the pandemic-era from both a Canadian perspective (thesis) as well as a global perspective (case study). Key factors of interest for this paper center around pandemic-era key success factors and how they are related with firm performance and resilience during times of crisis, specifically the COVID-19 pandemic. These variables will focus on the downstream

activities associated with the supply chain in strategy literature, meaning it will focus less on raw materials and relationships with suppliers, and will instead focus on decisions made by the organization regarding things like storage, marketing, strategy, distribution, manufacturing, and factors concerning the end consumer. The study will explain these relationships using the proposed three major key success factors that are supported through the lens of dynamic capability theory (sensing, seizing, and reconfiguring). They are then analyzed to provide real world managers and researchers new insights into how businesses can survive a crisis and set themselves up for success in the future. The case study (and briefly within this report) provides in-depth analyses of the regions of various locations around the world (Canada, USA, Europe, and Asia) and provides real case examples of companies that pivoted in order to find success, providing real valuable examples of these strategies being successful for hidden champions all over the world.

1.3 Contributions

This research will allow me to test the generalizability of the pandemic-era hidden champion success factors globally for the humble beginning SMEs and potential hidden champions. This study will explain the relevance of these factors through the lens of dynamic capability theory, as well as their connection with crisis management theory, therefore contributing new insights to both of these literatures with the pandemic-era hidden champion's focus. These key success factors will emphasize the importance for SMEs locally and in Canada (with the hopes of also generalizing to humble beginning cases globally as well) to ensure they can sense and seize opportunities in their environment during a crisis, and that they are willing and properly oriented to reconfigure their assets to truly exploit these opportunities. This action of pivoting has been a steady factor contributing to hidden champion success, as was the case for

many bold SMEs during the pandemic as well. This can open the doors for SMEs and hidden champions all over the world, including local and Canadian SMEs, to learn from these strategies and find success throughout the remainder of the pandemic, moving into a post-pandemic-era, and also moving forward with any possible future crises that may occur. I believe that my key contribution and implication is a theoretical and qualitative exploration of the hidden champion format, as well as an explanatory framework for survival and success during times of crisis. This implication is reached by providing practical lessons for SMEs and hidden champion-esque businesses to encourage the fostering of future hidden champions, to help energize economies, and to combat the challenges faced during the ongoing pandemic and any future crises.

1.4 Thesis Structure

Although hidden champions are not necessarily a brand-new concept, the literature is relatively underexplored and has primarily focused on German companies. The review in this study, as well as the accompanying case study, introduces the German hidden champion phenomena and applies them to a global context during the COVID-19 pandemic. On top of this, the pandemic-era hidden champion key success factors will be tested using cases of Newfoundland-based hidden champions that come from very humble beginnings. This will validate the hypothesized relationships between the proposed key success factors and firm success and resilience, as well as contribute to the literature on Canadian hidden champions. Although a study of hidden champion success factors in normal conditions could also be insightful for potential hidden champions and SMEs, looking in the context of COVID-19 provides so many more layers for possible takeaways moving forward. It still offers great insights to local SMEs, while also providing theoretical and practical insights into business survival during times of crisis and the importance of being dynamic with your business to

survive and succeed such crises. This study will therefore provide an overview of hidden champions, including a literature review on them conceptually, a regional overview of some regions of interest (Canada, USA, Europe, Asia) for global hidden champions, a theoretical and analytical background discussing the supporting theories and their connection to the proposed success factors, my findings (key success factors, hidden champion case examples, challenges), discussions and takeaways from the primary data collection, a review of the industry scenario, and finally the implications and conclusion.

2. OVERVIEW OF HIDDEN CHAMPIONS

2.1 Refinement of the concepts

2.1.1 The COVID-19 Pandemic

As has become increasingly obvious as the months have gone on, COVID-19 has been a huge problem to health and safety but has also been detrimental to countless small, medium, and large businesses around the world (Bartik, Bertrand, Cullen, Glaeser, Luca, & Stanton, 2020), having negative effects on all observable aspects of life. COVID-19 has had considerable effects on countless industries and sectors, including but not limited to agriculture, oil and gas, manufacturing, education, finance, pharmaceuticals, healthcare, or tourism, (Nicola et al., 2020). While technologically inclined and oriented businesses are often those in a better situation to combat the pandemic compared to those that center around human interaction, even many of them have been greatly impacted. The connection between hidden champions and the manufacturing industry (the most popular industry for hidden champions), which will be discussed in section 5, makes COVID-19 a serious concern, as there have been countless issues arising concerning importing, exporting, and staffing deficiencies, as well as the inability to adopt a work-from-home approach in manufacturing organizations (Nicola et al., 2020). This has made studying the

effects of COVID-19 on hidden champions and businesses in general, as well as how these businesses react to the changes that come with a global pandemic, an extremely important topic to investigate. This has also made tech-based hidden champions an interesting case, as they break the typical hidden champion mold but tend to be better suited for dealing with this current crisis. This is the rationale for the choice of industry for the various examples throughout this report. The global cases examine the manufacturing industry, the typically expected format of hidden champions, while the Newfoundland and Labrador cases examine tech companies, the future for hidden champions. This is to suggest that tech companies, despite often being underrepresented in the hidden champion world, are also great examples of hidden champions for the future. This is all important not only for understanding how businesses should react right now, but also how they should prepare and navigate themselves moving forward to ensure they are better prepared for any new crises that may occur in the future.

2.1.2 Hidden Champions

The idea of the hidden champion finds its roots in the phenomena known as the German *Mittelstand* (Audretsch, Lehmann, & Schenkenhofer, 2018). The German *Mittelstand* have their roots as the key players in the resurgence and recovery of the German economy in its difficult times that followed the Second World War (Audretsch & Elston, 1997). These German *Mittelstand* (German, family-owned SMEs) have formed the backbone of the German economy for decades (Audretsch & Elston, 1997; Berghoff, 2006; Blackbourn, 1977). Of these highly coveted *Mittelstand*, there is a smaller sub-group of SMEs that can be derived, the hidden champions. This sub-group of *Mittelstand* that thrive in international exporting have brought even more attention to the prestige and success of German SMEs (Audretsch, Lehmann, & Schenkenhofer, 2018).

The term hidden champion was coined by the German scholar Hermann Simon (1996b), when he was inspired by the work on Globalization from the scholar Theodore Levitt (Simon, 2009a). First, I begin with defining what a hidden champion is and the criteria to be considered a hidden champion, as stated by Simon (2009b) in the updated version of his 1996 seminal piece. There are three main criteria for a firm to be considered a hidden champion. The first criteria states that to be considered a hidden champion a firm must: a) be number one, two, or three position in the global market as determined by market share. OR b) be number one in their home continent in market position as determined by market share. The second criteria to be considered a hidden champion is that the firm must have revenues totaling less than \$5 billion. The third and final category to be considered a hidden champion is to have a low level of public awareness. The company must be relatively unknown to the general public, falling under their radar in terms of their perception and awareness of highly successful companies. One important point to mention as noted by Simon (2009b) is that one should be careful not to confuse public perception with the perception and awareness of the company when it comes to their direct customers. Instead, it is the general public (the average member of society) that would typically be unaware of the great success or even the existence of the company in the first place, as direct customers are very aware of the hidden champion company, and they often have a very close relationship. According to Simon (2009b), if a company meets all three of these criteria, then he considers them to be a hidden champion.

The term “hidden champion” was coined in Germany and was primarily concerned with German companies, but with how much countries around the world differ on a multitude of factors, it is important to look into how hidden champions exist around the world, and how they differ from those found in a country like Germany that is built to produce hidden champions.

Despite these national differences and the fact that the vast majority of hidden champions are German, according to several scholars and many studies (Hosoya, 2009; Simon, 1996; Voudouris, Lioukas, Makridakis, & Spanos, 2000; Zitelmann, 2019), there are of course hidden champions all over the world, but they may often tend to differ when it comes to their structure, focus, or even their defining criteria of a hidden champion. Although the focus in the literature is undoubtedly on German SMEs, there are countless SMEs around the world, including some in Canada, that are extremely successful, high-growth SMEs worth investigating. It would be a very tall task for any individual to identify every hidden champion in the world, especially those outside of one's own continent, therefore it is important for the global SME literature to investigate these businesses outside of Germany. This was the motivation for discovering and studying local hidden champions.

2.2 Regional Overview

Although Germany is the clear global leader for hidden champions, there are still countless other regions around the world that contain some fantastic examples of hidden champions. Some of the main reasons for Germany's high hidden champion numbers are rooted in the focus of their economy, how it is structured and how it functions. Germany is a country which has many SMEs, often private family-owned businesses, that support their economy. On top of this, hidden champions typically tend to be private, rather than publicly traded (Lehmann, Schenkenhofer, & Wirsching, 2019), connecting them further to the qualities of the German Mittelstand and potentially lending to both groups' overall lower profile. Germany also has a large economic focus on the manufacturing industry, and they are also significant exporters. This was the typical approach used by hidden champions in the 90's and early 2000's when Simon first started studying them. With the high rates of hidden champions being manufacturing-based,

as well as their inherent nature as exporters, this makes Germany a seemingly perfect fit to produce large numbers of hidden champions because of the seamless fit between hidden champion focus and the structure of the German economy (Venohr & Meyer, 2007). This is quite different from countries such as Greece, which focuses on the service industry, or Canada, which focuses on oil and gas, and energy sectors. Because of the differences in economy and the way the businesses in different countries differ from one another, it is important to look at hidden champions closely and consider where they originate. This is highlighted in the study conducted by Voudouris, Lioukas, Makridakis, & Spanos (2000), where they studied Greek hidden champions. They recognized that differences may arise in their context when compared to the structurally different country of Germany, where Simon's work was conducted. It was because of these differences between the countries and their businesses that the authors suggested alterations to Simon's criteria to define a business as a hidden champion, altering the criteria for the Greek context to account for the various differences between Greece and Germany. The precedent that this study set is a motivating factor for the global hidden champions inclusion of this report, as well as the Canadian-based data, as it will highlight different regions outside of Germany and examine the situations of these countries along with hidden champion key players that operate in each. The main areas of focus for this section are Canada, USA, Germany, Europe (excluding Germany), and Asia, and will aim to give some insight into the foundation of each region that leads to differing volumes of hidden champions globally.

Canada

Canada is one of the largest and most highly developed markets in the world, ranking as the 10th largest market in the world in 2019 by nominal GDP (World Bank, 2021b) and is projected to finish as the 9th largest market in the world by nominal GDP for 2020 (IMF, 2020a).

The Canadian economy is primarily dominated by the service industry (Statistics Canada, 2020) and also thrives off their natural resources, as they are the third richest country in the world in terms of natural resources (Migiro, 2018). Despite Canada's respectable manufacturing industry for its population (in markets such as aircrafts), its main industry continues to be in relation to services, natural resources, and sectors such as energy.

SMEs are key to the Canadian economy, as they make up nearly 99% of all Canadian businesses, but as was previously mentioned, Canada's economy being primarily based on natural resources and services does not align perfectly with the previously mentioned norm for hidden champions as defined in Germany, potentially explaining the lack of recognized hidden champions coming out of Canada. Along with this, Canada has a much smaller population compared to heavy hitters like Germany, America, Japan, or China, having only a fraction of the population. Despite this, there are still successful companies operating out of Canada in a variety of industries, manufacturing or not, that have significant market share and high revenues.

The pandemic has also had a very significant impact on Canadian SMEs, as roughly 20% of their SMEs were expected to have experienced significant decreases in profitability at the beginning of 2021, over a third of them are expected to experience significant impacts moving more long-term into the future (Statistics Canada, 2021), and 21% of them reportedly had to pivot their business to navigate the pandemic (Stevenson, 2021).

USA

As is Canada, the United States are also a large and highly advanced and developed market in the world economy; they were the number one ranked country in the world in 2019 by nominal GDP (World Bank, 2021b), and were projected to maintain their number one position

for 2020 as well (IMF, 2020a). While the US is the world's largest importer, they are also the world's second largest exporter as well (World Trade Organization, 2019), this coupled with their countless trade partners as well as their free trade agreements make it a massive powerhouse in the global economy. The US economy is also primarily driven by natural resources and their strong development in the technology, in such sectors as computers, medical, and military equipment (Lederman & Maloney, 2007; The World Factbook, 2021b). Despite being primarily driven by natural resources and energy, the US economy is also an extremely successful exporter and manufacturer, lending itself nicely to the typical hidden champion archetype. These various factors help make the US significant players in the global hidden champion rankings, placing them second, only behind Germany, in the number of total recognized hidden champions by a country (Zitelmann, 2019) (Appendix A).

SMEs are also vital to the American economy, as they make up 99% of all businesses there and account for 64% of all new jobs annually (Bartik et al., 2020). Despite the strength of the American economy, they also suffered greatly during the pandemic, with 40% of SMEs cutting employment and 43% being forced to close at some point (Bartik et al., 2020).

