Professional MBA
Entrepreneurship & Innovation

Pension Dilemmas for Expatriates: An Analysis of Need Structures and Potential Solutions

A Master's Thesis submitted for the degree of
“Master of Business Administration”

supervised by
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Vienna, 12.07.2020

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Affidavit

I, **MAG. CAROLIN BRUNNER**, hereby declare

1. that I am the sole author of the present Master's Thesis, "PENSION DILEMMAS FOR EXPATRIATES: AN ANALYSIS OF NEED STRUCTURES AND POTENTIAL SOLUTIONS", 111 pages, bound, and that I have not used any source or tool other than those referenced or any other illicit aid or tool, and
2. that I have not prior to this date submitted the topic of this Master's Thesis or parts of it in any form for assessment as an examination paper, either in Austria or abroad.

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Acknowledgement

To Georg and my Mother, without whom I would not have been able to write this.

For my Father, who is smiling down from Heaven on us.

Carolin

Abstract

Purpose

The purpose of this thesis is to examine a market opportunity with the Market Opportunity Navigator by Marc Gruber and Sharon Tal in order to discover and develop a product fit for a specific market, namely for self-initiated expatriates in the Asia Pacific region needing to fill their pension gaps after living and working away from their home country. Since the trend for self-initiated expatriation has risen to currently 80% of the expatriate workforce in the APAC region, the lack of financial education may pose some risks regarding pension benefits and other long-term financial implications. This thesis explores how to ameliorate this problem and develop a solution for it.

Design/methodology/approach

The approach of exploring the market opportunity is done with the Market Opportunity Navigator, in combination with scientific research, market research, surveys and interviews.

Findings

Findings have been that previous to this thesis there has not been any scientific research done on the financial implications of self-expatriation, neither short term nor long term. Another finding has been that there is a need and demand for financial education for the specific situation of self-initiated expatriates, the details of which has been drilled down and refined through surveys and interviews.

Research limitations/implications

Limitations of the research were the fairly small survey pool which should be representative enough for the thesis, yet more deep dive must be done in the future. The methodology does not take current the extreme political and pandemic situation into account, which will have an influence over the next 24-36 months.

Practical implications

This thesis poses a thought stimulus on the situation of the self-expatriated, who may be financially at risk in old age if no provisions are taken. A strategy to reach this community and help with long term, low cost solutions is proposed in this thesis as well as the consideration of continuing research on this topic.

Originality/value

A first step has been done in order help self-initiated expatriates in giving guidance on financial pitfalls when working abroad without paying into the home country's or local pension scheme. So far there has been no scientific research on this topic, neither about long term implications, loss of retirement income, tax implications or alternative solutions. The originality lies therein that this topic needs further research and solutions.

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Glossary & Abbreviations

AE – Assigned Expat

APAC –Asia Pacific Region

CPF – Central Provident Fund, Singapore pension scheme

Fragmented Benefits – Receiving pension benefits from several countries

MPF – Mandatory Provident Fund, local Hong Kong Pension scheme

MVP – Minimum Viable Product

SIE – Self initiated expat

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1 *Introduction*

In this day and age, the world is globalising itself at an exponential rate. The fast-growing economies of world cities like Singapore, Hong Kong or Shanghai have created unprecedented conditions for the demand of highly skilled workers in both the private and public sector. For individuals, world cities have become the 'global elevators' for career development and wealth creation (Beaverstock, 2012, p. 1340). Over the last 35 years, the highly concentrated, geo-economic reach and connectedness of world city corporate economies, particularly in banking, finance and professional services, have created the demand conditions for a new breed of highly skilled, talented and mobile worker who is required to engage in transnational working practices within the firm and its client relationships.(Beaverstock, 2007, p. 3)

Due to the ever-growing popularity of the expatriate lifestyle, the label expatriate has been increasingly applied to and used by persons who do not fit the classical definition of company-initiated expatriation, meaning having been assigned to a post by a company. These individuals have expatriated themselves instead of being assigned abroad. In this context, self-initiated expatriates have been discovered as a growing, yet under-researched population of the global work force.(Roth and Dana, 2015, p. 2)

Living abroad by self-initiated expatriates often does not have a set time frame, unlike the classic expatriate sent by their company or embassy, with a high chance of moving to other countries or staying much longer than anticipated. The reasons are numerous; many expats have grown up bilingual, have two or more nationalities, have grown up abroad and want to recreate the experience or are TCK (Third Culture Kids) and cannot wholly identify themselves with only one culture or nationality. (Kwon, 2019, p. 113)

Another reason for self-expatriation may be the search "greener pastures" in terms of economics. In 2012 (three years after the stock market crash of 2009) the author herself has graduated LMU University of Munich, and while finding employment in Germany was nearly impossible, looking at the other side of the planet, options were rife in Singapore. There is a high possibility that the economic crisis in 2008 has had a strong impact on the increase of self-initiated expats, not because of the previously mentioned reasons but purely economic ones. (Andresen, Biemann and Pattie, 2015, p. 13) The Asia Pacific region for instance, has recovered more quickly from the stock market crash and with a jump in demand for highly skilled workers, had a strong pull effect to the Western hemisphere, where young professionals sought out better chances than in their home countries.

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For employers and policymakers, in the race to be highly competitive on a global stage and to quickly recover from the crash, the requirement to attract and retain highly skilled, transnational experienced labour has never been so important in the global 'war for talent'. (Faulconbridge *et al.*, 2009, p. 803)

Highly skilled labour is the medium by which capital is generated, networks created, connecti ons made, and cosmopolitanism replicated through its embodied information structures, social ties and network. In a metropolitan context, highly skilled international labour migration, whether permanent or not, is essential for world cities to remain competitive in a global hierarchy or international world city index. (Beaverstock, 2011, p. 240)

Expatriates of many nationalities in these cities experience a privileged life. Most work in the central business district in the knowledge economy, such as the financial or civil districts, or are located in industrial/technological hubs with 'state with the art' design. (Beaverstock, 2011, p. 241)

Now, beginning of 2020 the Corona crisis which has spread rapidly around the globe and has left many people in dire situations, many who have lost remarkable amounts of money in the current stock market situation, expatriates have not been exempt from this phenomenon and will take a long amount of time to recover the incurred losses.[1]

Even without the crisis it is difficult to plan ahead, especially with a lack of financial education and living abroad. This thesis will elaborate on the problem of expatriates flocking around the world, to further their careers, explore the world and make a name for themselves, but oftentimes overlooking some very essential pitfalls. The author herself has been in the situation, having grown up, studied and worked in several countries. After watching a documentary about old age poverty, she realised that she will not be any better off if no future financial planning will be done. Many self-initiated expatriates share the same fate, and thus the idea was born the set up a company that will help expatriates around the world take care of their finances in an ever-changing world and without the reliance on government schemes.

As expatriates are exposed to a very specific kind of risk in their retirement age, a market opportunity to reduce or protect themselves from this risk will be explored in form of the Market Opportunity Navigator developed by Sharon Tal and Marc Gruber (Where to Play by

[1] Statista. 2020. *COVID-19 Pandemic - Percentage Of Income Loss 2020 | Statista*. [online] Available at: <https://www.statista.com/statistics/1108072/percentage-of-income-loss-due-to-the-covid-19-corona-pandemic/> [Accessed 3 July 2020].

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Gruber and Tal, 2017). As will be more elaborated later in the case study, expatriates who work on local contract conditions suffer from the risk of "fragmented benefits" (McNulty, Rason and McGrory, 2015, p. 4) while living and working abroad and are not protected by a company "expatriating them" to another country and taking care of their health insurance, pension benefits etc. and will either receive no pension benefits or scattered benefits from several countries, with an unclear amount of money by the time retirement age has been reached. As a self-initiated expatriate these risks must be ameliorated by oneself, which might be complex when one is young and not aware of what the implications are. Therefore, there is an opportunity to firstly help protect against certain risks, and secondly help build wealth, even while living and working abroad under somewhat precarious circumstances. This thesis will explore several options through the Market Opportunity Navigator, analyse market opportunities, market conditions, political and economic situations, and offer and discuss potential solutions at the end.

2 *Theoretical background*

In the following chapter the theoretical background of the Market Opportunity Navigator will be illustrated and explained, as well as the strategies for overall market insight and competitor analysis. The proposed strategy then will be applied to the case study in chapter 6 of self-initiated expatriates who need to consider long term financial planning and investing for their retirement.

From a theoretical standpoint, founding a new company can be a daunting venture. There are many obstacles to overcome, with actually finding the right market opportunity being the first and most important step. There are many business books that describe how to analyse a market, segment it and target it, however it is rarely discussed whether a company is actually going into the right direction or if it is overlooking other crucial market opportunities. (Gruber, MacMillan and Thompson, 2012, p. 281)Many entrepreneurs suffer from their own myopia, since due to limited knowledge outside of their specialization they might not select the most favourable market for their product or service. (Gruber, MacMillan and Thompson, 2008, p. 1663) Serial Entrepreneurs on the other hand, are more aware of their lack of knowledge than first timers and will take into account the experience of people in other fields in order to find the perfect venture-market fit. (Dencker and Gruber, 2014, p. 1048) Through the process of market opportunity analysis based on the Market Opportunity Navigator, the

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potential market opportunity of helping self-initiated expatriates cover their pension gaps will be deeply analysed. The Market Opportunity Navigator is based on the research of Marc Gruber and Sharon Tal, and is the first step when beginning to work with the Business Model Canvas.(Where to Play by Gruber and Tal, 2017; Osterwalder and Pigneur, 2020)
The premise of most start-up guides is to find an opportunity and concentrate on it with "laser sharp focus", yet many times there has been no thorough research done whether the start-up is going into the right direction at the time, where there is a product market fit or if the idea for a market opportunity might not work better in a different market. Therefore, Marc Gruber and Sharon Tal advocate for a more agile and "spread out" approach in order to be flexible in case the market conditions change drastically (as is the case with COVID19 for example).
In order to find the right fit, there are several steps that need to be taken. The first thing is to do delinking and re linking the capacities one has at hand, in order to look at each and every capability and ability in their own right and consider where the aforementioned can be applied.

2.1 Theoretical Strategy

2.1.1 De-Linking

In order to begin the process of finding the right market opportunity one must look at each and every capability separately through de-linking from each other.
De-Linking involves viewing technology in its own right, as distinct from its embodiment in products. It involves abstracting and identifying the knowledge as such from the product in question where it actually integrates the actual competence. Decoupling the technology-product connection means moving away from the existing products and pinpointing which technological competencies are integrated. This is also important to determine the fungibility or exchangeability of the technology, which means that some capabilities may be used in a completely different context than originally anticipated. (Gruber, MacMillan and Thompson, 2008, p. 282) This will also be visualised in one of the worksheets of the Market Opportunity Navigator.

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2.1.2 Re-Linking

After looking at all capabilities and technologies in their own right, the different aspects are relinked together in order to find more opportunities.
Re-Linking includes creating the market-related infrastructure needed to attract different groups of consumers and designing physical or intellectual property goods. This infrastructure to serve a particular group is called "customer competence" and involves resources like knowledge of consumer expectations, requirements and sourcing processes, market access to delivery and pricing, client loyalty or franchise expressed in the company's image and its products, and contact channels of knowledge sharing between company and customer. Figure 1. Shows in more detail how it works. (Gruber, MacMillan and Thompson, 2008)

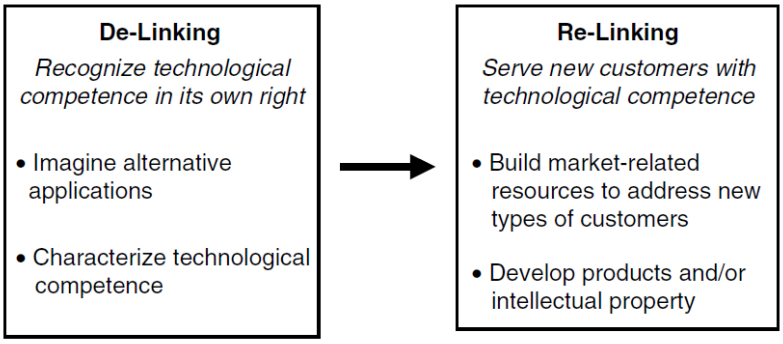

Figure 1. Technological competence leveraging

Figure 1. An explanation of de-linking and re-linking (Danneels, 2007)

2.1.3 Technological Competence Leveraging

All of the above mentioned is a part of the so-called technological competence leveraging, a term coined by Mitchell, and it is the idea that technological competencies are interchangeable and can benefit end consumers in different kinds of markets. (Danneels, 2007, p. 511) The resources are a combination of tangible and intangible technically related resources and may be recombined in order to fit into different markets. (Gruber, MacMillan and Thompson, 2008, p. 282) Different applications can be supported by technological competence, as defined by a package of technological tools. One technology is ideal for many commercial applications and therefore can support many products. (Danneels, 2007, p. 512) There are several kinds of markets and all of them should be considered when exploring

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opportunities in a new venture or when a large company is planning to shift their focus into a new direction. Yet, if the technological competence leveraging leads to perfecting one part of the business to the satisfaction of one segment of customers, things might move in the opposite direction and could lead into the customer competence trap.

2.1.4 Customer Competence Trap

The lack of proper delinking and relinking often leads to the so-called customer competence (often also called *competency*) trap, wherein main customers are the driving force of innovation of a company, therefore only innovations pertaining to the main customers will receive resources. However this may lead to failure of the company if the environment changes significantly in any way, (Ghezzi and Cavallo, 2020, p. 521) since existence of competence to service existing clients and the absence of competence to achieve access to potential customers both limit the use of technologies; and resource management processes are the organizational methods by which these competences exercise their power.(Gruber, MacMillan and Thompson, 2012). As can be seen in Figure 2., the effectiveness in pursuing exploration projects strongly diminishes when peak competency in one technological capability has been reached. This is an aspect that is rarely considered by a start-up, which lead it wedging itself into a very specific market niche and being overly dependent on existing customers and therefore are not able to pursue new projects or innovate into a different direction.

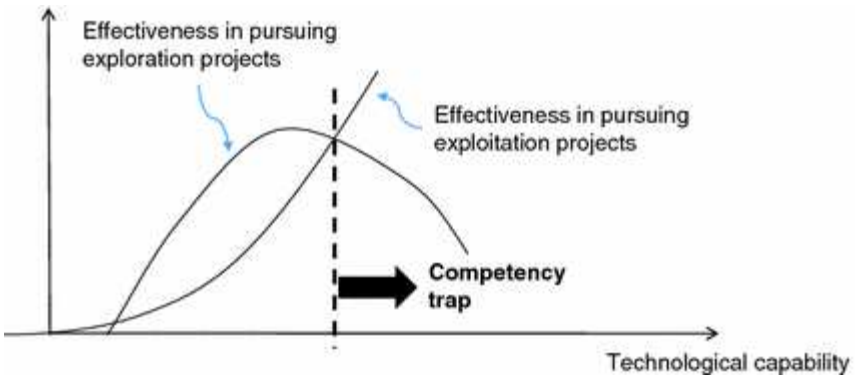

Figure 2. Technological Competence Leveraging& customer competence trap (Cantamessa M., 2016)

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2.2 Markets and their Identification

2.2.1 Types of Markets

After de-linking all abilities and technologies from one another, it is time to consider in what kind of market the company should be set up, therefore market research is the next step. A market is just any group of real or prospective purchasers of a product and there are 3 major market types:

1. The Consumer Market: The consumer market involves individuals and households that buy products for their own use or benefit. The two popular categories of consumer goods are medications and food products.
2. The Industrial Market: Individuals, groups or organizations purchasing the product or service for direct use in the manufacturing of other goods or for use in their everyday operations.
3. Middlemen or Intermediaries: such as wholesalers and distributors, who buy and resell finished goods for profit.(Kim and Canina, 2010)

In these three categories there are many subcategories and segments, which will be discussed later, but it helps to get an initial grasp on the direction the newly founded company should take, therefore the exact target market needs to be identified.

2.2.2 Market Identification

After deciding which kind of market to pursue the next step is to consider the opportunities in said market. Discovering the market opportunities, it is very important to keep a broad view and wide search. It is a well-established fact in entrepreneurial research that there has been a gap between theory and practice, especially in the start-up/company founding world. This so-called research practice gap describes practitioners not paying attention to current research and researchers rarely turning to practitioners for inspiration or verifying their theories. Closing the research practice gap however is difficult since entrepreneurs seldom go into science and the other way around.(Shepherd and Gruber, 2020, p. 1)

The attempt to close the research practice gap resulted in three books:

- The Market Opportunity Navigator in the book “Where to Play” by Marc Gruber and Sharon Tal. It provides a wide-lens perspective to find different potential market

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domains for the innovation in question, before the founder zooms in and designs the business model or the minimal viable product.(Gruber and Tal, 2020)

- The Lean Start-up which originated through Blank in 2013 who sought to make venture creating less risky. Many start-ups start with an idea and spend time, effort and money into perfecting their product without having properly researched their market and customers. (Ries, 2018)
- The Business Model Canvas, a model created by Osterwalder that helps entrepreneurs design their business model and develop a testing hypothesis. (Osterwalder and Pigneur, 2020)

The Market Opportunity Navigator is a building block for finding the right markets and the opportunities within these and should be worked through before using the Business Model Canvas or heading onto the Lean Startup.
Entrepreneurs are often too optimistic or deep set on their defined target market and might have to restart their initiatives after a crash and turn with their original strategy, therefore it makes sense to deeply analyse all opportunities that lie within these markets before setting up a go to market strategy and apply for funding.

2.2.3 The Theory of the Market Opportunity Set

The first worksheet in the Navigator is the Market Opportunity Set which helps entrepreneurs not only how to play but where to play first, in order to find the exact niche where a company would find the right kind of customers, which may be in several markets as opportunities.
It is worth noting that after recognizing multiple opportunities, entrepreneurs may indeed attempt to understand the relative attractiveness of such opportunities and may also acknowledge the various rates of uncertainty connected with each opportunity. The relative attractiveness entails that some opportunities are more attractive in some markets than in others, and that every opportunity entails with their own uncertainty risk. It is necessary for entrepreneurialism to advance awareness of how uncertainty conditions vary between opportunities.(Shepherd and Gruber, 2020, p. 4) Furthermore, based on the assumption that discovering a market opportunity set often influences the probability that a venture would diversify and therefore the growth paths that an enterprise will likely leverage, they may be able to leverage multiple business opportunities, often recognizing that key early decisions (e.g. selecting a brand name that could suit several markets, recruiting more multi-talented

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staff, etc) would later improve the versatility of their organization. Identifying an Opportunity Set will help entrepreneurs engage in multiple experiments at the same time, therefore cutting the cost of "restarting" in a different market domain. This is referred to as "hypothesis testing". (Shepherd and Gruber, 2020, p. 16)Testing one hypothesis after the other might not be feasible for every entrepreneur, however the Market Opportunity Set will help discover all opportunities the entrepreneur has within reach and in case they may need to deviate from their course, will already have an alternative market opportunity at hand. These alternative market opportunities are also called "option investments" and are staged (as in tested) in order to identify whether one option shows good market potential or not. If the hypothesis of a specific market option shows good potential, resources will be reallocated towards this option. If the hypothesis shows the market option goes towards a positive future, the entrepreneur could make further investments (time and financially); this is called *exercising the option.* (Shepherd and Gruber, 2020, p. 6)

It is found that start-ups with broader market options have an easier time changing their business model and with changes overall.

The second step in the Market Opportunity Navigator is to choose the most promising option, however due to the founders' own biases, the question on what constitutes the most promising option deems to be a research topic in itself. Looking at several studies, this depends highly on the founder's own experience.(Dencker and Gruber, 2014, p. 1048)

2.3 Decision Making and Evaluating depending on a Founder's Background

As had been previously researched, the outcome of a market opportunity set evaluation depends highly on the background of a potential founder. The subjective belief of an entrepreneur that an opportunity renders action and will offer value to a consumer or market is the key driver to the founding of a new enterprise. However, the heterogeneity of the backgrounds of founders hat not deeply been researched yet, and how it influences market opportunity pursuit. Yet, their subjective judgement of opportunity attractiveness e.g. their opportunity "prototypes" plays a large role why some entrepreneurs will find a specific market opportunity attractive, while other will not engage in a certain direction. (Baron and Ensley, 2006, p. 1340)

Herein lies the issue of heterogeneity: People with experience in a certain domain may vary in their cognitive representations (mental models) of those definitions, as they interpret knowledge and understand bits of information in more theoretical and nuanced ways than

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people with little to no expertise in that area. These mental models can be viewed as *generalized interpretations* of the environment that underpins the views and evaluations of an individual and, in particular, assessments on the attractiveness of opportunities. (Dencker and Gruber, 2014, p. 208; Kim, Gruber and Brinckmann, 2015) People with a background in different fields have specific expertise and experiences in addressing challenges, so they often have common blind spots. Even though the backgrounds of potential founders can be very diverse, Gruber et al have pinpointed and narrowed it down to the following three backgrounds. (An exception could be made for the public or non-profit/not for profit sector, however the number of founders coming out of this field is either unknown or negligible):

- Management
- Technology
- Entrepreneurship (Kim, Gruber and Brinckmann, 2015, p. 208pp)

2.3.1 Management

In their market opportunities assessments, individuals with management expertise would be more prone to competition-related aspects than individuals without this form of expertise. This focus on competitive success and the attainment of competitive advantage is likely to be increased in their daily work as managers, as the performance of their firms in relation to other companies in the industry is a primary indicator of their own performance at work.(Kim, Gruber and Brinckmann, 2015) This in turn means there could be an oversight in product related aspects.

2.3.2 Technology

Technological experience represents a specialized, functional type of experience . Individuals with technology experience would be more responsive to product-related dimensions in their market opportunity evaluations than individuals with no such experience.(Kim, Gruber and Brinckmann, 2015, p. 220), which means their knowledge on cash generation, business development and other functions are fairly limited.

2.3.3 Entrepreneurship

People with entrepreneurship experience may be more susceptible to cash generation/financial aspects in their market opportunities analyses than individuals without

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this type of experience. Experienced entrepreneurs are more sensitive to 'positive cash flow generation capability' and 'revenue generation speed.' They are causes and conditions related to the actual start and run of the product. Their opportunities for prototypes do not include features such as novelty or competitive superiority, which might also suggest that they do not stress these attributes, or they might not take product related aspects into account. (Kim, Gruber and Brinckmann, 2015, p. 211)
Overall it can be said that people with an entrepreneurial and management background will have more balanced opportunity preferences than people with a technology-only background, as aspect that needs to be considered when starting a new venture.(Kim, Gruber and Brinckmann, 2015, p. 221)

These three different kinds of backgrounds heavily influence the decision making process and need to be taken into account with the beginning of a venture, in order to diversify the backgrounds of the founders or taking in advice from various sources.

2.4 Discovery & Creation

Yet not only the different backgrounds play a role, the process of researching an opportunity itself has two different strategies that are discussed in the following chapter.
According to economic theories, business opportunities are market imperfections which can be exploited by certain individuals in order to gain economic benefits and serve customer needs at the same time.(Shane and Venkataraman, 2000, p. 218) Since these individuals need to commit substantial amounts of time, energy, money, etc, they need to approach a market discovery or exploration strategy in order to find the right opportunity for them. There are two types of approaches when exploring certain market opportunities:

- The Discover Approach
- The Creation Approach (Alvarez and Barney, 2007, p. 207pp.)

2.4.1 The Discover Approach

In the discovery process potential company founders pay close attention to their environment, market conditions, political sentiment and many other factors; with these they will try and find market opportunities and exploit them for their own economic benefit. Also, since these changes are objective and observable, potential founders have a high tendency to have

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sufficient understanding on the key measures of specific opportunities when determining the potential for creating value (Shane and Venkataraman, 2000, p. 222). Because opportunities are discovered and critical information signals are obvious, people will spend limited cognitive or analytical effort on opportunities related data. (Kim, Gruber and Brinckmann, 2015, p. 17; pp.Alvarez and Barney, 2007, p. 207)

2.4.2 The Creation Approach

The creation approach is somewhat different, as potential founders come into the process with very limited information but with a set of ideas that need reconfirmation in reality. They often possess very little to no information on the existence of a specific market, if revenues can be achieved, how to price the product or service and if customers are willing to pay, therefore they need to create the opportunities with the information they have at hand.
The information can only be obtained through research, which means interacting with other entrepreneurs, engaging with potential customers, getting market feedback, testing minimal viable products; they are therefore "flying blind "and need to constantly readjust their course, in order to fine-tune their business model. (Alvarez and Barney, 2007, p. 208 pp.)

Based on the theories above, the Market Opportunity Navigator can take on very different forms, not only depending on the background of each and every individual, yet there are common features apparent. A peculiarity in the common features is that people with a technology background (without managerial or entrepreneurial background) will have a more "rugged" evaluation of a business opportunity, as they lack the financial and managerial aspects of a new venture. This means that without any prior business experience, the evaluations will be more product based, whereas cash generation and management structures rely on educated guesses and are not very detailed as opposed to people with a management or entrepreneurship background.(Kim, Gruber and Brinckmann, 2015, p. 218 pp.)
With this background, the theory behind the development of the Market Opportunity Navigator has been founded. Since there are many backgrounds a founder could have, the creativity and idea generation need to be funnelled into a certain direction, therefore a strategy needed to be set in place.

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3 *The Market Opportunity Navigator*

The Market Opportunity Navigator poses challenging questions to the budding entrepreneur and there are several steps to it. According to the book "Where to Play" by Marc Gruber and Sharon Tal there are several steps that need to be taken and are all condensed in the so-called Market Opportunity Navigator, consisting of three worksheets. This system is based on research instead of personal experiences; as opposed to other publications which are written from an author's personal angle, yet these methods have not been substantiated by scientific research (The 100$ Start-Up, The 4 Hour Work Week, as an example). Since every person is inherently biased, the Market Opportunity Navigator will help to look in other directions which have previously either been discarded or have never been considered before, and help a founder overcome those biases.

