# Master Thesis Project Report



What are the prospects of creating a company in the environment of the Bulgarian construction industry?

Department of Civil Engineering

MSc Management in the Building Industry, 4<sup>th</sup> semester

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Title:	What are the prospects of creating a company in the environment of the Bulgarian		
	construction industry?		
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#### **Synopsis**

Dette speciale er afviklet i perioden fra oktober 2018 til januar 2019 på det den teknisk videnskabelig fakultet på linjen byggeledelse. Specialet er afviklet i forbindelse med kandidatafhandling på Aalborg Universitet, af fjerde semester studerende Stoyan Bakardzhiev. Specialet er et teoretisk projekt, som tager udgangspunkt i forfatterens egen interesse i, at være en del af bygningsindustrien. Specialet har netop givet forfatteren en mulighed for dette, hvilket også har bidraget til, at forfatteren samtidig har undersøgt potentielle muligheder for at starte egen virksomheden.

Formålet med specialet er at analysere og vurdere det bulgarske bygningsindustri, hvor fokusset vil være at finde det optimale område for at starte et konstruktionsfirma. Specialets struktur tager udgangspunkt i IMRAD, da dette giver læserens den bedste læseoplevelse. I forbindelse med specialet har forfatteren gennem forskellige former for litteratur forsøgt, at få en bredere viden om begreber og forståelse angående nyopstartede virksomheder - alt fra hvordan det økonomiske system fungere til det specifikke i det bulgarske konstruktionsindustri. På baggrund af dette er der efterfølgende udarbejdet en PESTEL analyse af det bulgarske konstruktionsindustri. Parrallet er der foretaget et felt studie af virksomheder i den pågældende industri, hvortil interviews er udarbejdet og anvendt. Resultatet af førnævnte analyser er opsummeret i kapitlet 'Konklusion', hvor specialets problemformulering besvares. Ved afviklingen af specialet kan det udledes, at der er potentielle nicher såsom præfabrikation, kvalitets konstruktion og outsourcing. Endvidere er der nogle udfordringer forbundet herved, hvilke hovedsageligt er korruption, manglede og uuddannet arbejdskraft.

Report pages: 85

Appendix pages: 38

### 1. Abstract

The thesis gives the author an opportunity to investigate the possibilities for opening new entrepreneurial venture, hence, is the reason for the topic behind the thesis - *"What are the prospects of creating a company in the environment of the Bulgarian construction industry?"* 

The report aims to explain how the modern day economic system works, why entrepreneurship is the key to innovation, and the important role of the construction industry. The main goal of the report is to identify and evaluate possible opportunities in the construction industry of Bulgaria. The evaluation and identification process is carried out in two ways: Approach 1 – Literature and Data and Approach 2 – The Field Study.

Chapter Literature review is focused on the basic understanding of how the "world works". The literature reviewed chapter analyses the free-market economy, entrepreneurship, how to create value, the specifics of the building industry and good practices in the industry.

Chapter Detailed analysis consist of a series of analysis, most notable PESTEL. The analyses are combined to create a picture of the Bulgarian construction industry; meanwhile an investigation with interviews with companies in the Bulgarian industry from the inside is carried out. Investigation that can be described as a series of interviews with different construction companies in all branches of the industry.

Chapter Conclusion holds the findings of the two methods of analyses contained in chapter Detailed analysis. The report concludes that although there are many opportunities and possibilities for new entrepreneurial endeavors in the Bulgarian industry, the environment is polluted with corruption and illegal practices. In the right circumstances the corruption can be avoided, however, it poses a great risk for a company that is new and venerable. The chapter finishes with the answers to the Final Problem Statements.

Chapter Reflection mentions possible routes for the report. The data gathered and the timeframe for completing the report are some of the main points in the chapter.

#### 2. Preface

The report is written by Stoyan Bakardzhiev during the final 4<sup>th</sup> semester of the program Management in the Building industry at Aalborg University under the supervision of Arne Rasmussen. In addition, this master project is an original intellectual work carried out in the period of 01<sup>st</sup> of October 2018 until the 10<sup>th</sup> of January 2019. The report has the freedom to be developed in an area found interesting by the researcher and agreed by the supervisor and study board. Therefore, the researcher seeks to gain knowledge and competences in the areas of the subjects: management of companies in the building industry, analysing strategic positions of construction companies, strategic choices.

The report is structured according to IMRaD format which is explained in greater detail in chapter 3 Readers guide. The thesis is carried out in accordance with the academic requirements for a final dissertation project of the MSc in Management in Building Industry program, department of Civil Engineering at Aalborg University (AAU), Denmark.

The researcher decides it is best that the thesis is produced only by one person – himself. The decision came about because of the lack of colleagues interested in the same direction for a master thesis. Moreover, there were just a few people who had knowledge about Bulgaria.

The Initial Problem Statement (See Chapter Initial problem statement) is generated because of various reasons. Firstly, the believe of the author is that there are niches for new ventures in the field of the Bulgarian construction industry. Moreover, another factor is the author's desire to prove wrong the subjective believe of many Bulgarians that the country` industry is not doing so well. There is a general sense of skepticism among Bulgarians that there is a lack of stable or promising financial future for individuals and businesses alike.