Germany

Germany is another exceptionally successful and developed market in the global economy, practicing a social market economy (Spicka, 2007), and is the largest and most successful economy in Europe (World Bank, 2021b). In terms of nominal GDP, Germany was ranked the fourth largest market in the world in 2019 (World Bank, 2021b) and is projected to finish as the fourth largest market in the world for 2020 as well (IMF, 2020a). Germany is a massive exporter in the world economy, ranking third in the world in exporting in 2019 (World Bank, 2021a) and second in the world in trade surplus as of 2019 (Plecher, 2020). The German

economy is primarily focused on the service and manufacturing industries, with both sectors contributing to roughly 68% and 30% of national GDP as of 2017, respectively (The World Factbook, 2021a). Some of their top exports, stemming from their manufacturing, are vehicles, machinery, and electronic products, to name a few. When looking at the success of the world's countries in global markets, it becomes clear that countries such as Germany have the greatest success with their exports in relation to their imports, implying a strong international presence for their businesses (Simon, 2017). With this relationship in mind, it has been identified that the countries at the top of hidden champion rankings share a similarity in the nature of their industry focus, with the top-ranking countries being manufacturing oriented while the lower ranking countries would tend to be less so (Lehmann et al., 2019; Simon, 2017). Countries such as Canada, Greece, or the UK, which rank lower on this list, tend to be more service oriented. Since these manufacturing-oriented Countries like Germany also rank highly on the global hidden champion rankings, the role of industry in hidden champion success becomes an interesting area for exploration, both in the past during Simon's research as well as how these trends may have evolved since then.

Being the origin of the hidden champion concept, Germany is a very important area to investigate when looking into hidden champions. With SMEs and the Mittelstand being a pillar of the German economy making up 99% of all German businesses (Germany Trade & Invest, 2019) and hidden champions being a sub-group of them, they are an extremely integral part of the German economy (Audretsch, Lehmann, & Schenkenhofer, 2018). Germany is the golden standard when it comes to every variable contributing to the successful fostering of hidden champions, and they are the undisputed global hub for hidden champions, offering a plethora of knowledge and insight into how these companies function and what types of approaches,

strategies, or infrastructure help in hidden champion development. Despite their success, the German SMEs have also been hit hard by the pandemic, with roughly 2.6 million SMEs struggling when the pandemic first commenced, but these numbers steadily began to lessen as the months progressed as the country and its SMEs implemented rigorous pandemic minimizing strategies and guidelines (Bank aus Verantwortung, 2021).

Europe

After examining several individual countries, I will now look at a couple of broader ranges of areas. The first of these two will be the European economy, excluding Germany (discussed in previous paragraph). The European continent contains 50 countries with diverse people and economies. One connecting variable among many countries in Europe is the European Union (EU) and the countries within it using a common unified currency, the Euro. This shared currency allows for easier collaboration and cash flow among members within the EU. Europe has a very developed economy with most of its countries having higher than the global average GDP per capita (IMF, 2020b), with its most successful economies being some of the largest economies in the world. Its largest economies in terms of nominal GDP in decreasing order are Germany, UK, France, Italy, and Russia (World Bank, 2021b). One of the largest industries in Europe is the manufacturing sector, contributing much to the global manufacturing economy. This emphasis is similar to that of the German economy, making the major industry in Europe overlap with the most common industry for hidden champions. Most of the economic power of Europe is said to fall in the area known as the “Blue Banana”, which covers a western chunk of Europe spanning from North Wales to Northern Italy and includes countries such as England, Germany, France, Switzerland, and Italy. This area not only contains most of the people, cash, and industry in Europe, but is also thought to be one of the most economically and

industrially successful zones in the world (Jacobs, 2014). Some of the countries found here, even with the exclusion of Germany, still have many other large and successful economies that still find themselves in the top rankings of the world, such as the UK, France, and Italy ranking 6th, 7th, and 8th in nominal GDP in the world, respectively (World Bank, 2021b). Despite Germany also being the main hub in Europe and the world for hidden champions, Europe still has several countries that have had great success in building successful hidden champions from some countries situated on the “Blue Banana”, such as Italy, France, and the UK finding themselves ranked highly in the global hidden champion rankings, ranked 5th, 6th, and 7th, respectively (Zitelmann, 2019) (Appendix A). Europe even has hidden champions in countries outside of the “Blue Banana”, with hidden champions found in countries all over the continent (Simon, 2009b).

As was the case in Germany, SMEs are also vital to the entire European economy, there are roughly 26 million SMEs in the Europe Union (99% of European businesses), they contribute over half of Europe’s annual GDP, and they employ nearly two thirds of the continent’s workforce (Dimson, Mladenov, Sharma, & Tadjeddine, 2020). Despite their massive presence worldwide, European SMEs were also noticeably impacted by the pandemic, with 70% of SMEs in the UK, France, Germany, Italy, and Spain reporting notable declines in revenues during the pandemic, with 20% reporting challenges covering their loans and being forced to layoff employees, and over half of them uncertain if they would still be in business after another 12 more months (Dimson et al., 2020).

Asia

The Asian continent is key to the global economy as it comprises roughly 59% of the world population with over 4.6 billion people among its 48 countries and several territories (Worldometers, 2021a, 2021b). With its immense population, massive growth period and

ongoing growth in wealth and purchasing power, Asia has become the largest market among the world continents in nominal GDP by quite a significant margin (IMF, 2021). With its huge size in terms of population and land also comes with an obviously large range of wealth, culture, landscapes, resources, governments, and currencies, with some countries being extremely rich in cash and resources, and some being quite the opposite. Asia is home to some significant players on the global scale, with some of its largest markets being China, Japan, and India, all markets that find themselves in the top 10 GDP rankings over the last several years, ranking second, third, and fifth, respectively (IMF, 2020a; World Bank, 2021b). Being the largest continent in the world, Asia is very rich in natural resources, as much of the old Soviet Union's mines in Russia fall within Asia's territory (The Moscow Times, 2019). Other key sectors in the Asian economy have been the agriculture and manufacturing industries (Pannell et al., 2020; Pattanaik et al., 2009; Pham, 2017), with manufacturing and exporting being huge for East and Northeast Asian countries such as China and Japan (Pham, 2017). This focus on manufacturing and exporting aligns well with the golden standards presented by Germany on how most of their hidden champions operate. Asia's hidden champion success also aligns with the fact that most of their manufacturing and exporting success stems from Eastern and Northeastern parts of Asia, as the Asian countries with the most recognized hidden champions are China and Japan. Not only are these two countries the highest ranking in Asia when it comes to hidden champions, they are also very highly ranked by global standards as well, with Japan and China placing 3rd and 4th, respectively (Zitelmann, 2019) (Appendix A).

As was the case with all other regions discuss above, SMEs are vital to the Asian economy with 99% of all businesses in Southeast Asia with over 70 million SMEs, employing over 140 million workers there (Schaper, 2020). SMEs in the Asian Pacific region make up

roughly 97% of all businesses, they employ over half of the region's workforce and account for upwards of 60% of the regions GDP annually (Schaper, 2020). These areas were also significantly impacted by the pandemic, with the Asian Pacific closing nearly 18% of all SMEs and South Asia closing nearly 46%, with factors such as poor technology contributing to these closures (Khatun, 2020).

3. THEORETICAL AND ANALYTICAL BACKGROUND

This section will introduce the theoretical and analytical frameworks being used to evaluate pandemic-era hidden champions and SMEs. It will go over some of the key conceptual foundations that will be used to build the literature review and the propositions, as well some of the main focuses and implications to be taken away from this study. These key points include the concept of business pivoting, crisis management theory, and dynamic capabilities theory. These three topics will be discussed at great length throughout this report, but this section will introduce the underlying concepts and purposes of these theories to ensure a sturdy foundation for the findings and analyses is first set. Business pivoting provided some conceptual background to one of the key variables, and crisis management relates to the focus of the COVID-19 pandemic as the crisis in question, however, the main focus for this paper is dynamic capability theory. Dynamic capability is the conceptual framework used for this study and the key success factors explored here are explored through this lens. For this reason, dynamic capability theory is the primary focus here and is therefore central to the analysis and recommendations explored throughout this report.

3.1 Business Pivot

How entrepreneurs and managers of SMEs and start-ups approach and embrace pivoting is a very important point of inquiry in the literature (Ye et al., 2020). Deviating from original plans and structure is a very common occurrence for these kinds of businesses and when put in a position where pivoting is a great, or potentially even the best, plan of action, it is important that these managers are aware of the importance of embracing this type of strategy (Ye et al., 2020). Pivots can encompass all sorts of shifts in one's business but are typically defined as the change in the fundamental direction of a business and is often used when you are not meeting the current market needs (Agrawal, 2020). However, it can also be used as a great source of opportunity when new opportunities are presented or expected to be presented in one's environment (Guillén, 2020). Pivoting does not necessarily need to involve completely changing the organization as a whole but may often only require the pivoting of one element of an organization, such as certain strategies, manufacturing processes, market focus, technologies, or business models. Pivoting can be useful in situations where your progress has stalled despite large investments of resources, when there is too much competition, if you have plateaued, or if your perspective on your industry has changed, or as a means of survival or opportunity exploitation during times of market turmoil (Agrawal, 2020; Guillén, 2020). The importance of this factor has encouraged me to highlight it as a factor in my pandemic-era hidden champion criteria, evidenced in how both companies interviewed for this project demonstrated tendencies to pivot both before and throughout the pandemic

3.2 Crisis Management

Crisis management is key for organizations because of how unexpected, disruptive, and threatening crises can be on the survival of businesses (Bundy et al., 2017; Coombs & Holladay, 2002). Crisis management consists of the proper planning and preparation of the different aspects

of one's business that could be affected by crises, with the organization ultimately preparing a crisis management plan for each part of the organization that could be vulnerable (Coombs & Holladay, 2002). These plans are typically based on clusters of types of crises that an organization can logically prepare for, giving them the opportunity to cluster the different types of crises into types and prepare/adapt accordingly (Coombs & Holladay, 2002). This type of crisis management would be considered more a pre-emptive and planned approach for future crises that may occur. Crisis management considers things like stakeholder perception, organizational reputation, organization learning/adaptation, financial performance and survival, and re-establishing order following a crisis (Bundy et al., 2017). Crises cause drastic dynamic change in business environments (Mansour et al., 2019), and the COVID-19 pandemic has been one of the most devastating crises of the century, therefore, a consideration of crisis management is also very useful both conceptually and practically.

3.3 Analytical Framework: Dynamic Capabilities

The analytical framework being used in this study is dynamic capabilities theory as it is presented by Teece et al. (1997) and Teece (2007). The dynamic capabilities approach is a framework used to analyze the sources and the methods of success and wealth creation that are used by firms in dynamic environments that experience change (Teece et al., 1997). The framework presents the ways these firms react and adjust themselves in dynamic and flexible ways within these changing environments through three main steps, sensing, seizing, and reconfiguring/transforming (Teece, 2007). Sensing focuses on the firm's ability to sense, recognize, and shape opportunities and threats that arise in one's environment. It is key for firms to detect these opportunities and threats in changing environments by scanning, searching, and exploring, as this can help them stay on top of the upcoming challenges and also allow them to

be early movers regarding upcoming opportunities in both local and distant markets. Seizing looks at the firm's ability to address and act on opportunities, often requiring investment from the firm. A firm needs to be able to maintain and improve their competencies and be prepared to invest heavily in these ripe opportunities. Reconfiguring or transforming refers to the adjustment and evolution of firm assets and approaches to exploit new opportunities, and to be able to reconfigure other assets and business structures in order to grow. The greater the dynamism in a firm's environment, the greater the importance of dynamic capabilities, and as crises have been shown to be dynamic forces of change, dynamic capabilities theory becomes a clear fit to apply to the pandemic (Mansour et al., 2019)

4. DATA AND METHODOLOGY

Examining the phenomena of hidden champions is an interesting point of view to gain insight into the global success of SMEs and how they managed to find such levels of success. A collection of online sources from various journals, news articles, and other sources on the topic can be found in the appendix (Appendix B), where you will find a table cataloging the literature on hidden champions (title, author, description). Accompanying the qualitative data used to validate and test the propositions, this study also includes supplementary information in the form of a case study consisting of a comprehensive evaluation of global hidden champions from several major regions of the globe. These regions covered are North America, Europe, and Asia. This case discusses and analyses their qualities, differing factors, case examples, as well as insights and implications to be learned from these different hidden champions all over the world.

Looking at the pandemic-era success factors from both a global (case study) and a Canadian perspective (interviews) is a very interesting point of view because hidden champion

success is capable of stimulating the economy (Audretsch, Lehmann, & Schenkenhofer, 2018; Hosoya, 2009) and it could prove to be a very powerful example for local business and local governments to consider in order to revitalize stagnant economies during the pandemic.