The Market Opportunity Navigator consists of three worksheets, which will be worked through in the case study below:

- The Market Opportunity Set
- The Attractiveness Map
- The Agile Focus Dashboard

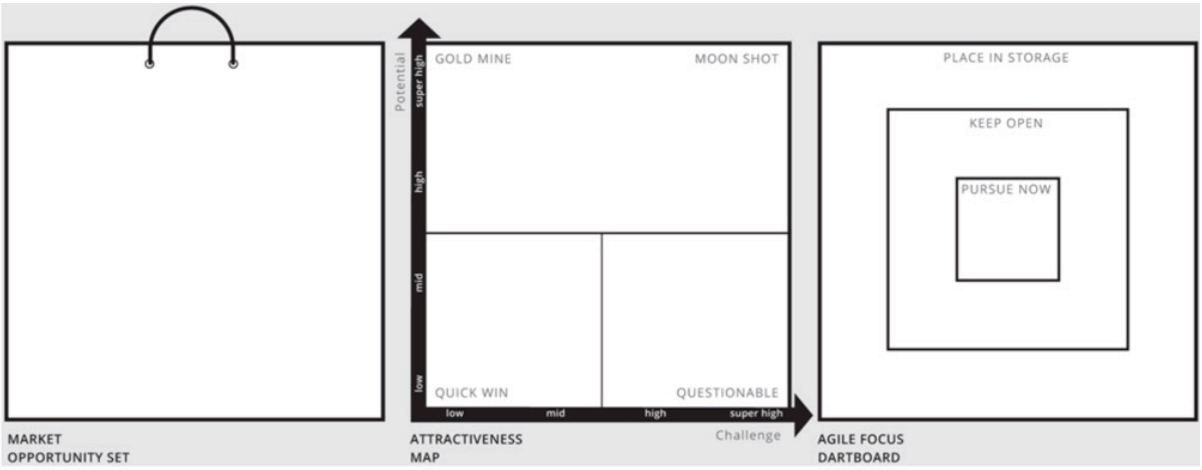

Figure 3. The Market Opportunity Navigator Worksheets (Where to Play by Gruber and Tal, 2017)

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3.1 What is a Market Opportunity Set

Any combination of technologies and customers is a market opportunity and the development process allows one to think deeply in various aspects: future solutions and potential clients. The need is the connection which binds the two ends and applications or products are developed to satisfy these specific customer needs. The main point in the first worksheet is to think broadly (De-Linking): it will be of vital importance to think across a person's own biases and personal boundaries and expanding on mental models outside of a potential founder's experience. This is especially important if the business opportunity is not discoverable through exogenous processes but needs to be deeply researched through a creation process.(Kim, Gruber and Brinckmann, 2015, p. 207) (As opposed to a discovery process) In this part of the process, Cognitive Flexibility, the mental ability to develop a variety of viewpoints, is a key ability on whether an entrepreneur will be able to identify enough market opportunities. (Shepherd and Gruber, 2020, p. 7)

Firstly, unique abilities and technologies must be taken into account, as well as other technologies outside of the firm which they can be combined with. It is not always necessary to develop all parts of technology in-house and many times outsourcing certain solutions will improve speed-to-market.(Yau and Murphy, 2013, p. 5)

Unique capabilities lay the foundation on which one would then identify market opportunities, recognizing what they can do, what characteristics they have and what functions they can perform is of crucial importance (Gruber and Tal, 2017, p. 34) Technological elements and abilities should be described in the most generic manner since only then they will be able to form the foundation of the broadest form of general utilization.

The second step, and possibly the most important part, is to consider all elements of the business idea as separate entities and decoupled from the original targeted market opportunity. This is where the previously described process of technological competence leveraging comes in. Through De-linking it is possible to look at every single aspect of an idea independently and personal and technological abilities, disassociate them from each other and consider how each may apply to different markets and consumers.

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3.1.1 Discovery

As mentioned in the chapter before, the next step is to discover if a real customer need truly exists, and whether the own currently existing unique capabilities are able to satisfy the customer need or if there already existing solutions. An existing solution does not necessarily a negative, it proves that a market and a customer base is viable. A competitive analysis will later provide deeper insight on existing solutions, whether the market is saturated and if the Unique Capabilities add a feature to the market that has not existed to this point.

This step poses difficulty in terms of overcoming personal biases towards a person's own experience background – escaping the prior knowledge corridor if you may.(Gruber, MacMillan and Thompson, 2012, p. 295) In this thesis it is a well-established fact that founders are fixated on their prior industry related experience to define market opportunities. Therefore, it is always of utmost importance to either diversify the founding team of a company or to seek out experts in fields unrelated to one's own in order to broaden to search scope and identify more market opportunities. Based on the figure below it stands to reason that including external sources into a search for market opportunities will have a positive effect on discovering a higher number of opportunities than when external sources are not sought after and consulted. (Dencker and Gruber, 2014, p. 1040) As can be seen in Figure 4., the opportunity variety in the de-linking phase rises in number when external knowledge has been sourced.

Figure 4 Market Opportunity Variety: Interaction Effect Between Breadth of External Knowledge Sourcing and Technological Experience

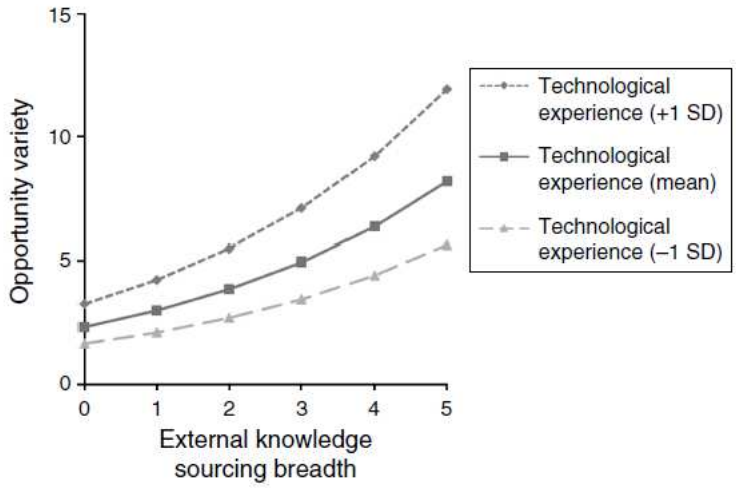

Figure 4. Opportunity Variety and External Knowledge Sourcing (Gruber, MacMillan and Thompson, 2012)

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There are certain terms for this kind of behaviour, for example the “Founder’s Myopia” or “Entrepreneur’s Bias” (Gruber, MacMillan and Thompson, 2008, p. 1663) where a founder or “agent” would only look into opportunities pertaining to their specific market expertise, in the area close to home or only considering well established companies or “obvious” local companies as rivals, which as will be explained in the coming chapters, is contraproductive in being agile. There is a difference in the search for opportunities itself, some may have their raison d'être, yet for founding a new venture they are inconducive, as explained below.

3.1.1.1 Local search

Many times founders and even large companies will search “local”, this refers to a geographic and capability wise narrow scope of market opportunities. Since it is usually the least risky and cost intensive way of searching it is the most used but will reap the least results. As an example a company will only focus on their regional or national market, whereas it could be entirely possible, their product will have international demand. Other times, certain market segments are not approached, even though a hidden demand exists.(Gruber, MacMillan and Thompson, 2012, p. 290)

3.1.1.2 Distant search

Distant search, as previously discussed, is the consideration of other knowledge and technology sources, after de-linking and re-linking, to consider a wider market opportunity breadth. Distant search provides companies with access to information that does not exist within their organizational boundaries.(Piezunka and Dahlander, 2014, p. 6; Kudesia, Baer and Elfenbein, 2015). As can be seen in Figure 5, distant search will lead to a larger opportunity variety.

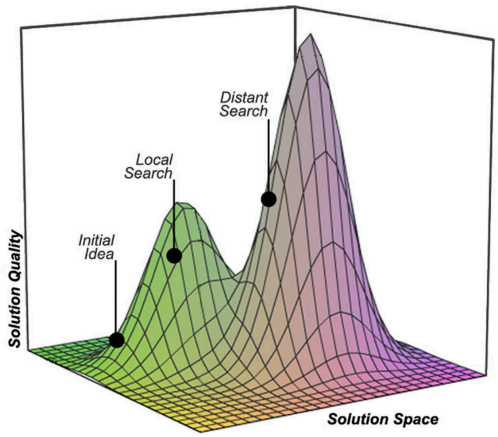

Figure 5. Search processes within a hypothetical solution space (Kudesia, Baer and Elfenbein, 2015)

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Therefore, the leveraging capacity is much higher when performing distant search for market opportunities, which is shown in Figure 6, where the diversity of a founding team renders a higher number of opportunities which can be leveraged.

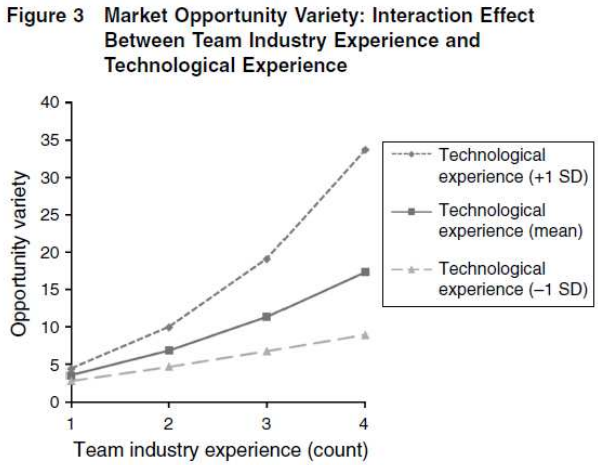

Figure 6. Opportunity Variety and Team Industry Experience (Gruber, MacMillan and Thompson, 2012)

The next step is to understand the customer/consumer market for the idea. Before even founding the company the questions of whether the consumer need actually exists must be addressed beforehand. Therefore, some market research must be done and explored whether the existing capabilities and technologies can satisfy this consumer need, and if this can be achieved even better than currently existing market solutions. The question of legal and moral obstacles should also be acknowledged.

3.1.2 Segmenting the Overall Market

After the market is identified, the next step is to segment the potential market. Market segmentation is a marketing concept that refers to aggregating prospective customers into common needs categories or segments and reacting similarly to a marketing activity. In "Where To Play"(Gruber and Tal, 2017, p. 44) this is represented in the "continents and countries" concept, where a continents is understood as a broad market domain and the countries within this market are representations of customer segments. (Gruber, MacMillan and Thompson, 2012, p. 218)

Market segmentation helps marketers to reach specific groups of consumers who differently interpret the full value of those goods and services. (Smith, 2020; Kim and Canina, 2010) Larger markets are most generally split into smaller target market segments based on regional, economic, psychographic and behavioural features:

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Figure 7. Market Segmentation (Virgillito, 2018)

3.1.2.1 Geographic

Potential customers are in a local, state, regional or national marketplace segment. In some industries climate plays a role, whether it is cooling and heating, sports, or gardening. (Virgillito, 2018)

3.1.2.2 Demographic

Potential customers are identified by criteria such as age, race, religion, gender, income level, family size, occupation, education level and marital status.(Virgillito, 2018)

A decision should also be done in whether the company will face the consumer or the business market

Consumer Market	Business Market
Age	Geographic location
Income	Size of Company
Gender	Annual revenue
Profession	Number of Branches
Education	Number of Employees
Family Size	Industry
Marital Status	Age of Company

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3.1.2.3 Psychographic

Many businesses sell goods that are based on their target audience perceptions, values, and emotions. Examples of psychographic variables are the desire for status, enhanced aesthetics and more wealth. These are the factors affecting the purchase decision of buyers. A vendor of luxury goods will appeal to a desire for status symbols from an individual.

One may even define business customers in psychographic terms. Some businesses see themselves as cutting edge or high-tech, while others see themselves as socially responsible, stable and powerful. Others still consider themselves to be innovative and creative. Such distinctions contribute in deciding the positioning of the organization and how one may use the position of the business as a marketing strategy. (Smith, 2020)

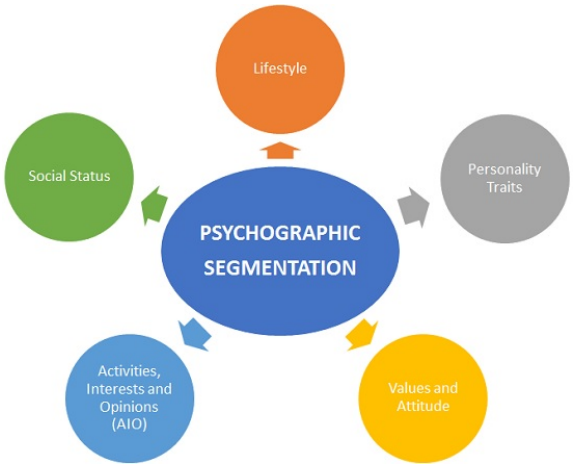

Figure 8.Psychographic Segmentation (Team, 2020)

Disadvantages of psychographic segmentation:

With many advantages, there are certain drawbacks to psychographic segmentation:

1. An excessively time-consuming method that produces largely qualitative results, which is challenging to interpret and hard to decide which action should be taken.
2. As each customer is unique, so is their psychology. Categorizing all consumers by psychographic segmentation thus is incredibly challenging.(Team, 2020)

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4 *The Attractiveness Map*

After finishing research on the Market Opportunity Set it is time to assess the relative attractiveness of every market opportunity that has been evaluated before. Not all market opportunities are of the same attractiveness, as some might generate more revenue than others, some have an easier implementation and speed-to-market, others are more scalable. The appraisal of the potential worth of an opportunity is done through the Attractiveness Map as can be seen in Figure 9 below.

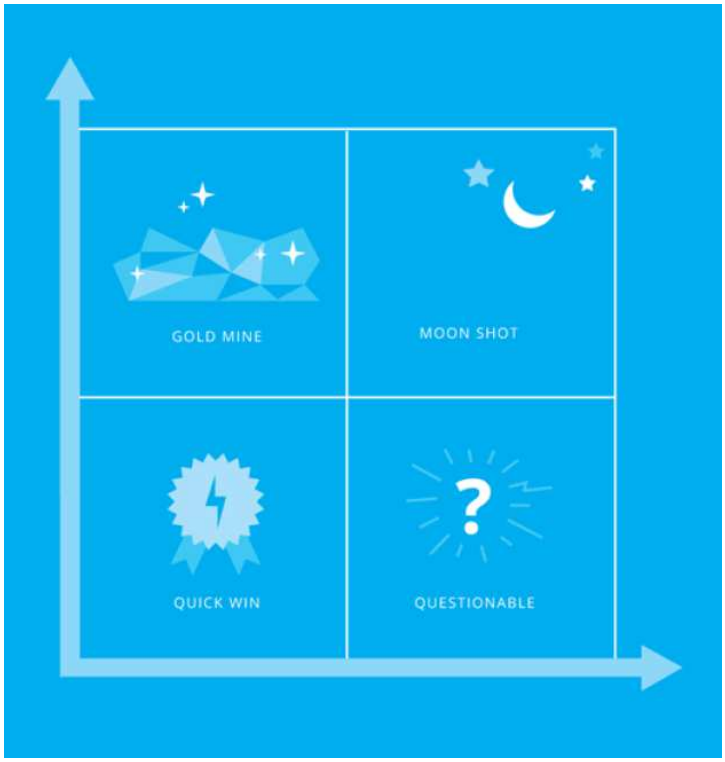

Figure 9. The Attractiveness Map (Gruber and Tal, 2017)

The Y variable describes the potential of a certain market opportunity.
The X variable describes the challenge of a market opportunity.
Within the attractiveness map are four different categories to describe the relative attractiveness of an opportunity:

- Gold Mine: This is the most desirable category as it includes a high potential with a low challenge
- Moon Shot: High potential with high challenge
- Quick Win: these opportunities pose a low challenge but also low returns

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- Questionable: the least desirable category, with low potential and high challenge. (Gruber and Tal, 2017, p. 91)

4.1 Potential

To analyse an opportunity to fit into the Attractiveness Map, the points below need to be taken into account and receive a scoring on the Y- Axis which indicates the potential of an opportunity. The following points are analysed and scored according to their weighting.

4.1.1 Compelling Reason to Buy

In order to be able to assign a market opportunity a category, the first step to do is to understand the customer's world, this is also where psychographic and behavioural segmentation plays the biggest role, as this is where the analysis of need structures is the most profound. The same goes for the business environment if the decision has fallen to target the B2B market side. Both segments need a compelling reason to buy, therefore the value creation proposal must have a potential upside that cannot be ignored. This is only feasible if there is a real unmet need in the current market situation or if current solutions do not fulfil the need to a satisfactory degree. (Anderson and Narus, 1998, p. 14)
Several questions need to be taken into account, especially what will change for the consumer with the product or service offered and what value it can offer:

- Economic → is there a value that can be estimated in financial terms?
- Functional → can speed of production be increased?
- Emotional → will it improve mental health?
- Expressive → will it help with self-actualization? (Gruber and Tal, 2017, p. 63)

Within the Attractiveness Map, extensive customer research must be done before any resources can be allocated to a market opportunity. It is therefore imperative to learn about the customer's world and therefore their need structures.
On the B2B side, it is important to learn about the specific business environment a company finds itself in. Without this research value creation will be very hard to gauge and it will be difficult to approach a potential customer without an argument for a compelling reason to buy. (Anderson and Narus, 1998, p. 12)

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4.1.2 Market Volume

The next step is to get an overview the actual market that could be behind the customers that have been analysed before.

Points that need to be analysed are firstly the size of the current market and its expected growth rate. As a founder there are three numbers that must be considered when analysing a market. They are:

- TAM - Total addressable market
- SAM - Served available market
- Target market

Estimating the target market and the TAM and SAM is a strong starting point for the Hypothesis on business growth. For sizing up the market current reports, data bases, research companies should all be consulted.(York, 2018, p. y) However, TAM can be deceiving, therefore a bottom up approach would work best for first time entrepreneurs. (Gruber and Tal, 2017, p. 77)

The bottom-up analysis consists of firstly adopting a resource-based strategy in which a company determines the requirements that need to be fulfilled to deliver a project, how much research and development might cost and how many employees are needed. After arriving at a figure, it can be determined what project needs to be done first with the resources that are at hand.

Other questions that can be asked are

- What is the projected revenue per customer?
- How many units per annum?
- How much to customers currently pay to ease an existing inconvenience?(Gruber and Tal, 2017, p. 67 pp.)

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4.1.3 Economic Viability

If the company is in its early stages it does not make sense to make a detailed financial plan, especially if this had to be done for every market opportunity. However, a good understanding of the economic potential of the market can be done by examining three key points:

- Size of margins
- Economic situations of the potential customer
- Probability of the return/loyalty of the customer

Estimation of Margins:

- Estimated price
- Cost per acquisition of customer
- Economic potential per customer (Gruber and Tal, 2017, p. 69; York, 2018, p. 8)

One thing that needs attention is the customer's ability to pay, this is especially important when it is a B2B customer, who is most likely constrained with an annual budget. It is also vital to know whether the company has the ability to wait for payment of a customer, as a corporate client often has a set payment schedule that may pay a few months after a project or product has been received. There is also the possibility of non-payment by corporate clients, and an estimation of financial shortfalls must be taken into account. (Connell, 2014, p. 17 pp.)

Every part of the market opportunity, be it market volume, economic viability and compelling reason to buy needs to be evaluated on their overall score in the Attractiveness Map on the Y-Axis, which indicates the potential of an opportunity.

Figure 10. Y-Axis (Potential) of the Attractiveness Map (Gruber and Tal, 2017)

The difficulty in assessing the weight and importance of every factor lies therein, that these factors highly depend on the specific market itself. A low market volume may get cancelled out with a very compelling reason to buy; a low economic viability could be neutralized by a high market volume. (Gruber and Tal, 2017, p. 72)

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4.2 Challenge

While one should always focus on the positive sides of a venture, there must also be a risk assessment which is called "Challenge" in "Where to Play". The challenge consists of implementation obstacles, times to revenue and external risks which are then scored on the X-Axis of the Attractiveness Map.

4.2.1 Implementation Obstacles

Firstly, implementation obstacles need to be considered. Especially the difficulty to develop a certain product or service need to be taken into account, to quickly recognize any technological hurdles, such as integrations into other platforms, interfaceability, 3rd party cooperations or the actual human resources to develop a certain technology. (Weigelt and Sarkar, 2009, p. 39 pp.; Gruber *et al.*, 2015)

Usability for the customer should be a focus, since the "human factor" is something that founders with a technological background seldom consider.(Szalma, 2014, p. 1463). Same goes for legal and regulation requirements, since rarely one has experience in copyright infringement, company set up, patent filing, data privacy regulations or compliance problems. This would be best discussed with a lawyer; however this may incur high costs.

Other difficulties a founder would usually face and need to consider before exercising a market opportunity option are anything business development related. (Bradford, Johnston and Bellenger, 2016, p. 13). Again, if one has a technology-only background, the knowledge about these topics does not come naturally. If one is not a professional in a certain market it could be difficult to gauge which distribution channels are needed, what even are the existing channels to distribute and to market and how to access them. In a similar vein, marketing costs to even create awareness or interest in a product or service must be considered and they are usually much higher than anticipated. (Bradford, Johnston and Bellenger, 2016, p. 14)

What also might not be anticipated for a new founder is how difficulty if and how funds need to be raised. This goes indirectly into marketing and business development, as a founder needs to "sell" their ideas to investors.(Hsu, 2006, p. 217) Also the amount of time and money which are required until paying customers can finance the venture is something that needs to at least taken into account and it may also be wise to consult a finance professional if this is not one's own background. (Connell, 2014, p. 17)

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4.2.2 Time to Revenue

This is one of the topics that many founders often overlook, as many costs that are incurred are not included in the overall calculation. Major milestones, like technical development, user interface, legal requirements, need to be set in a timeline and an overall estimation of when the product will be ready for the consumer. (Hsu, 2006, p. 217)

On the sales side the question how long the sales cycle would be is quite important; if it is a technology company selling into the B2B market, the sales cycles can be unexpectedly long with up to a year or even longer, and implementation may take several months until the project is live. (Bradford, Johnston and Bellenger, 2016, p. 15) Between the ready product and the first sale there should not be an unexpected delay as salaries of employees, product costs etc still need to be paid.(Connell, 2014, p. 18) On the B2B side the number of decision makers may be unexpectedly long or there may be budget constraints, (Bradford, Johnston and Bellenger, 2016, p. 16)on the consumer side there may be more than one decision maker in a household.

Another point may be payment defaulting my companies, and sudden loss of anticipated revenues need to be anticipated with liquidity to cover gaps in salaries and other expenses. (Connell, 2014, p. 17)

4.2.3 External Risks

On the side of external risks, competitors play the biggest role, therefore an intensive competitive analysis must be exercised be used for future strategy.

Definition of Competitive Analysis: there are two different kinds of context of identifying opportunities and threats→ offensive and defensive. (Kotler and Armstrong, 2008, p. 552)

The context of the offensive strategy helps companies to leverage opportunities more quickly and build on strengths. Alternatively, the defensive strategy context helps them to combat the challenge posed by competing companies trying to leverage the company's own vulnerabilities more effectively.(Kotler and Armstrong, 2008, p. 553)

By identifying competitors, companies:

- determine who their main competitors are
- build a profile for each of them,
- define their goals and tactics
- evaluate their strengths and weaknesses
- gauge the threat they present

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- and predict their reaction to competitive moves.(Cuellar-Healey and Gomez, 2013, p. 4)

Companies who establish systematic and advanced profiling of competitors have a significant competitive advantage. In order to identify their current and potential competitors, firms must apply both an industry approach and a market approach. The industry approach can provide insights into the business structure and the goods all market players are offering. The market approach on the other hand focuses on the consumer needs and the businesses seeking to fulfil those needs, which will give the entrepreneur a broader view of current and future threats. Sources of potential competitors include (but are not limited to) companies working on a product in the same or similar field, using similar technology, already targeting the same market (maybe even with different products), offer similar products in other geographic regions and possibly new start-ups.
Companies that concentrate on the same target market with the same approach form a *strategic group* and are the nearest rivals to those companies who plan to join such a group. Firms that develop systematic and advanced competitor profiling have a significant competitive advantage. (Cuellar-Healey and Gomez, 2013, p. 5)

4.3 Market Analysis

In this chapter the details of an industry-based and market-based analysis will be explained in more detail to show what different approaches there are in analysing a market opportunity.

4.3.1 Industry-Based Analysis

An "industry" is characterized as a group of firms, who target the same market with similar products. Industries are primarily categorized according to the number of vendors involved and the degree of differentiation between products. Other factors that define the structure of an industry are: barriers to entry / exit, business model, degree of vertical integration and scale of globalization. Industries are generally categorized as:

- monopoly
- oligopoly
- differentiated oligopoly
- monopolistic rivalry
- or pure rivalry based on number of sellers and product differentiation.

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Monopoly occurs when a given product / service is supplied in a specific country or region by only one company.
Oligopoly comprises of several companies in the fuel industry which produce essentially the same commodity as Mobil, Shell and Sunoco. Selling fuel products above the current price is difficult for any particular company, unless it can distinguish its product line in some way.
Differentiated oligopoly applies to a market in which a few corporations manufacture somewhat differentiated products in the digital camera market, such as Sony, Canon and Nikon. Distinction is based on particular product features such as price, special features, packaging or capabilities. (Cuellar-Healey and Gomez, 2013, p. 5)

Competitors would usually try to be the leader in a given feature, draw consumers who value that particular characteristic, and charge a premium for it. *Monopolistic competition* applies to a scenario in which a number of competing companies in an industry may distinguish their product in whole or in part.
This is the case for supermarket corporations such as Edeka, Rewe and Tengelmann in the Germany grocery industry. In this case, rivals usually target certain consumer segments where they can best serve the demands of the customer and thereby demand a premium price (or the opposite).(Cuellar-Healey and Gomez, 2013, p. 6)

Pure competition takes place in industries that have the same or very similar product or service sold by several companies. Since there is no distinction between products, prices are the similar for all companies, which would be the case for most agricultural products offered as commodities. There is no advantage to advertising and the revenues of sellers can only vary in so far as they can reach lower production or distribution costs.(Cuellar-Healey and Gomez, 2013, p. 6)

4.3.2 Market-Based Analysis

From a business viewpoint, instead of looking for companies that sell the same product as its rivals, a founder should search for their competitors among other businesses that fulfil the same customer's needs. However, this need must be described as widely as possible in order to avoid falling into the Marketing Myopia pit, and to include both current and potential competitors. In the mobility business, for example, a company like BMW envisages other

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companies that sell cars like VW and Audi as its direct competitors but should also consider its indirect competitors.(Cuellar-Healey and Gomez, 2013, p. 6)
This may include any company that produces electric cars or offer other mobility concepts, like Uber, Carsharing or even public transport.
The number of existing and potential competitors is wide. For example, undertakings will face brand competition, market competition, competition and generic competition depending on the degree of product substitution.

1. *Brand Competition*: the organization recognizes other businesses selling related products / services to the same consumers at prices comparable to those of its rivals. Example: BMW will see Audi as their main competitor
2. *Industry Competition:* the business takes a wider view which considers other companies producing the same product or product class as their rivals. Example: BMW will consider all other car producers as its competitors
3. *Product Competition:* the company takes an even wider view and sees its rivals as companies selling goods that offer the same product. Example: BMW will see every other manufacturer of mobility devices as competition
4. *Generic Competition:* The company could use an even broader view to see its rivals as firms vying for the same customer dollars. Example: BMW will regard all other suppliers of mobility as their rivals.(Cuellar-Healey and Gomez, 2013, p. 7)

4.4 Competitor Profiling

Another way to analyse the potential of a market is to do competitor profiling to understand how active they are in the market. When a company has defined its primary competitors, its goals, tactics, strengths and weaknesses as well as its strategic reactions need to be measured and evaluated. Competitor-related goals may include profitability, increases in market share, cash flow, technological leadership, product leadership, etc.(Cuellar-Healey and Gomez, 2013, p. 7)
The strategies of the rivals are influenced by a number of factors, including the size, background, current leadership and competitiveness of the company. Strategies of competitors include product quality, product features and product mix, branding and positioning objectives, customer support, pricing strategy, distribution reach, marketing and sales strategy, advertisement and sales promotion initiatives, research and development

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(R&D), Production, Purchasing, Financial and Marketing Strategies (4Ps: Product, Price, Place / Distribution).(Kotler and Armstrong, 2008, p. 560) The more one company's tactics mimic the strategy of another company, the more the two companies compete. Strategic groups should be identified (i.e. companies concentrating on the same target demographic with the same approach). Whether or not a competitor can accomplish their goals and tactics depends on their resources and capacities.(Cuellar-Healey and Gomez, 2013, p. 8) Because of this, the evaluation of the corresponding strengths and weaknesses is vital information for a company to understand its competition. The method usually used for this analysis is called SWOT (Strengths, Weaknesses, Opportunities, and Threats).(Helms Marilyn and Nixon, 2010, p. 216)

It includes establishing a goal and evaluating the internal factors (internal strengths and weaknesses of the company) and the external factors (opportunities and risks posed by the external environment) that are favourable or unfavourable to reaching their goal.