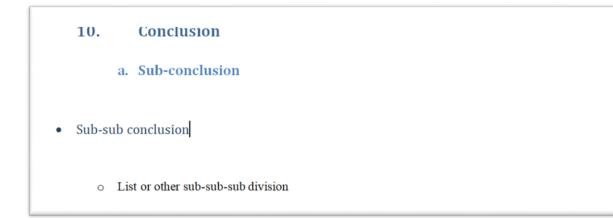
The report serves as a platform for collecting and analyzing the initial steps of creating a new entrepreneurial venture. In that regard all conducted analysis and interviews are with the goal of understanding how the industry functions and identifying possible niches.

# 3. Readers guide

The report consists of fourteen main parts – numbered from 1 to 14– Abstract, Preface, Acknowledgments, Readers Guide, Table of Contents, Introduction, Methodology, Literature Review, Final Problem Statement, Detailed Analyses, Conclusion, Reflection, Bibliography and Appendix.

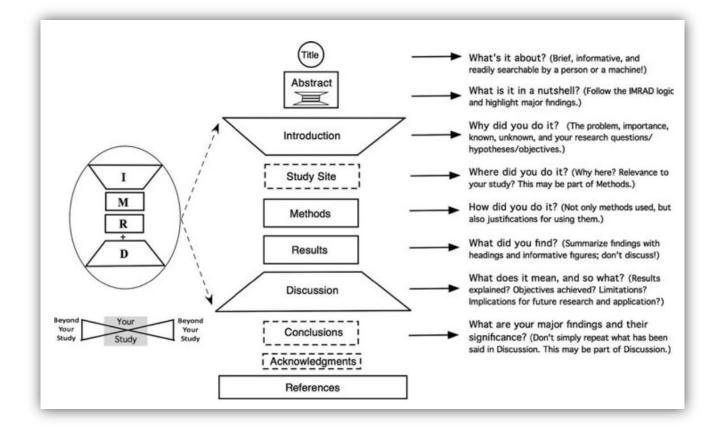
The main report consists of five chapters from Chapter 6 – Introduction to Chapter 11- Reflection. These chapters are placed in a chronological order. Therefore, the "red thread" of the report is present.

Some of the main parts of the report have sub-chapters. The sub-chapters are marked with: a), b), c), etc. Sub-divisions of the sub-chapters are using dots as a starting point. (See example Figure 1 - Report structure)



#### **Figure 1 - Report structure**

As previously mentioned in chapter Abstract (See Abstract) the paper follows the IMRaD structure (See Figure 2 - IMRAD diagram) based on "*Improving the writing of research paper: IMRAD and beyond*" by Jianguo Wu (Wu 2011). IMRAD stands for Introduction (What question was asked?), Material and method (How was it studied?), Results (What was found?) and Discussion (What do the findings mean?). However, a small deviation from the IMRAD structure is made in this thesis. Methods (called Methodology in this thesis) are placed 1<sup>st</sup>. The rest of the thesis follows the IMRAD structure. By using the IMRaD format, the author aims to answer the research question in a deliberate and effective manner. (Wu 2011) For illustration of the IMRAD structure check Figure 2 - IMRAD diagram on the next page (page 6).



#### Figure 2 - IMRAD diagram (Wu 2011)

In the report the researcher refers to himself as "*the author*". The Master thesis is referred to as "*this/the report*", "*this master thesis/this thesis*".

Short explanation about the contents of the report's chapters is presented below.

Chapter 5 - Methodology explains methods and procedures that the report follows to ensure coherence of its logic. The chapter covers: research philosophies, research design, target reader and limitations.

Chapter 6 – Introduction of the thesis aims to introduce the author and the project context. The chapter covers how the author reached the decision to focus on the specific research question. The initial problem statement explains what the starting idea of the report is.

Chapter 7- Literature review –is a chapter containing the main literature investigations behind this thesis.

Chapter 8 – Final problem statement. A short summary of the literature review and what goals of this project are.

Chapter 9 – Detailed analyses is a chapter containing the main research effort. In that chapter the author conducts the analysis effort of this thesis.

Chapter 9 - Conclusion - the author endeavors to conclude on the findings of the report carried out in the previous tree chapters. Answers for the final research questions are given.

Chapter 10 – Reflection - evaluates the findings to the main research question and possible directions for the report.

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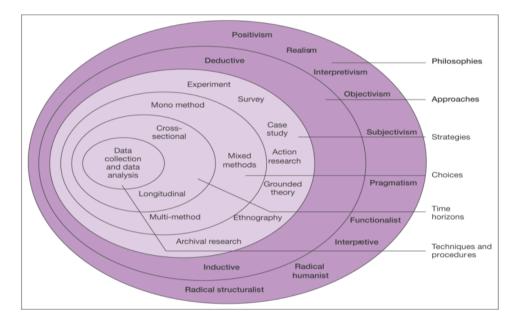
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# 5. Methodology

The purpose of the chapter is to introduce the reader to the research framework and methods of the report.