The foundation for the propositions in this report is the secondary information amassed from the various literatures examined during the literature review process. The propositions and the other work in this report are tested using the information received from a set of interviews with local hidden champion firms. The sample for these interviews comprises Newfoundland-based hidden champions that I have recently identified based on Simon's criteria. These companies were chosen based on several common factors that aid in their ability to generalize my findings to a wide range of Canadian and Newfoundland-based SMEs and start-ups. The companies involved are MYSA and Verafin, two Newfoundland and Labrador tech companies who were chosen because of their common factors and their direct relevance to this project. The findings from this analysis are generalizable to the large pool of Newfoundland-based SMEs that have started out small and aim to grow and increase their market share. I also believe this study to be generalizable in a larger context and scope, such as a much wider range of SMEs, not necessarily those who started from nothing, but confirmation on this would likely require further data in future studies. With that being said, the main goal is to disseminate this knowledge to these humble beginnings-type businesses in an effort to revitalize and ensure the future success of the SME landscape in Newfoundland and Labrador. My goal with the selection of Verafin and MYSA was to examine local hidden champions with very humble beginnings, hidden champions that started very small in scale and resources, with only a couple of employees and no initial funding, and through the implementation of hidden champion strategies and the proposed success factors managed to become the industry-dominating firms they are today. This is in the

hopes of demonstrating this method of success to other SMEs in Newfoundland and Labrador with similar beginnings and situations to encourage further growth, success, and increased market share. Both of these firms have demonstrated hidden champion type approaches from their inception without even knowing what a hidden champion was, which not only supports the idea that hidden champion approaches are a gold standard for up-and-coming SMEs, but also that even coming from a small, isolated island like Newfoundland and Labrador, these businesses can thrive and becoming massively successful at an international level.

This project also suggests an ethically approved survey questionnaire for future research that would aim to empirically test the proposed variables. This survey was determined to be useful in the future as it's quantitative data could compliment the qualitative data received from the interviews to give a more wholistic picture for our takeaways. The survey contains survey items on the various key variables discussed above to help identify, confirm, and guide SMEs and possible hidden champions in Canada when it comes to the pandemic era key success factors and how they have navigated the unprecedented challenges that came from it. The drafting of the survey underwent a pilot test where local business managers and researchers in my network tested the accuracy and validity of the survey scales, but due to constraints and limitations from the ongoing pandemic it is recommended as an avenue for future research to support the existing qualitative findings presented in this report.

As was discussed above, the independent variables that were focused on both in the interviews are presented through the lens of dynamic capability theory's three steps, they are (A) seizing, (B) sensing, and (C) reconfiguring/transforming. In this case, (A) is applied to international capabilities (visibility), (B) is applied to innovative capabilities (agility), and (C) is applied to pivoting capabilities (flexibility). The two dependent variables in this study are firm

resilience and firm performance. These factors will be discussed in great length in section 5, but the following point act as an introduction to the concepts and their theoretical foundation.

4.1 International Capabilities (Global Visibility – sensing capability)

Being focused on and capable in international markets has stood out as a significant key success factor for hidden champion success in the literature with its roots going all the way back to the concept's conception by Simon (1996). Using dynamic capability theory as the lens for this study, I suggest international capabilities as an effective crisis response strategy for SMEs and hidden champions during the pandemic. This is linked to Teece's (1997) work on dynamic capabilities, and more specifically, his first step of effective dynamic capabilities, being the firm's ability to sense and shape opportunities and threats in their environment. SMEs and hidden champions will be able to counteract the stagnancy in their business operations resulting from the pandemic by taking advantage of their presence in other international markets. It can also help diversify their market focuses in case any of the areas they operate in become unstable, so they can shift focus to those that are more stable. In this sense, it meets one of the theories roles as a means to sense and react to threats. These give the business increased chances to sense and capitalize on opportunities arising from the crisis, as well as added exposure to the threats in other markets that they can learn from when adapting their strategies.

4.2 Innovative Capabilities (Agility – seizing capability)

Not only are strong innovative capabilities a key factor for hidden champions in normal situations, but they have also stood out as a key success factor for hidden champions and SMEs around the world to survive and find success amid the crises such as the COVID-19 pandemic. A strong tendency to engage in and successfully implement innovation is a proven method for

success in crisis management theory. This variable will be explored through the lens of dynamic capability theory and applied using the second step of Teece's (1997; 2007) dynamic capability framework, being the variable that will aid these firms seize the opportunities present in their market.

4.3 Pivoting Capabilities (Flexibility – reconfiguring capability)

Pivoting has several different meanings when it comes to business and can comprise elements such as changing one's business model, their technology, or their strategy, to name a few, but overall, it is focused on the changes and reconfigurations undertaken by an organization to any of these kinds of key elements of their business. Pivoting will be implemented using the final step of Teece's (1997; 2007) dynamic capability theory, which is the reconfiguration of the business enterprise and its assets. This step states that firms will be dynamic in their ability to reconfigure their assets in order to capitalize on opportunities that arise around them. This perfectly represents the essence of business pivoting during a pandemic, where crisis management theory has stated newly arising opportunities in the market are highly effective success strategies. SMEs and hidden champions that not only recognize and take action on opportunities during the pandemic, but also reconfigure their business in a way to implement them will be providing themselves with a new outlet in which to thrive and find success.

4.4 Firm Resilience & Performance

Firm resilience is presented as a dependent variable in this study and looks into the planned and adaptive resilience of these firms in order to gain a comprehensive understanding of their overall resilience during times or crises, such as the ongoing pandemic. Based on the same logic presented in the variables above, I propose that resilience is a valuable variable to consider

when looking at these hidden champions in a crisis, as resilience is an invaluable asset for not only hidden champions but all other small, medium, or large businesses (Prayag et al., 2008). Firm performance is also examined as the key outcome of the positive influence that the discussed key success factors have. Performance can be subjective depending on who is measuring it and for what purpose, so for the sake of this project and the interviews that were conducted, performance was determined to be based on the sales and revenues of the business. The questions aim to examine the performance of the firm both before and during the pandemic in hopes to determine the possible role that the key success factors may have on effecting the financial success of these hidden champions.

5. SECONDARY DATA FINDINGS

5.1 Overview

Hidden champion success is shown to be capable of stimulating the economy (Audretsch, Lehmann, & Schenkenhofer, 2018; Hosoya, 2009). It is because of this that it could prove to be a very powerful example for local business and local governments to consider in order to revitalize stagnant economies or to encourage further growth and internationalization for the coming generation of businesses. It is for this reason that looking at the pandemic-era success factors from both a global (case study) and a Canadian (Newfoundland-based) perspective (primary qualitative data) becomes a very interesting point of view, as it could prove helpful for Canadian SMEs to attain success in their local markets as well as successfully transition into the global market. As was previously stated, this was the main motivation for the selection of the sample, as I wish to demonstrate these key success factors in a Newfoundland and Labrador setting and demonstrate how the hidden champion archetype is successful at breeding hidden champions

even in small communities where businesses start from nothing and have little to no exposure to the global market. These findings could provide invaluable guidance for local and Canadian businesses and governments to try to encourage the development and growth of successful SMEs that could help grow or stimulate local economies. It can also provide them with much needed insights into the art of navigating a global crisis, helping them with the COVID-19 pandemic as well as any possible crises in the future. Uncovering the secret to Newfoundland and Labrador hidden champion success could provide our province and other Canadian businesses with proven success strategies and approaches to push through the challenges presented by the pandemic and continue growing and succeeding while moving into a post-COVID-19 era. As the famous saying goes, “stand on the shoulders of giants”. This symbolizes the importance of learning from other’s experiences and strategies, which highlights the importance of how global and local SMEs could learn from the precedent set by hidden champions during the pandemic in order to benefit local economies, support further growth and globalization, and aid in crisis management for SMEs moving forward.

5.2 Research Case

As was previously mentioned, on top of the Newfoundland-based interview data, examining hidden champions in a global context is also important to understand how hidden champions around the world operate and differ from each other. This can provide great insights for SMEs no matter where they are operating. For this reason, on top of the discussions on MYSA and Verafin, I also present a set of hidden champion cases from various regions around the world and evaluate their nature as a hidden champion as well as their strategy during the pandemic. The criteria used for selecting these firms uses my newly coined idea of “pandemic-era hidden champions” rather than merely selecting hidden champions. These pandemic-era

hidden champions must be top five in market share in their industry, must be relatively unknown, and they must have pivoted an element of their strategy, approach, or product during the pandemic. This keeps the essence of hidden champions, while being a little more lenient in their market share requirement, and focuses in on the businesses that set themselves apart with their innovation and pivoting capabilities during the pandemic.

5.3 Successful Global Hidden Champions

5.3.1 Canada: Richards Packaging

Operating out of Ontario, Canada, Richards Packaging specializes in both the manufacturing and distribution of glass and plastic containers. Operating in the Packaging and Labeling industry in Canada, Richards Packaging employs roughly 500 employees and provides their product to small and medium businesses in a variety of sectors, such as food and beverage, health and beauty, pharmaceuticals, and industrial (Koronios, 2020; Richards Packaging, 2021). They supply to the packaging market in Canada, the US, and Europe, and they are the market leader in Canada with roughly 22% of the industry market share (Koronios, 2020). The company has experienced strong growth in the last five years and even expected growth of upwards of 48.3% in 2020 despite the difficulties faced by many during the COVID-19 pandemic, and ultimately had revenues of \$208.1 million in 2020 (Koronios, 2020). One of the main strengths of Richard's Packaging during the pandemic was their ability to recognize the need for adaptation in order to survive. With their main focus being on packaging materials (containers, bottles, etc.) they decided to expand slightly to hit a market that was in high demand with not enough supply at the time, branching into personal protection equipment (Richards Packaging, 2020). They began making packaging equipment for hand sanitizer, as well as alcohol gel, face shields, visors, and masks (Richards Packaging, 2020). This helped them gain extra traction in

these markets during those difficult times and allowed them to help with COVID-19 relief by aiding in the supply of these products in a time where the market supply could not satisfy the overwhelming demand. According to some of their reports, their profits increased by 21% during the challenging times of the pandemic because of their flexible pandemic-related choices (Richards Packaging, 2020). This demonstrates their ability to sense an opportunity in the market, seize this opportunity, and reconfigure their business to accommodate the implementation of these changes.

5.3.2 USA: Bobcat

Bobcat is a company based out of North Dakota that operates in the farm and construction equipment industry, more specifically, they specialize in the manufacturing and production of compact industrial, construction, and agri-business equipment (Bobcat, 2021c; Simon, 2009b). Bobcat has been a staple in their market for a long time, founded in 1947, they were a trailblazer in what they do, having created the compact equipment industry with their invention of the skid-steer loader over 60 years ago (Bobcat, 2021a). Along with their creation of their industry niche, they continue to lead the compact equipment industry in terms of performance and dependability, and they also lead the charge in terms of product and technology innovation (Bobcat, 2021a, 2021c). When it comes to COVID-19, despite being designated into the critical infrastructure sector to continue working through the pandemic (Bobcat, 2021b), even Bobcat faced many challenges, and was at one point forced to halt operations in some states for two weeks during the month of April in 2020 (Bobcat, 2020). Mike Ballweber, the president of Bobcat in North America, recognized that despite the challenges they were facing, and the various precautions being put in place by the company to maintain safety (Bobcat, 2021b), their main customers were also trying to survive, and they rely on Bobcat to do what they need to do

(Fox, 2020). The company has stated that their main goals and keys to success during the pandemic have been their communication, their dedication to implementing proper safety precautions and especially their flexibility and adaptability when it comes to pandemic related opportunities and challenges (Fox, 2020). They have been very adamant about safety and flexibility as priorities and have extensively analyzed their operations throughout their target markets to assess the situation in different areas. This allowed them to recognize (sense) that some areas were more heavily affected by the pandemic while some were less effected. They used this approach to strategically adapt their marketing, manufacturing, and distribution to focus on these less effected and more profitable areas where risk was lowest and, in a time where competition was struggling. This demonstrated the benefit of a diversified focus. It was because of this that they were able to make up for the difficulties/temporary closures in some locations that were more effected by focusing on the locations in safer areas with less risk of an outbreak (Fox, 2020). Because of this adaptability and flexibility, after seven months of the pandemic, Bobcat had locations in America where COVID-19 was non-existent in their plants during times when COVID-19 was still causing mass lockdowns, and some of their locations that had been most effected had returned to normal with the virus being minimal to non-existent in those locations (Evanella, 2020). This allowed them to persevere through the pandemic, and their outlook for the future remains positive and optimistic, despite the various extra variables and challenges thrust onto them, because of their ongoing flexibility and adaptability moving into their planning process for all of 2021's operations (Wordsworth, 2020).

5.3.3 Germany: 3B Scientific

The hidden champion example for a German company is 3B Scientific, an advanced medical and healthcare delivery company founded in 1948 that are the world market leaders in

the anatomy market and are among the top global leaders in the manufacturing of Medical and Science Education solutions (3B Scientific, 2021a). Represented in over 120 markets worldwide and experiencing constant growth over the last several years, their main focus in terms of product offerings is equipment used in medical simulation and training for skills in areas such as anatomy, healthcare, and patient education, with a particular focus on constant updates and innovations for improving their offerings and meeting customer wants and needs (3B Scientific, 2021a). These technologies are offered to their main customer segments of universities, hospitals, ministers of health and education, medical distributors, medical students, and various other practitioners in the medical and pharmaceutical field (3B Scientific, 2021a). Some of the main areas they focus on that have helped them gain their success have been top notch product quality, a highly skilled workforce, competitive value, and great flexibility and adaptability when it comes to customer requirements and customer service (3B Scientific, 2021a). Despite the challenges faced worldwide throughout the pandemic, 3B Scientific was able to recognize the possible opportunities that stemmed from the crisis and pivoted to implement some new strategies and offerings to succeed during COVID-19. The main addition during the pandemic has been the creation of COVID-19 Simulation scenarios on their app REALITi, in collaboration with their subsidiaries iSimulate and Cardionics (3B Scientific, 2021b). They supply medical simulations for medical professionals and trainers to aid with training and education on dealing with COVID-19. The simulations can be added to the systems of users of the REALITi app, and a free patient monitoring app with more limited functionality is available to those who do not own the system (3B Scientific, 2021b). There are several learning cases offered covering a variety of simulations and topic templates that can be edited to fit specific needs for the user during training. All these simulations were developed based on the data from real patient cases

(3B Scientific, 2021b). This is a key example of a company recognizing an opportunity during from a crisis and making the best of it by adapting their current approach to seize this opportunity and find a way to excel despite the challenges.