- Internal factors (Strengths and Weaknesses) include factors such as: employees, corporate culture, finance, production efficiency, etc.
- External factors (Opportunities and Threats) refer to opportunities and challenges presented by macro and microenvironments.(Helms Marilyn and Nixon, 2010, p. 225)

The macro-environment includes demographic, economic, technological, political, legal, social, cultural factors. Customers, competitors, distributors and manufacturers are included in the microenvironment. The results of a SWOT Analysis are presented in a matrix as can be seen in Figure 11.

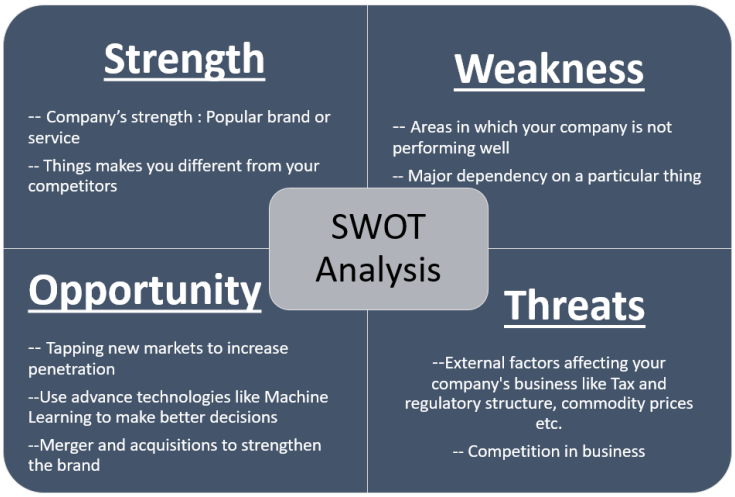

Figure 11. SWOT Analysis Template (WeirdGeek)

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4.5 The Final Attractiveness Map

With the full analysis done, every single factor should have received a rating. For some factors this may be subjective as an objective way is undetectable. Scoring the different market opportunities is both a learning and a validation process and may confront certain biases a founder had before beginning the process. The Attractiveness Map displays the estimation of business prospects visually, so that an entrepreneur may better grasp their upsides and downsides. With each and every market opportunity evaluated and pinned onto the Attractiveness Map, the visual depiction of the level of difficulty and potential will facilitate their comprehension in order to arrive at a final decision. (Gruber and Tal, 2017, p. 90)

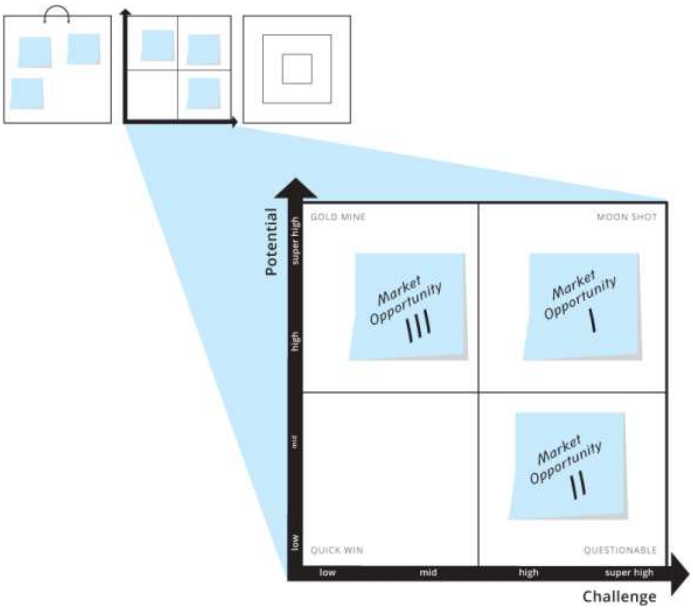

Figure 12. Final Attractiveness Map (Gruber and Tal, 2017)

A strategy to score market opportunities is, as has been discussed in this thesis, on an absolute scale, which means each market opportunity is examined in its own right; however a relative approach, which means contemplating several market opportunities in relation to each other and their interdependent scoring, might make sense in order to find out cross functionalities between opportunities as well as fully comprehending the market environment it is in. (Gruber and Tal, 2017, p. 89)

Other factors also must be considered, the relevance of the analysis for example; it needs to be taken into consideration whether the analysis is to be perfunctory to exclude certain market opportunities in order to diminish their quantity, or thorough in order to truly establish a strategy for a company. Other variables come in to play, for example the time horizon or

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quantitative vs qualitative scoring, as each of these variables affect the outcome of the final scoring.

Many times a start-up has been chasing the wrong opportunities which pose a too high challenge in the beginning, have a too low margin, or where the market is already saturated.(Tobak, 2014) However with this kind of exercise the risk of not finding the most desirable market opportunity and not making an educated decision about what the Primary Market opportunity is, is significantly reduced. (Gruber, MacMillan and Thompson, 2008)

Figure 13. X-Axis (Challenge) of the Attractiveness Map (Gruber and Tal, 2017)

5 *The Agile Focus Strategy*

After the question of the most fitting Primary Market Opportunity on has been answered in the previous two steps, the question on HOW to focus will be answered with the Agile Focus Strategy – it is the final outcome of the Market Opportunity Navigator. With the Agile Focus Strategy, a company can find a balance between focus and flexibility which is needed in case of severe market changes where suddenly a different strategy or product is required.(Shepherd and Gruber, 2020, p. 6) The current situation, the COVID-19 crisis is an exemplary model of an extreme and sudden change in market conditions. Companies who are able to adapt quickly may survive the change, some industries are heavily shaken up, and like the hospitality industry, will not come out of the global health crisis the same way they came in. Within the crisis some hotels for example have changed up their offering to local guests who stay for the day to work from a "hotel office" instead of a home office and a start-up has built a search engine that lets users look for the right hotel to work from in their desired area. (Seatti.co, 2020). This is a very good example of "flexible focus" by providing hospitality services in a time where personal contact is heavily reduced.

The Agile Focus Strategy is based on the Real Options Theory (Trigeorgis and Reuer, 2017, p. 43), a theory which states that Real Options Theory is an important modern paradigm in investment decision-making theory. This adjusts the principle of investment choices by NPV

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(Net Present Value). The NPV theory notes that potential cash flows of an investment project are projected, and where there is uncertainty regarding such cash flows, the expected value is calculated.

The NPV formula is a way of calculating a series of cash flows Net Present Value (NPV) based on a specified discount rate. While evaluating the worth of an investment (a business, a project, a cost-saving plan, etc.) the NPV method can be extremely helpful for financial analysis and financial modelling. (Gallo, 2014)

5.1 Types of Real Options

Real options may be classified into different groups. The most common types are: option to expand, option to abandon, option to wait, option to switch, and option to contract.

- Option to expand Is the option of making an investment or pursuing a project to increase the market activities in the future
- Option to Abandon Is the option of abandoning a project or asset in order to realize its salvage value
- Option to wait Is an option to postpone the business decision into the future
- Option to Contract Is the option to shut down a project in the future at any stage, if circumstances are adverse
- Option to Switch Is the option of winding down a project at any stage in the future if the circumstances are difficult and restarting it at favourable conditions (Trigeorgis and Reuer, 2017, p. 43 pp.)

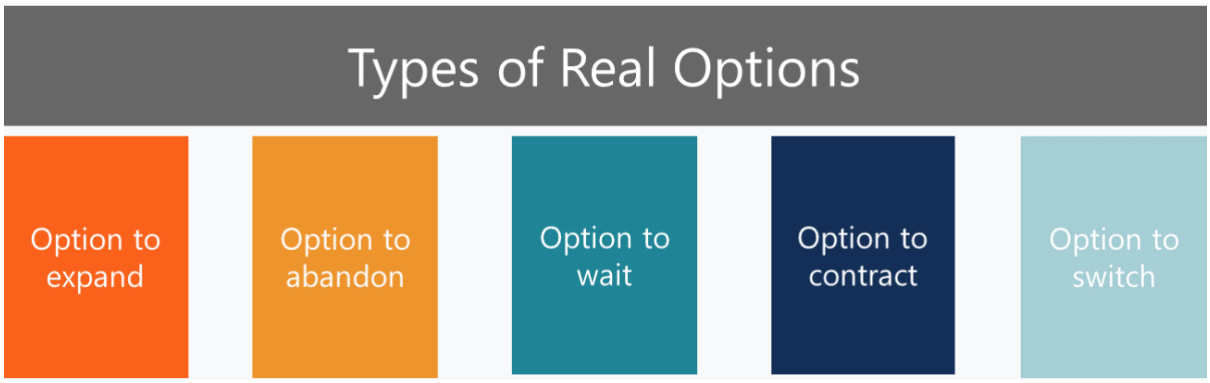

Figure 14. Graph of Real Options Theory

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5.2 Assessing the Firm's Current Position and the Market's Attractiveness – Porter's Five-Force Model

The evaluation of Porter's Five Forces is a tool that aims to assess the degree of competitiveness within a given sector. This is extremely useful before taking on a new venture or entering a new segment of industry. Competitiveness, according to this system, doesn't always come from competitors. Instead the level of competitiveness in a market depends on five basic forces:

Figure 15. Porter's Five Forces (Forces, 2016)

1. Degree of existing rivalry. The best indicator of how competitive and efficient an industry is, is this force. In a competitive industry, businesses must bid actively for a market share resulting in low income
2. Threat of potential entrants: New entrants to a sector introduce new resources and the ability to capture market share, the magnitude of the challenge depends on the obstacles to joining a given industry, the higher the access obstacles, the lower the danger to current players.
3. Bargaining power of suppliers. Strong bargaining power lets distributors sell their buyers higher-priced or low-quality raw materials. This impacts the earnings of the importing firms directly, as they have to pay extra for supplies
4. Bargaining power of buyers. When their bargaining power is strong, buyers have the power to demand lower price or higher product quality from the producers in the

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industry. Higher price means lower producer profits, while higher quality goods typically raise production costs. All circumstances give suppliers lower profits.

5. Threat of substitutes Particularly threatening when buyers can easily find replacement products with competitive prices or higher quality and when consumers can switch from one supplier or service to the other at reasonable cost. (Cuellar-Healey and Gomez, 2013, p. 9)

5.3 Designing the Agile Focus Strategy

With the information above it is time to design the Agile Focus Strategy with the third worksheet. The Agile Focus Strategy balances the conflict between focus and versatility/flexibility by actively leaving other market opportunities open: those who will enable risk reduction and the relatively low effort to maximize demand.

First and foremost, the mindset, namely cognitive flexibility plays a major role. Once the Primary Market Opportunity has been established, the Growth Option and the Backup Option still need to be identified, which is normally based on their attractiveness and their relatedness to the primary opportunity.(Gruber and Tal, 2017, p. 109)

It is important to recognize potential market opportunities that could work as a backup or growth option. If the current opportunity is not successful, a backup option should be pursued. A growth option is a market opportunity to be looked for once the current opportunity is successful.(Gruber and Tal, 2017, p. 109)

The relatedness of possible market opportunity choices should be assessed, since the relationship between to options ensures that designing and producing the product for both markets requires fairly comparable capital and skills, because the more an option is related, the more it can be leveraged to work with current competencies.(Gruber, MacMillan and Thompson, 2012, p. 297) At least one backup and one growth option should be chosen to be kept open and at least one backup and one growth option should be selected. Since keeping an open option requires committing very little resources and management time in it, it is crucial not to get blocked out of it. Although the unique capabilities, resources and channels of the enterprise are being developed, the other alternatives will be explored with less effort in order to stay agile. By understanding and taking these future options into account, resources and abilities are built in a more versatile manner so that such comparatively minor

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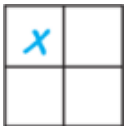
changes would make the business more resilient to transition, without losing the quest of the most attractive opportunity.(Kim, Gruber and Brinckmann, 2015, p. 221)

5.3.1 The Primary Market Opportunity

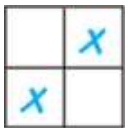
There are several types of Primary Market Opportunities:

1. Obvious Superior Opportunity

   The obvious superior opportunity will find itself in the Gold Mine quarter and should be pursued first.

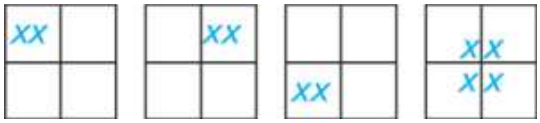
   

2. Diagonal Trade-off

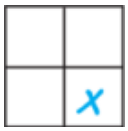
   In the diagonal trade-off, which is quite common, the options are spread along the "risk-return" diagonal, which could either mean a Moon Shot or a Quick Win opportunity and a Primary Market Opportunity is not easily to distinguish. When a diagonal trade-off occurs, it is possible to pursue the Quick Win opportunity first in order to gain some momentum and the move on to the Gold Mine.

3. Closely Located Options

   In some cases the primary market opportunity does not become apparent at since the opportunities are clustered too close together in order to be obvious. In this case other considerations must be taken into account, explained in detail below.

4. No Apparent Attractive Options

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Sometimes no option is apparently attractive and lands only in the Questionable quadrant. It would be vital then to rework the first worksheet or reconsider a new approach to all the market opportunities. (Gruber and Tal, 2017, pp. 116-117)

5.3.1.1 Other Considerations

After finding the Primary Market Opportunity, other considerations need to take place too.

Personal interest and fit:

Here come into play personal values and interest in the opportunity as well as considerations about one's personal risk profile: same as in investing, people have different risk profiles based on personal preference, age, family status, existing debt etc. (Dencker and Gruber, 2014, p. 1050)

Another point is the so called product/ market/ founder fit which is by definition is not only building something that the market wants, but also something the founder is passionate about.(Gil, 2018) One could even go a step further and call it Ikigai - Founder-Product-Market-Impact Fit, a term coined by Bonnie Foley-Wong, who explained that a founder's Ikigai can be described as the convergence or intersection of four primary elements:

- *What you love*
- *What the world needs*
- *What you are good at*
- *What you can be paid for* (Foley-Wong, 2019)

Stakeholder's interest:

If stakeholders in terms of investors are already present, they must also need to be taken into consideration.

Resource constraints:

Especially in a young company there are many time resource constraints which limit the opportunities that can be pursued, therefor it is very important to choose the right primary market opportunity wisely. (Dencker and Gruber, 2014, p. 1048)

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5.3.2 Final determination of Agile Focus Strategy

- Decision between Backup Option and Growth Option
- Decision of allocation of effort and resources between the two options

5.3.3 Determining Growth Option and Backup Options

The balancing of Backup options and Growth options are a trade-off between either attractiveness versus relatedness versus risk balancing. After all facets of the options have been evaluated, some options need to be set aside and may be considered if other options have been fully developed and on the market, some options may be kept by the side-lines and some resources can be allocated to them so that they may be developed along the way but not full focus will be set on them. The last option and the most important option is the one where all time and resources will be allocated upon and full focus will be set on until the options is fully developed and ready to go to market. (Gruber and Tal, 2017, p. 134; Kim, Gruber and Brinckmann, 2015, p. 222)

Apart from the Primary Market Opportunity, in the terms of the Agile Focus Strategy the other identified options are either a:

- Growth Option: An exciting market opportunity allowing added value to be produced over time OR *If we are successful, what shall we do next?*
- Backup Option: an also compelling market opportunity that does not pose the same risks as the Primary Market opportunity and therefore is a stable fallback option OR *if we are NOT successful what shall we do next?*
- No option

The product and market relatedness take advantage of existing resources, skills and partnerships and thus maximize value generation and align the commitment with minimum effort, the mindset is in the spotlight. (Gruber and Tal, 2017, p. 109)

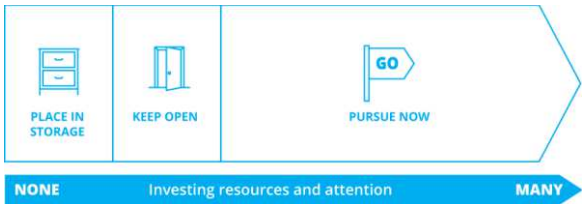

Figure 16. Resources and Attention Provision per Option (Gruber and Tal, 2017)

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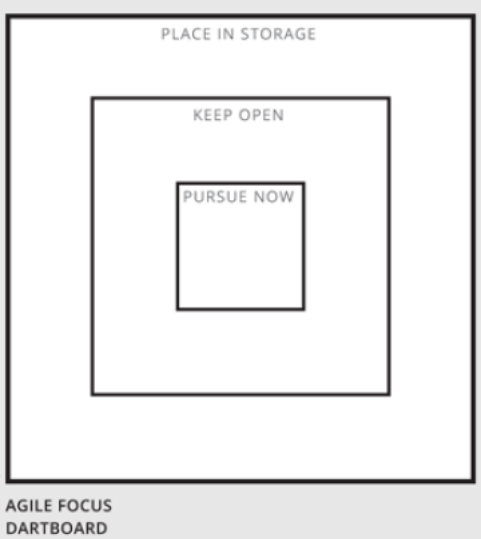

Figure 17. Agile Focus Dashboard (Gruber and Tal, 2017)

Figure 17 shows the Agile Focus Dashboard, where Primary Market Opportunity, Growth Option and Backup Option are placed in order to visualise where each opportunity stands and which needs to be focused on immediately.

This concludes the first half of the thesis, the theory of the Market Opportunity Navigator and finalising a strategy for a market opportunity. In the second half these strategies will be applied to the case study on self-initiated expatriates who need to further their financial education according to their special situation.

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6 *Case Study*

This case study will illustrate the current situation of expatriates who move abroad on their own volition without being sponsored by a company or government entity and a proposal on how this problem could be tackled by firstly raising more awareness for it and secondly recognizing a market opportunity and proposing several solutions for it.

There has been a large gap in the financial education of millennials, even after the stock market crash of 2008. Many life savings were decimated or eradicated altogether and sometimes did not recover in time when the money was needed. There is a specific gap in European expatriates, and in this thesis the focus lies on German expats who live in the Asia Pacific region, yet the theories should be transferable to other nationalities.
German/Europeans have the very specific problem regarding financial education and investing in the stock market:

- Cultural: "über Geld spricht man nicht": the taboo about discussing finances is very detrimental to the problem of not having enough money in old age. It is also a hindrance
- Prejudice: There are different kinds of prejudices why people to not broach the subject of finances. This could anything like that it is considered too difficult to understand. Only greedy people will deal with finance, as it has a negative connotation (which may come from the cultural taboo)
- Fear, especially since the stock market crash in 2008 the fear of losing invested money looms over the young expatriate's head. The stock market crash has been a collective trauma experienced through third hand as the currently millennials saw their parents struggle with or lose their jobs, got furloughed and has problems paying mortgage or rent. Others had just graduated into a depleted job market which made making a liveable starting salary very hard and a delay in moving out of the parental home which may explain a deep distrust in the financial markets.

Yet with this kind of socio-economic setup, a large number of highly skilled workers leave their home country in order to live and work abroad as either one of the two categories of expatriates explained below:
There are two types of expats, among of which there are several subtypes which will be explored later in the case study:

- *Assigned Expatriates (AE):* the classical definition of company-initiated expatriation.

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- *Self-Initiated Expatriates (SIE):* who are not sent by a company but are self-motivated to live and work abroad. (Andresen, Biemann and Pattie, 2015, p. 943; Biemann and Andresen, 2010, p. 443)

Self-expatriation has become popular with multinational corporations, as they become increasingly interested in more flexible forms of employment of their internationally mobile high-skill workforce.(Faulconbridge *et al.*, 2009, p. 803)The major difference between company assigned and self-initiated expatriates is therefore clearly in the fact that the latter manage their expatriation on their own responsibility, hence define self-initiated expatriates as individuals who:

1. have been free to choose whether, where and how long to go abroad,
2. have not been sent by an employer, and
3. are currently working in their host country or have had relevant professional experiences there, respectively.

The concept is commonly applied to persons with both singular overseas experiences and a longer international career path. (Biemann and Andresen, 2010)
With this fairly new but growing portion of the expat population in comes to light that SIE have not been researched extensively yet, which in turn means that there are not enough provisions for them set in place.(Andresen, Biemann and Pattie, 2015)
SIE are more prone to have temporary contracts and often do not have set employment to return to. (Andresen, Biemann and Pattie, 2015)They are also often on "expert" positions than management positions which is reflected in the chance of expatriate postings to Singapore since the bursting of the dot.com bubble in the early 2000s. The postings have become shorter in duration and the contractual focus has been shifting away from the luxurious 'expatriate package' to 'foreign talent' being employed on local packages, with partially corresponding pay to local nationals. (Beaverstock, 2007, p. 420)

This Market Opportunity Analysis will focus on self-initiated expats, as they lack a specific safety net in terms of pension, health care, possible double taxation and other related issues, as opposed to AEs, who are provided by their employers.
Self-initiated expats have, through different reasons a drive to live and work abroad, mostly for personal reasons, as well as financial motivations. (Roth and Dana, 2015, p. 5 pp.)
However, since they are not sent away by their company, a lack of planning for the return of

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the home country, pension planning and health care provisions usually are not done. This is in part based on the reliance of the government of the home country, where, for example in the case of Germany or Austria, health care, pension, schooling, unemployment benefits are settled automatically with taxes and social security contributions, therefore not much must be done otherwise. Yet it creates a bottleneck in financial literacy and retirement provisions however, when SIE move abroad and fail to plan to cover the gaps in protective provisions. Interestingly this is usually not due to a lack of awareness around these issues.
There has been a problem in recent years with the development of more and more expats arriving in the APAC region to work but are not sent by companies in their home countries. Over the last 30 years there has been a shift from expats being sent out to expats working under local contract conditions which will leave a gaping hole in their retirement contributions in their home country, which, will show in the survey below now is close to an 80-20 percentage split.

Since this is a growing workforce globally, protective provisions should be made, either by themselves or through companies who can fill in the need for protection.

6.1 Female Expatriates

There is a stark difference in the percentages of assigned female expatriates and self-initiated expatriates:(Andresen, Biemann and Pattie, 2015, p. 8)

- *Assigned* female expatriates comprise approx. 20% of the international workforce whereas
- 50% of all *self-initiated* expatriates are female (depending on origin country this number varies by 10%)(Tharenou, 2010, p. 75)

The question whether women seek an international career by themselves as they are not assigned abroad by their companies due to discrimination is a question for another paper and can be read up in *"Women's Self-Initiated Expatriation as a Career Option and Its Ethical Issues".(Tharenou, 2010)*

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6.2 Literature review

While there has been extensive research done on expatriates from all kinds of angles, as well as research on financial literacy, there is only one single paper that discusses financial literacy in expats, however not the implications of its lack of it. (Suri and Purohit, 2017)
Looking at the current literature, the gap has occasionally been addressed but never has a proper concept especially for self-initiated expats been researched. There are many self-help resources online, there are companies providing certain services (*Expat Pension Review*, 2020) and books have been written about the issue (Hallam, 2018), but never from a scientific perspective it was analysed how and why there is such a gap that needs to be filled. The pension gap has occasionally been mentioned in a few expat research papers but neither fully analysed, nor has it been viewed at from the perspective of the employee. A reason could be that even SIE are so well remunerated that the issue has not been pressing or that the rising trend of self-initiated expats has been so recent that the retirement issue has not come up yet. Pension while living abroad is a complex matter, *"yet this aspect of remuneration remains one of the most challenging aspects particularly for career expatriates; only 12 percent of companies in a Mercer survey had established international pension plans to ensure long-term expatriates their continuity of benefits." (Mcnulty, 2014, p. 14; Herod, 2012, p. 9)*

There is little to no research done in how SIE can self-manage their financial situation, avoid pitfalls and plan for their future independently of their location.

This problem is exacerbated in female expatriates who, though socio-cultural norms have gained even less financial education than their male counterparts and have an even higher risk ending up in old age poverty, even if they were well compensated during their employment abroad. (Tharenou, 2010, p. 77)
Another issue is the exploitation of SIE when searching for a solution to the problem, either through buying a retirement plan through a bank with opaque fee structures (HSBC, 2020) paying very high fees to a wealth advisor, adding contributions into their home country's government retirement scheme, yet possibly not being eligible in the end for benefits. In Germany the private retirement schemes Riesterrente or Rürup Rente, often times have a too high fee structures to be feasible in the long run. (Stocker, 2018)

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The market opportunity lies in an idea, to help self-initiated expatriates plan for their retirement independently of the country they are currently residing in, and are not tied to a specific timeframe when investing for their retirement, as many do not have a set time frame for the return into their home country or might switch between employment in several countries. This in turn leads to *fragmented benefits*,(McNulty, Rason and McGrory, 2015, p. 4) where the retired SIE employee receives benefits from different countries, which leaves them exposed to risks of swings of currency exchange, high transfer costs of monies, and an overall lack of funds due to the possible management fees structures of the host countries. (McNulty, Rason and McGrory, 2015, p. 5)Another point might also be the question if and how these fragmented retirement benefits will be taxed.

The author herself has worked under such conditions for six years (one year in Singapore and five in Hong Kong) and even though she has worked for 6 years abroad, has never officially paid into the German retirement contribution scheme, therefore will not receive retirement benefits for the years she has actually worked. Under local contract conditions (in Singapore and Hong Kong) retirement contributions are either voluntary (since as a foreign worker you are not required to in Singapore) or minimal (5% of gross salary p.a. but only to a fee of 1800 HKD per month). Upon departure of said country it is not unusual to reimburse any kind of contributions that have been made, leaving no benefits for old age.(Asher and Newman, 2001)

有關入息 Relevant income	強制性供款額 Mandatory Contributions	
	僱主供款 Employer's contributions	僱員供款 Employee's contributions
少於最低有關入息水平 Lower than the minimum relevant income level	有關入息 x 5% Relevant income x 5%	無須供款 Not required
介乎最低及最高有關入息水平 In between the minimum and maximum relevant income levels	有關入息 x 5% Relevant income x 5%	有關入息 x 5% Relevant income x 5%
超過最高有關入息水平 Higher than the maximum relevant income level	最高有關入息水平 x 5% Maximum relevant income level x 5%	最高有關入息水平 x 5% Maximum relevant income level x 5%

Figure 18. Set up of the Hong Kong Mandatory Provident Fund (MPF) and its contribution system (Ho, 2015)

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With the aforementioned circumstances, combined with a lack of financial education, many local contract expats eventually may find themselves in dire financial circumstances in old age. There have been a few movements made to improve the situation of SIE, with existing blogs, books, financial advisors catering to expats, yet the situation is still lacking.