The chapter is structured in a way that begins with Research Philosophies and Research design utilized in the report. The chapter continues with an explanation of who the intended target reader is and what the limitations of the report are. The research onion serves as a guide for the format of the subsequent paragraphs starting from the outer layers towards the inner ones (See Figure 3 - The Research Onion )



#### Figure 3 - The Research Onion (Saunders, Lewis and Thornhill 2009)

The dark purple coloured part of the research onion is representation for the Research Philosophies. The two outer layers are covered first. Afterwards, the Research Design and the rest of the layers are elaborated.

#### a. Research Philosophies

By the use of the research philosophies a coherent data collection is ensured and the way the data is gathered-explained. The purpose of the sub-chapter is to present the philosophical point of view of the author as well as the implemented methods obtaining information.

#### • Philosophy

The Research Philosophy is the lens that you see the world through. With the different philosophies you see the world different. That leads to different observations and conclusions from the same starting point. The different philosophies are: Paradigm, Intepretivism, Realism and Positivism. A little summary about each one is going to be presented. (Brooks 2013)

- Pragmatism is a "*philosophy that concerns are only relevant where they support action*". In the context of this research paper that would mean that only data and questions relevant to answering the research questions are going to be examined. Sometimes this philosophical stance utilizes other philosophies incorporated in a research. As long as they lead to action as the main idea of the pragmatism states. (Brooks 2013)
- Intepretivism "advocates that it is necessary for the researcher to understand differences between humans in our role as social actors". The term social actor plays a big role in the definition. It implies that each person is acting in life according to his/hers understandings of the world. Critical to the Intepretivist philosophy is that the author has to adopt an empathic stance. That would mean that all interpretations would have to be considered from the point of view of the investigated person. (Brooks 2013)
- Realism a philosophy based on the assumption of the scientific method to development of knowledge. This assumption relates the idea that human senses and understandings are not always sufficient to gather knowledge and understandings of the world. (Brooks 2013)
- Positivism the philosophy that conceives the world through the observable reality and searches for regularities and relationships in data. The idea of that is to create lawgeneralizations like those produced by scientists. (Brooks 2013)

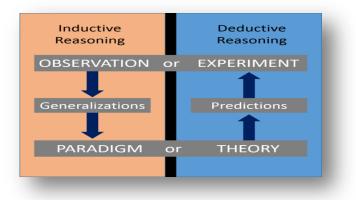
That leads to the question - Which one is chosen for this research paper?

All of the fore mentioned research philosophies describe how knowledge can be acquired and analysed for the sake of the report. The researcher finds the Interpretative approach the most suitable for the

goals of the research. For that reason, it is vital for the researchers to concentrate on interpreting the participants' "*actions and their social world from their point of view*". (Brooks 2013) This approach uses qualitative data and requires the implementation of methods such as unstructured interviews which are described in the consecutive sub-chapters.

## • Approach

Deduction, Abduction and Induction are the different choices when it comes to approaches according to Richard Brooks (Brooks 2013). That part of the methodology is about how new knowledge and is created. Deductive is the approach that creates a theory beforehand and tries to find if that theory is correct or false. On the other hand Inductive approach creates a theory only after observations are made. The inductive approach is generalizing from the specific. Abduction is generalizing from the interactions between the specific and general. In here known premises are used to generate testable conclusion. Inductive and Deductive approaches are summarized in the figure underneath (Brooks 2013) (see Figure 4 - Inductive and Deductive reasoning (Self-made).



#### Figure 4 - Inductive and Deductive reasoning (Self-made)

The Inductive approache is utilised in this report. The author performs variety of observations with the purpose of creating a generalization and that to lead to a paradigm. The observations on the Bulgarian construction industry are leading to the generalisation "Bulgaria is a good/bad place to start a business", which in turn leads to the paradigm of "how to find and exploit a business opportunity in the construction industry".

#### b. Research design

This sub-chapter of methodology presents how the various data is gathered and analyzed. In addition, the most suitable strategy of choice is introduced together with the time horizon, techniques and procedures for gathering data. (Brooks 2013)

#### Methodological choices

Introduction to the different methods of data collection is provided in this sub-sub-chapter so that the more relevant one is selected and utilized in the research. On the one hand, there is the qualitative method that focuses on comprehending the fundamental reasons, incentives for actions and identifying the way people interpret their experience and their surroundings. On the other hand, there is the quantitative method which at its core is concerned with finding the answers to questions like "How many?", "How long?", "The degree to which?" The quantitative method uses quantities of data to summarize results from a subset of data. (Brooks 2013). Moreover, the author suggests that various combinations are possible. Thus, a whole another branch of choices is compiled. (See Figure 5 - Methodological choices map ). However, due to the fact that the choice of the author based on the research itself points in a different direction an explanation regarding the multiple methods is not included in this report. (Brooks 2013)

The methodological choice follows the decisions of the author rather than push the report in a certain direction. There are two main approaches utilised in the thesis. Approach one – calls for gathering data from sources like books, journals etc. Approach 2 deals with gathering and analysing data from interviews with companies in the Bulgarian Construction Industry. Hence, the chosen Methodological choice is Mono method – Qualitative study. The possibilities can be seen in the picture underneath (Brooks 2013) (See Figure 5 - Methodological choices map ).