5.3.4 Europe: De La Rue

The example for Europe is a UK based hidden champion in the printing industry, with a niche in the printing of bank notes. This hidden champion is De La Rue, founded in 1821, based out of Basingstoke, England (De La Rue, 2021c), and a massively important hidden champion for the entire world. They are the world market leader in the design, manufacturing, and production of bank notes (Lawrence, 2020). De La Rue has five locations inside the UK and aside from their main locations they have manufacturing sites in Kenya, Sri Lanka, and Malta, and they employ roughly 2,400 people in over 24 countries (Lawrence, 2020). Although they specialize in bank notes, they also produce some other things such as tax stamps, passports, and credit cards (De La Rue, 2021b), but it is their banknote specialization that is their main success, providing paper money to over half of the major banks worldwide, and producing 35% of all new bank notes issued globally over the last five years (De La Rue, 2021a). Roughly 20% of its revenues come from its UK operations, with the rest coming internationally, as De La Rue reported revenues of £466.8 million (\$818.26 million CAD) in 2020, with industry-related revenues expected to drop around 2.8% into 2021 until the situation regarding the COVID-19 pandemic stabilizes (Lawrence, 2020). As with the other companies that managed to do well despite the challenges faced during the pandemic, De La Rue also implemented some new innovations in 2020 and 2021 that helped them during these difficult times. In early 2021, the company launched a new smartphone app that acts as a hologram enabled validation tool that allows authorized brand inspectors to scan for certain holographic features and labels to ensure

they are genuine and not counterfeit (Riaz, 2021). This helped during the pandemic as it emphasized an inclination of moving digital in the future and allowed certain aspects of the job to be done with less changing of hands. There have also been talks between the company and their government to make use of De La Rue's authentication technology to authenticate vaccines, test kits, and to provide immunity certificates (Thomas & Clarfelt, 2020). In this case, De La Rue is recognizing the importance of pivoting, digitization and technology moving forward and are taking a step into that realm to secure their standings moving into the inevitably more technologically oriented future. This also demonstrates the company's willingness to innovate and their ability to sense and seize new opportunities to succeed and reconfiguring appropriately to exploit these opportunities.

5.3.5 Asia: *Hanwha Q-Cells*

The hidden champion example for Asia is a Korean company called *Hanwha Q-Cells*, and their main focus is on the manufacturing of photovoltaic solar cells, which is the main process involved in turning solar cells into energy for electricity, primarily in products such as solar panels (Infinite Energy, 2021; Simon, 2009b). They operate in many markets all over the world, including Europe, North America, Asia, South America, Africa, and the Middle East (Hanwha, 2020b). Q-Cells was founded in 1999 as Q-cells AG in South Korea and they are the biggest player in the Korean market for solar cells (Bo-gyung, 2018; Si-soo, 2015), but also a massive player globally as they hold the number one spot in the hyper competitive US market, the second biggest solar market in the world (AltenergyMag, 2020; Hanwha, 2020b; Sylvia, 2020), and the top spot in the global market as well (AltenergyMag, 2020; Sylvia, 2020). According to Simon (2009), Hanwha Q-cells claimed to have achieved their number one spot in the global market all the way back in 2008/2009. Their success in this massive market outside of

their home country is not to be understated as their market share in the US residential sector rose to 26.4%, which also happens to be roughly the same amount as the next three biggest competitors combined, marking the eighth consecutive year that they have topped the US market (Hanwha, 2020b). Q-cells has continued its strong success throughout the COVID-19 pandemic despite a multitude of challenges faced by organizations all over the world. One of these successful moves during the pandemic was their focus on quality and customer satisfaction, and their new strategic partnership with the microinverter specialist “Enphase” where they adapted their focus to exploit the need for new AC modules in the US. This partnership developed US-specific AC modules that proved to be a great help in maintaining success despite these difficult times (Hanwha, 2020b). This is a strong decision as in these desperate times when businesses everywhere are struggling, they recognize the need for adaptation and used their diversified market scope to their benefit, choosing to focus on the biggest and one of the most important markets available in their industry, the US market, where they have already established themselves as a top player. Even though this new venture is not necessarily perfectly aligned with their usual focus of photovoltaic cells, they recognized it was a great opportunity, and that it was in a market they are familiar with and successful in. Therefore, they decided this pivot was a great opportunity to counteract the challenges and struggles from the pandemic while also setting themselves up for similar types of endeavors in the future.

5.4 Pandemic-Era Key Success Factors

When it comes to hidden champions, there have been several variables highlighted as key success factors that are essential to the massive success experienced by these businesses throughout the pandemic. These factors are explained first based on their importance to hidden champions and SMEs, and then are explained in the context of being specifically beneficial

during the pandemic. Looking at the key success factors of these hidden champions can prove vital in aiding in the success of businesses both for future crises and for overall strategy moving forward. The suggested key success factors are explained through the lens of dynamic capabilities theory and were determined based on an extensive literature review in the areas of hidden champions, SMEs, and crisis management because of their ability to help businesses find success throughout various crises, including the pandemic. The main key success factors that will be discussed are the hidden champion's international capabilities, innovative capabilities, and pivoting capabilities.

5.4.1 International Capabilities

The first factor is regarding hidden champions' tendency and capability to engage in international markets, rather than focusing solely on their home domestic market (Audretsch et al., 2018; Mascarenhas, 1986; Schleppehorst, Schlömer-Laufen, & Holz, 2016; Simon, 2009a; Voudouris et al., 2000). Hidden champions are often found to have very high levels of international success (Audretsch et al., 2018), with some studies adopting the concept of hidden champions to their own country and making internationalization a pre-requisite to be considered a hidden champion in their eyes (Voudouris et al., 2000), further emphasizing the importance that international capabilities have on the number of hidden champions and their success. This is one point that differentiates hidden champions and most other SMEs, as Audretsch et al. (2018) has pointed out, many SMEs do not aggressively target international markets because they are often smaller in scale and have a smaller pool of resources, however, hidden champions are quite the opposite and tend to aggressively target internationally. This emphasizes the relevance of international capabilities for SMEs, as finding a way to arrange their resources to accommodate international markets can yield huge benefits. Having a global focus is useful for hidden

champions, who are typically smaller in scale compared to larger corporations, as according to foreign direct investment theories, internationalization can be used as a tool for smaller companies to diversify their risk and compete in a way that lets them minimize direct competition with massive dominating corporations. This international focus coupled with their differentiated product approach increases their success rate, helps stabilize the firm, and allows them to increase their market share (Mascarenhas, 1986). The German market is a key example of this, as the success of Germany's exporting over the last several decades has often been credited to the international success of the country's small and medium sized firms that have a global focus and who overwhelmingly tend to be exporters (Blackburn et al., 2001; Simon, 2009a). These two aspects are especially important for hidden champion success because it has been shown that strong exporting and a dependence on international markets are important criteria for positioning yourself as a market leader (Simon, 2009b). In short, to position themselves as strongly as possible, hidden champions need to have strong international capabilities (Simon, 2009d).

In the context of dynamic capabilities theory, the first stage needed for performance is explained to be the ability to sense opportunities and challenges (Teece et al., 1997; Teece, 2007). The ability to sense these opportunities is key to success, and in this study this concept is being applied to the ability of international capabilities to give hidden champions increased opportunities to have increased visibility and sense their environment. In his seminal piece on dynamic capabilities, Teece et al. (1997) reiterates the importance of sensing when looking at effective winners in international marketplaces and states in his 2007 works (Teece, 2007) that when sensing, firms must constantly be scanning, searching, and exploring not just local markets, but also much more distant markets as well. Also, Tatham et al. (2017), after analyzing

the work of Teece, suggest similarly, as they explain the connection between sensing and responding to changes in supply or demand in international markets, as now in recent years supply chains have been increasingly more international and global in nature. This ability to sense new opportunities to act on, and to sense challenges to be aware of, can increase the resilience of a firm during these times, giving them the added visibility, awareness and padding against the otherwise unexpected challenges that may occur, and giving them additional options to survive if they act on the new opportunities discovered. The relationship between international capabilities and the recent COVID-19 pandemic is a key relationship to examine. There have been many studies in crisis management theory on the influence of crises on global business, such as the effects of health crises, market crashes, and natural disasters, but COVID-19 has been different because of how multi-layered it is and just how drastic and widespread its repercussions have been; it has been estimated to be the largest effecting factor on the global economy in the last century (Ratten, 2020; Zahra, 2021). It has been shown in the crisis management literature that a reliance on international markets can actually be beneficial in times of crisis because of the fluctuations in foreign currencies. Global crises often result in devalued currencies worldwide, therefore making exporting cheaper and enhancing performance (Grewal & Tansuhaj, 2001). Therefore, firms who have increased capabilities to operate internationally, and engage in these markets more often, can take advantage of these lowered costs. On top of this, a strong international presence can diversify the risk of doing business, as it gives the firm added options to focus on should one or more market begin to fail, making them more resilient in the face of challenges (planned resilience), like the saying “don’t put all your eggs in one basket”. Therefore, based on the above, I propose international capabilities (sensing) here as the first key success factor related to success and resilience in times of crisis because of the added exposure to

global supply chains and international markets, giving hidden champions new opportunities to sense and interact with compared to if they only operated locally. Because of this added ability to sense opportunities, which is key to enterprise success in dynamic capability theory, and because of how important dynamic capabilities are in times of crisis (Mansour et al., 2019; Makkonen et al., 2014), I propose a positive relationship between international capabilities and firm resilience and performance.

P₁: A hidden champion's international capabilities will be positively related to their resilience during times of crisis.

P₂: A hidden champion's international capabilities will be positively related to their performance during times of crisis.

5.4.2 Innovative Capabilities

The next key success factor to be discussed here is a hidden champion's approach as a game changer in their industry, and their overall innovativeness. Hidden champions often credit much of their success to their strong innovative capabilities, allowing them to be game changers within their industry and break the mold of what is typically expected of them (Blackburn et al., 2001; Colman, 2013; Simon, 2009; Yoon, 2013). A game changer is a business or strategist that alters the norm/the way the game is played in their industry and uses innovation to operate differently than what is expected in their industry, differentiating themselves from the competition (Lafley & Charan, 2008). Also, hidden champions tend to spend more on research and development in relation to their size than larger corporations, and they also do it more efficiently (Colman, 2013). It is this vigorous R&D engagement that is typically looked at as the root of their strong innovative capabilities (Colman, 2013; Yoon, 2013). They also use their very

strong relationships with their customers to help drive their innovation and use their customer feedback and suggestions to help develop and innovate their products in the future (Simon, 2009; Voudouris et al., 2000).

It has been shown in some studies that dynamic capabilities is a legitimate lens to approach studies in the context of the COVID-19 pandemic because of its focus on adjusting and reacting to environmental changes (Ai & Peng, 2021). On top of this, dynamic capability theory applied to COVID-19 also highlights the importance of innovation during the pandemic, as dynamic capability approaches are key determinants of effective innovation models, and these models have been proven to help sustain businesses throughout COVID-19 (Ai & Peng, 2021). This connection between innovation and dynamic capabilities is further supported by Teece (2007), where he states that the seizing stage of his framework must be addressed by following up the sensing stage with the use of innovative new products, processes, or services. This is the root of the decision for using innovative capabilities as the seizing stage of dynamic capabilities, as it provides a seamless fit conceptually to the original work on the theory (Teece et al., 1997; Teece, 2007).

The COVID-19 pandemic has made it clear just how important innovation is for hidden champions and other SMEs (Lee & Trimi, 2020). The precursors of the hidden champion, the German Mittelstand, have put considerable efforts into focusing on and improving their innovation throughout the pandemic and they credit this focus on innovative capability as a key factor for their strong resilience, their survival, and their success despite the challenges from COVID-19 (Lee & Trimi, 2020). Along with a company's willingness to recognize and implement innovation, it is also highly important for them to be properly prepared to be able to have the capabilities to implement these changes, because if they are incapable of acting on these

plans then it is irrelevant whether they are willing to engage or not. To build on this, it is worth noting that COVID-19 has had massive negative effects on the business networks that are proven to be essential for innovation, and these damaged networks are proven to be detrimental to international businesses, especially international ventures (Zahra, 2021). This has made it even more clear now how important it is for businesses to have established means, personnel, skills, and capabilities for innovation and without having to completely rely on their external networks to survive, thrive, and continue to grow during and after the pandemic (Zahra, 2021). It is because of these reasons that there is a clear need for flexibility and innovativeness for hidden champions to succeed not only in general, but also to survive and succeed in challenging times such as the pandemic, and that innovation is one of the overall keys to long term success for businesses combating the pandemic (Juergensen, Guimón, & Narula, 2020). Therefore, it is proposed that the SMEs innovative capabilities will be positively related to firm resilience and performance.