For SIE the "American way" might be a possibility to move ahead, i.e. long-term low fee investing into exchange traded funds, with a classic asset allocation. The US has an employer related private pension scheme, where the employee pays into a fund and the company matches their contribution up to a certain percentage of the net income. This is wholly privatised however, and not every employer offers this scheme; therefore it has been historically important to save and invest early on.
The result is the so-called FIRE movement (Financial Independence Retire Early), where a large part of the net income is saved, invested into the stock market with low fees and living off the dividends/share sales on a perpetual basis.(Kerr, 2020)

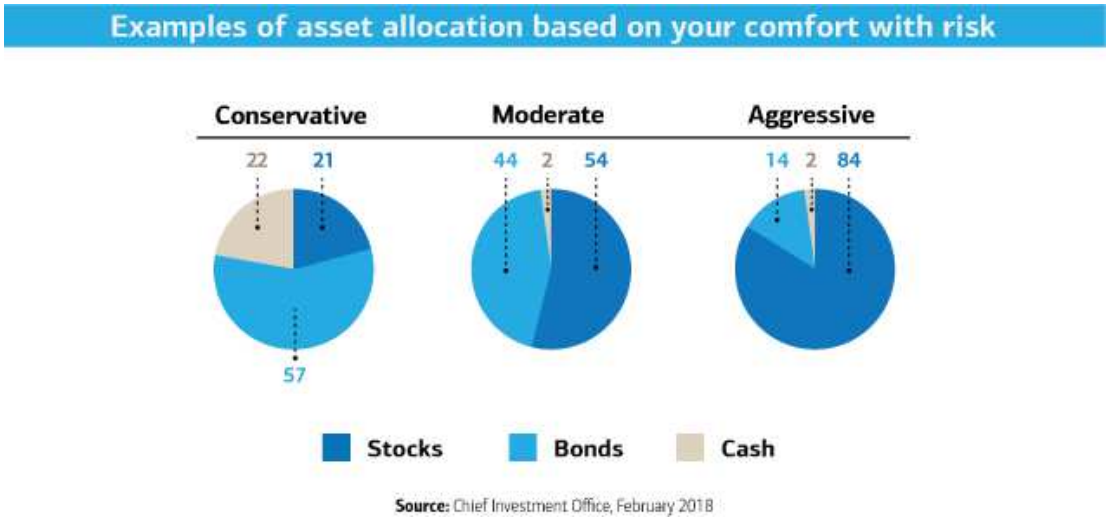

Figure 19. Examples of Asset Allocation depending on Risk Profile

However, due to the lack of awareness, lack of financial education or confidence in being able to handle personal finances, this concept is rarely put into realization. There is also no political pressure in the host countries to do any changes regarding expats as they are a minority with a high fluctuation, which also makes them quite vulnerable.(Straits-Times, 2020)
This issue is even more exacerbated during a crisis such as COVID19, where, for example, expats who hold an employment pass visa, were not allowed to re-enter Singapore, even though they hold a job in the country, have family living there and are still required to pay the

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rent of an apartment they are not able to use.(Ministry-of-ManPower, 2020; Ting, 2020) This does show, that even when earning well, and even having a family abroad, it could mean at any minute than one may have to leave the country one has settled in. In order to protect oneself and family of these risks, it is important to have an emergency fund in place, which needs to much higher when residing in countries where there are no provisions for job loss or deteriorating health when only on a work visa. One might think that in a country like Singapore or Hong Kong such measures might seem extreme, however the COVID19 crisis has proven quite the opposite.

Also, this is getting more and more important with a young workforce that often lives and works while traveling, the so called "digital nomads".(Hayes, 2019) These workers many times do not even have a work visa and enter countries on tourist visas, meaning they have low legal and health protection in case of an emergency. Hotspots for digital nomads in the APAC region are Bali, Manila, Bangkok, Saigon, Jakarta since costs of living is low, yet the technological infrastructure is sufficient. Other locations in Europe are mostly Eastern European cities such as Tallinn, Prague, Warsaw or Budapest, just to list a few.

6.3 Current Situation

The market opportunity lies therein, that due to the special nature of the SIE lifestyle a customised "financial planning package" is required. Many SIE are very well educated, be it doctors, lawyers, IT professionals, non-profit or not for profit organisation employees, engineers, pilots, managers etc. Except for the expatriates working in the financial and banking industry, many of them did not receive adequate financial education in order to soften the blow on their retirements earnings.

The goal is to give enough financial education according to the FIRE principle (Financial Independence, Retire Early) through long term and especially low-cost investing into index funds and bonds. It is vital to know the basics of long term, low cost investing, which is the core of the whole market opportunity and one of the reasons expatriates suffer the financial implications of going abroad in the first place. Below is a summary of basic investment knowledge which describes the difference between what "active" and "passive" means when describing the most basic form of investing, namely into funds.

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6.3.1 Actively Managed and Mutual Funds

- Utilizes the extensive research and expertise of the portfolio manager to pick stocks or bonds for the fund by hand and follows a specified strategy
- The fund manager actively tries to outperform the current market benchmark
- The risk lies in the possible underperformance in comparison to the market
- The management fee or “expense ratio” is fairly high, as the fund trades very often in buying and selling stocks, as well as the salary for the fund manager (S.E.C., 2017)

6.3.2 Passively managed index and exchange traded funds (ETFs)

- Tries to match as closely as possible the performance of a given market benchmark (or "index" such as DAX, S&P500, Nikkei)
- Purchases all of the stocks or bonds (or a representative sample) in the index it is tracking
- The fund performance correlates directly to the risks involved in the particular stock or bond market.
- Very low expense ratio as the fund trades much less and since it uses an algorithm, does not need to pay a fund manager’s salary
- No risk of underperforming the market (Vanguard, 2020)

This investment strategy at its core is actually fairly transparent and easily implemented, yet through many factors it is not widely practised. A seemingly simple solution for a SIE would be hiring a financial advisor to invest on their behalf, however this is only a superficially sufficient solution, since many times an independent financial advisor will take management fees to take care of one’s finances, usually at a 2% fee of the gains (they might also still need to paid even if there is a loss during a downturn). What seems to be a fairly low fee, will, through compounding (this works not only for interest but for fees too), turn into a hefty sum over the investment horizon over 30 years. The same result will be achieved when investing into funds with a high management fee.

Below is an example of a managed fund fee calculation, with the usual (financial advisor or management) fee of 2% over a timespan of 30 years. When self-investing and paying attention to the fact that expense ratios do not cross the 0.25% per annum range, the differences are quite staggering.

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Below in the figure an initial investment fee of 20,000 $ is invested in a fund, with monthly additions of 1,000$, based on a median of 5% investment earnings rate per year. The management costs are set at 2% per annum. As can be seen in the graph below:

- the initial investment without interest has been 360,000$
- after 30 years the overall fund balance will have arrived at 619,310 $,
- fees will have been 282,505$, paid over 30 years

Figure 20. Managed Funds Fee Calculator with a 2 % Management Fee (Moneysmart.gov.au, 2020)

The fact that a 2% management fee can have such a major influence on the outcome of an investment, is widely unknown, and is also not widely publicised.

As a counter example the figure below will show the same amount of investment but at the rate of a 0.25% management fee.

- the initial investment without interest has been 360,000$
- after 30 years the overall fund balance is at 859,060$
- fees have been 42,755$ paid over 30 years

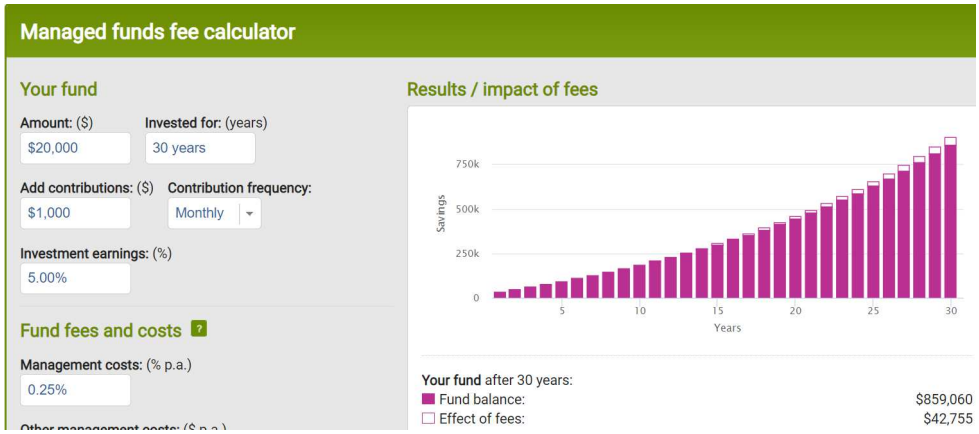

Figure 21. Managed Funds Fee Calculator with a 0.25 % Management Fee (Moneysmart.gov.au, 2020)

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Fees cannot be avoided completely, but the focus is paying attention and reducing them as muss as possible. This example shows quite blatantly that the difference between engaging an advisor to invest on one's behalf as opposed to self –led investing, can be quite staggering and means loss of life savings and pension income, and the hiring person does not profit from this concept, unless the person has only saved the amount without investing it at all. Financial advisors and banks highly profit from these so called "low fees" quite a bit.

Studies have also proven that actively managed funds and/or financial advisors over the long run, do not or just rarely and barely outperform the market; (Bryon and Verhoeven, 2009)therefore it is not wise to give away the sovereignty of one's finances (and one's future) to an external partner.

On a side note: the knowledge about self-led investing is not only vital to self-initiated expats but even within Germany, since the government pensions have been shrinking over decades cannot provide a liveable income anymore, and therefore private provisions must be made. A rising population of retirees are living below the poverty line in Germany and are not able to afford basic necessities, the problem of old age poverty (Altersarmut) that will intensify over the coming decades.(Tagesschau, 2020)

Since it was historically unnecessary to save more than what the state governed pension had to provide, it could be the reason that Germans/Europeans have no historic predisposition towards the stock market as an investment option. The stock market crash of 2008-2009 did not help with the furthering the trend either. Through the bull market in recent years and a steady increase in real estate pricing, as well as extremely low interest rates to the point where it did not make sense to put money into a regular savings account anymore, a slow movement towards stock market investing has begun, yet it might slow down again with the latest stock market collapse during the COVID19 crisis.

Henceforth, it is of vital importance for SIE to obtain financial education notably for the special situation in which they are located. So far, some efforts have been made, in terms of blog posts, independent advisors, even a book, called "Millionaire Expat" (Hallam, 2018), yet there has been neither a breakthrough, nor a scalable solution that could be customised so easily that at least "most" expats can use it.

After having recognized a possible specific need in the market with detailing the case study above, the time has come to examine the discovered market opportunity with the Market Opportunity Navigator; the options are plenty and there are still many to be found in the market niche that has been discovered.

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6.3.3 De-Linking

In the De-linking phase on the first half of the worksheet every ability and capability of the potential founder has been looked at from different spotlights, looking at:

- Market Knowledge
  - Own experience in the market
  - Well connected
  - Pain points that are already apparent

- Investing
  - Several years of experience in investing strategy
  - Deep dive in knowledge
  - White papers and website already in the making

- Technology
  - Previous experience in technology platforms and building network through work experience
  - Banks would profit from a cooperation
  -
- Consulting
  - Existing experience in consulting
  - A legal entity already exists
  - Easy to set up

And considered several market opportunities with the knowledge and abilities that currently are at hand, as can be seen below on the worksheet.

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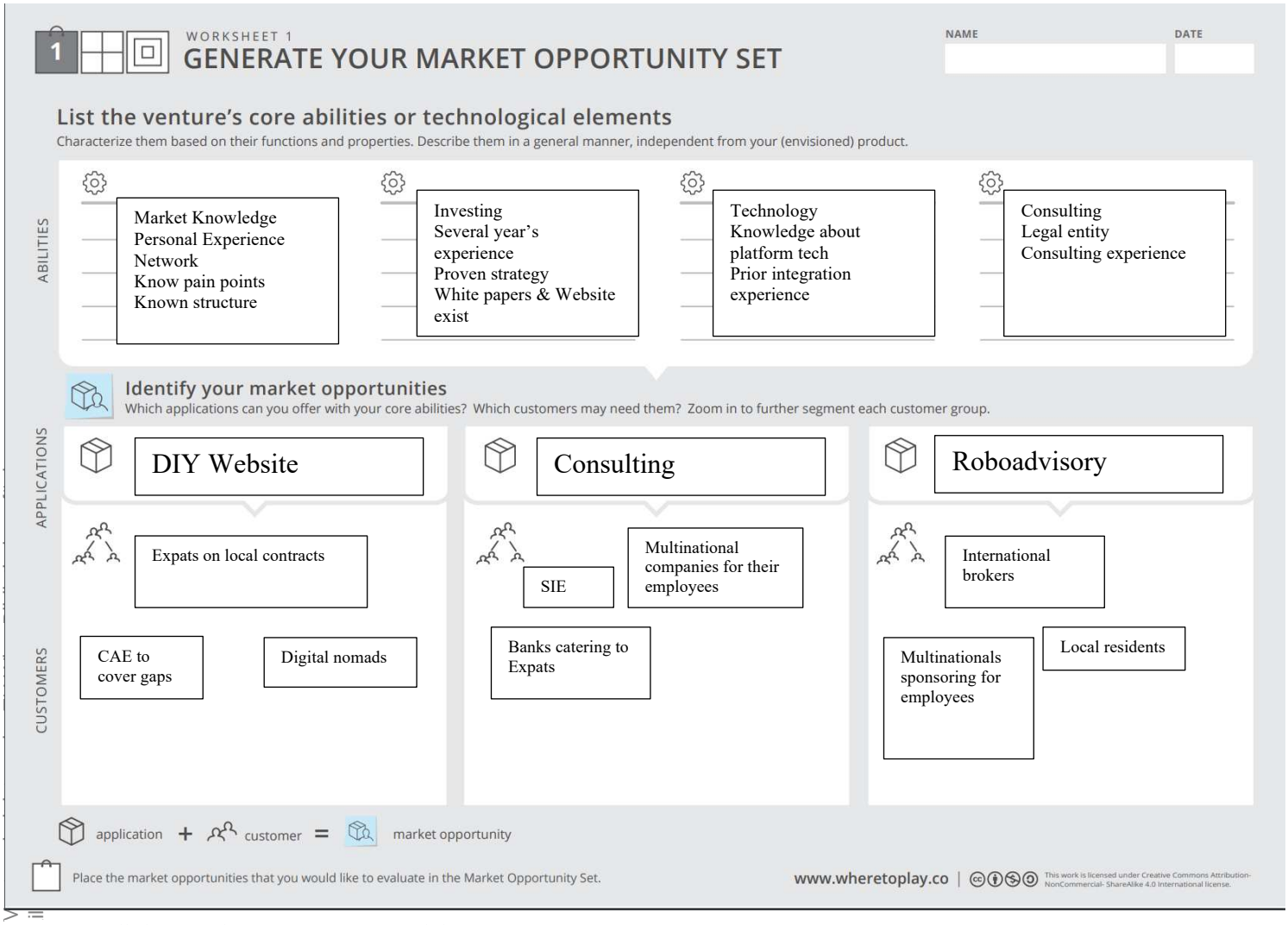

Figure 22. Filled out Market Opportunity Set Worksheet

6.3.4 Re-Linking

In the second half of the worksheet all abilities are recombined for different applications, be it as a DIY website for investors who want to extend their knowledge on their specific situation, or multinational companies who have a large percentage of expatriates on local contracts who they want to support long term. Also local residents who need to close their pension gap could be considered, as well as cooperations with banks to supply a more automated strategy that is less time consuming a more convenient. In the next chapter the most viable solutions will be discussed in more detail.

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6.4 Market Opportunities

Through the Market Opportunity Worksheet several opportunities have sprung up which could help this business case mentioned above.

1. *Website for investment guidance*

   Getting Expats to invest independently on their own through a DIY website:

   - Financial education on the website
   - Workshops
   - White papers
   - Online courses

   The goal is to provide especially young expats who move abroad guidance on how to be financially prudent, plan for the long term and develop their wealth and confidence. It is also important to do a risk assessment which would not be immediately apparent for a young person, be it health care provider issues, visa issues and a checklist on what to do and what pitfalls there are when returning to the home country.

2. *Investment coaching*

   A financial strategy consulting company which is based on an hourly rate instead of percentage-based fees in order to provide workable financial advisory services in conjunction with the business background of the founders, and to provide valuable services in a timely and cost-effective manner. If the DIY information is not enough, potential clients are able to contact the company employees through a form or by phone registered on the website. From there on a 1-on-1 coaching session or a course can be booked where the company analyses their clients' needs and shortfalls. There are several topics that can be addressed:

   - Investment consulting
   - Financial Advisory
   - Wealth creation and management

   There are many factors that play into the expat's desired lifestyle they want to maintain or reach. In the sessions there will be discussed:

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- Help to think about life during and after being an expat. Very few prospects have thought beyond the next few years and appreciate having a structure to work through.
- Review current investments and savings trajectory and see if they are 'on track'.
- Consider different approaches to company stock options.

3. *Technology based Investment Consulting:*

   Together with the client, the company will find an ideal salary savings plan based on an approximate 30-year period and set up age and risk-related asset allocation to fill the gap in retirement age or completely replace the government pension plan. This would entail a product will be a technology programme that can help estimate what is needed to fill the pension gap. It should be able to help forecast needs, help examine how spending, savings and investing will affect plans for the future. It should be able to calculate how much a person or family needs to live comfortably and prepare for ongoing costs of lifestyle and emergency funds for unexpected expenses. Below is a snapshot of such a program that can show the current financial position and initial cash flow forecast that has been provided before the coaching session. A comprehensive income and investment plan can then provide a cash flow analysis, and projected growth of a stock portfolio that can help visualise a stable financial future. Preferably it can test different scenarios and show the effect of key financial decisions in the future. Below is an example of how such a programme could look like.

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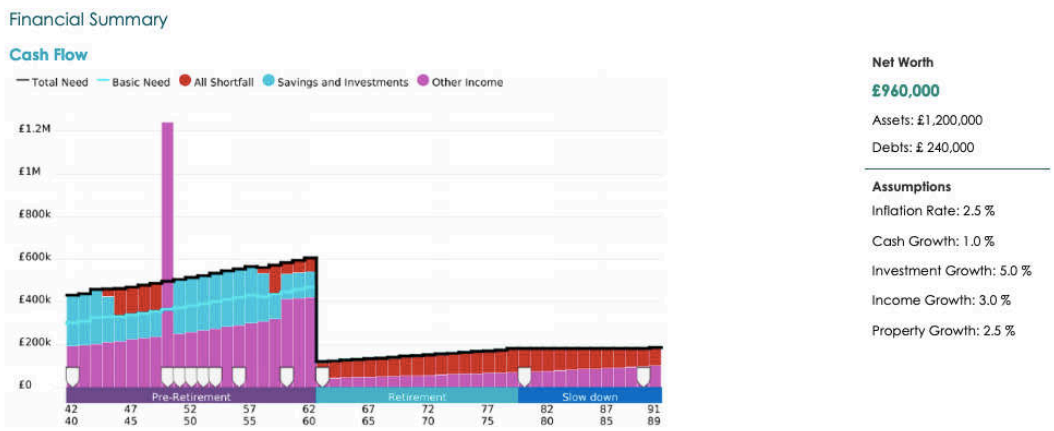

Figure 23. Financial Analysis Tool of Lifetime Earning, Spending and Saving (Expat Pension Review, 2020)

4. *Pre-set Portfolios and Robo-Advisory*

   Cooperate with a bank or other partner to provide access to low cost funds and portfolios, speeding up the process of investing. Part of the long run would be a corp-up with a financial provider in order to give expats who are interested to set up a retirement portfolio a chance to do this in a quick manner with a pre-set of portfolios with low management fees. At this point in time after detailed analysis with the help of this website: https://brokerchooser.com/best-brokers/best-international-online-brokers-for-citizens-in-thailand. The founder has so far decided to approach Saxo Bank, a Danish Bank that offers international accounts and trading stocks and funds all over the world to be the most fitting corp-up partner in order to give expats the best service possible. Another option is to partner up with Syfe, a robo-advisor with pre-set portfolios and low fees based out of Singapore. (*Syfe*, 2020)

Pre-set Portfolios could be set up by risk profile, age and family status, the FIRE movement recommends an asset allocation according to age:

1. *Young expat 20-34 years of age*: higher risk with a high allocation in stocks and low allocation of bonds. They are second largest group and growing.

2. *Medium aged expats (which would be the largest group) 35-50 years of age*: less risk than the first bond with a higher allocation of bonds ratio to stocks. This will ameliorate effects of stock market crashes, since the expats are still fairly young and can ride it out over a decade

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but are not in a situation to lose their life savings and be able to recover all losses just with salary.

3. *Closer to retirement aged expats 50-65*: much higher allocation of bonds to stocks ratio. These expats have hopefully accumulated enough wealth to live on for the next two decades or more and absolutely are not able to ride out a stock market crash. They are not able to take a hit in their portfolio as it will directly impact their ability to pay their living expenses.

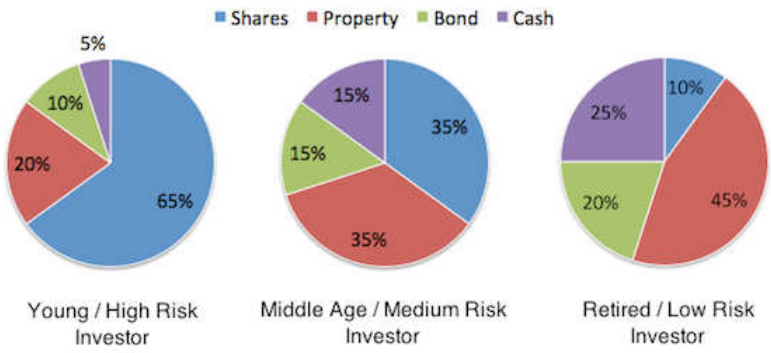

Figure 24. Example of classic asset allocation according to age(iMoney, 2018)

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6.5 Attractiveness Map

Now after finding out the opportunities that have become apparent, the next step is to put them on the Attractiveness Map and discuss every opportunity in detail.

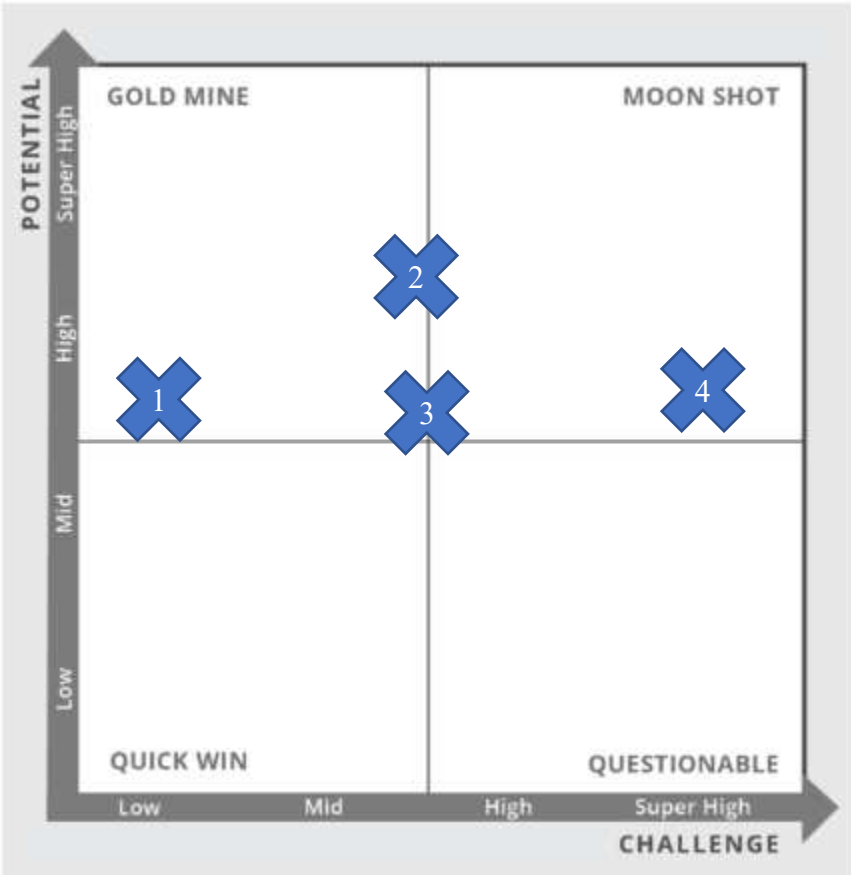

Figure 25. Attractiveness Map with assessed Opportunities. (Gruber and Tal, 2017)

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1.DIY Website: The challenge would be low and the potential, (if well done) could be quite high. The market is somewhat crowded, however there are still enough niches that can be filled with specific knowledge

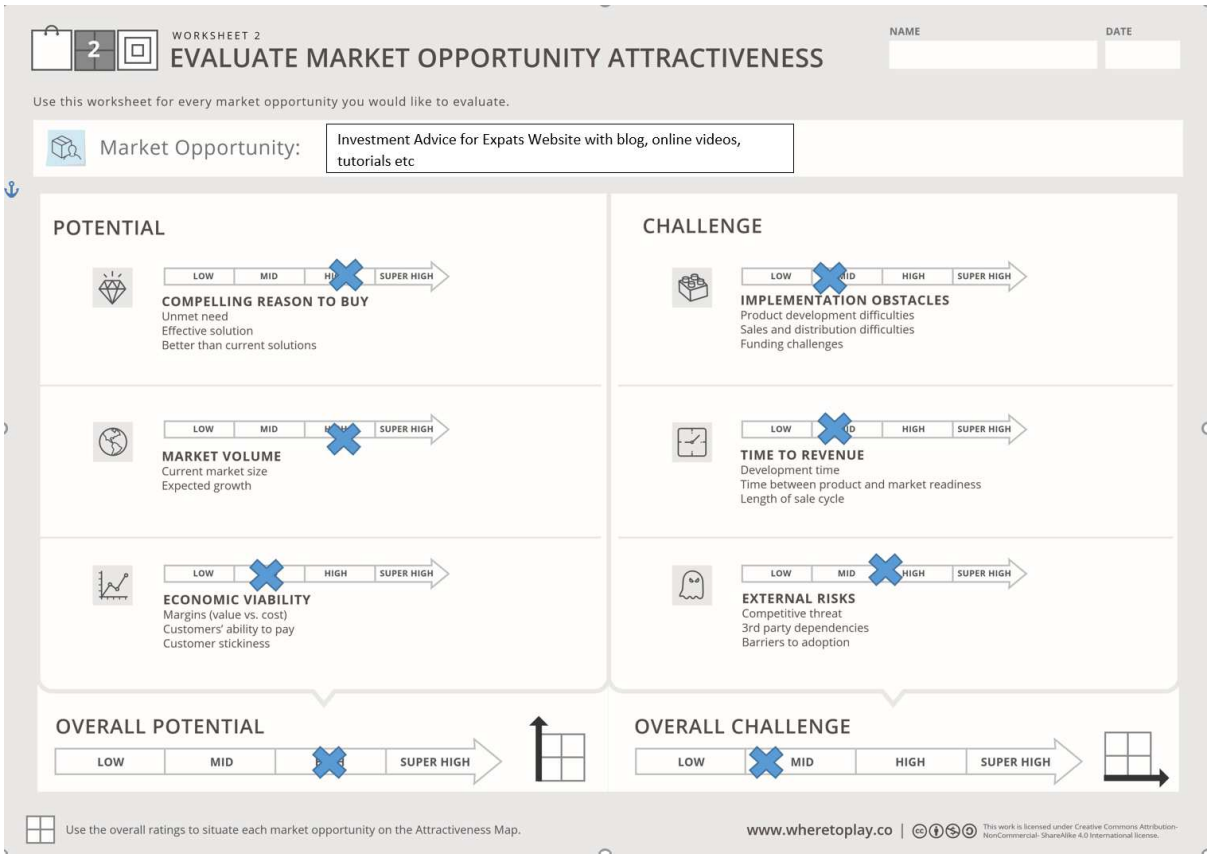

Figure 26. Market Opportunity Attractiveness Worksheet DIY Website (Gruber and Tal, 2017)

Compelling reason to buy - Yes, as access to this information is difficult Market volume - Can reach all of APAC Expats, so it is high - High since it is scalable Economic viability - High, as margins can grow quickly after user acquisition	Implementation obstacles - Proper set up of website, online courses etc will take some time, but isn't too difficult Time to revenue - Somewhat quickly External risks - Easy to imitate

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2. Consulting Company: Here the challenge would be somewhat higher, as one would need to comply with rules and regulations and might need a financial advisory license (depending on the country). The potential would however be slightly higher.