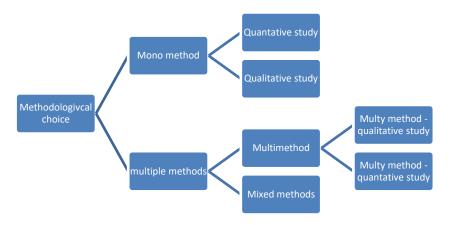


Figure 5 - Methodological choices map (Saunders, Lewis and Thornhill 2009)

#### • Strategy

Strategy is the part of the research design that describes the plan that the thesis needs to follow in order to achieve its goal. Multiple semi-structured interviews are half of the plan for this thesis. The other half is the literature review focused on how the Bulgarian industry is performing. Hence, the "strategy" of this thesis is multiple case studies. There are a lot of different strategies that are available to the author. It has to be kept in mind the goal of the thesis when mentioning other solutions since each strategy comes in a combination with a different data gathering process and Research philosophy. Some examples of different strategies that the author might have used in this case are Survey and Archival research. (Brooks 2013)

### • Time horizons

There are two possibilities of time-horizons for a project: Cross–sectional and Longitudinal. The main features of the cross sectional research is that it studies the problem at a certain point in time. Change over time is not a subject that this time horizon takes into consideration. Change over time is a future that the longitudinal time horizon deals with. The goal of this thesis is to assess the situation of the Bulgarian industry as of now, hence, is why the choice is cross-sectional. (Brooks 2013)

### • Techniques and procedures

The last layer of the research onion is related to the techniques and procedures used for accumulating data. For the evaluation of the research it is crucial that only valid information is collected. (Brooks 2013)

Two types of data are to be part of the research project – primary and secondary data. The data that the researcher obtains from the communication with companies is considered to be the primary data. Additionally, all the information gathered from external resources – books, articles and online sources is considered secondary data. The whole research is based on these two data collection methods. The following paragraphs delve deeper into both types of data. (Brooks 2013)

• Primary data

The primary data used in the report is collected solely for the purpose of the research. The methods for gathering the data employed in the writing of the paper are semi-structured interviews. The researcher gathered the data by contacting companies via e-mail and then following up with phone interviews (See chapter Data gathered - transcriptions and e-mail communication). Among the advantages of applying that particular type of observation is the opportunity to recognise the natural conduct of the participants, the possibility to obtain information by actively taking part in the observation that can otherwise be difficult to collect. Lastly, the validity of statements can easily be proven by asking additional question or turning to secondary data. Moreover, this particular type of data is characterised by its structure which allows openness and freedom for the interview to follow its natural course. It also predisposes the participants to a genuine discussion rather than a concrete and predictable one. (Brooks 2013)

The openness and truthfulness of the answers provided by the companies cannot be determined for certain. However, the author tries to make the conditions for a truthful and clear communication as favourable, as possible. For that purpose a contract for confidentiality is offered to the companies under question (See chapter Contract for Confidentiality). Based on the fact that the research is conducted under the interpretivist philosophy the validity of each individual interview is decided on by the author. A description of the validity is carried out after the information of interview is gathered. The evaluation can be seen in chapter Detailed analyses under sub-chapter Approach 2 – interviews (See sub-chapter Interview reports).

# • Secondary data

It is also necessary that secondary data is included in the research because it can contribute to finding solutions to the research questions. (Saunders, Lewis and Thornhill 2009) . For conducting this study various data sources have been used – books, scientific papers, journal articles, internet resources etc. More on how the secondary information has been gathered see Literature review and Chapter Detailed analysis.

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#### c. Target reader

The author of this report assumes that the reader is familiar with the terminology of the construction industry. This assumption is based on the following reasons. Firstly and most importantly, it limits the explanations and introductions required to a variety of basic concepts that are already known to the professionals of the industry. Second, the main purpose of this thesis, which is twofold: to serve as a master paper for the final fourth semester of the author's studies and for assessing the Bulgarian construction market for opportunities, thus, the main audiences contains of the Supervisor and censor for the evaluation of the paper. Third, people who would like to use the paper for gathering knowledge on the Bulgarian construction and it is assumed that they would have some background of the industry. Fourth, fellow to the author students that are interested in the report structure or material are most likely to be participating the same education program or at least be part of the same department at AAU. Finally, some of the representatives of the companies that have agreed to participate in this report request the finalized report to serve as a re-payment for the provided information. These representatives are professionals in the field of construction and are already familiar with the terms and concepts in the report.

#### d. Limitations

As the analysis is conducted and literature reviewed, certain factors acted as limitations to the report.

#### • The Time Frame

The report is written in the time frame of one study semester, therefore, the report and the analyses are conducted according to the Curriculum of the study program. Had there been no limits by time or university requirements, the problem areas could have been analyzed in much greater depth. The extent of the corruption, State of the competition in the Bulgarian construction industry, Future of the Bulgarian construction industry and many more could have been explored in a greater depth.

#### • Resources

By resources is meant the manpower behind this research. It has been recommended by the Aalborg University Guidelines that two-three persons is the most suitable group size for completing a project like this one. However, in this case only 1 person is attempting to complete the report. The reasons why you can find in Preface (See Chapter Preface).