P₃: A hidden champion's innovative capabilities will be positively related to their resilience during times of crisis.

P₄: A hidden champion's innovative capabilities will be positively related to their performance during times of crisis

5.4.3 Pivoting Capabilities

Pivoting is a well accepted strategy for firms in situations where a crucial discovery has been made, as pivoting to exploit the new opportunities associated with this discovery are often very beneficial for the firm despite the effort needed to pivot (Lehrer & Schmid, 2019). The idea of pivoting has been shown to be as a strategic tool used by the German Mittelstand, who are so

closely related to the concept of hidden champions that the idea of German hidden champions is almost synonymous with Mittelstand. This makes the Mittelstand another great subset to examine in the literature when studying hidden champions. The German Mittelstand, have demonstrated strong efforts towards digitization and other types of pivoting, as they reconfigured factors such as their technology and business model to combat COVID-19, and their success despite these difficult times was credited to their responsiveness, their business model flexibility, and their recognition for the need to pivot and transform different aspects of their business (Meffert, Mohr, & Richter, 2020).

The idea of business pivoting has been shown to align very well with dynamic capability theory because both are focused on the reconfiguration and realignment of firm assets. In the case of pivoting, it often involves reconfiguration of business models, supply chains, or marketing, to name a few (Arora et al., 2020). The idea of pivoting has been said to possess similarities to the idea seizing in dynamic capabilities, the same way that innovation does, but because of Teece's (2007) emphasis of reconfiguration in step three of his framework and based on the types of business pivots discussed above, pivoting is better supported by the theory for business reconfiguration. This allows it to build on the previous stages of sensing (through international capabilities) and seizing (through innovative capabilities), as a legitimate business pivot is the final step in the realignment of firm assets when implementing significant change. These first two steps are different key factors that also help prepare the firm for said reconfiguration and implementation. Whether it means changing/altering a business model, strategies, value chains, technological orientation, or different areas of focus, the pandemic has forced countless businesses to adopt pivoting in order to survive (Marr, 2020). There have been countless SMEs all over the world who have found great success by implementing pivots during

the pandemic, as it allowed them to find new ways to succeed and set themselves apart from the competition. Not only are the companies discussed in section 5.3 all great examples of this, but the following breakdowns of MYSA and Verafin, as well as the supplementary case study also contain valuable examples discussed at length, as well as a table summarizing over twenty SME pivots during the pandemic. If businesses can ensure they are capable of engaging in and implementing business pivots, then they will be much more resilient in surviving a crisis, they will be more capable of exploiting new opportunities, and they will be much better off in the future. This is because it has been shown that the businesses that have proven themselves to be capable of pivoting things such as their business models and supply chains during the pandemic have been more likely to capitalize on a massive opportunity, shifting their focus to new high-demand products or services in order to capitalize on these newly attractive markets. This supports the belief that because of COVID-19, the world will experience a large surge in firms innovating and pivoting because these businesses are recognizing the need to adjust in order to survive (Zahra, 2021). It is because of these reasons that there is a clear need for pivoting, flexibility and reconfiguration in order for SMEs and hidden champions to survive and succeed in times of crisis such as the pandemic. It highlights how reconfiguration in the form of pivoting is a key step in the finalization of Teece's dynamic capabilities framework and how it is a legitimate method to take advantage of the sensing and seizing of opportunities in your environment by pivoting to implement and exploit these opportunities. Therefore, it is suggested that pivoting capabilities of the firm will be positively related to firm resilience and success.

P₅: A hidden champion's pivoting capabilities will be positively related to their resilience during times of crisis.

P₆: A hidden champion's pivoting capabilities will be positively related to their performance during times of crisis.

5.5 Key Challenges

As has been abundantly clear by living through the times of the COVID-19 pandemic, there have been countless challenges to all aspects of life, and businesses like hidden champions and SMEs were no exception. SMEs have been facing strategic challenges in ensuring their survival because of a variety of challenges such as international border closures, quarantining rules, social distancing regulations, flight cancelations, and reductions in public gatherings; these have all resulted in a spike in prices for various goods and raw materials, massive debt for SMEs that experienced reduced business, and highly disrupted supply chains (Brammer & Clark, 2020; Chiu et al., 2021; Liu, Lee, & Lee, 2020).

The impact on business' supply chains during the pandemic has been huge, and SMEs (and hidden champions) above all others have been especially affected (Melnyk et al., 2021). It was found in a study that the SMEs in this regard that were most heavily affected by the pandemic were the smaller scale SMEs with 49 or less employees, and government support was not found to be effective at aiding them through the early stages of the pandemic. These smaller SMEs in this group were made up of many supplier-focused businesses, which in turn had a substantial impact on the supply chains in the industry studied (Melnyk et al., 2021).

One major key challenge for many businesses that arose because of the pandemic was one that may potentially turn out to be a positive opportunity for the future, but at first, was quite the hurdle for many SMEs to organize. This challenge was needing to pivot to navigate and implement remote working. There were many challenges associated with implementing a remote

working environment for many SMEs, mainly centered around how quickly it was needed and the lack of planning and infrastructure in place to implement a streamlined process. Many issues such as financial constraints, juggling bureaucracy in the business, problems ensuring proper communication, high levels of employee turnover, a lack of knowledge and interest from managers and employees in implementing solutions, and difficulties finding employees trustworthy enough to entrust with remote working responsibilities were all key challenges associated with trying to effectively transition into a remote working environment (Islam et al., 2021). With that being said, much evidence has shown that despite these challenges, the immediate need for remote working may have set the world up for the way of the future, as over 20% of workplaces in a study were shown to be able to effectively implement three to five days of remote working per week for their employees while maintaining the same levels of productivity as if they were in the office (Lund et al., 2020). This could have significant impacts on the lives of these employees as things like reduced spending on transportation and various other types of spending associated with a typical office commute and workday can be reduced. While many physically oriented jobs such as work involving manufacturing or location-specific machinery cannot necessarily be made remote, many other more remote-friendly types of work could have more staying power after the pandemic (Lund et al., 2020).

SMEs also faced different types of challenges throughout the pandemic that can be categorized into short-term and long-term challenges/disruptions. Many short-term challenges, resulting from immediate need for lockdowns and closures, were centered around logistics and disruptions to their demand, financial issues, or liquidity issues, with the severity of the disruption varying by industry (Juergensen et al., 2020). Some higher-tech companies with digital infrastructures and less focus on physical interaction had an easier time, while industries

centered around manufacturing or tourism were hit much harder. The longer-term also presented different kinds of challenges, such as the need for non-technologically inclined businesses to push themselves into the digital age, whether it be their infrastructure, new technologies, or business systems, as the struggles faced during the pandemic will prove to persist into long-term issues for firms that refuse to adapt (Juergensen et al., 2020).

5.6 Industry Scenario

The industry scenario for not only hidden champions, but for virtually all businesses around the world has completely changed compared to how it was before the unprecedented effect of the pandemic (Bartik, Bertrand, Cullen, Glaeser, Luca, & Stanton, 2020; Guillén, 2020; Lang, 2020). Although some businesses managed to succeed and some were presented with convenient opportunities, as was discussed in the key player examples, the pandemic has caused many businesses to fail and many were barely able to survive as countless businesses around the world were being forced to change how they do things in order to survive or find even just some levels of success (Duffy, 2020; Guillén, 2020; Lang, 2020). The pandemic proved that it was not only the small businesses that failed during the pandemic, and it also proved that just because you are a technologically oriented business you are not guaranteed to breeze by without challenges if you do not use the proper strategies. For example, this was especially apparent for the online marketplace company Airbnb. Even though Airbnb is an online oriented marketplace that relies on technology and app development for business, it is also heavily reliant on travel and interpersonal contact as it involves individuals living in the homes of other people. Airbnb, who had been experiencing amazing growth and great success for the last several years, was left devastated by the pandemic because of the restrictions and fear surrounding travel and tourism with COVID-19, as 47% of hosts and 70% of guests in a study stated they were fearful to

continue using the service (Lane, 2020). This led to a 44% reduction in revenue during the summer of 2020 for Airbnb (Lane, 2020), which completely shocked the company who were just preparing to finally go public after many years of success and fantastic growth (Muldoon, 2020). This is also not unique to large metropolitan cities that were ravaged by COVID-19 cases, it has also been devastating to parts of the world that were experiencing relatively low levels of cases. An example of this is the remote island province of Newfoundland and Labrador, Canada, a province with one of the lowest infection rates in the country, where Airbnb hosts had still experienced cancellations of over 30% of their bookings, greatly effecting their bottom line and leaving their plan for the summer months in shambles (CBC News, 2020). While many cancellations were expected because of difficulty with travel, many cancellations were also made by locals who were now cautious of traveling within their province and staying in another person's home despite the increased regulations and standards for cleaning by Airbnb and its hosts.

As was previously mentioned, another factor proving the shift in the industry scenario because of COVID-19 is how the pandemic has forced many businesses in countless industries to adapt their strategies and business models moving forward, with many of these being permanent changes, not just temporary. According to Dawson (2020), roughly 71% of businesses in the UK have had to change their business model in response to the COVID-19 pandemic, and of these firms, over half of them believe that these changes will be permanent. Of these many types of changes being made during the pandemic, some of the most common changes include adjustments to marketing strategies, implementing online and digital oriented adjustments to the business model, revisiting delivery options, and changes made to the products or services being sold and used by the business (Dawson, 2020). To focus in on one of these previously mentioned

changes, countless businesses were forced to adopt a completely digital approach to business to accommodate social distancing, which proved easier for some than it did for others. However, many companies who implemented these digital focuses and remote working environments recognized the benefits and plan to continue using this approach even after the pandemic has ended. Also, many businesses have been forced to make substantial changes to their business model, completely altering the way they do business. Some of these changes were for survival, and some of them were strategically designed to exploit new opportunities in their environment and find great success during those difficult times.

A few examples of companies that had to make such changes because of the pandemic are Chipotle Mexican Grill, Blue Moon Estate Sales, and Kyōten. The first example, the American fast food joint Chipotle Mexican Grill (Colvin, 2020), countered the reduced foot traffic and business they were experiencing by going all in on pickup orders using their “digital kitchen”. This broke their previous business model centered around having the employee build the customer’s burrito in front of them as they give real-time orders and requests. These pickup orders through their newly coined “Chipotlanes”, their own designated drive through lanes for these orders, grew so fast that Chipotle hired 8,000 new employees in May of 2020 and an estimated 10,000 more in June. Despite all the business difficulties during COVID-19, Chipotle experienced nationwide success and their stock hit all-time highs. The second example, Blue Moon Estate Sales (Blue, 2020), was previously focused on the standard elements of estate sales, however, because of COVID-19, they prioritized the safety of customers and clients. Therefore, they completely changed the business model of estate sales to be a reservation-only system to limit foot traffic. Not only did it minimize interpersonal contact and possible exposures, but customers loved the experience of reduced wait times and the more personal and less crowded

shopping experience. Blue Moon Estate Sales plan to continue utilizing this business model and their new reservation technologies moving into the future, even after COVID-19 has passed because of how successful it was and how much their customers valued the changes. The final example, Kyōten (Morein, 2020), an American fine-dining Japanese restaurant, was suffering from a lack of business because of COVID-19, so they took an interesting approach to their business model to make it safe and attractive for their target audience. Kyōten went all in on the high-class fine dining experience, targeting wealthy, high-income couples by offering a private dining experience. The offer involves renting out the entire restaurant for you and your dining partner for a private and luxurious night involving a personal experience with the chef. The price is \$600 USD per person, so it is not for the average diner, but it offers high-income customers a safe, comfortable, and private dining experience. This allowed the restaurant to abide by social distancing regulations, provided a solution for the decreased foot traffic in their restaurant, pleased their target customers, and the increased price for private dining allowed them to still make solid revenues despite the reduced number of total customers in their restaurant each night.