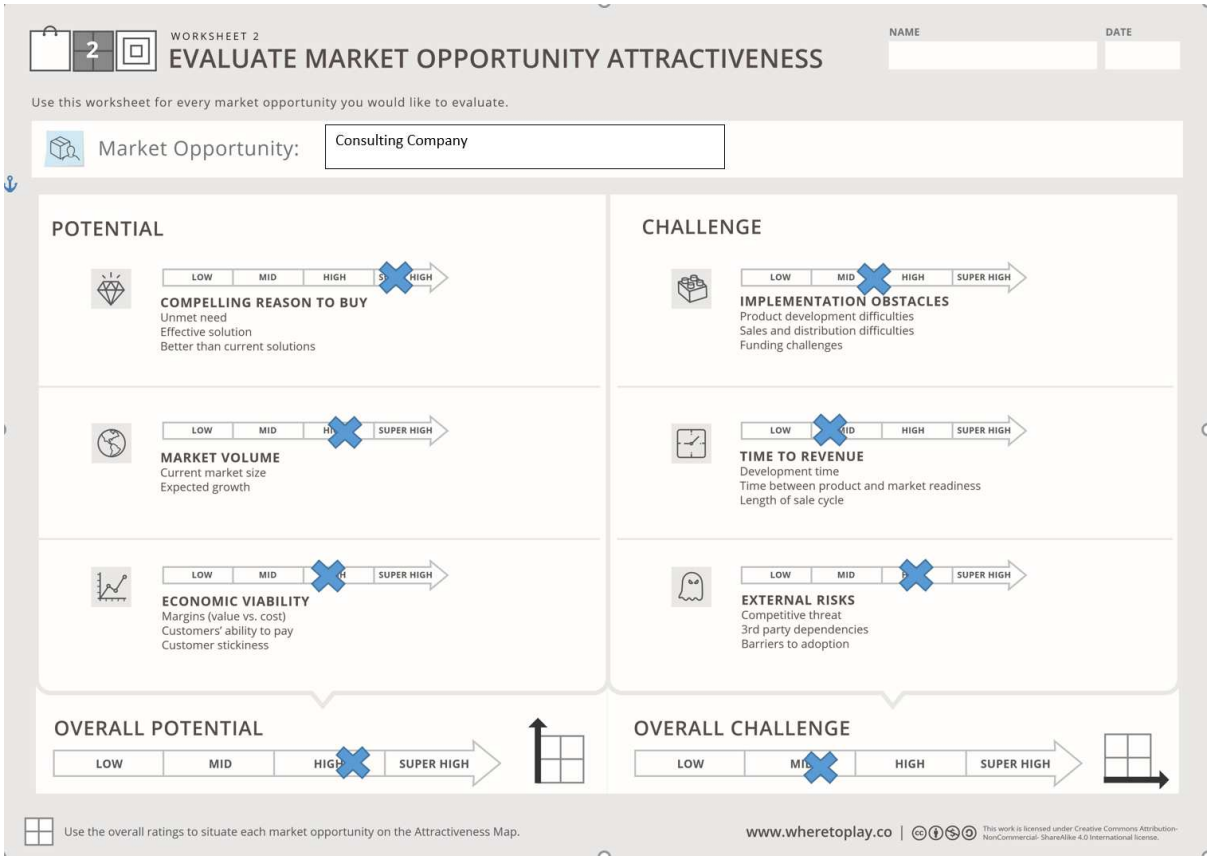

Figure 27. Market Opportunity Attractiveness Worksheet Consulting Company (Gruber and Tal, 2017)

Compelling reason to buy - Very high, as it will lead to results fast for clients Market volume - High, yet with personalised consulting hard to reach all of the market Economic viability - High but harder to scale	Implementation obstacles - Need some kind of financial advisory license Time to revenue - Quickly as money can be made right with first client External risks - Legal requirements might change - Competition possible

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3. Investment consulting based on technology programme: Here the challenge would be even slightly higher in order to develop the programme, however if this programme itself can be sold in conjunction with consulting, the potential might be quite large

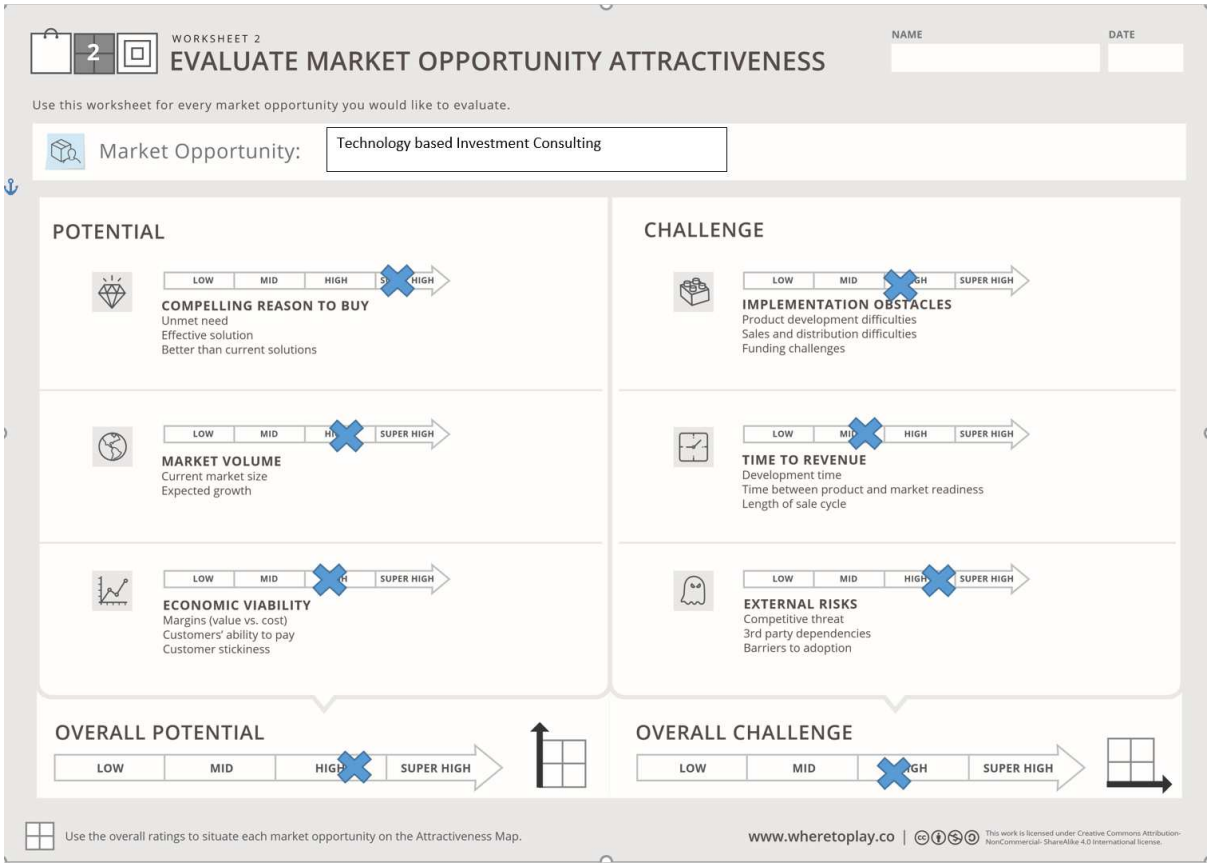

Figure 28. Market Opportunity Attractiveness Worksheet Technology-based Investment Consulting (Gruber and Tal, 2017)

Compelling reason to buy - Yes, as consulting will be based on numbers, not purely on experience Market volume - Medium Economic viability - High, technology product must get developed but should be fairly straight forward	Implementation obstacles - Technology platform itself Time to revenue - Medium, as tech development needs to be ameliorated External risks - Low, as not need banking license, - Competition however very possible

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4. Robo advisory with pre-set portfolios: Here the challenge would be the highest, however this potential could be fairly high if tailored and marketed to the right segment correctly. Given that many people do not know how to invest and it actually take quite a lot of time and effort to understand it, if given enough trust and reliability this would work best and would also be the most scalable solution as one does not only be charged according to man-hours only.

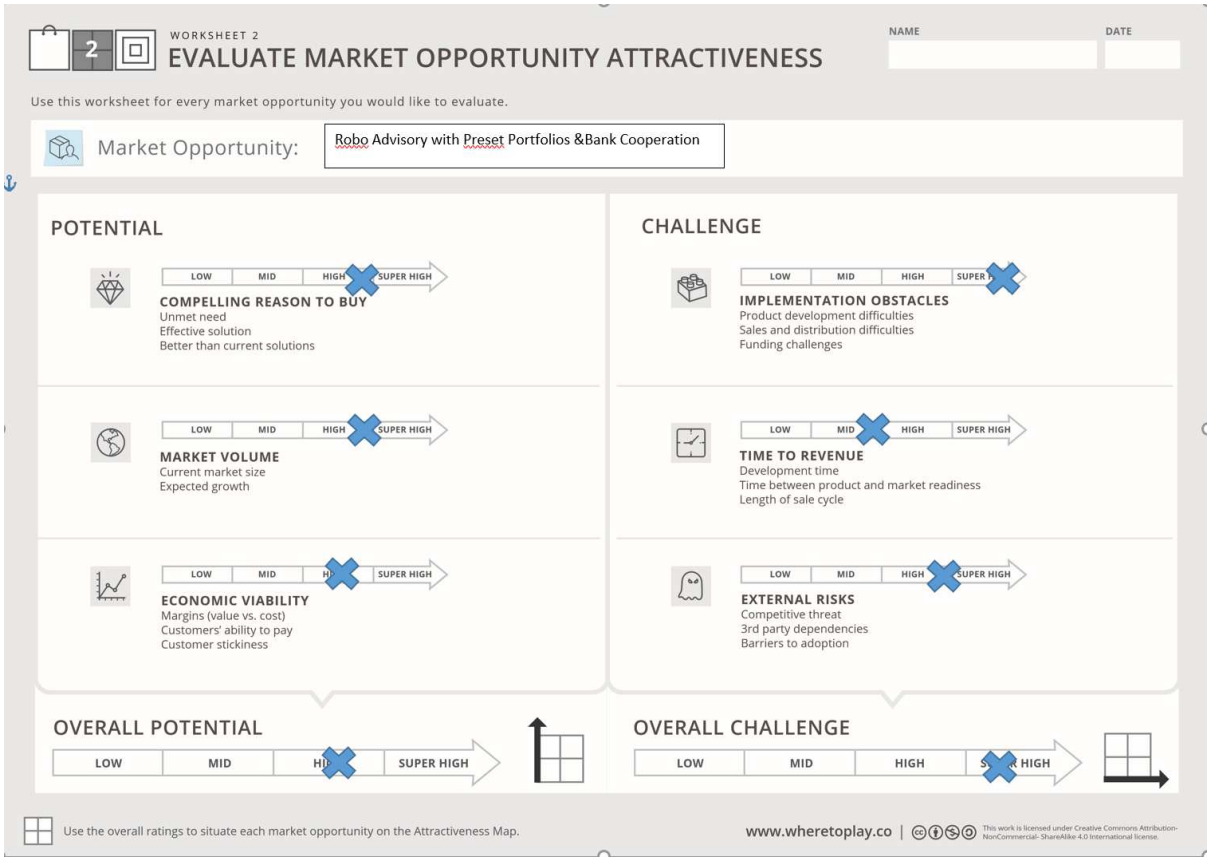

Figure 29. Market Opportunity Attractiveness Worksheet Robo-advisory with Pre-set Portfolios (Gruber and Tal, 2017)

Compelling reason to buy - Yes, very compelling Market volume - High, as it also can be used by local population Economic viability	Implementation obstacles - Extremely high, as would need to set up full company, partnership agreement with bank who has banking license and operation rights. Time to revenue

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- Difficult in the beginning, as a lot of development will need to be done. After go-to-market strategy is finished, economic viability will be very high though	- Long, as technology platform needs to be developed External risks - Need to comply to local laws and regulations, bank might change their mind in partnership

These possible market opportunities lie within the B2C Space that would be approached first. The next step from there could possibly be approaching local companies that have a high expat work force, such as law practices, Airlines, hospitals, logistic providers, car manufacturers and even banks.

6.6 Challenges

The opportunities with the highest potential also are the ones with the higher challenges. In order to make investing a simple option for expats it would need to get automated in order to be scalable and be accessible from anywhere.

6.6.1 Vantik

A similar concept already exists in Germany: The company is called Vantik and offers an easy way for young investors to plan ahead for their retirement as the current government pension scheme will not provide enough money in their old age. It can be managed from a smartphone and has mostly sustainable investments. Vantik has set up their own fund and gives people living in the EU the option to manage their investments living in two or more countries. (*Vantik*, 2020)

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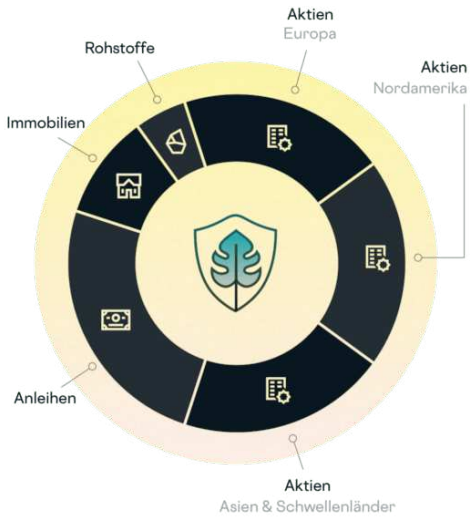

Figure 30. Setup of the Vantik Fund (Vantik, 2020)

This fund is set up with a bank and run over the private fund company AXXION set out of Luxemburg. (*Axxion*, 2020)

There is the question whether such a fund is necessary; on the one hand it is the convenience of handling everything on the smartphone, but there are some constraints:

1. The fund's expense ratio is comparatively high.
2. These costs can easily be mitigated by setting up an investment plan by oneself. The yearly expense ratio of investing in funds should not exceed 0.25%, however Vantik takes at least 0.9%, which, in the long term, can reduce profits, as has been previously explained.
3. Also, Vantik only has a single fund with asset allocation for young people, therefore it is not adapted to different risk or age profiles.
4. The fund will not be able to be used outside of the EU as a non-EU citizen(*Vantik*, 2020)

The strategy of low-cost funds with a low fee and asset allocation by age also already exists with the company Vanguard and Blackrock who are both exchange-traded funds providers, however these are more easily available for American investors and not for people living outside of the US. Living as a SIE in different countries, none of those solutions can help in the long term.

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As an alternative a bank or broker could be used as a partner, which has representations in several countries, an easy setup process, low fees and a transparent user interface.

6.6.2 Saxo Bank

Incidentally Saxo Bank, a bank that has branches all over the world, where expats have access to has representations in all major countries where expats live, have a trading platform, low fees, an easy setup and can be accessed from anywhere.(Saxo Bank, 2020) Saxo Bank offers access to different markets, can handle different currencies and offer bank accounts in several countries, all from one login. As a bank and broker, they do not offer any specific portfolios or strategies as a user, therefore a partnership together with Saxo might be an opportunity to use their existing assets and infrastructure to attract more users who wants to use a certain strategy. Saxo would offer the platform, where in cooperation with the new company a marketing and education company could be started, addressing SIE from all the main hubs over the world. This would increase the scalability of the new company, as with the existing infrastructure no banking licenses, brokerage technology etc would need to be established and obtained.

Assets of Saxo Bank:

- International bank accounts with access from everywhere
- Ability to maintain the technology framework
- The support system in case there is a technical problem.
- The after sales and customer support
- Ability to comply to international banking regulations through obtained licensing
- The internationally well-known reputation

There could be a mutual benefit for the bank as well as the company as it will give ease of access to existing clients as well as an influx of new clients without a higher development effort on both sides. In this case both parties will benefit from the innovation: The bank will be able to save on R&D and especially marketing efforts, and the company can rely on the bank's infrastructure.

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6.6.3 Syfe

Syfe(*Syfe*, 2020) is a digital wealth manager licensed by the Monetary Authority of Singapore (MAS) for retail fund management. Syfe offers investment management for everybody, providing investors with globally diversified portfolios that are designed to help achieve their financial objectives. To do this, they use a proprietary Automated Risk-Managed Investment (ARI) technology to ensure that portfolio risk is in control with the risk level chosen by the investors, regardless of market conditions.

This is where Saxo already comes into play: Monies and assets are held in a custodian account via Saxo Capital Markets ('Saxo'), a global broker regulated by MAS. This means that money and assets remain secure even if operations cease at Syfe or Saxo as they are held separately from Syfe or Saxo's assets.

They also offer several pre-set risk portfolios according to age, risk appetite and other factors which are filled out in a questionnaire. There are several points that need to be taken into consideration with Syfe:

Pros

- No minimum amount to start investing
- No minimum amounts or lock in periods, funds can be withdrawn at any time
- Investment goes into Exchange-traded funds (ETFs) covering important asset classes. ETFs that are liquid and have low expense ratios are selected to minimize costs and maximize returns.
- Pre-set portfolios according through factors like age, risk profile, family status etc (*Syfe*, 2020)

Cons

- Only invest into ETFs listed on US stock exchanges
- Invests into Us denominated assets, therefore investors are exposed to currency exchange risk
- Portfolios cannot be changed or altered
- Automated Risk-managed Investment (ARI), an algorithm that is supposed to protect against loss, has not been on the market for long, therefore the long-term effects have not been proven

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- Through investing in ETFs costs are low, the ARI usage does increase the expense ratio by 0.4% on top of ETF expenses. It is questionable if the extra expense "convenience fee" will justify the loss of income over the long-term time horizon.

One thing Syfe definitely does not do, is target expatriates in any kind of way, but focuses mainly on local Singaporeans, even though it is definitely possible for non-Singaporeans (even without residency in Singapore) to open up an account with Syfe.
It poses the question whether it makes sense for a local Singaporean to invest heavily into US based stocks and bonds, or if Syfe, in connection with the previously identified market opportunity should refocus their marketing efforts towards expats who could make heavy use out of the pre-set portfolios and are not necessarily bound to a home currency.

Another market opportunity, together with another challenge, is using a B2B approach, where companies who have a large expatriate ratio in their employees. This would be targeted to either multinational companies with offices in Hong Kong or Singapore, or local companies with an international outlook.
This would be the next step after setting up a successful B2C solution that has already gained traction and a positive reputation has been built up. A potential starting point would be German companies in the APAC region, such as Siemens, DHL, Lufthansa, TÜV just to name a few, overall there are around 600 German subsidiary companies only in Hong Kong and 5000+ in Greater China. This would mean a different target market and a different strategy to get new clients, however the core contents of the company would be the same. It would make sense to do another set of the Market Opportunity Navigator on the B2B approach alone, as a detailed market analysis, target segments and other research must be done beforehand.

6.7 Overall Challenge: COVID19

The first few months of 2020 have been proof that it is impossible to know that the future will bring. The market has been on a historical upwards trend for over a decade and many times investors have speculated a crash in the near future, not because the economy was moving into a recession but because the markets have been overheated for a long time and it seemed implausible that the bull market would continue. Covid19 has caused a severe market disruption that eliminated the gains of the stock market of the last 3-4 years with a recession

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and a high unemployment rate to follow. The travel industry has been disrupted especially hard, same as retail and logistics. Theoretically it is a good time to invest according to the FIRE movement, as stocks are “on sale” and eventually will rise up again in value which will help private investors increase their long-term wealth.

However, the target market that has come out of the market opportunity analysis is also heavily affected. Many expatriates are considering leaving their posts and return to their home country as they lack significant political and also health care protection. In case of a job loss there is seldomly a social security system to soften the blow, a health insurance that covers the cost in case of a job loss, or even rental protection in many cases. The chance of an expat exodus out of the APAC and Middle East region will be very high in the next 24 months, which is especially amplified in Hong Kong, where protests against the government have reignited after the lifting of the COVID19 related restrictions. The shrinking of the possible target market is something that needs to be taken into consideration for the future and for the agile focus dashboard as a growth opportunity that is expensive to develop might not find enough consumers to ameliorate the costs.

Figure 31. Expats leaving Hong Kong due to Coronavirus Pandemic and Anti-Government Protests (Westbrook, 2020)

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6.8 Market-Based Analysis

As has been discussed in the theoretical part before, a market-based analysis through research must be done to reconcile with the opportunity that have discovered through the first worksheet. Below is the results of a survey that shows a clear representation of the global expatriate population.

Figure 32. Ten Types of Expats according to Internations (Expat-Insider, 2016b)

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Looking at the target market, there are definitely several kinds of expatriates that can be segmented into.

As seen above, the expatriate population can be divided into 10 types of segments. This segmentation has been done by the expat social network website *Internations.org,* which supports expats in different countries, offers networking possibilities, different kinds of insurances, sponsors events, offers local information, housing ads and so on. (Expat-Insider, 2016)

Internations.org regularly does surveys of their user base, the above survey is called "*Expat Insider*" which is held annually; the sample population was segmented into multiple subgroups based on statistical criteria for cluster analysis and grouped on the similarity of their responses. Thanks to this, certain trends and tendencies have begun to emerge among these subgroups.(Expat-Insider, 2016) On the basis of these results the *Expat Insider* survey has identified ten types of expatriates: from the classic Foreign Assignee and Traveling Spouse, to the Career Expat, who found their own job abroad, and the Adventurer, looking for a personal challenge.

Telling from the figure, not all expatriates are self-initiated, yet the rest of them are not necessarily assigned expatriates either. Some are spouses, some move for relationships, some are researchers and may not 100% fit the mould. The focus on the segmentation, after careful consideration would be put in into the following order:

1. The Career Expat - They fit the target customer of the company most likely, moving for their career and improving their salary, but are on local contracts. They are high earners and very well educated.
2. The Greener Pastures Expat – A large part of the expat population with over 20%, have money but live in countries with unstable social systems, but where being an entrepreneur pays off.
3. The Adventurer – Most likely Digital Nomads who want to travel the world and work remotely most of the time. Not the highest earning segment but will be very interesting developing solutions for them.
4. The Dream Destination Expat - Since they are planning to stay abroad forever, they have to plan ahead in order to either fit into the social system of their chosen country or set a plan up themselves if the gap is too wide.

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5. The Foreign Recruitee - small part of the expat population, but very well earning. Based mostly out of Middle Eastern countries they most likely do not have any pension provisions set up by their employer and need to take this gap (while earning well) into consideration.

6.9 Potential Customer Interviews

Through previous interviews with 15 potential customers following points were discovered:

- Approx. 25-40 Years old, more male than female (but female ratio growing rapidly)
- On local contract with little or no pension
- Highly educated, highly mobile
- Awareness that there will be a gap in government pension since not paying into scheme
- " I know I really need to do something but don't know where to start"
- Will save money but don't know what to do with it
- Feelings of insecurity with regards to the future
- Desire to feel secure, to know what strategy to use
- Fear of financial markets / Fear of losing money
- Fear of getting ripped off by insurance agents and banks
- Insurance plans and bank saving plans have highly exploitative fees and T&Cs when wanting to withdraw/high penalty fees when withdrawing early
- Lack of awareness on opaque fee structures
- High dependency on home country government makes clueless when trying to work abroad

Since these interviews have been conducted through the personal network of the author, the results are likely somewhat skewed especially towards gender and age, therefore she decided to do a more representative survey in the relevant target market.

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6.10 Customer Survey

A survey to discover this market opportunity has been distributed with 20 questions to relevant target groups on Facebook and my personal network. 100 people have replied to the survey which shines a more representative light on the SIE situation.

6.10.1 Demographics

- In comparison to the interviews there has been a much higher percentage of men (63%) vs women (37%) (Q1)
- 62% have at least a Master's degree (Q2)
- 48% are in middle management (Q3)
- Largest majority age wise are in the 35-44 year old bracket with 54% (Q4)
- 81% have worked in 1-2 countries outside of their home country (Q5)
- 79% are on a local contract, only 15% are on assigned contract (Q6)

6.10.2 Financial Education

- 49% of surveyed are aware of the amount of pension they will receive when they retire, 46% are not (
- A whopping 80% have made provisions for bridging the possible pension gap
- 33% set up an investment portfolio
- 12% invested in property
- 13% are paying into a private pension scheme
- 27% are doing a combination of the aforementioned (details in appendix)
- Only 10% pay into their home country's government pension scheme on a voluntary basis
- In the case of saving money or setting up an investment portfolio 46% are aware of the amount of money needed to bridge the pension gap, 53% are not
- When asked about how management fees affect earnings of investments, most of the respondents were knowledgeable in the area, same goes for interest compounding (Q20 and Q21)

Q13: Preparation for moving abroad

This is one of the most important questions in this survey and the results are quite interesting:

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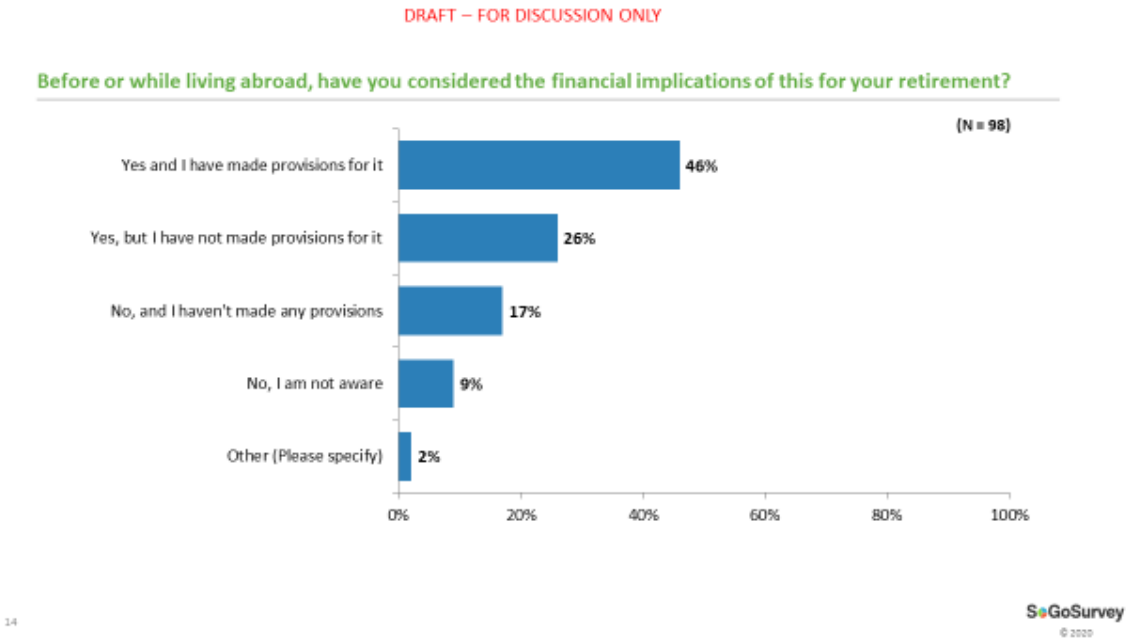

Figure 33. Question 13 of survey

46% were aware of the financial implications before or while moving abroad on their retirement and have made provisions for it, yet 52% have not considered them.

6.10.3 Emotional

- Q14: On a scale of 1-10 with 5 being in the middle 30% are "somewhat" worried about their potential pension gap, 11% are "not worried at all" and 1% are "very worried"

The question (Q15) whether the surveyed SIE would use a service that would help them invest for the long term for their pension, with low fees and transparency, has been answered to varying degrees with „Yes" on a scale of 1-11.