#### • Data Collection

It needs to be specified that data collection in this particular part of the limitations refers to primary data – the interviews with the companies and the way they have been conducted. The interviews are included in the Limitations chapter because of the fact that the obtained information is based only on the subjective perspective of only one person. Furthermore, the trustworthiness of the data cannot be measured against other reliable information or observations. Moreover, not being in Bulgaria for the duration of the thesis poses a limitation to some extent based on the fact that the interviews were not taken face to face. E-mail, phone and non-personal communication eliminates the element of personal interaction and some of the information might be lost.

#### • Occupation and other businesses

The researcher has a part-time job so he can support himself throughout the completion of his studies. Furthermore, postponing and failing previous semester exams that had to be re-taken in the period of the master thesis took time and effort to prepare for. That should not affect his performance,

however, it should be regarded as a limitation to some degree. The time spent working at a part-time job and preparations for exams do reduce the overall time available for the report.

### • No previous experience

It must be kept in mind that the researcher had not used this style of writing before. The Literature review chapter (See chapter 7 Literature review) is an example for a research that the author has not performed in his previous projects in Aalborg University and Bachelor degree in the University-Collage of Northern Denmark.

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#### 6. Introduction

The aim of this chapter is to introduce the project and its context to the reader. It is organized in tree sub-chapters: the project context, initial problem statement and finally the objectives and scope. A small introduction to the author is presented in the following paragraph.

My name is Stoyan Bakardzhiev, I am 26 years old and I am from Bulgaria. This is one of the reasons why Bulgaria and the Bulgarian Building Industry is the focus of this master thesis. I am currently living in Aalborg, Denmark. I moved here right after my high school graduation in 2011 and I have been living in Denmark for the past 8 years. My family and I deemed the Bulgarian universities as lacking in many areas, so the logical choice was to study abroad. Denmark was my choice for bachelor and master education because of the high quality education provided here basically and the financial aspects was fulfilling as well, meaning that the education is free of charge. My bachelor degree is held in Architectural Technologies and Construction Management at University Collage of Northern Denmark. The motivation to study master program at Aalborg University – Management of the building industry came from my strive for self-improvement and my believes that climbing to a good position with such a degree would be easier. My motivation for choosing the program came after my research on the topics studied in the program. I saw that my interests and the subjects match closely and that leaded to the creation of this master thesis – the final effort for graduating.

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#### a. Project context

This sub-chapter has the aim to provide the reader with the information of how the author came up with the topic of this master thesis. As there are more than one factor the sub-chapter is further divided into sub-sub-chapters to accommodate for the different reasons of the author to pursue the topic.

#### The way of the future

The world nowadays is changing faster than ever. Technology plays a big part in that. Social media like Facebook, Twitter etc. and network tools like SMS, E-mail etc. are dividing people around the world into two categories: those who use them productively as tools and those who are influenced by them and get distracted. The gap between the two groups seems to be widening. Technologies and advances in transportation are making the world "smaller place", thus, the markets in which companies and people are competing are getting more and more competitive. As a result to the transportation advancement each person is now threatened by a substitution from someone that can travel to the working location. Thus, drastically increasing in value of work that is original, unique and hard to replicate. Repetitive tasks are to be left to machines and unskilled labor. (Newport 2016)

According to Carl Newport and his book "Deep work" tree groups of people will be the ones shaping the future world: The high-skilled workers, the superstars and the owners.

- The high skilled workers –the people who can create tools and machinery that replaces repetitive tasks and working with intelligent machinery. Advances in areas such as robotics, voice recognition, automation, etc. are poised to eliminate and replace many work positions available to uneducated people. On the other hand people creating such tools and being able to control and interface with them are going to be in high demand. (Newport 2016)
- The superstars the interconnection of the world today created an environment that makes the successful more successful and escalated the failing of the mediocrity. As a proof of that concept can be used as an example the situation with most of the programmers and consultants around the world. A programmer in Spain can work for a company in The United States. Allowing both parties to be more flexible and to improve

their productivity. In the terms of the example the programmer can work part time for the United States company as well as any other requests he receives from around the world. For the company that would mean that they would hire a top specialist for the specific job required. The alternative being of hiring a programmer and then investing in his position and resources required. Moreover, there is little to gain from keeping a top programmer only partly occupied in a company with unrelated business. That creates a niche for highly specialized and efficient workers who can outperform most people and will be always preferred in a situation verses a regular or highly skilled worker. (Newport 2016)

• The owners - people who have power. Power in these circumstances can be defined as "the ability of a person to turn an idea into reality". Having the ability to put together the knowhow and raw materials makes this group of people able to shape the future as they see fit. (Newport 2016)

All just mentioned can be summarized and defined as a singular idea. The future is going to be shaped by people who belong to one of these tree groups. This is an idea that the author shares with Carl Newport. As a person who want to be part of one of these tree groups the author has to take the necessary steps. There are different ways to get into a group that will shape the future. Some examples might be - hard work, education, heritage and many more. Hard work in education and self-improvement can make a person a high-skilled worker. The desire of the author to be a part of the groups of people that are going to create the world of tomorrow urge him to take action in that direction.