6. PRIMARY DATA FINDINGS

6.1 Overview

To accompany the secondary data retrieved from the extensive literature review on hidden champions, SMEs, crisis management, and dynamic capabilities, this report will also be supported with primary data collection in the form of qualitative interviews. These extensive interviews were conducted with two identified hidden champions found locally here in Newfoundland and Labrador. These hidden champions were identified after months of investigation and networking with local businesses and events and were determined to meet the

hidden champions criteria set out by Simon (1996). They were chosen because of their similar stories, origins, and other common factors shared between them in an effort to ensure the generalizability of the findings to other SMEs or potential hidden champions that are on similar paths to the ones they treaded. They were also determined to meet my pandemic-era hidden champion criteria mentioned above as well. The identified hidden champions are MYSA and Verafin, two local tech companies based in St. John's. The breakdown of both companies will be conducted in great detail below, but first, I will provide a brief overview of their hidden champion standing. MYSA is a local consumer electronics SME that operates in the smart thermostat industry. They meet all of Simon's three criteria to be considered a hidden champion. This was first theorized after researching the company and listening to a presentation from the COO at a business seminar and was then confirmed after speaking with them during my interview. The next business is Verafin, the anti fraud and money laundering software company here in St. John's. Although Verafin is quite a common name around Newfoundland and Labrador after their acquisition by NASDAQ, they are still not at the level of notoriety around the world as other massive tech companies, so I have determined they continue to meet the criteria regarding public awareness. They also meet the requirements of revenues and market share. Verafin, like MYSA, was theorized as a hidden champion after investigating our local pool of fantastic tech companies and after listening to one of their directors speak at a business seminar, and these suspicions were confirmed after I interviewed this director at length. Although hidden champions are typically SMEs, it is not a specific criteria set out by Simon in order to be one (see De La Rue), so this allows Verafin to fall under the umbrella despite now being a larger organization in scale after their recent growth and increased number of employees. I chose to still focus on Verafin because of their humble beginnings as a small group of

engineers working in the Genesis Centre at Memorial University and I aim to demonstrate what is possible for businesses like them despite finding their roots as a small group of individuals in the isolated island region of St. John's, Newfoundland and Labrador.

6.2 MYSA

The first interview conducted was with a high-ranking member of the Newfoundland-based SME called MYSA. MYSA is a St. John's based SME with 100 employees that operates in the consumer electronics industry. They are one of my key potential hidden champions in Newfoundland and Labrador that I have identified, as they meet all of Simon's criteria of a prototypical hidden champion. MYSA operates in a market niche focusing on smart thermostats, with a particular focus on the baseboard heater segment, which is a niche they carved out themselves as the first company in the world to offer this. Baseboard heating is the primary form of heating in Newfoundland and Labrador, and the founders, two engineer brothers, wanted to create a smart thermostat compatible with their at-home heating. Thus, MYSA truly came into its current shape in 2017 as it began rolling out its baseboard heater smart thermostats. MYSA is the number one market leader in this segment in North America, as even after a few smaller competitors entered the market since its inception, they still maintain over 50% of the market share. MYSA also still meets the criteria of revenues less than \$5 billion. They are also not yet a household name globally or in North America despite dominating this market, as some of their non-direct competitors in other parts of the smart thermostat industry, such as Google and Amazon, maintain most of the public's attention. On top of this, MYSA has remained a privately owned business, partly because they continue to value the ownership over their knowledge and information regarding their strategies, technologies, processes, and sales information. This private nature, similarly to other hidden champions, also aids in keeping them out of the public

eye. This also keeps the attention of the massive corporations like Amazon and Google off of them and keeps them out of their crosshairs. The same cannot be said for one of their Ontario-based competitors, Ecobee, which because of pressures from Google and Amazon, was eventually pressured into selling their business. Their market niche and low-profile helps them operate on the periphery of the smart thermostat industry, dominate their niche, and remain out of the crosshairs of the giants like Google and Amazon. Throughout the interview, MYSA also gave me great insights into the variables I had discussed above.

Despite the many challenges of the pandemic, MYSA actually found great success. Initially, they went remote because of social-distancing rules, which was made much easier because of their tech-oriented nature, as well as their proper planning and preparation (will be discussed further under resilience). Like many businesses, they experienced some small dips in their sales at the beginning of the pandemic, but as the months went on, they actually noticed their sales rising higher and higher, until their sales had started to hit all-time peaks. One of their main credits for this increase in success is their international e-commerce focus. This made up 70% of their sales because of a surge in people staying at home and renovating during quarantine. Overall, their sales did not suffer at all, and by the end of fall 2021, they had come out of the previous lockdowns unscathed, reaching all time highs. The pandemic also gave them the opportunity to sense and seize business opportunities more effectively and efficiently than before. Some examples of this include the opportunity to innovate new products to add to their product line, the increased demand internationally during the pandemic which allowed them to discover new markets globally, and the reduced costs of processes for finding funding and contracts because of reduced travel costs and the ability to have meetings and make deals remotely.

MYSA is also a very resilient business, demonstrating both planned and adaptive resilience over the last several years. They were able to adapt by quickly reacting to immediate needs of the pandemic-unique challenges, but they also had a head start because of the lessons they had learned from a past crisis. Early in the winter of 2020, much of Newfoundland and Labrador was shut down because of a massive snowstorm dubbed “Snowmageddon”. This forced businesses like MYSA to work remote with little to no notice. This made MYSA realize the areas in which they were unequipped to handle remote working and also how to handle disruptions to their supply chain in case of an emergency. Because of this, plans were put in place to ensure all employees had the proper hardware and knowledge to work remotely if it was ever needed again, and they had already ensured proper precautions to ensure supply chain disruptions would not cause substantial impacts. Not even three months later, that planned resilience paid off, as Newfoundland and Labrador entered lockdown and MYSA quickly and seamlessly transitioned to business as usual remotely. They also demonstrated adaptive resilience as they were capable of immediately adjusting all other challenges not covered by their planning and quickly returned back to normal operations during the early stages of lockdown.

The first key success factor discussed was the firms’ international capabilities (their visibility and ability to sense opportunities). Although they started as a small business in St. John’s, Newfoundland and Labrador, MYSA was not solely focused on its local market. They launched their product through e-commerce, including customers outside of Canada, a method they believe to be a massive reason for their success and the real way of business for the future. Through this born-global start, they began to notice more opportunities sprouting up all over Canada and even in the US in the forms of regional clusters. Sensing these pockets, they pursued further and noticed pockets in these areas around the continent where baseboard heating was

common. Through this increased visibility and newly sensed opportunities, they began pursuing marketing campaigns in these pockets to get their name out there in the areas that really matter. They now have a near 50/50 split of their North American sales between the US and Canada. Now, after more rigorous market research, they are also currently planning more focused entries into markets like Australia and New Zealand. Unlike before, where they acted on the opportunities they noticed organically, they are now sensing opportunities internationally via research and then planning entry accordingly. In the future, coupled with research for sensing new markets worldwide, they also plan to monitor their current markets for possible new opportunities that they can exploit, such as strategies based on customer feedback in different areas. They place a massive value on diversifying their market focus internationally as they see it as a way to avoid putting all their eggs in one basket. This diversified market focus, along with their international e-commerce, are the main reasons why MYSA believes they were so successful during the pandemic, as despite now stocking their products in physical stores, over 70% of their sales are still made through e-commerce. Overall, the pandemic did not really affect their overseas sales at all, and if anything, they saw an increase in their sales internationally. So, through this increase, coupled with the increased ability to sense new opportunities, MYSA has highlighted the importance of their international capabilities, and emphasized its importance in ensuring the success of their sales throughout COVID-19.

The second key success factor that was discussed was the firm's innovative capabilities. MYSA is a very innovative firm that prides itself on its ability to create new products that target unique needs in the market. This is evident in their innovation of the niche space for baseboard heater smart thermostats, as well as their new product they are readying targeting customers with mini-split heating/air conditioning. Much of their innovation is fueled by their close relationship

with their customers, as they value this relationship, so they target many of the wants, needs, or issues that customers are having and focus innovation on these. Their approach to innovation, unlike many massive corporations which are constantly seeking the next global phenomena, is to make smaller incremental innovations, that when considered together can be even more successful. One area of focus for the innovation is their product ecosystem, which they aim to make seamless and comprehensive for all their product offerings, unlike many of their competitors. Innovation was also still at the forefront during the pandemic, as they continued to work on innovating their mini-split thermostat product throughout the pandemic. This approach, coupled with their customer-oriented innovative efforts, allowed them to cut R&D costs during the pandemic drastically, allowing them to allocate funds to other different market research endeavors and core business processes. An example of this is one innovative feature they created during the pandemic that was based on customer feedback and helps set themselves apart from the competition. This innovation was the addition of digital screens to their thermostats. This was not previously a feature offered in their niche, but they now have a head start on their competitors giving them a key competitive advantage during the pandemic. Like was highlighted in the key success factors' discussion, MYSA demonstrates great innovative capabilities, with their roots centered in innovation, which helped them seize opportunities both before and during the pandemic. They continued innovating throughout the pandemic, which helped them find success, and they plan to continue innovating long into the future.

The final key success factor discussed was pivoting capabilities, the company's agility with reconfiguring parts of their business. Similar to their innovation efforts to product improvement during the pandemic with their digital screens, MYSA also has pivoted to new areas as a means of capitalizing on opportunities. During the pandemic, they pivoted their focus

from primarily baseboard heater thermostats to begin targeting the market for mini-split heating homes as well. This was a new venture but based on their research and the demand of their customers domestically and internationally, they believed it to be a worthwhile pivot during the pandemic. Mini-split heating is the most common form of heating worldwide, so not only is this the opportunity to please additional demands of existing customers, but also broadens their customer base to a much wider range. Another example of a pivot they made during the pandemic was one that helped give them great relief, extra security, and ended up paying off in the long run. This pivot was one they made away from a previous venture they were following which was targeting condos and hotels, and instead pivoted back to focus on existing and new ways to please the consumer electronics market. They believed that the challenges and pitfalls associated with the condo/hotel market during the pandemic was not worth the risk, so they abandoned this venture and pivoted these assets to focus on vamping up their existing products and into developing their mini-split product. This greatly helped their budget and ended up being extremely lucrative, as the consumer electronics market increased drastically with people stuck at home and people's increased drive for home renovations. Meanwhile the hotel market suffered because of the reduction in travel and tourism. Not only did this provide added relief in the pandemic, but it ultimately turned out to increase their sales to never before seen numbers. Finally, as was mentioned in their resilience, MYSA made a significant pivot to complete remote operation of their office spaces during the pandemic, pivoting all employees and necessary hardware to home in order to accommodate social distancing. This was made easier because of their experience with remote working earlier that year, but moving everyone remote was a challenge at first, but due to proper planning and strong adaptive capabilities, this pivot was

extremely successful and has even become an approach they consider using regularly after the pandemic has ended.

6.3 Verafin

An interview with the Newfoundland-based company Verafin was conducted with one of their heads of sales, a director who has worked with the company for well over a decade. Verafin has very humble beginnings in the province of Newfoundland and Labrador. They started in 2003 with just a couple of engineers in the Genesis center for small businesses who were working on ocean AI and eventually became the leading company in the world for fraud and anti-money laundering (FRAML) software. They have always been a tech company but pivoted to FRAML (a term which they pioneered) after they were approached by a potential partner in the Canadian credit union sector to apply their technology to fraud detection, and they eventually moved into the American banking industry as well in 2010. Verafin had been a very successful SME in St. John's for many years, but in recent years they have picked up some serious steam, as they technically no longer fall under SME criteria with their growth to almost 800 employees, but nonetheless, they are golden standard for Canadian SMEs who have started from nothing and turned themselves into a global powerhouse. With that being said, despite having this many employees, they still continue to meet Simon's three criteria to be considered a hidden champion. After their acquisition by NASDAQ, they have continued to maintain autonomy over their operations, strategies, and decision making, and continue to operate in their niche of FRAML software, unlike many other competing companies who are less focused and try to do many other things as well. Despite no longer being technically considered an SME, they had been and continue to be a fantastic example of a Newfoundland-based hidden champion. Although most hidden champions are SMEs, it is not technically a requirement based on Simon's (1996) criteria.

They are the global market leader in their niche of anti-money laundering and fraud detection software, with some of their smaller market segments capturing up to 70% of the North American market share, and most markets capturing at least 50% market share. Their niche is centered around premium price and premium quality. They are priced higher than competitors but offer a much more holistic service through their industry leading technologies, gold standard customer service, and their customer support and service covered in their initial contract fees. Despite being a popular name in Newfoundland and Labrador, a small province where almost every success story becomes a household name, Verafin is not quite a household name worldwide just yet, despite their increased press in Canada and the US from the NASDAQ acquisition. Finally, despite their huge success, they are still not large enough to surpass the \$5 billion annual revenue threshold set out by Simon, with some sources reporting estimated revenues of \$140 million USD going into 2021 (Nasdaq Inc., 2020). This interview with a local hidden champion success story was able to provide me with fantastic insights into how a local hidden champion can separate itself and find great success during a devastating crisis.

The pandemic presented countless challenges, and Verafin was no exception. They had a slower than regular Q2 of 2020, mainly because their workforce and customers were adjusting to the new pandemic-era lifestyle, but after that short period, their numbers balanced out and ended up being unaffected by the end of the year. They also believed that their nature as a tech firm made them better off during these times compared to other types of businesses. If anything, Verafin was able to increase their revenues during the pandemic because fraudsters took the pandemic as an opportunity to get more creative and aggressive with their fraud attempts, increasing the demand for Verafin's FRAML software. It was because of this and the strong resilience and adaptation (to be discussed later) that Verafin had a phenomenal 2021, despite

countless other businesses suffering. Their 2021 revenues are expected to surpass even their 2019 numbers, which was their most successful year ever.