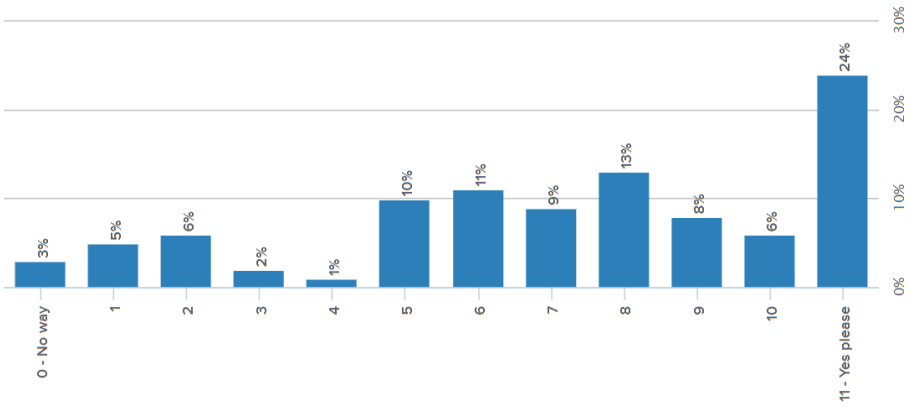

Figure 34. Question 15 of survey

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Counting from 5 up, 81% of respondents would use such a service, with the majority choosing the highest score.

This correlates with Q16, when asked how thinking about managing their financial future makes SIE feel, 34% know that something needs to be done (even though a large percentage probably has made provisions already), and 38% already have a strategy in place.

Finding information on how to invest and handle finances as an expat is considered moderately difficult (Q17) with 28%, and 14% finding it very difficult.

If asked how having the right investment strategy would make them feel (Q18), 56% of the respondents would feel confident, 23% relieved, and 20% nothing in particular.

Another surprising set of answers was Q19, where asked which kind of investment solution would be preferred most of the respondents answered with "guidance through coaching with a flexible strategy" with 44%, and only 19% would prefer the option of ready-made portfolios depending on age etc which was quite contrary to the author's personal belief.

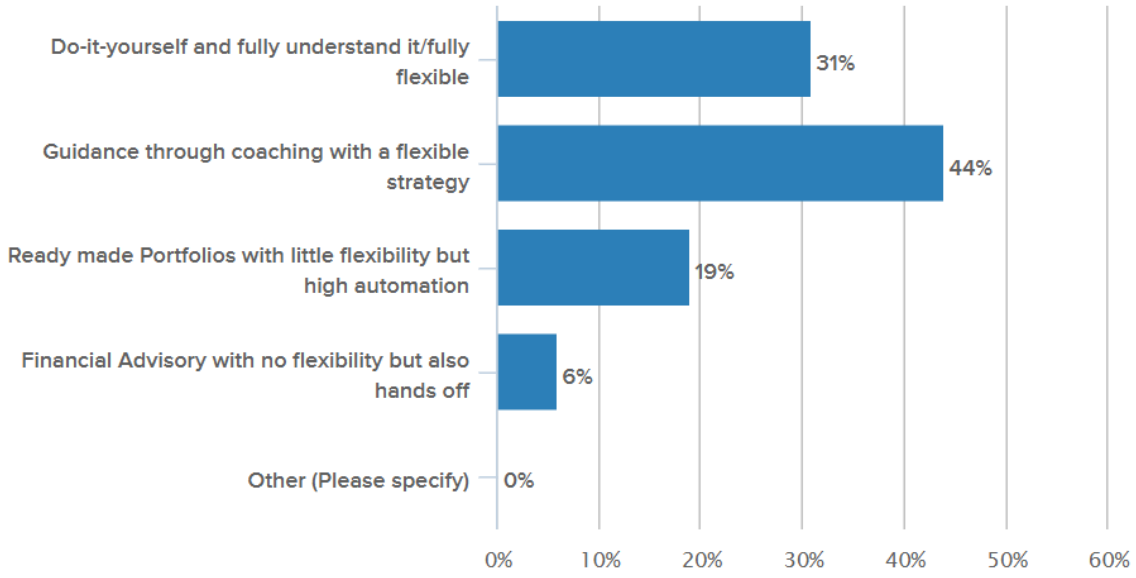

Figure 35. Question 19 of survey

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6.11 Market research: Example German Expat Population

In addition to being the second most attractive country for immigration, 3.4 million Germans resided in other developed countries in 2016, which is about Berlin 's population. This makes Germany the fifth largest country of origin after Mexico, Britain, China and India of emigrants living in the OECD. (Deutsche im Ausland Fakten and e.V, 2019)

1.1million of these Germans live in the United States, and 270,000 each live in Britain and Switzerland. France, Italy and Spain are also popular spots where Germans like to settle.

6.11.1 Educated Expatriates

The level of education of German expatriates is generally high and continues to rise. 1.4 million of them have the Abitur (end of school diploma) or a vocational qualification. A further 1.2 million are university graduates.
Due to the high proportion of well-educated women, the number of highly qualified emigrants has increased by 40 percent over the last decade as can be seen in Figure 36 and 37.

- 12% have lived in five or more countries
- Nearly a third want to stay abroad forever
- 28% have access to a household income of over 100k USD per year

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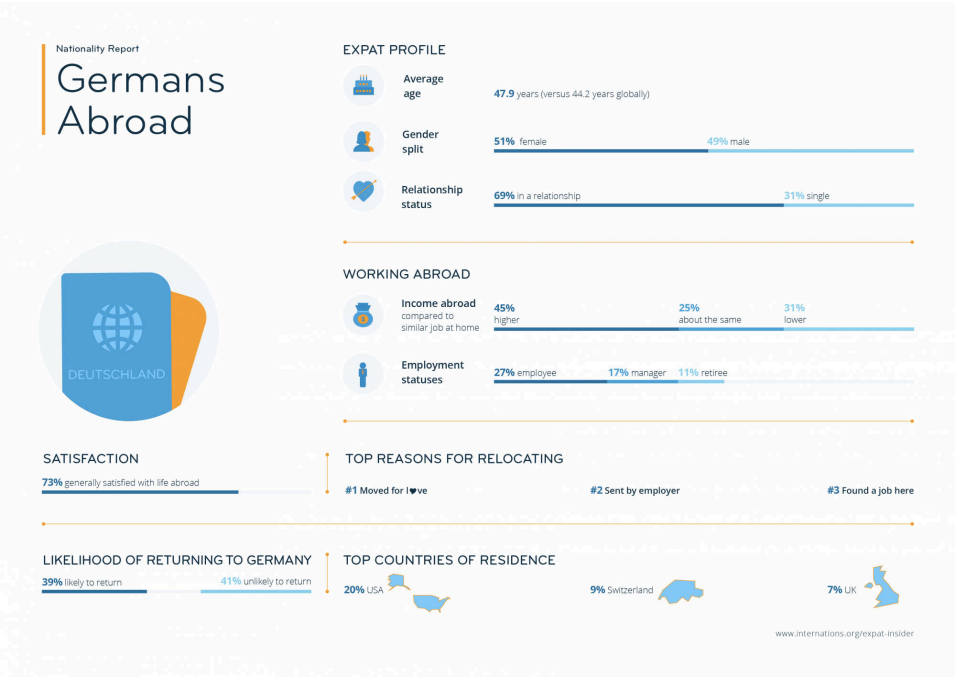

Figure 36. Expat profile of Germans abroad(Expat Insider 2017: Germans Abroad, 2020)

Figure 37. Expat profile of Germans abroad (Expat Insider 2017: Germans Abroad, 2020)

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6.12 Segmentation

The ideal segment consists of expats who live abroad at least for two years, but preferably five. The knowledge that comes with the company will help them also when they return to their home country as in using the strategy further, while saving and investing for retirement, but also for other goals such a property purchase.

The target market cuts across people mainly citizens from the European Union who live and work in Asia, in the longer term the market segment could be expanded to citizens of other nationalities but since the specialisation of the founder lies within that scope, this is the currently most professional solution. More and more highly educated workers come from the EU to work abroad, be it in the US, UK (after Brexit), Middle East, APAC or South America. Most face the same issue in having gaps in their government mandated pension scheme and need to plan for the long term. Since there is a tendency to move abroad to work, to work location independent, and as digital nomads, the market is projected to be growing, albeit, it will significantly slow down directly after the outbreak of COVID19.(Einhorn, 2020; Westbrook, 2020)

There is a long list of viable expat populations in the APAC region. It can also be expanded in the middle Eastern region; however it will not be the primary focus of the company in the beginning. Again, part of this will also be because of the current COVID19 outbreak and the possible looming recession that possibly come with the crash in the oil markets as well as the long-term attractiveness of the Middle East as an expat destination. (Browne, 2020b; Browne, 2020a) A list of the expat population in the APAC region is below as the first viable target market, the numbers show that the market would be large enough to sustain such a business as described above, considering that 80% of expats are on local contracts as previously stated in the survey results. Every market with deviate slightly from these numbers, and a more in-depth research on the sociological makeup of each country.

Figure 38. APAC Region

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Expat population by country in the APAC region:

- Singapore 30K
- Hong Kong 40K
- Taiwan 10 K
- China 200K
- India 100K
- Vietnam 10K
- Australia/NZ N.a.
- Dubai/Qatar/UAE 1.7M

Small runner ups

- Indonesia
- Malaysia
- Vietnam
- Thailand
- Cambodia

Below is an example of Singapore's expat population. Employment pass holders in the non-resident section are the target market, as well as their dependents.

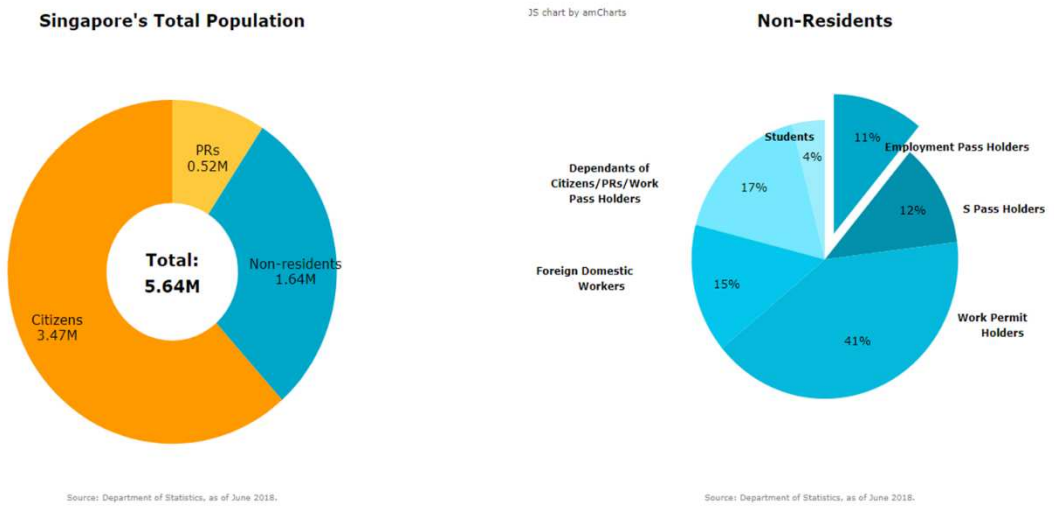

Figure 39. Population of the potential segment of Non-residents in Singapore (Population.sg, 2020)

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6.13 Industry based Analysis

6.13.1 SWOT Analysis of Competitors

Looking at market opportunities is important but is is also as vital to look at the current existing companies within the specified market. Below is a SWOT Analysis of the current market situation. 4 Companies, who are in the market, get analysed to see whether they would pose a threat to the future market opportunity:

Market and Competition	
Research conducted to understand market, including industry, regions, customers, competitors	
• Surveys & questionnaires • Interviews • Desk or online research • Personal experience • Social media research • Family and friends	
Competitor 1:	
Name, location, website:	Average prices:
The Expat Pension Review http://expatpensionreview.com/ Singapore	None that are obvious from the website. The expat pension review seems to be free but only for UK expats
Strengths:	Weaknesses:
• Free • Specific to British target market • Very new, approx. 6 months	• Not useful for any other kind of expats. • Not obvious in terms of guidance, need to leave personal data

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Competitor 2	
Name, location, website:	Average prices:

Expat Financial Planning
 	
https://www.expatfinancialplanning.com/
 	
Singapore
	On offer are financial planning with full cash flow anaylsis, tax and real estate planning. Software is used to analyse which goal can achived when and a plan is designed specifically for each client.
	Starting price is as 3500 SGD
	Project fee is at 500 SGD per hour
	Also assets that are managed are charged at:
	
	• Less than $2m
	  ○ 1%
	• Above $2m
	  ○ 0.5%
	
	Platform/Product Cost
	• Platform/Product for Regular Savings: 0.10%-0.30% pa
	• Lump Sum Platform/Product: 0.10%-0.30% pa plus admin and dealing fees.

Strengths:	Weaknesses:
• Direct competitor • Has financial experts on board • Have financial planning tool on hand • Well-designed website	• Very steep pricing • Charging high fees for managing assets • No guidance on how to manage own assets • Large amount of assets needed • Focused on UK and AU Expats

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Competitor 3	
Name, location, website:	Average prices:
The New Savvy https://thenewsavvy.com/ Singapore	None
Strengths:	Weaknesses:
• Financial and career advice geared towards women in Asia • Good website • Many articles on how to save money and invest • Would probably be a good cooperation partner	• Not exact target market • Not geared towards expats • No strategic advice, very general

Competitor 4	
Name, location, website:	Average prices:
Andrew Hallam https://andrewhallam.com/ Unknown	No pricing

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Strengths:	Weaknesses:
• Detailed DIY teaching of investments for expats • Has published very extensive book on expat DIY investing called "Millionaire Expat"	• Not interesting for target group • Geared toward British teachers • Does not offer private investing advice

Market Opportunity	
What sets the business apart from the competitors?	
The market opportunity sets itself apart from most expat financial planners as there isn't any minimum value of assets that needs to be achieved first, the company can teach to invest even with the smallest incomes. As most financial planners and coaches are male and in their late 40ies-50ies they do not reach the target market of young professionals who establish themselves while living abroad. There needs to be an understanding of the situation of young people who have not received financial education and need a flexible solution while building wealth.	
Strengths:	Weaknesses:
• Personal experience • Product will fit any expat • Profile Millennial, can relate to younger generation and their problems more • Has done extensive market research on the topic	• Not a financial planner • Self-taught DIY investor

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• There actually has been no scientific research on the topic of financial implications of SIE going abroad→This thesis is the first	
Current or future opportunities:	Current or future threats:
• Corp up with a bank • Corporate deals	• Lack of expats coming in • Fairly easy to imitate • Coronavirus • Political instability

6.14 Porter's 5 Forces Model as an overall Market Analysis of the Primary Market Opportunity

Figure 40. Porter's 5 Forces Analysis of the Primary Market Opportunity

The above 5 Forces Model is based on the Primary Market Opportunity, which is a more coaching and consulting approach than a technological. The barriers to entry into the market

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is not too high since it only a consulting/coaching company. This also means that the threat of imitation can be quite high and needs to be ameliorated with soft attributes like reputation and accuracy. The more technology is involved, the lower the threat of substitution, yet the barriers to entry are much higher.
Supplier power is fairly low in the coaching/consulting opportunity, but also gets higher the more technology is involved, as a banking license, cooperation agreements and APIS are required.

7 Agile Focus Strategy

The survey spanning 100 expatriates on local contracts has yielded very apparent results. Contrary to the belief of the author, there is much lower desire for pre-set portfolios according to risk profile than originally anticipated, yet a high demand in detailed DIY guides, workshops, white papers and coaching. The original assumption that only with a high technology set up, bank partnerships and licensing there can be success has been disproven. The Author has considered the options from above with classic market research and through personal experience, however did not work this opportunity through the Market Opportunity Navigator which has now changed the direction entirely.
The survey has been posted in the authors personal network and in expat Facebook groups, which have approx. 6000 users each which could be considered fairly representative.

Pain points of the survey and a reason why further market research must be done:

- It is fairly short with 20 questions
- There needs to be a deeper research done in what is required per age group and gender
- There needs to be a larger respondents population residing in different countries.

Still it has brought much more clarity to the process and how to proceed from here on out. The most prominent or obvious result has been changed from pre-set portfolios to the DIY website with online courses, white papers and workshops as the Primary Market Opportunity which is in this case even poses much less of a challenge than originally anticipated. The Growth Opportunity will then be building the technological programme that can project all necessary investment options into the future and possibly start hiring fee based financial advisors to add an extra service. This could possibly move the opportunity into the Quick

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Win category; the challenge is comparatively low, the demand fairly high. The Quick Win Opportunity could then be used to finance the expansion of the company as well as its services; after doing more market research the market opportunity with working together with banks to develop an expat friendly product could be considered a backup opportunity if more research has regarding product requirements. After all, it is the deeply set belief of the author that making investing more automated and easily accessible, will help expatriates a lot in the long run. Learning to invest properly takes a lot of time and effort, yet it is nothing that cannot be automated and simplified, especially for SIE expat women, who through socio-economic disadvantage have not received enough information and education, may not have the time to catch up onto the levels of their male counterparts.

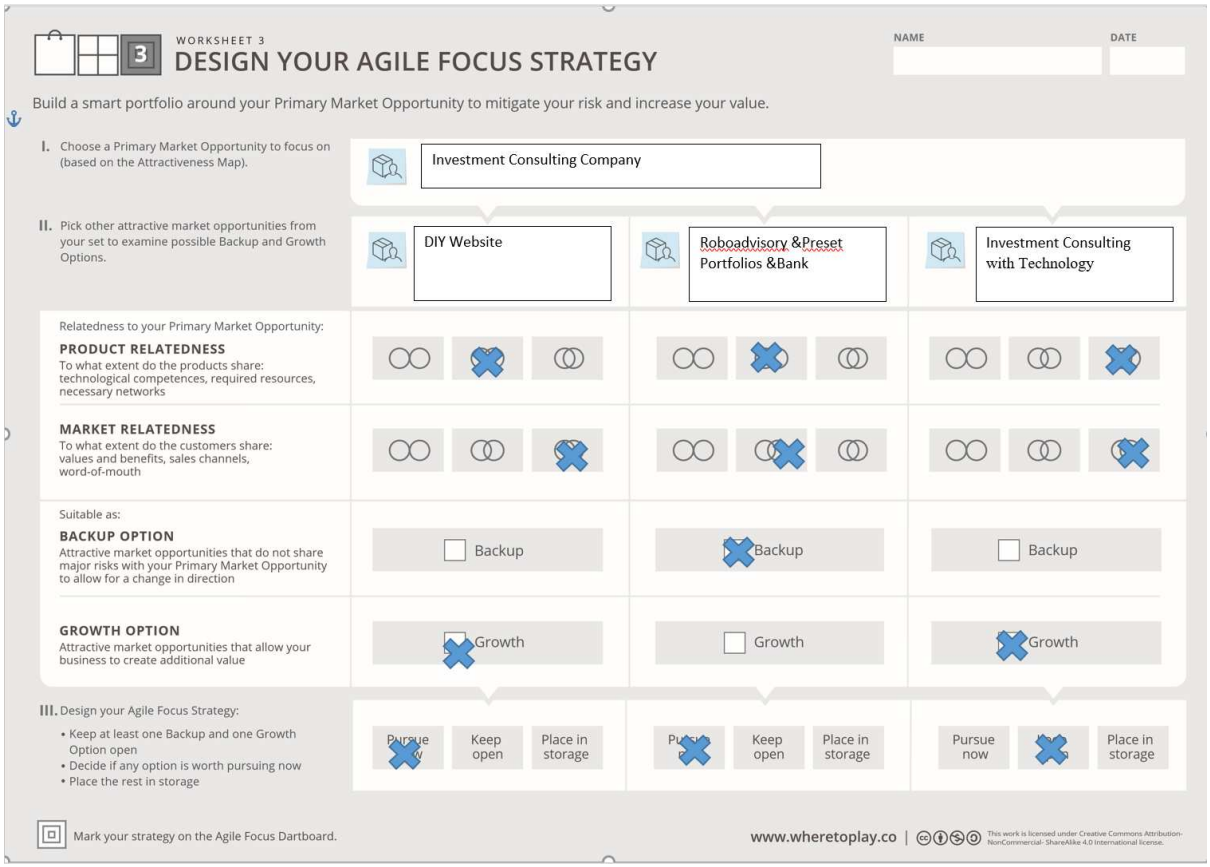

Figure 41. Filled out Agile Focus Worksheet on previously mentioned Market Opportunities.

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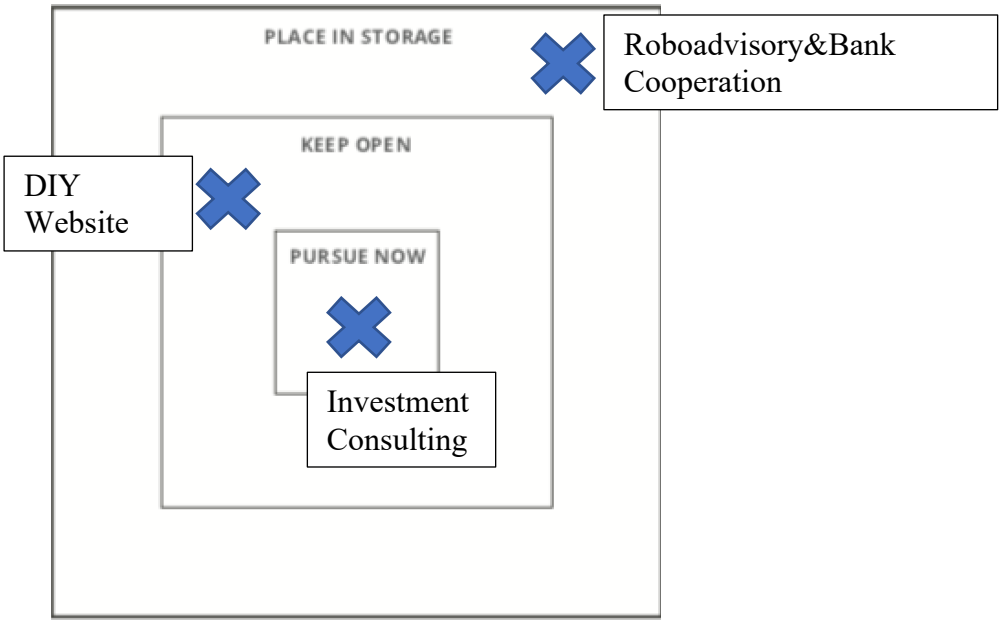

Figure 42. Agile Focus Dashboard with previously mentioned Market Opportunities

8 *Excursion Value Proposition*

Value Proposition

Even though the thesis is centered about finding the right market opportunity, a quick excursion into value creation for the aforementioned Primary Market opportunity might even help in finding more clarity for the agile focus strategy. Yet, this chapter would only address the topic of the value proposition itself, not the rest of the Business Model Canvas, in whichthe Value Proposition Canvas lies.

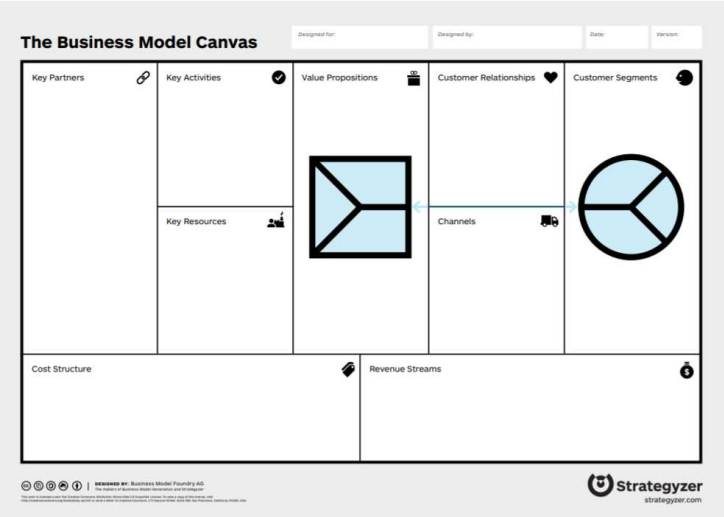

Figure 43. The Value Proposition Canvas inside the Business Model Canvas(Osterwalder and Pigneur, 2020)

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Osterwalder in his paper *Modeling Value Propositions in E-Business(Osterwalder and Pigneur, 2002)*, that through globalization, rapidly changing markets and new technologies things have become so complex and complicated that formal methods to seize value propositions are of vital importance. The offered framework, developed by Osterwalder et al, is called the Value proposition canvas, which allows modelling and mapping a company's value proposition. It also provides a better understanding of the company's offer to stakeholders and enables better IT implementation. Conceptually seized and modelled value propositions are also useful to assess the value proposition of a company's competition, which is important for building sustainable competitive advantage through differentiation.
It is important for a consulting and coaching service to offer a high value proposition as opposed to clients learning about the topic themselves or going to a competitor. Yet, the real value proposition has not been discussed in detail yet in the aforementioned market opportunities, however a cursory glance should be taken over it to truly consider the impact on the customer.
Value Proposition can be interpreted as a statement of advantages that the company provides to its external stakeholders and for Target customers which is focused on one or more Capabilities. In this specific case the value proposition will be analysed for the primary market opportunity, which is the coaching and consulting company for expatriates.
The potential customer has a specific "job" that must be done, has a certain problem that needs to be solved, in this case covering the gaps in the retirement

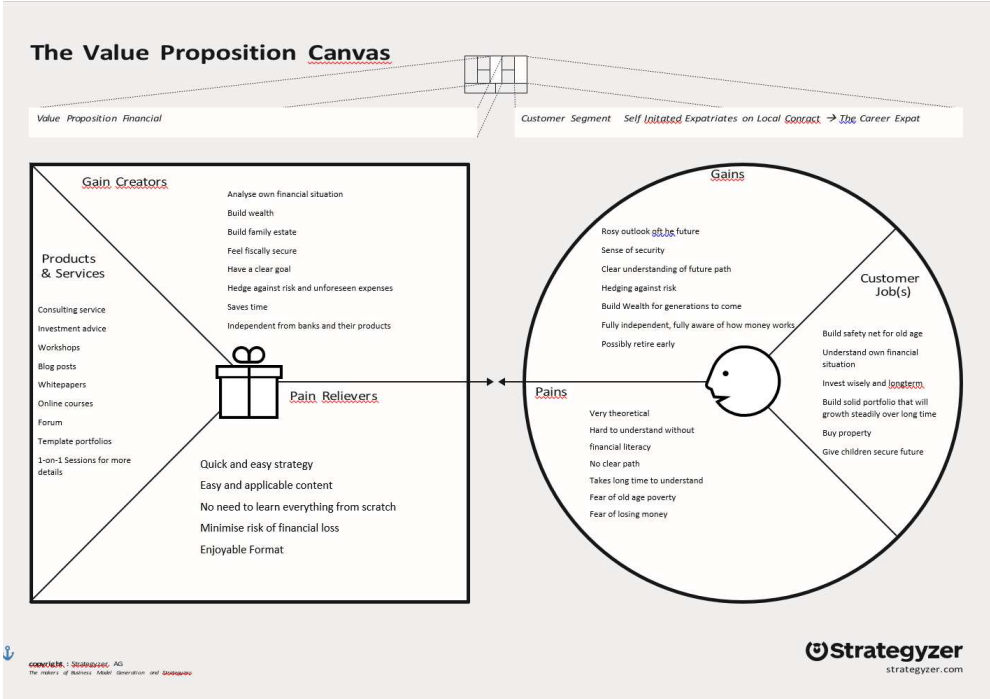

Figure 44. Primary Market Opportunity analysed with the Value Proposition Canvas

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9 *Conclusion & Discussion*

The Market Opportunity Navigator is a fantastic and scientifically proven tool to work through one's own biases and preconceptions of a certain market opportunity and exploit maximum value out of any given idea. Without the deep analysis, market research and conclusion there would have been a high possibility that the author would have gone in a much different direction and might have focused on the wrong opportunity for too long with too little results. In order to start the company, there is a now much clearer picture of what the next steps are, what is required for market entry what the targeted market segment is requiring.