#### Happiness logic

Complete happiness is something not possible to achieve for a human. The happiness comes from our ability to compare it with the times when we are struggling or suffering. In our society goods and services can always be offered in exchange for making someone's life easier or happier. Therefore, the conclusion that goods or services will always exist in order to make a person happier. Following this logic it can be concluded that a country with happier people has more of their needs satisfied that the people of another less happy country. What makes a person happy is hard or may be impossible to

determine. Maslow explains the satisfaction of people experience in their lives with his Pyramid of Needs theory. (Maslow 1943) (See Figure 6 - Maslow's hierarchy or needs .



#### Figure 6 - Maslow's hierarchy or needs (Maslow 1943)

However, Maslow's theory suggest that a person can move up and down the pyramid based on which needs he is able to fulfill. Having that in mind it is easy to come to the conclusion that services and material goods offered in our society can help a person move up and down the hierarchy while the that movement is at the lower end of the pyramid.

The people of Denmark are among the happiest in the world according to the World Happiness Report of 2018 (Helliwell, Layard and Jeffrey 2018). On the other side of that spectrum are the people in Bulgaria. Bulgaria is a poor country relative to its European neighbors and quite unhappy according to the World Happiness Report of 2018 (Helliwell, Layard and Jeffrey 2018). Having in mid what has been said in the previous paragraph and that we can distinguish the levels of happiness on country level, a conclusion can be made that one country has more opportunities for entrepreneurial ventures than the other. Following that logic suggests that happy countries like Denmark have fulfilled the needs of more people and provided them with opportunities and filled the gaps at least for basic needs in the pyramid. On the other side developing countries with unhappy people still have gaps needed to be addressed, hence, leaves more opportunities for the business in developing countries to fill.

#### The skepticism over Bulgaria

The author pursuits better understanding of the Bulgarian construction industry because of the widespread idea that the Bulgarian economy in general is not doing so well. The author reached this conclusion prior to any investigation and only based on own observations, thus, this has to be taken

with a "grain of salt". These observations have been made based on discussions and normal person to person interactions with other Bulgarians, people who have visited the country and people interested in the country. Furthermore, social interactions are most probably affected by the social circle of the author. As a student in a foreign country most of the people interacted on that topic have also fled the country for one reason or the other. Their opinions are most likely influenced by the same reasons as the author's, hence, proves to be only a minor part of the people interested in the topic. Furthermore, the heritage of these people makes them improbable source for gathering objective information.

#### Sub-Conclusion

The choice of subject for this mater thesis is based on the facts laid down below and previously in this chapter. Combining all the reasons the author pursued a topic like this one are:

- The fact that the author is pursuing a degree in the building industry makes a career in the managerial or top echelons of construction companies the logical choice. The author believes that starting a company in the construction industry seems to be one of the ways to achieve that goal.
- The goals of the author are associated with an entrepreneurial endeavor. Pursuing that path fulfills the desire of the author to get into the tree groups of people who are going to be most influential in the future.
- Bulgaria is the place which contains more unexplored niches. The origins of the author also defined the reason for the geographic point of research.
- Utilizes the experience of the family in entrepreneurship. Many of the authors` family members were pursuing careers with different entrepreneurial companies.
- A case is made on the possibility to prove the assumptions of many Bulgarians that the country is a bad place for living and business.

With all that mentioned a set of final goals for this project is determined:

- Identify and evaluate opportunities in the field of the Bulgarian construction industry
- Find niches in the Bulgarian construction industry

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#### b. Initial problem statement

Keeping in mind the goals and aspirations of the author for this thesis (See sub-chapter Project context) it is clear that starting a new entrepreneurial endeavor is the final goal of the author. Moreover, the current education provides an opportunity to the author to combine the master thesis report with the research needed for starting a new company into one combined effort.

The master thesis focuses on the prospects on starting a new company in Bulgaria. The foundation idea of this project is to investigate the conditions of the construction industry in the country and to consider the opportunities and difficulties in that regard. The thesis intends to find the niches for potential company.

A two prompt approach is taken towards the aim of the thesis in order to assess the Bulgarian construction industry. Firstly, a literature review of the state of the industry is conducted and its conclusions are compared with the findings of a filed study - interviews of construction companies. Based on the conclusions of the research on the Bulgarian construction industry a conclusion on the possibilities to create a new company are determined.

The initial problem statement is based on a combination of all the goals set from the author for this project (see sub-chapter Project context)

# What are the prospects of starting a company in the environment of the Bulgarian construction industry?

Finally, the author utilizes the requirement for having a chapter Literature review as a chance for gathering data that helps him understand "how the world works". Following a chain of logically connected questions and their answers are used in order to gain the required knowledge. The process is outlined in the introduction of chapter literature review (See Literature review).