Verafin also prides itself in being a very resilient business, like MYSA, they also demonstrated a nice ability to balance both planned and adaptive resilience, despite their main ability being their adaptive resilience. Like many other tech companies, Verafin was very quick to implement a remote working environment when the pandemic hit, and because of their digital nature, they were very adept at seamlessly adjusting to this new environment with minimal issues. Prior to the pandemic, they had already implemented the proper infrastructure and strategies for many employees to work remotely, albeit on a much smaller scale than currently, so this previous planning helped greatly in their success. But they believe that it was really their ability to react to the challenges and implement large scale plans for organizational-wide remote working, digital meetings, and other similar approaches that allowed them to quickly regain their footing when the pandemic first began. They also took what they learned from this event to help in the future as many of their strategies and approaches learned during this time will remain in the long-term both for convenience and for planned resilience.

The first key success factor to discuss for Verafin is their international capabilities, regarding both how they have been internationally inclined for many years and throughout the pandemic. When Verafin first began, their original focus was on the Canadian market, but in 2007 they entered the American market through a partnership and never second-guessed this endeavor. They saw the US as a great opportunity to sense countless new opportunities in the countless markets of banks and credit unions, as well as a great way to diversify their target market. The industry in America and Canada are extremely different, so it was not a seamless transition, but after proper strategizing and painstaking efforts to perfect their service in the US,

they have also become the most successful provider in the American market as well. It has now gotten to the stage where the vast majority (~3/4) of their business was done in the American market. They now value international markets so much that they created a separate business unit for their American market and have also dedicated a brand-new unit to exploring and sensing new opportunities in other markets around the world. They would serve these customers similarly to how they do in Canada and the US, through a direct to customer contracting agreement. However, it is not yet known if these markets will be entered outright, or through partnerships similar to their US entry. They view their existing American market and new international markets as a fantastic opportunity for growth, even during the pandemic, as they continue to try and scale their operations and expand their reach to new parts of the world.

One of the key things learned during this interview was that innovativeness is completely embedded in the culture of Verafin, with the interviewee stating, “the only thing constant at Verafin is change”. They truly see themselves as innovators in their space, from their beginnings innovating their own space with the FRAML market and up to today where they are constantly innovating all aspects of their business very regularly. The director stated, “Our products are innovating on a daily basis... and this innovation gives us the step ahead of our competition today”. One key aspect that drives the innovation of their services is their relationship with their customers. Customer feedback is a huge driver for their innovation, as they have a very close relationship with their customers and use their feedback, issues, complaints, and compliments to help determine the direction of their services moving forward. This relationship helps them develop innovative solutions to enhance the customer experience and set themselves apart from their competition. An example of an innovative approach they have made that stem from this relationship is the focus on the support for their customers. The norm in this industry is to

continue to charge customers for additional service calls and other technical help provided on top of their initial purchase. But Verafin's approach, to help ensure the life of the customer is as easy as possible, is to instead cover all of these additional needs at no added cost with no added difficulty for the customer, instead, they market their service at a premium price and do not nickel and dime their customers for every single additional charge. Another innovative path they took (which will also be discussed in the next paragraph) was their approach to using the Cloud. Using and developing the necessary tools to operate in the cloud was an extremely innovative approach when they did it, no competitor was doing this and these competitors shunned Verafin for doing this, saying it was not the proper route to take. However, they did it anyway, and now it is the new norm in the industry and almost all competitors have since followed. They truly believe their business is extremely proficient at innovating, from the innovative nature of FRAML's inception, to the quarterly (and usually more often) meetings where goals and other aspects of the business and services are updated and innovated based on current needs, Verafin's standing today is based upon a foundation of years of strong and willing innovative capabilities.

Finally, pivoting, or the firm's agility with reconfiguring, was discussed. Verafin is also no stranger to pivoting, likely rooted in their inherent nature as strong innovators and how welcoming they are of change. One key example of their pivoting capabilities was their 2007 move discussed above, where they made a huge pivot from the industry norm and moved to cloud based. They were heavily criticized by the competition for making this decision, but they felt it was the way of the future, and this was during a time when the "digital age" was not yet as cemented in our society as it is now. This pivot was extremely successful, provided them with a significant advantage over their competitors as they were first movers in their market, and eventually led to their competition following their lead as they too realized it was the right way

to go. Another pivot they made early on was when they pivoted away from a focus solely on credit unions and decided to pivot the way their service was designed to also target the American banking system. They sensed this opportunity from the international exposure they received from a partnership with an American company, and their innovativeness set them up to be able to reconfigure their existing assets to exploit this opportunity. It is now this banking segment that makes up a massively significant portion of their business. One aspect of their business that helps encourage and support future pivots (which continued throughout the pandemic as well) is their quarterly meetings (and sometimes more often) where they discuss their thematic goals (large goals encompassing how they want to be that year) and all their other goals to help make this happen. These larger thematic goals are not set in stone, and often they will pivot their goals entirely based on new opportunities that arise or new information that they are made aware of. Pivots may be used as a means to achieve these goals or as a means to pivot to new goals entirely. One major pivot they made during the pandemic was the complete adjustment of their working environment. The pandemic forced them to pivot to remote working, which they discovered worked very well for their organization, so they have since pivoted away from a traditional work environment, allowing almost all staff to choose how they want to work, either remotely or in the office. Another pivot that resulted from this was the adjustment of their new building. They have a new building under construction to accommodate their growth, and the pandemic gave them tons of new insights on things such as working quarters, meeting areas, and much more, which they completely altered during the pandemic to better accommodate their new attitudes and approaches to working from the workplace and working remotely. Overall, Verafin as an organization has a very strong attitude towards change, and they have both the willingness and capability to embrace pivots when necessary because they recognize the huge potential.

They do not shy away from any pivots that could benefit their company, their employees, or their community, and I believe this strong inclination, coupled with the factors discussed above, led to their huge success they have attained over the last few years, as well as their record year during a global pandemic.

6.4 Takeaways

The interviews with these local hidden champions were extremely insightful and were able to confirm the validity of my propositions presented in section 5. One key takeaway discovered throughout this study is the massive surge in importance of being technologically inclined. As was previously stated, most hidden champions have been manufacturing-based, but the pandemic hit this industry very hard, hidden champions included, while the tech-oriented hidden champions continued to thrive. This study has helped me discover the possible way of the future for hidden champions outside of Germany, as moving into the digital age of the future, hidden champions around the world, specifically here in Newfoundland and Labrador, could find great success in the tech industry, despite it not being the previously accepted norm.

Both hidden champions discussed demonstrated strong capabilities in all three proposed key success factors, and they also demonstrated strong resilience and performance both before and during the pandemic. Both believed that their capabilities in these variables were central to their business and believed that both absolutely contributed to their ability to survive, find success, and even experience increased performance despite the crisis. It is because of these findings that I believe my propositions to be supported, demonstrating that capabilities in international endeavors, innovation, and pivoting are all positively related with firm resilience and success in times of crisis. Each variable had its own key role in both organizations, giving the company some benefit during these times that helped with their pandemic performance.

Having all three factors helps with the sequence of sensing opportunities and threats, seizing opportunities, and reconfiguring/transforming parts of the organization to exploit these opportunities. Therefore, while I stand by the fact that each variable is positively related to my dependent variables, I reiterate that having all three, in accordance with dynamic capability theory, will optimize this improvement for businesses during a crisis.

7. IMPLICATIONS & CONCLUSION

7.1 Implications

With the use of both primary and secondary data, examining hidden champions in a global context, specifically the Newfoundland and Labrador context in Canada emphasizes that hidden champions differ from one country to another, either by their focus, approach, industry, or even their defining criteria. This is supported by the manufacturing-focus in Europe and the tech-focus in Newfoundland and Labrador. In short, this study presents both theoretical and practical implications, both of which are primarily centered around studying success in the context of crises. The theoretical implications fill various gaps in the literature, such as hidden champions in Canada, the application of the key success factors to dynamic capability theory, the application of dynamic capabilities to hidden champion research, and primarily, how the capabilities (explained through the lens of dynamic capability theory) can be used in times of crisis (aiding in crisis management theory as well). The practical implications, also centered around the findings of success during a crisis, are the takeaways that can be given to local entrepreneurs, business managers, and policy makers on how to develop and foster hidden champions that can be successful and resilient in the toughest of times, as was examined during the COVID-19 crisis. In theory, these findings should be able to be generalized to SMEs

everywhere to help build resilient hidden champions that can weather any crisis, however, because of the limited scope of the sample, it can currently only be confidently applied to the Newfoundland and Labrador business environment. Despite the intuitive nature of these variables working in a global setting (based on prior literature in different settings outside of hidden champions and crisis scenarios), to truly apply these findings to a global setting there would need to be additional data considered from firms outside of Newfoundland and Labrador.

7.1.1 Theoretical Implications

The main theoretical contribution lies in the research gap filled by the presentation of a generalizable set of success factors for Canadian SMEs to survive and find success during a crisis, with a particular focus on thriving during a crisis such as the COVID-19 pandemic. Although the primary theoretical implication of this paper is the examination of the key success factors of hidden champions during times of crisis, this paper will also provide novel contributions to the literature by combining these topics of SMEs, hidden champions, the pandemic crisis, crisis management theory, and dynamic capabilities together. This study will address not only the lack of research on global hidden champions, but it will also be addressing a newly evident gap of hidden champion and SME literature during COVID-19 and how vital the proposed key success factors are for hidden champion businesses with small and humble beginnings to find great success and in-turn thrive during a crisis. The non-German examples analyzed here become even more rare when coupled with the pandemic-era focus of this study, which is an extremely timely and vital, yet near non-existent, area in the hidden champion literature.

While the listed key success factors have been discussed previously in non-crisis contexts of business operations, this study contributes to the literature by testing these factors, using

dynamic capability theory during times of crisis, which is a novel contribution not previously explored. Further adding to the gaps filled by this study, it tests the validity of these crisis related key success factors for hidden champions, which are relatively under researched, have very little research during times of crises, and have not yet been examined during the COVID-19 pandemic. This aids theoretically by contributing to several gaps in the literatures of international business, SMEs, dynamic capabilities, and crisis management, but also aids practically for real companies struggling during the pandemic.

7.1.2 Practical Implication

Concerning this study's practical implications, this study can educate the Canadian business population and SMEs in other parts of the world on the phenomena of hidden champions, informing both business leaders and governments on the overwhelmingly positive outcomes associated with a strong hidden champion presence both for general business success as well as how to succeed in times of crisis such as the COVID-19 pandemic. Using this data to generalize the pandemic-era key success factors to SMEs (especially those in the tech industry) in Newfoundland and Labrador and other parts of Canada, specifically those who started from nothing, is the main goal this study aims to fulfill.

This study has huge practical implications for local business managers, future entrepreneurs, local businesses, and provincial policy makers. While these findings are presented as generalizable to Canadian SMEs, the specific focus for them to be applied to are Newfoundland-based SMEs with humble beginnings who may be struggling to find their place right now but strive for huge success in their industry. The contribution of proving the importance of hidden champions in Canada using the primary data also brings significant practical implications for practitioners in Canada and Newfoundland and Labrador specifically.

From the many studies conducted in the German context, it becomes very clear that the hidden champions located there are extremely successful and resilient because of their ability to make use of the key factors examined above. These criteria have been considered in other areas of the world as well, as has been highlighted above, therefore the application of these theories into a global (case study), and notably the Canadian/Newfoundland and Labrador context is both a novel and realistic contribution. This study can confirm the pandemic-era hidden champion success factors in order to push for a movement towards a stronger hidden champion presence everywhere outside of Germany, namely here in Canada, as well as help inform local businesses and the local/Canadian governments on the importance of these hidden champion strategies. This will not simply change a country's standing in the world hidden champion rankings, it can stimulate local and national economies, educate managers on new marketing strategies and act as proof that even small and medium sized firms can gain huge success in international markets both in normal circumstances as well as in the unprecedented times surrounding a pandemic. It can also act as a motivator for local governments to become more invested in educating future generations of entrepreneurs, and the importance of providing would-be entrepreneurs access to resources that build entrepreneurial skills and attitudes in students at various age groups. It is vital to give young entrepreneurs opportunities to test and apply this learning in real practical situations, such as government funded extracurricular activities where students can experiment with how to start or operate a small business. These types of resources need to be available to all high schools and colleges, and college students in business need to be given the opportunities and facilities to start a post-secondary level small business both for experience and local economic stimulation. Educating these future entrepreneurs on the key factors discussed above will help cement the future generation of SMEs in the global market long into the future,

regardless of any crises that may present itself. While starting out as an entrepreneur can be stressful, overwhelming, and leave the individual wondering where they should even start, having the proper policies in place by a government that is aware of hidden champions and willing to help foster them can aid these entrepreneurs in starting their business off on the right foot in the direction of the hidden champions archetype, and also encourage them to make preparations in relation to proactive crisis management strategies. An example of this is to adopt the born-global approach, where a business will begin their operations as an internationally minded entity straight from their inception. The findings from these NL-based firms, as well as the precedent set by hidden champions all over the world throughout the pandemic, can help inform this future generation of entrepreneurs, helping mold them into resilient hidden champions in the years to come. Therefore, it is a significant practical contribution for not just local business leaders and local governments, but business leaders everywhere, to consider the hidden champion archetype and be aware of the gold standard practices of having international capabilities, innovative capabilities, and business pivoting capabilities in order to succeed and survive a severe crisis. This presents significant practical implications for entrepreneurs, managers and policy makers if they can identify the key success factors that they currently have (in the case of policy makers, what the local business landscape is like and how to help develop hidden champions), identify and be prepared to implement the key success factors that they are currently not exploiting and learn how these factors will be useful moving into the post COVID-19 era. These learning points during and post-COVID-19 are vital for dynamic capability and crisis management theory in understanding how businesses succeeded or failed in the face of great challenges and how being dynamic in these situations was key. This can help educate

scholars and industry and help them learn invaluable lessons for the future and educate local businesses on these strategies and capabilities moving forward.