The Market Opportunity Navigator shows that a founder can reach beyond their own perception or awareness of a certain opportunity and build for a potential much larger than previously anticipated. This method does not only help a founder or team of founders of a start-up but would also help large companies reconsider their strategies when looking to innovate. Some companies are good examples of de-linking and re-linking their unique capabilities, an unusual example would be the company Rügenwalder Mühle, who traditionally are a company for cold cuts and deli meats, but who have examined their capabilities to offer vegetarian and vegan alternatives which have the taste and feel like a traditional meaty bread topping. This company has truly de-linked and re-linked their capabilities to offer products which are actually the opposite of their range and are able to reach a whole new segment of customers while retaining the old ones, and therefore truly applied technological competence leveraging.

There are of course many other examples like this, but it renders impressive that a traditional butcher company has achieved something BMW and other automobile companies have not been able to attain, namely to innovate into the "opposite" direction. BMW et al have famously missed the opportunity to innovate on electric cars and could have pioneered strongly in this segment yet have forfeited their chance to be on the forefront of innovation. Technological competence leveraging and distant search is a concept that, at its core, should be mandatory even in very large companies to fully exploit their potential.

Regarding the results of the Market Opportunity Navigator in the case study:

The COVID19 Crisis has and will pose a challenge for many expatriates, especially SIE. As they do not receive the protection of an employer who can transfer them back to their home country, many will reconsider their choice to stay abroad and risk unemployment and visa

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cancellation. As has been read in several newspaper articles and forums, many will return to their home country, and possibly this trend will continue for at least 24 months. A recovery phase will possibly lead to more expatriates returning into the APAC region by 2025, as there will be more demand in the recovering industries like luxury hotels and airlines which are not always possible to fill with local staff. There also might be another trend to hire more local talent and the return of SIE into their home countries will be permanent.

Therefore setting up the more low risk but similar return market opportunity as a consulting company might make more economic sense. It would help SIE returning into their home countries consider what to do with funds that have been paid into local pension schemes, for example; in the case the funds get paid out, they must be reinvested in order to cover the gaps, or if no funds have been paid into any schemes what needs to be done upon return into the home country.

From the financial and economic hurdles, the easiest way to set up a consulting and coaching company would be over Hong Kong and start from there. Hong Kong is also an ideal location to test the minimum viable product (MVP)

- Small but exact target market
- Very easy and low cost to set up company
- Already familiar with Infrastructure
- Ability to use previously existing network to leverage opportunity either as customers or introductions
- No capital gains tax
- Easy to travel

It would be fairly simple to gauge the response in the market, do more in depth research and speak to potential clients directly in order to fine tune the product range.

From there on a new set of the Market Opportunity Navigator should be established for the B2B sector, as many companies send their employees now abroad and hire them on a local contract basis with amended benefits instead of assigning them abroad directly.

This is a theoretical strategy as Hong Kong has recently been heavily hit by anti-government protests as well as having been affected by the COVID19 crisis and subsequently closed borders.

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10 Bibliography

Alvarez, S. A. and Barney, J. B. (2007) 'Discovery and creation: alternative theories of entrepreneurial action', *Strategic Entrepreneurship Journal,* 1(1-2), pp. 11-26.

Anderson, J. C. and Narus, J. A. (1998) 'Business marketing: understand what customers value', *Harv Bus Rev,* 76(6), pp. 53-5, 58-65.

Andresen, M., Biemann, T. and Pattie, M. W. (2015) 'What makes them move abroad? Reviewing and exploring differences between self-initiated and assigned expatriation', *The International Journal of Human Resource Management,* 26(7), pp. 932-947.

Asher, M. and Newman, D. (2001) 'Hong Kong and Singapore: Two approaches to the provision of pensions in Asia', *Pensions: An International Journal,* 7.

Axxion (2020). Available at: https://www.axxion.lu/no_cache/de/disclaimer.html?requestUri=%2Fde%2Ffonds%2Fdetail%2FDE000A2H9AA6%2Fshow.html (Accessed: 10. Jul. 2020.

Baron, R. A. and Ensley, M. D. (2006) 'Opportunity Recognition as the Detection of Meaningful Patterns: Evidence from Comparisons of Novice and Experienced Entrepreneurs', *Management Science,* 52(9), pp. 1331-1344.

Beaverstock, J. (2007) 'Transnational work: Global professional labour markets in professional service accounting firms', *The Handbook of Service Industries*, pp. 409-431.

Beaverstock, J. (2012) 'Highly skilled international labour migration and world cities: expatriates, executives and entrepreneurs', pp. 240-250.

Beaverstock, J. V. (2011) 'Highly skilled international labour migration and world cities: Expatriates, executives and entrepreneurs', *International Handbook of Globalization and World Cities*, pp. 240-250.

Biemann, T. and Andresen, M. (2010) 'Self-initiated foreign expatriates versus assigned expatriates: Two distinct types of international careers?', *Journal of Managerial Psychology,* 25(4), pp. 430-448.

Bradford, W., Johnston, W. and Bellenger, D. (2016) 'The Impact of Sales Effort on Lead Conversion Cycle Time in a Business-to-Business Opportunity Pipeline', *SSRN Electronic Journal*.

Browne, G. (2020a) *Britons in Dubai sell possessions and return home as coronavirus ends expat dream*. The Telegraph. UK. Available at: https://www.telegraph.co.uk/news/2020/06/20/britons-dubai-sell-possessions-return-home-coronavirus-ends (Accessed: 7. Jul. 2020.

Die approbierte gedruckte Originalversion dieser Masterarbeit ist an der TU Wien Bibliothek verfügbar.
The approved original version of this thesis is available in print at TU Wien Bibliothek.
TU WIEN Bibliothek Your knowledge hub

Browne, G. (2020b) 'Britons in Dubai sell possessions and return home as coronavirus ends expat dream', Available: Telegraph.

Bryon, M. and Verhoeven, L. (2009) 'Do actively managed equity funds outperform index funds?', *FACULTEIT ECONOMIE EN BEDRIJFSKUNDE,* Master, pp. 31.

Connell, W. (2014) *Economic Impact of Late Payments*: Directorate General Economic and Financial Affairs (DG ECFIN), European Commission. Available at: https://EconPapers.repec.org/RePEc:euf:ecopap:0531.

Cuellar-Healey, S. and Gomez, M. (2013) *Marketing Module 4: Competitor Analysis*. Ithaca, NY: Charles
S. Dyson School of Applied Economics & Management College of Agriculture and Life Sciences Cornell University. Available at: http://publications.dyson.cornell.edu/outreach/extensionpdf/2013/Cornell-Dyson-eb1305.pdf (Accessed: February 6 2020).

Danneels, E. (2007) 'The process of technological competence leveraging', *Strategic Management Journal,* 28(5), pp. 511-533.

Dencker, J. and Gruber, M. (2014) 'The Effects of Opportunities and Founder Experience on New Firm Performance', *Strategic Management Journal,* 36.

Einhorn, B. (2020) *Expat Families Flee Hong Kong After Double Whammy of Virus, Protests*. Bloomberg.com: Bloomberg. Available at: https://www.bloomberg.com/news/articles/2020-02-18/expats-flee-hong-kong-after-double-whammy-of-protests-and-virus (Accessed: 07 Jul 2020.

Expat Insider 2017: Germans Abroad (2020). Available at: https://www.internations.org/expat-insider/2017/germans-abroad-39190 (Accessed: 10. Jul. 2020.

Expat Pension Review (2020). Available at: http://expatpensionreview.com/about/ (Accessed: 7. July 2020.

Expat-Insider (2016) *Ten Different Types of Expatriates | InterNations*. Available at: https://www.internations.org/expat-insider/2016/ten-types-of-expats (Accessed: 7. Jul. 2020].

Fakten, D. u. and e.V, D. i. A. (2019) *Zahlen zu deutschen Auswanderern*. Available at: https://www.deutsche-im-ausland.org/im-ausland-leben-und-arbeiten/leben-im-ausland/daten-und-fakten.html (Accessed: 08 Jul 2020.

Faulconbridge, J. R., Beaverstock, J. V., Hall, S. and Hewitson, A. (2009) 'The 'war for talent': The gatekeeper role of executive search firms in elite labour markets', *Geoforum,* 40(5), pp. 800-808.

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TU Bibliothek WIEN Your knowledge hub

Foley-Wong, B. (2019) *Ikigai - Founder-Product-Market-Impact Fit*: Linkedin. Available at: https://www.linkedin.com/pulse/ikigai-founder-product-market-impact-fit-foley-wong-cpa-ca-cfa/ (Accessed: March 3rd 2020).

Gallo, A. (2014) *A Refresher on Net Present Value*. Available at: https://hbr.org/2014/11/a-refresher-on-net-present-value (Accessed: 6 June 2020.

Ghezzi, A. and Cavallo, A. (2020) 'Agile Business Model Innovation in Digital Entrepreneurship: Lean Startup Approaches', *Journal of Business Research,* 110, pp. 519-537.

Gil, E. (2018) 'PART 2: HACKING LATE-STAGE FUNDING, An interview with Naval Ravikant', *High Growth Handbook: Vol. May 25th*. USA: Stripe Press, pp. 344.

Gruber, M., Leon, N., Thompson, P. and George, G. (2015) 'Managing By Design', *The Academy of Management Journal,* 58, pp. 1-7.

Gruber, M., MacMillan, I. C. and Thompson, J. D. (2008) 'Look Before You Leap: Market Opportunity Identification in Emerging Technology Firms', *Management Science,* 54(9), pp. 1652-1665.

Gruber, M., MacMillan, I. C. and Thompson, J. D. (2012) 'Escaping the Prior Knowledge Corridor: What Shapes the Number and Variety of Market Opportunities Identified Before Market Entry of Technology Start-ups?', *Organization Science,* 24(1), pp. 280-300.

Gruber, M. and Tal, S. 2017. Where to play: 3 steps for discovering your most valuable market opportunities. London, England: FT/Pearson.

Gruber, M. and Tal, S. (2020) *Where to Play | Market Opportunity Navigator*. Available at: https://wheretoplay.co.

Hallam, A. a. (2018) *Millionaire expat : how to build wealth living overseas.* Second edition. edn. London: Wiley.

Hayes, A. (2019) *Digital Nomad*. Investopedia: Investopedia. Available at: https://www.investopedia.com/terms/d/digital-nomad.asp (Accessed: 07 Jul 2020.

Helms Marilyn, M. and Nixon, J. (2010) 'Exploring SWOT analysis – where are we now? A review of academic research from the last decade', *Journal of Strategy and Management,* 3(3), pp. 215-251.

Herod, R. (2012) *Challenges and Trends for Expatriates and Internationally Mobile Employees*, Geneva: Mercer. Available at: https://www.imercer.com/uploads/GM/webcasts/expatriate-benefits-webcast-120328a.pdf.

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HSBC (2020) *Insurance Fees and Charges - HSBC HK*. Available at: https://www.hsbc.com.hk/insurance/fees (Accessed: 7. Jul. 2020.

Hsu, D. H. (2006) 'Venture Capitalists and Cooperative Start-up Commercialization Strategy', *Management Science,* 52(2), pp. 204-219.

Kerr, A. (2020) *Financial Independence, Retire Early (FIRE)*. Investopedia: Investopedia. Available at: https://www.investopedia.com/terms/f/financial-independence-retire-early-fire.asp (Accessed: 7. Jul. 2020.

Kim, J.-Y. and Canina, L. (2010) *Featured Chapter: On the Importance of Market Identification*. Available at: https://in.sagepub.com/sites/default/files/upm-assets/35211_book_item_35211.pdf (Accessed: 05 Jul 2020.

Kim, S., Gruber, M. and Brinckmann (2015) 'What is an Attractive Business Opportunity? An Empirical Study of Opportunity Evaluation Decisions by Technologists, Managers, and Entrepreneurs: What is an Attractive Business Opportunity?', *Strategic Entrepreneurship Journal,* 9.

Kotler, P. and Armstrong, G. (2008) *Principles of Marketing.* Pearson/Prentice Hall.

Kudesia, R., Baer, M. and Elfenbein, H. (2015) 'A Wandering Mind Does Not Stray Far from Home: The Value of Metacognition in Distant Search', *PloS one,* 10, pp. e0126865.

Kwon, J. (2019) 'Third Culture Kids: Growing up with mobility and cross-cultural transitions', *Diaspora, Indigenous, and Minority Education,* 13(2), pp. 113-122.

Mcnulty, Y. (2014) 'The Opportunity costs of Local-Plus and Localisation Approaches to Expatriate Compensation ', *The Compensation Handbook. In L. Berger and D. Berger,* (Eds, 6th Edition).

McNulty, Y., Rason, J. and McGrory, K. 2015. To be, or not to be, Local Plus. Singapore: Santa Fe Consulting Services.

Ministry-of-ManPower (2020) *MOM Entry Approval and Stay-Home Notices Now Covers All New and Existing Work Pass Holders*. Available at: https://www.mom.gov.sg/newsroom/press-releases/2020/0318-mom-entry-approval-and-stay-home-notices-now-covers-all-new-and-existing-work-pass-holders (Accessed: 7. Jul. 2020.

Osterwalder, A. and Pigneur, Y. (2002) 'An eBusiness Model Ontology for Modeling eBusiness', *BLED 2002 Proceedings*.

Osterwalder, A. and Pigneur, Y. (2020) *Strategyzer Corporate Innovation Strategy, Tools & Training*. Available at: https://www.strategyzer.com.

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Piezunka, H. and Dahlander, L. (2014) 'Distant Search, Narrow Attention: How Crowding Alters Organizations' Filtering of User Suggestions', *Academy of Management Journal,* 2015, pp. 856-880.

Ries, E. (2018) *The Lean Startup*
The Movement That Is Transforming How New Products Are Built And Launched. Available at: http://theleanstartup.com.

Roth, S. and Dana, L. (2015) *What is a self-made expat? Self-disclosures of self-initiated expatriates*: ZBW - Leibniz Information Centre for Economics. Available at: https://EconPapers.repec.org/RePEc:zbw:esprep:110355.

S.E.C. (2017) *Mutual Fund Fees and Expenses*. Available at: https://www.sec.gov/files/ib_mutualfundfees.pdf.

Saxo Bank, T. T. I. S. (2020) *Saxo Bank*. Available at: https://www.home.saxo (Accessed: 7. Jul. 2020.

Seatti.co (2020) *Entdecke flexible Arbeitsplätze in deiner Nähe*. Available at: https://seatti.co/ (Accessed: March 2020).

Shane, S. and Venkataraman, S. (2000) 'The Promise of Entrepreneurship as a Field of Research', *The Academy of Management Review,* 25(1), pp. 217-226.

Shepherd, D. A. and Gruber, M. (2020) 'The Lean Startup Framework: Closing the Academic–Practitioner Divide', *Entrepreneurship Theory and Practice*, pp. 1042258719899415.

Smith, E. (2020) *5 Types of Market Segmentation & How To Use Them*: Remesh. Available at: https://blog.remesh.ai/5-types-of-market-segmentation-how-to-use-them (Accessed: 7 Jul 2020.

Stocker, F. (2018) *Altersvorsorge: Riester-Verträge lohnen sich wirklich nicht mehr*. DIE WELT. Germany: WELT. Available at: https://www.welt.de/wirtschaft/article175680761/Altersvorsorge-Riester-Vertraege-lohnen-sich-wirklich-nicht-mehr.html.

Straits-Times (2020) *Expats are leaving Dubai and that's bad news for the economy*. The Straits Times. Singapore. Available at: https://www.straitstimes.com/business/economy/expats-are-leaving-dubai-and-thats-bad-news-for-the-economy.

Suri, A. K. and Purohit, S. (2017) 'An Analysis of Personal Financial Literacy among Expatriates in the United Arab Emirates', *Contemporary Review of the Middle East,* 4(3), pp. 278-296.

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Syfe (2020). Available at: https://www.syfe.com.

Szalma, J. L. (2014) 'On the Application of Motivation Theory to Human Factors/Ergonomics: Motivational Design Principles for Human–Technology Interaction', *Human Factors,* 56(8), pp. 1453-1471.

Tagesschau (2020) *3,2 Millionen Senioren armutsgefährdet*. tagesschau.de. Germany: tagesschau.de. Available at: https://www.tagesschau.de/investigativ/monitor/altersarmut-129.html.

Team, M. S. (2020) *Psychographic Segmentation*. Available at: https://www.mbaskool.com/business-concepts/marketing-and-strategy-terms/16967-psychographic-segmentation.html.

Tharenou, P. (2010) 'Women's Self-Initiated Expatriation as a Career Option and Its Ethical Issues', *Journal of Business Ethics,* 95, pp. 73-88.

Ting, C. Y. (2020) 'Coronavirus: About 400 applications for work pass holders' re-entry into Singapore rejected daily', *Straits Times*. Available at: https://www.straitstimes.com/singapore/manpower/coronavirus-about-400-applications-for-work-pass-holders-re-entry-into-singapore (Accessed: 07 Jul 2020).

Tobak, S. (2014) *9 Reasons Why Most Startups Fail*. Entrepreneur.com. Available at: https://www.entrepreneur.com/article/231129.

Trigeorgis, L. and Reuer, J. J. (2017) 'Real options theory in strategic management', *Strategic Management Journal,* 38(1), pp. 42-63.

Vanguard (2020) *Index funds vs. actively managed funds*. Available at: https://investor.vanguard.com/index-funds/index-vs-active (Accessed: March 2020).

Vantik (2020). Available at: https://vantik.com/de/der-vantik-fonds (Accessed: 10. Jul. 2020.

Virgillito, D. (2018) *What is Market Segmentation? Learn How to Segment Your Customers*. Available at: https://www.oberlo.com/blog/market-segmentation.

Weigelt, C. and Sarkar, M. B. (2009) 'Learning From Supply-Side Agents: The Impact Of Technology Solution Providers' Experiential Diversity On Clients' Innovation Adoption', *Academy of Management Journal,* 52(1), pp. 37-60.

Westbrook, L. (2020) *How virus, protests soured expat dream in bitter blow for Hong Kong talent pool*. South China Morning Post. Hong Kong. Available at: https://www.scmp.com/news/hong-kong/hong-kong-economy/article/3074038/leaving-hong-kong-how-coronavirus-anti-government.

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Yau, A. and Murphy, C. (2013) 'Is a Rigorous Agile Methodology the Best Development Strategy for Small Scale Tech Startups?', *University of Pennsylvania Department of Computer and Information Science Technical Report No. MS-CIS-13-01.*

York, J. M. (2018) *putting lean startup into perspective a novel approach for discovering and developing a successful business model*. California: Gavin Publishers. Available at: 10.29011/ABAM-104. 10000 4.

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11 APPENDIX

In this Appendix are all Questions 1-20 that have been posed to the surveyed expats and Shown as graphs

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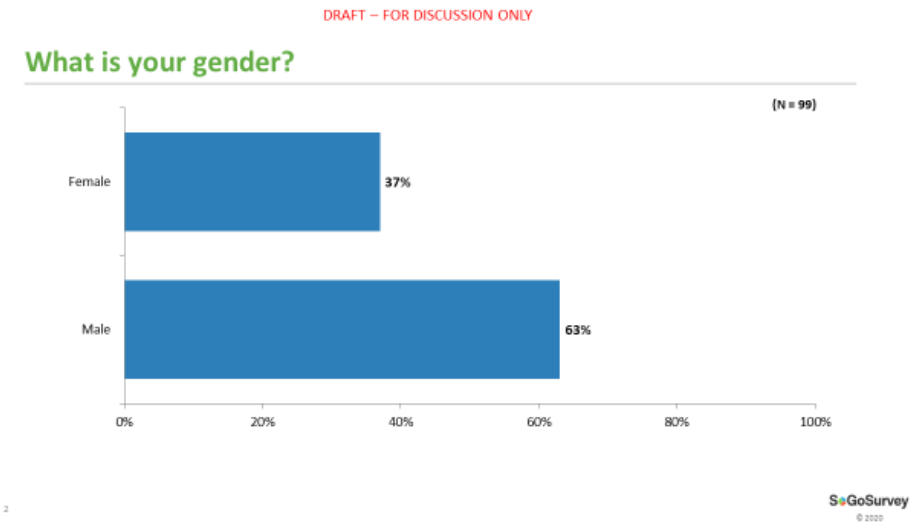

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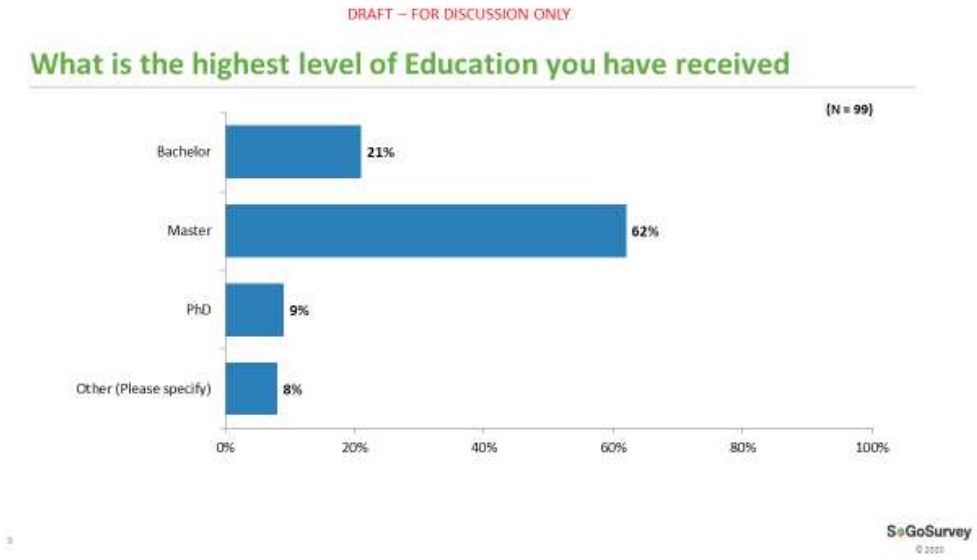

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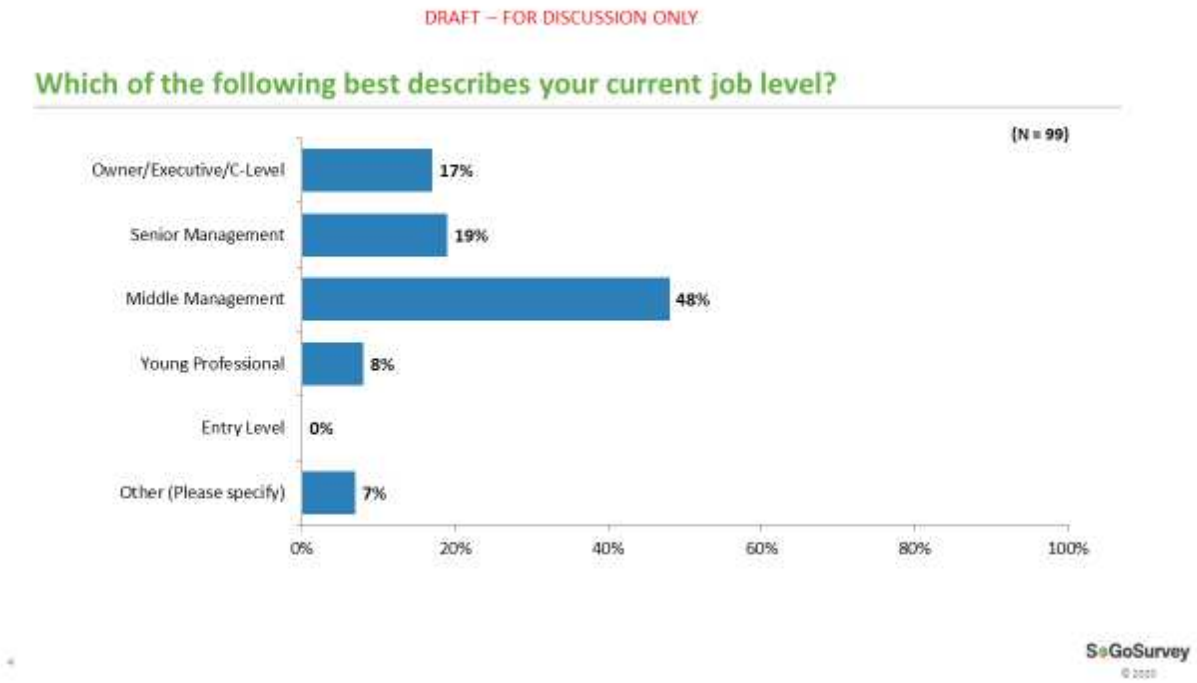

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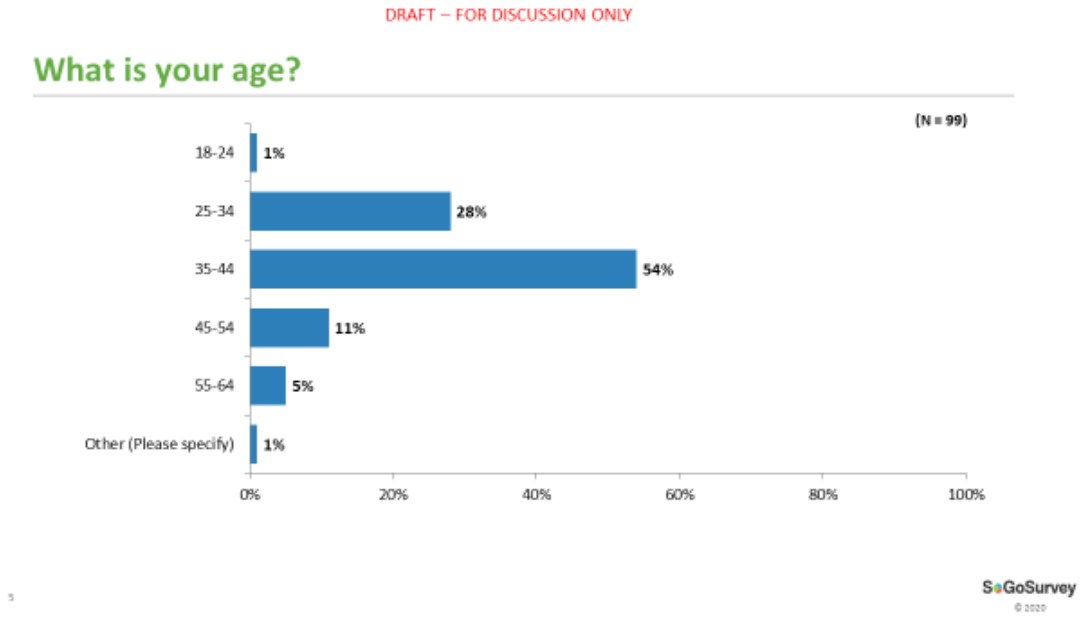