#### 7. Literature review

The following chapter contains a review of the work by published authors, the purpose of which is to support the analysis and arguments of the thesis. Moreover, as mentioned in sub-chapter Initial Problem Statement (See chapter Initial problem statement) the literature review helps answer a set of questions. The questions have the aim of guiding the author through the process of finding and using the reliable and credible literature. Furthermore, the questions are organized from a broad aspect to specific topics with the purpose to show the author how the "world works". The formulation of the questions goes as follows:

The economic environment of a country or region affects how the processes of a company work. For example a company in a socialist country acts completely different from a company in a free market. An example for that might be the way innovations works in a free market society and socialism society. The work of David Kotz gives a good example for that (Kotz 2000) He points out that innovations in capitalist society are driven by 2 things – The market and the Research & Development institutions like universities, etc. However the innovations in a socialist society like the USSR is driven only by the Research and Development institutions. The motivation of the free market entrepreneurs comes from their wish for wealth and other rewards associated with a risk like that (Hisrich, Peters and Shepherd 2010). This not always but sometimes gives results and innovation is achieved. Thus comes the questions: *What is the current economic system of the western world*?

The preliminary search of the author shows that the entrepreneurship has a significant meaning for the development of the countries following the capitalist free market (Todorov 2010). Therefore the question: *What is the role of entrepreneurship in our economic system?* 

Third, the construction industry is like any other industry (Hillebrandt 1984). The specifics of the construction industry have to be understood before a company could be created. Thus the question: *What are the specifics of the Building industry?* 

Finally a short description of how a company can create a product or service of value. – *How to create value*?

#### Search for academic work

The search for books or articles used for this thesis follows the summary-article of Helen Morgan-Rallis. This is done in order to make sure that the literature review part of the report has been done properly. (Morgan-Rallis 2006) .The chapter is divided into seven sub-chapters. Each sub-chapter is going to follow tree steps. A short explanation on the steps follows.

- Step 1: Decide on a topic -This step requires the author to have a topic or to decide on one. The main topic for this master thesis or research goals can be found in Sub-chapter Initial problem statement. However, due to the fact that the main research effort of the report is going to be split into several parts (See chapter Detailed analysis) the topics for each one of these parts have to be decided on as well. (Morgan-Rallis 2006)
- Step 2: Identify the literature that is reviewed. This step could be divided into sub steps. These sub steps are: Familiarize yourself with the Databases, determine which ones could be useful, and use the key words from Step one in the chosen databases, Determine the useful results, Pick the literature to be used. (Morgan-Rallis 2006)
- Step 3: Analyze the literature. In this step the author has to create an overview the literature. Afterward grouping of the articles or books into categories is possible. (Morgan-Rallis 2006)

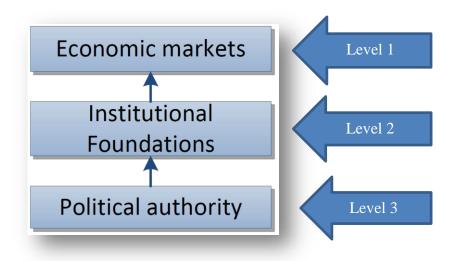
The final output of this chapter is a series of reviews and summaries of articles or books. The description is made useful for the purposes of this master thesis. It aims to be understandable by the readers of this project (See sub-chapter Target reader). Furthermore, these reviews and summaries are organized in a chronological and logical order. It is chronological because that was the way the topics were examined by the author and it is logical because it shows the "the red thread" of the literature review.

#### a. What is the current economic system of the western world?

This sub-chapter aims to understand the economic environment of the region that Bulgaria and the European countries are in. What are its characteristics and specifics? How the government does regulate the market and how much the government is involved in the business of the entrepreneurial enterprises?

Most of the countries in Europe according to the Index of Economic Freedom (Miller, Kim and Roberts 2015) are hitting quite high scores comparing to the rest of the world. 68.8 is the average score on the Index of Economic Freedom for Europe and that is compared with 60.1 for the Americas, 61 for the Pacific region, the middle east + north Africa is scoring 61.5, finally Asia is 61.0. That index is compromised from 10 different economic freedoms – business freedom, trade freedom, fiscal (tax) freedom, government size, monetary freedom, investment freedom, financial freedom, property rights, freedom of corruption and Labor freedom. (Beach and Kane 2008) (See the ranking in here (Foundation 2018). Each one of these 10 economic freedoms is evaluated individually and then combined into the Index of Economic Freedom. Bulgaria takes 64<sup>th</sup> place in the rankings of the Index with 68.3 points. (Miller, Kim and Roberts 2015). It is safe then to conclude that the European economic market is the freest region in the world.

After the fall of the Soviet Union in 1989 it became clear that the free-market capitalism is the superior economic system. Capitalism is defined by Bruce R. Scott as "an economic system where private actors are allowed to own and control the use of property in accord with their own interests, and where the invisible hand of the pricing mechanism coordinates supply and demand in markets in a way that is automatically in the best interests of society. Government, in this perspective, is often described as responsible for peace, justice, and tolerable taxes". From this definition we can extract the main role of the government – responsible for peace, justice and tolerable taxes. Bruce R. Scott depicts it as a tree level system where markets occupy the first level, the institutional foundations are the second level and finally the third level is the political authority (The Political Economy of Capitalism 2006) (See Figure 7 - Capitalism as tree level system).