Not only is a globally case-driven hidden champion study a theoretical contribution for the literature, but practically speaking, it also opens the possibility to make managers and governments (disseminated especially to those in Canada, where the recognized hidden champion presence is near non-existent) more dynamic and more aware of the ways of the hidden champion by showing them real life success stories. They can be exposed to the overwhelming success of hidden champions, such as those discussed above and in the case study and help them be made aware of the global hidden champion key success factors during the pandemic, showing how even SMEs can become global powerhouses and survive and thrive during such unprecedentedly challenging times. This is a significant managerial implication because previous studies (Simon, 2009; Zittleman, 2019) show that Canada is severely lacking in the world rankings of hidden champions, with several sources not crediting Canada with even one single hidden champion in the whole country. This global-oriented case study and Newfoundland-oriented data can expose SMEs, potential hidden champions, and governments to the ways of the hidden champion, and how wildly successful they can be both in normal times and times of crisis.

If other Canadian SME businesses (or ideally, some local SMEs in Newfoundland and Labrador) can successfully follow in the footsteps of the German hidden champions and the local hidden champions discussed, and move forward post-COVID-19, then in the next decade we could see increases in the World's (and Canada's) exporting numbers, increases in globally oriented SMEs, as well as a spike in the world hidden champion rankings for underrepresented countries like Canada. SMEs can be the backbone of a society, as shown in Germany, therefore

they are extremely important to support, foster, develop, and have succeed during the times that could devastate a nation's economy. It is for this reason that this study pushes the importance of showing these SMEs a new way to succeed and survive a crisis like the pandemic and ensure their long-term success in the future.

7.2 Limitations

There are a few limitations found in this study, primarily related to the ongoing pandemic and the time constraints associated with a graduate thesis. The first limitation is the specific focus on tech companies. Although the specific focus on this industry was intentional because of the sectors' importance to the future of the Newfoundland and Labrador economy, I recognize that a wider range of industries could have been beneficial when it came to the generalizability of the findings. Despite this, I stand by this focus as the primary goal was to provide findings specific to this industry as it is arguably the fastest growing and most important sector in the future of the Newfoundland and Labrador economy. The second limitation, related to the first, is the specific focus on NL companies. Again, this focus was intentional as the goal of this research was to provide a set of recommendations that would be specifically applicable to local businesses and policy makers in Newfoundland and Labrador in order to aid in the revitalization of its stagnant economy. However, I recognize having a wider scope of participants from around Canada would help provide more nationally generalizable findings, which despite not being the primary motivation of this study, could be a great avenue for future research. Finally, the third limitation is the exclusion of empirically tested data using a survey instrument. A sample survey was developed, and pilot tested, but due to the global pandemic causing unforeseen time constraints and other difficulties the survey was omitted in favor of qualitative data collection. The qualitative data provided fantastic personal anecdotes of true Newfoundland-based hidden

champions, but quantitative data could help test these findings empirically. All three of these limitations are recommended to be addressed in future research, as the increased scope of the sample and the inclusion of empirical data would greatly complement the qualitative data in this report and help provide even more generalizable findings to a wider Canadian audience.

7.3 Conclusion & Future Research

Germany is the gold standard for SMEs and hidden champions, but that does not mean that hyper successful hidden champions are exclusively German, these kinds of companies can be found all over the world, like the two homegrown success stories in Newfoundland and Labrador discussed above. The ways that many unsung hidden champions and potential hidden champions succeeded throughout the COVID-19 pandemic can provide invaluable insights for SMEs everywhere, and this study specifically aims to aid those in Newfoundland and Labrador and Canada. I aim to aid these businesses in current times, in stable times in the future, and for future crises. Through the various analyses of this study, it was shown that these humble beginning types of hidden champions during the pandemic that take advantage of strategies such as having international capabilities, innovative capabilities, and pivoting capabilities will be more resilient and successful during times of crises such as the COVID-19 pandemic. The positive impact of these strategies should not be understated, as the approaches taken by hidden champions from virtually every corner of the globe can provide great aid for SMEs or other potential hidden champions during times of crises and can provide wonderful new insights to the literatures of crisis management, dynamic capabilities, SMEs, and international business. In turn, this can also help to make Canadian and Newfoundland-based SMEs more aware of the strategies and approaches to help with encourage the hidden champion model both during and after the COVID-19 pandemic. Adopting these qualities and key success factors, these

businesses can increase the success of their business, increase their likelihood of becoming a potential hidden champion, and can set themselves up better for any future crisis that may occur. They can also increase the appreciation for these unsung heroes in the global SME market and help encourage local SMEs in Newfoundland and Labrador and Canada to adopt the hidden champion strategies like Verafin and MYSA in order to capture market share and cement their success regardless of any crisis that may occur.

Future research on this topic would benefit from a full-on empirical study that encompasses a sample made up of verified hidden champions from a wide variety of industries and backgrounds. This would allow for the measuring of any possible moderating effects caused by industry type and could provide a more comprehensive and widely generalizable approach to the topic. This proposed empirical study could be completed with the survey questionnaire I have already drafted. Ideally, the study would include hidden champions from a variety of countries (or other Canadian provinces) in order to measure any variance that may occur based on country of origin. Thirdly, this future research would also benefit from a follow up study after the COVID-19 pandemic has ended. The suggested key success factors have so far proved to be effective in ensuring resilience and success during these crises, but a longitudinal approach that measures if SMEs maintained these approaches after the pandemic ended and how the implementation of these strategies post-pandemic may affect their success in the future would provide extremely interesting and novel insights for the dynamic capability's literature.

I hope that this paper increased your understanding and appreciation for hidden champions, how valuable their strategies can be in times of crises and can make people recognize their value in society despite being generally small and unknown businesses.

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APPENDIX

Appendix A: 2019 Known Hidden Champions by Country Ranking (Zitelmann, 2019)

Country	Number of Hidden Champions
Germany	1307
USA	366
Japan	220
China	84
Italy	76
France	75
UK	67
Korea	23
Russia	14
Spain	11
Total worldwide	2734

Appendix B: Hidden Champion Literature – Key Articles

Title	Author	Key Findings/Description
Internationalization strategies of hidden champions: lessons from Germany	Audretsch, Lehmann, & Schenkenhofer (2018)	Success of hidden champions is driven by product type and effective strategies. Niche strategies allow them to lock in specific customer segments. Enter markets through wholly owned subsidiaries to maintain control and using highly skilled, highly trained workers.
Hidden (SME) champions: the role of innovation and strategy	Blackburn, Merrilees, Tiessen, & Lindman (2001)	The analysis of the capabilities with the cases shows that all constructs were related to the success of the hidden champions. These constructs are: 1) Clear global vision (niche) 2) Capabilities (r&d, adaptability, etc.) 3) Strategic drivers (innovation, relationship marketing) 4) Value proposition (superior products) 5) Customer interactions
Why are German companies so good at weirdly specific things?	Freitag et al. (2019)	The importance of choosing, focusing on and defending your niche in the market and how it can lead to the success experienced by German hidden champions.

<p>Japan's Hidden Champions Hold the Key to Revitalization of Regional Economies.</p>	<p>Hosoya (2009)</p>	<p>The importance of hidden champions for a country for such things as economic development, job creation, encouraging innovation, and product development/innovation. Also, hidden champions can be supported and encouraged by appropriate government policies to aid in targeting and attaining market niches and increasing organization networks.</p>
<p>Hidden champions and unicorns: a question of the context of human capital investment</p>	<p>Lehmann et al. (2018)</p>	<p>This reading goes over the concept of hidden champions and compares hidden champions to unicorns (examples like tech companies in Silicon Valley).</p>
<p>Is America encouraging the wrong kind of entrepreneurship?</p>	<p>Litan & Hathaway (2017)</p>	<p>The phenomena of two kinds of entrepreneurship, productive and unproductive and how each can affect the industry and the economy. How the US can encourage entrepreneurs to cultivate innovation and be productive.</p>
<p>International strategies of non-dominant firms</p>	<p>Mascarenhas (1986)</p>	<p>How non-dominant firms gain success through non-direct competition with dominating large organizations. Findings show that using international strategies or niche differentiation strategies were common between all cases for finding success without direct competition.</p>
<p>What's Driving Superstar Companies, Industries, and Cities?</p>	<p>Manyika, Ranaswamy, & Birshan (2018)</p>	<p>Superstar firms created 80% of the economic value in the sample, and the top 1% created 36% of the value. While the bottom 10% destroy as much economic value as the top 10% creates. Superstars were more involved in international business than non-superstars.</p> <p><u>Characteristics of superstars:</u> they spend 2-3 times more intangible capital on r&d, higher foreign revenue, rely more on acquisitions and inorganic growth. Size alone is not a sufficient indicator.</p>
<p>Hidden champions: Lessons from 500 of the world's best unknown companies.</p>	<p>Simon & Simon (1996)</p>	<p>Simon looks at 500 hidden champion companies and examines them and how they operate in the global market to garner such massive success while keeping a low public profile. He examines the similarities and success factors of these hidden champions.</p>

<p>You Don't Have to be German to a Hidden Champion</p>	<p>Simon (1996)</p>	<p>Simon takes the phenomena of hidden champions and attempts to look at it in a lens wider than just the German context, by examining how hidden champions can exist outside of Germany and lists several cases of such.</p>
<p>Hidden champions of the twenty-first century: Success strategies of unknown world market leaders.</p>	<p>Simon (2009)</p>	<p>A sequel to his previous book on hidden champions (1996), Simon examines the changes to the nature of hidden champions with the surge of globalization. He also looks at over a thousand worldwide hidden champions and examines what similarities they share and what makes them successful.</p>
<p>Hidden Champions One Minute: 7 Lessons of the Hidden Champions</p>	<p>Simon (2016)</p>	<p>He provides a model depicting the main lessons concerning their form and success. The core of the model is strong leadership and ambitious goals. The second layer consists of depth, innovation, and high-performance employees. The outer layer consists of global orientation, focus on niche, competitive advantage, and closeness to customer.</p>
<p>The Secrets of the Hidden Champions</p>	<p>Simon (2017)</p>	<p>Key Success factors for Hidden Champions: Innovativeness, Manufacturing base, Cost competitiveness (wages relative to productivity). Why are hidden champions so successful? 1) extremely ambitious goals 2) focus combined with depth 3) strategies for globalization 4) innovation. Market leaders innovate, not imitate.</p>
<p>Determinants of Hidden Champions - Evidence from Germany</p>	<p>Schlepphorst, Schlömer-Laufen, & Holz (2016)</p>	<p>Experiment supports that R&D, international business activities, and high levels of ambition to maximize market share have strong positive relationships with the likelihood of being a hidden champion. Service and distribution companies are less likely to be hidden champions when compared to manufacturing organizations.</p>
<p>The German miracle keeps running: How Germany's hidden champions stay ahead in the global economy.</p>	<p>Venohr & Meyer (2007)</p>	<p>Even a decade later the firms continue to prosper with a family-owned approach, strong external management, niche market strategies, and a focus on operational effectiveness. Scholars and business leaders from other high-cost countries should use Germany as a source to learn how to succeed globally.</p>

<p>Greek hidden champions: lessons from small, little-known firms in Greece</p>	<p>Voudouris, I., Lioukas, S., Makridakis, S., & Spanos, Y. (2000)</p>	<p>Identifies possible Greek companies that could be considered hidden champions, looks at the relevant criteria for the Greek context, and examines the factors that contribute to the success of these Greek hidden champions. Factors include market served, customer relationships, innovativeness, leadership, focusing on narrowly defined markets, and strong customer service.</p>
<p>How do hidden champions differ from normal small and medium enterprises (SMEs) in innovation activities?</p>	<p>Yoon (2013)</p>	<p>Compares hidden champions to non-hidden champions. Hidden champions focus on market initiative and globalization to gain success with their innovation activities. A focus on market-oriented and global strategies with technological competitiveness.</p> <p>Sometimes they hide their technological superiority to hide in a niche market.</p> <p>A high focus on high levels of globalization of products and services.</p>
<p>The effects of entrepreneurial proclivity and foreign market.</p>	<p>Zhou (2007)</p>	<p>Looks at the foreign market knowledge in relation to the success and speed of entrepreneurial internationalization.</p>
<p>The Leadership Secrets of The Hidden Champions.</p>	<p>Zitelmann (2019)</p>	<p>Review of the hidden champion topic: Germany leads the world in the number of hidden champions and the per capita exports (USD\$) from 2009-2018.</p> <p>They key to their success is in their leadership. Unity of person and purpose (staying with the company long term), single mindedness, fearlessness, stamina/perseverance, inspiration of others.</p>