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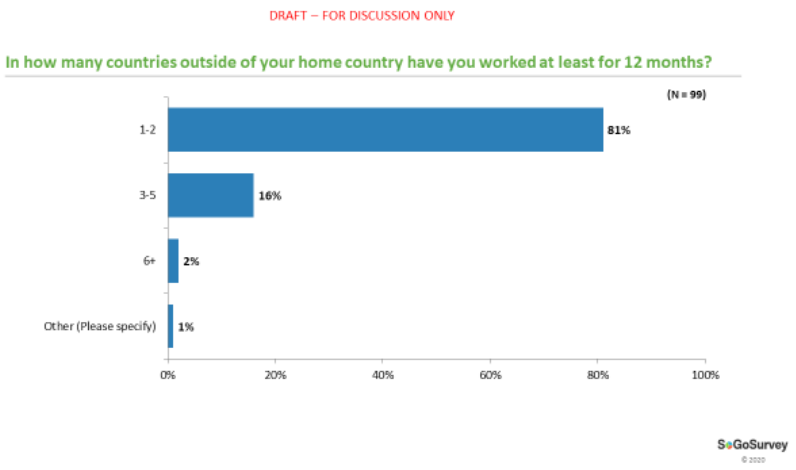

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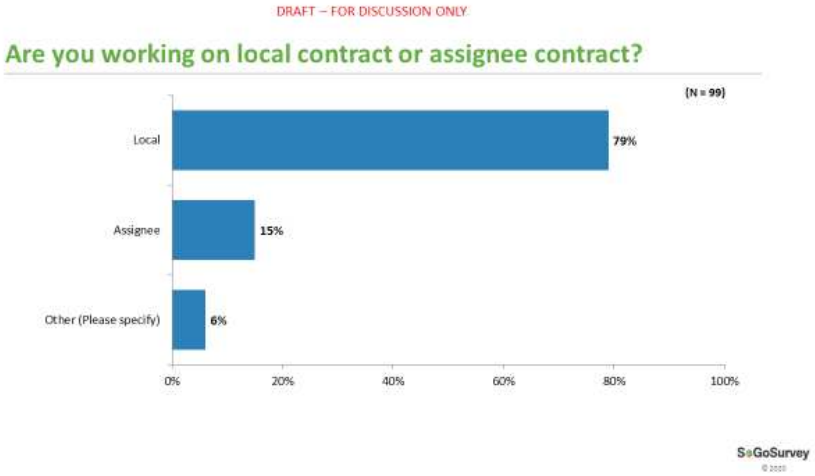

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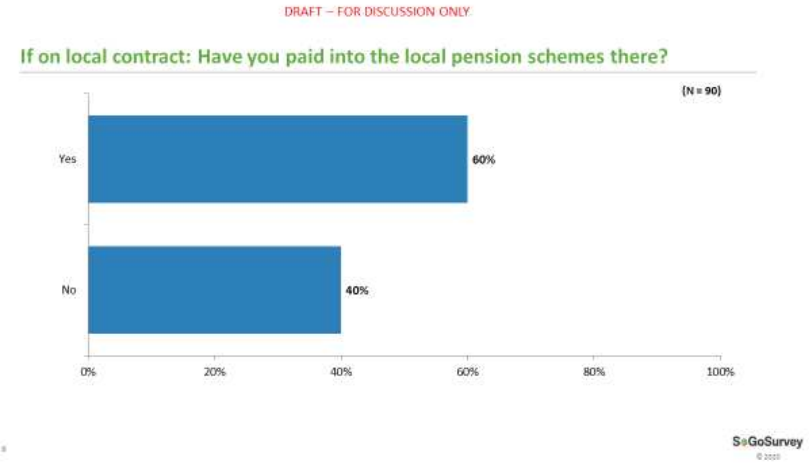

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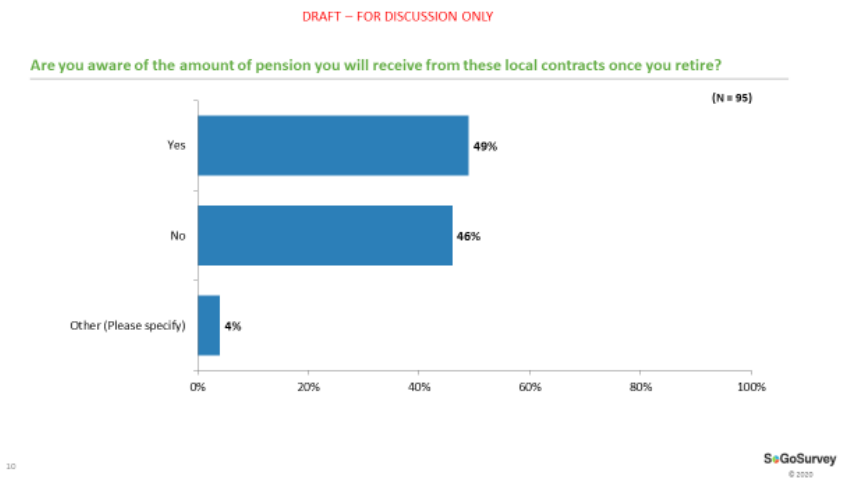

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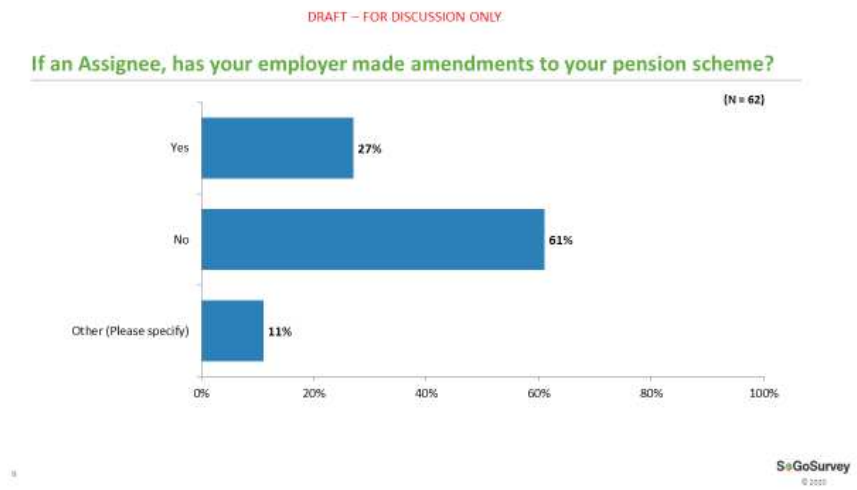

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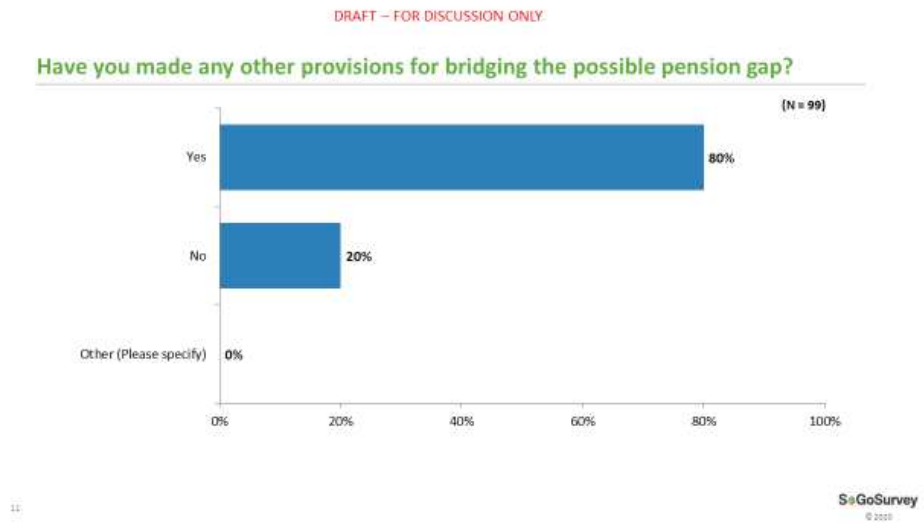

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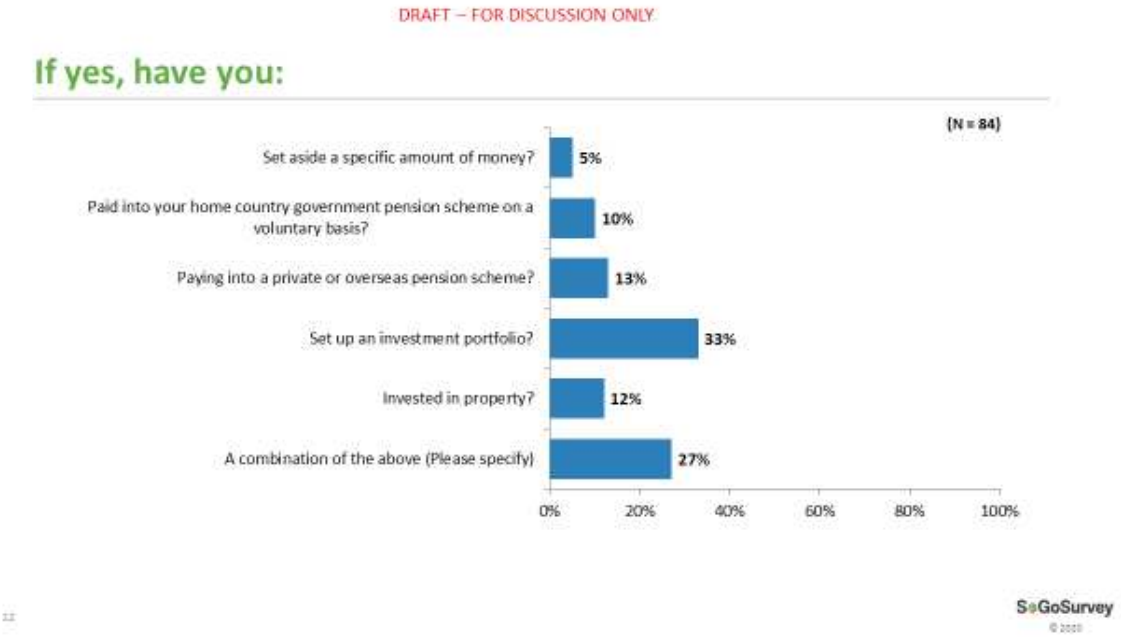

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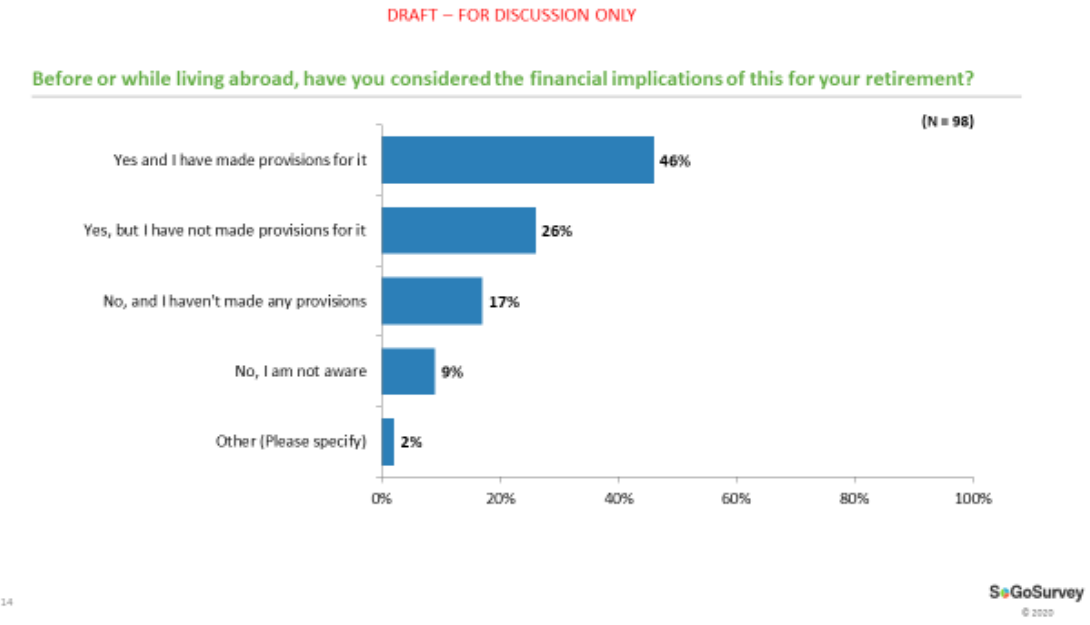

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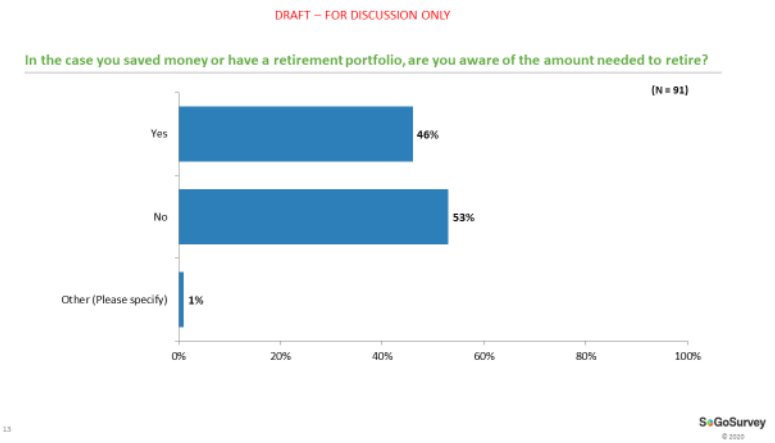

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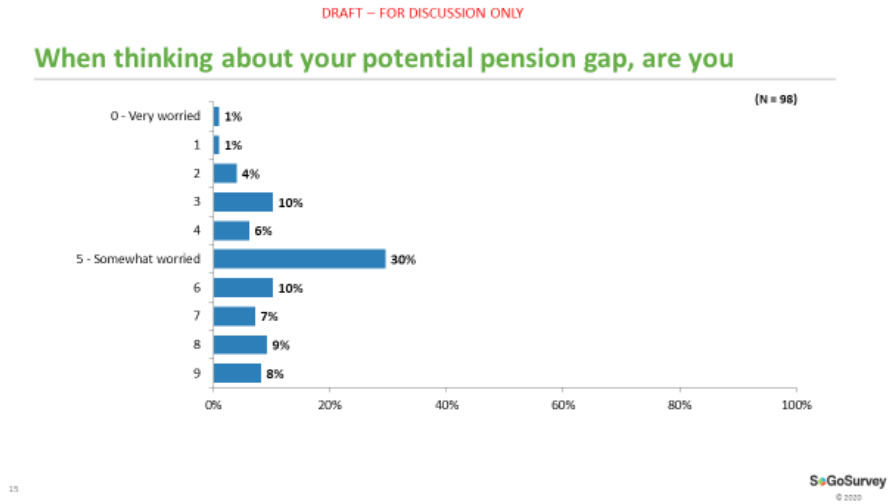

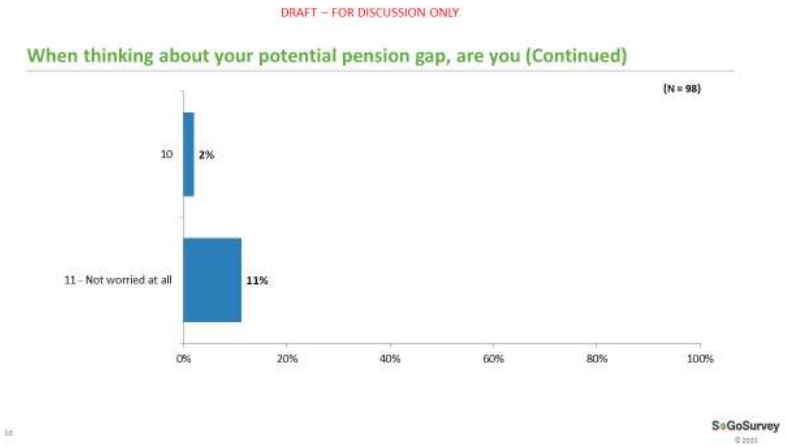

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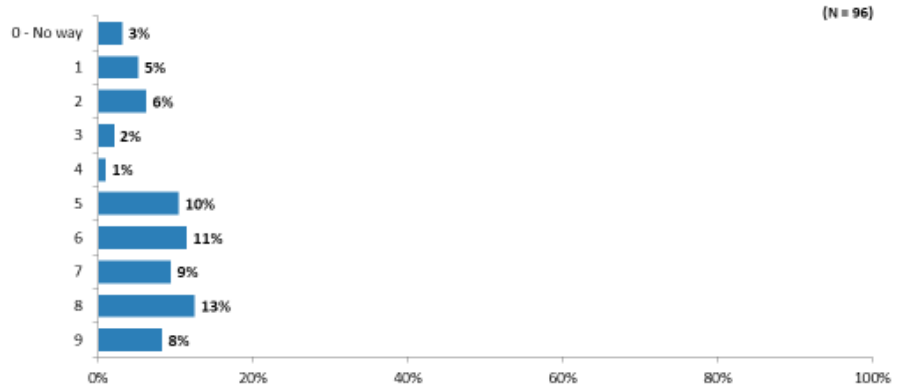

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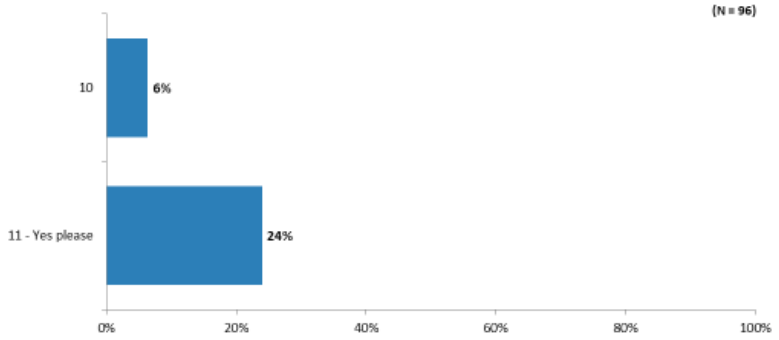

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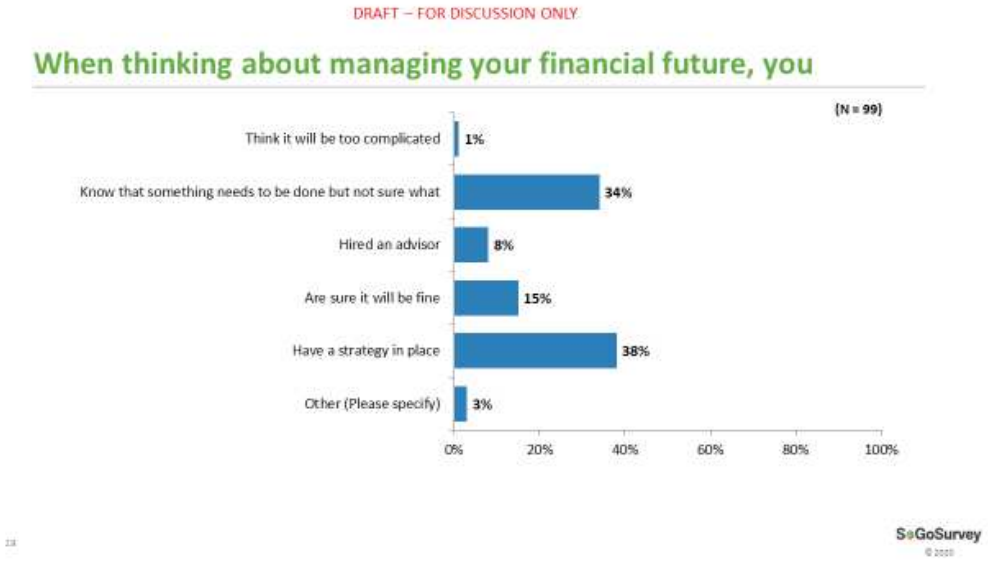

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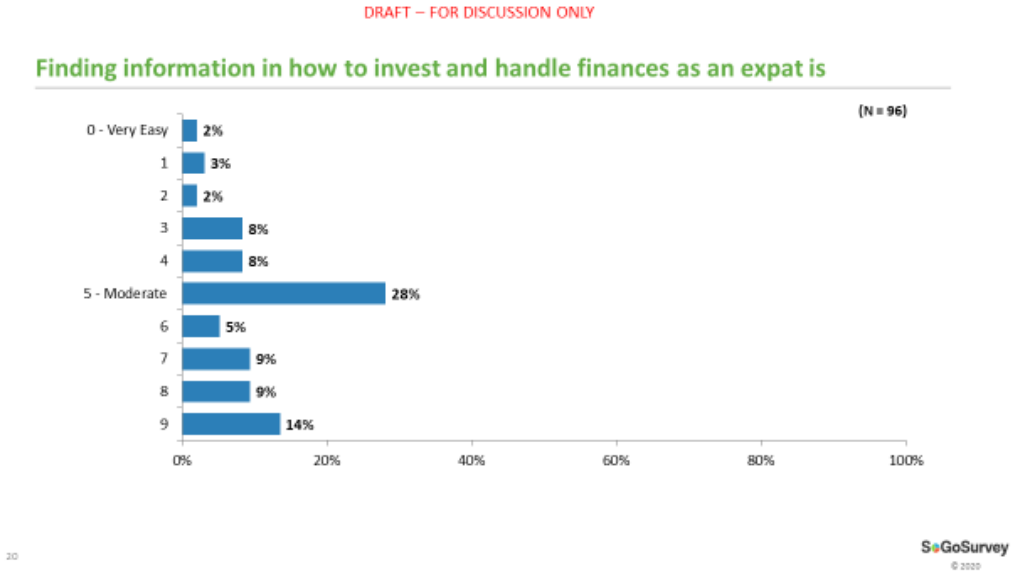

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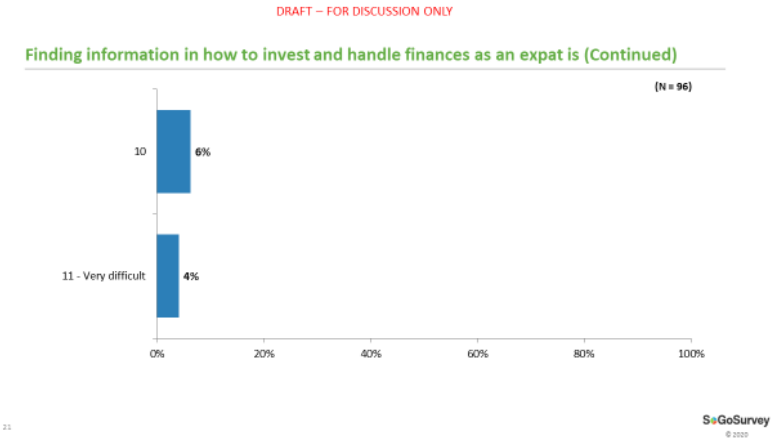

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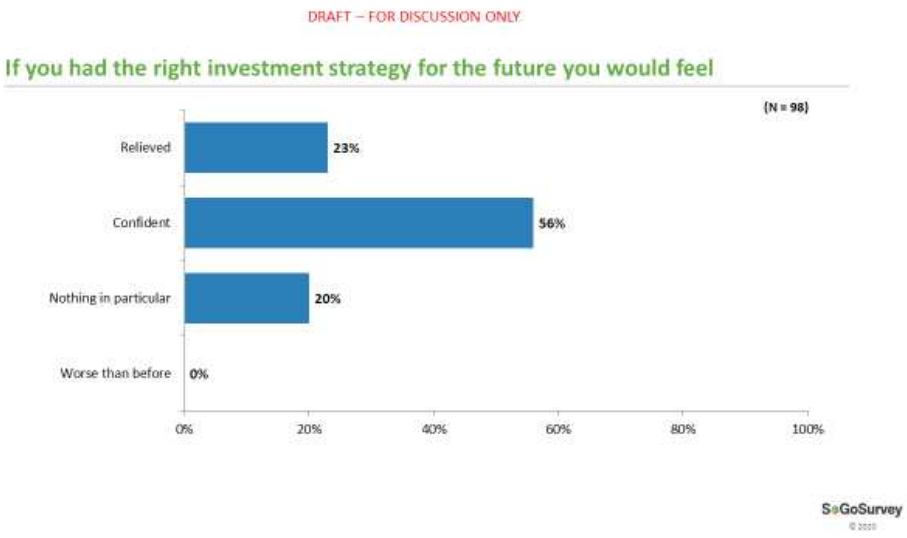

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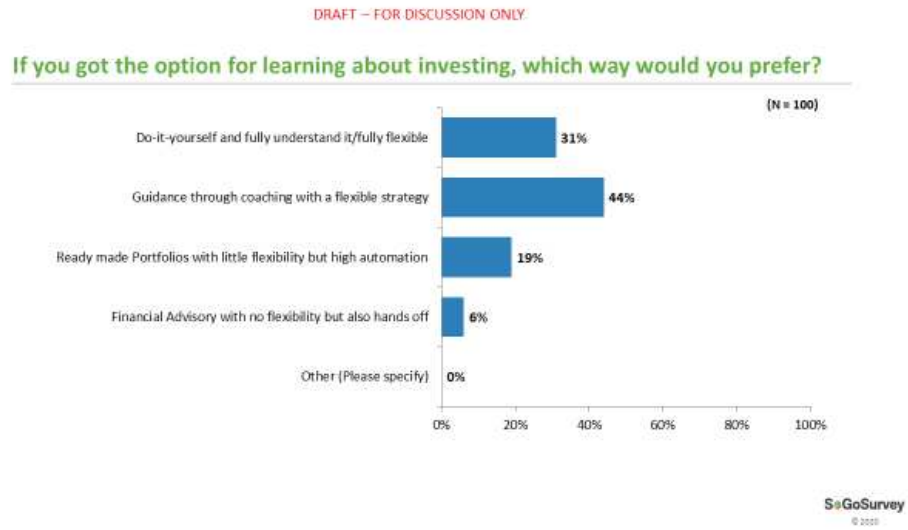

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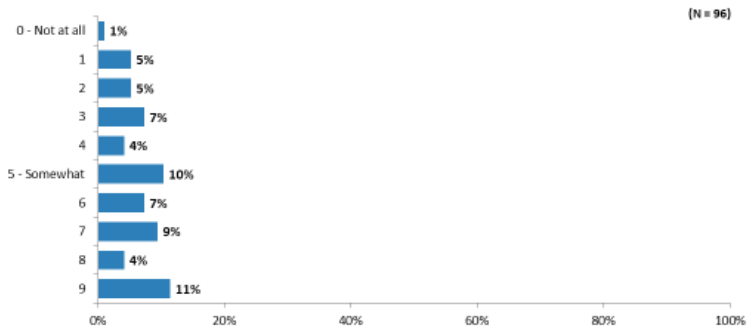

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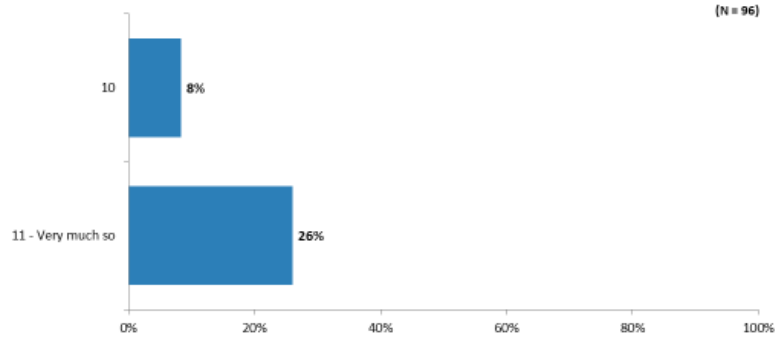
How aware are you of the effect of management fees influencing earnings on investments? (Continued)



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