#### Figure 7 - Capitalism as tree level system (The Political Economy of Capitalism 2006)

**The first level** (seen on the picture above) of the system are the economic markets and is where the companies are competing with each other and trying to secure their labour, capital and serve their customers as well. The economic level can be described as having 2 dustings markets – factor markets and product markets. The process in which a company participates in the market can be understood the easiest with a figure (See Figure 8 - Economic markets Figure 8 - Economic markets )



#### Figure 8 - Economic markets (The Political Economy of Capitalism 2006)

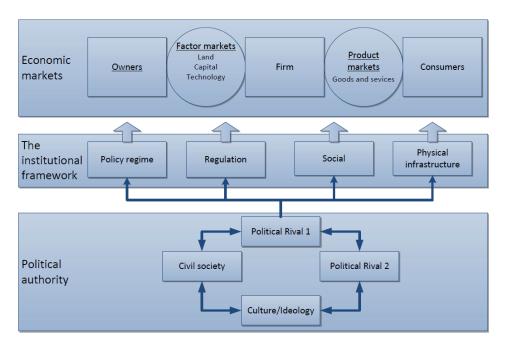
In the figure above can be seen how the owners of the enterprises are using the factor markets to create their companies using the capital, technology and land available on the market. The goal of the firm then is to use what is available in the product market and satisfy its consumers with the produced goods or services.

A good analogy for the whole process can be a game and it is the game that any firm plays. However, there are rules to that game. Here comes the next level of the whole system which is the institutional foundations (See Figure 7 - Capitalism as tree level system

The second level (Figure 7 - Capitalism as tree level system ) is the "referee" of the game – the institutions that govern and provide a "level playing field". Entrepreneurship is one of the key aspects of the system. It drives innovation and lowers the prices of goods and services. Moreover, it adds new players to the game. New and existing companies are in a way waging war. From this "war" the customers win. As the "race" for customers gets ever more competitive the prices are falling and the profit margins of the companies involved in the "race" are dropping. The role of the government as mentioned is to keep the "game clean". Set the rules and appoint the referee for the game so they can keep the playing field level. The government can use different variety of ways to influence the economic markets (level 1 – the markets and players). These are the Policy regime, Regulations, Social Infrastructure and Physical Infrastructure. (The Political Economy of Capitalism 2006)

**The third level** (Figure 7 - Capitalism as tree level system ) is the authority that gives power to the "referee" to do their job. Moreover, the government not only gives their power over the markets and players but also sets the rules. The governmental power is divided in three as well – Judicial, executive and legislative. This again is created in order to create checks and balances in the system itself. (The Political Economy of Capitalism 2006)

All of the levels mentioned above can now be added together in order to see how the whole system works (see Figure 9 - Capitalism as tree level system



#### Figure 9 - Capitalism as tree level system (The Political Economy of Capitalism 2006)

Microeconomics is the study of how markets—the usual defining institution of capitalism coordinate decentralized decision making through a price mechanism to bring supply and demand into equilibrium. In this perspective, capitalism is a largely self-regulating economic system in which the role of government is limited to providing certain basic public goods and services at low cost. (The Political Economy of Capitalism 2006)

The original work of Adam Smith is probably the best way to describe how the modern day economy works. - *"Little else is required to carry a state to the highest degree of opulence from the lowest barbarism but peace, easy taxes and a tolerable administration of justice."* (Smith 1776). Smith's explanation for this minimalist role for government is derived from his seminal insight that the pricing mechanism would coordinate the actions of private actors so as to achieve socially optimal outcomes. Or, in Smith's words: "As every individual ...endeavours ...to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of greatest value; every individual labours to render the annual revenue of society as great as he can. [While] he intends only his own gain ... he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention." (Smith 1776)

#### b. What is the role of entrepreneurship in our economic system?

This sub-chapter of the literature review aims to introduce the topic of entrepreneurship to the project and point out why entrepreneurship is so important for our economic system.

The work of Kiril Todorov in 2010 on the topic of "The Bulgarian entrepreneurship during the crisis and as an engine of the post-crisis development" is a study analyzing how the entrepreneurial activity supports the economy. Furthermore, Todorov makes a point where he states that the processes of entrepreneurism are becoming the engine for development. He states "It is a wide spread view that the entrepreneurship is the engine of the modern economic development in global, regional and national aspect having in mind the problems that it solves." (Todorov 2010). That statement shows how important entrepreneurship is to the modern day economy and an explanation of it is due. The writers of the book Entrepreneurship – Robert D. Hisrich, Michael Peters, Dean Shepherd define entrepreneurship the following way. Entrepreneurship "is the process of creating something new with value by devoting the necessary time and effort; assuming the accompanying financial, psychic and social risks and uncertainties and receiving the resulting rewards of monetary and personal satisfaction." (Hisrich, Peters and Shepherd 2010). They expand the definition of entrepreneurship and state that the different aspects of the entrepreneurship are: Identification and evaluation of opportunities, Developing business plan, Resources required and Manage the enterprise. Furthermore, they break down each one of these aspects and the result is shown in the following figure (See Figure 10 - The aspects of Entrepreneurship on the next page).

1. Identify and Evaluate	2. Develop Business Plan	3. Resources Required	4. Manage the Enterprise
the Opportunity			
<ul> <li>Opportunity assessment</li> <li>Creation and length of opportunity</li> <li>Real and perceived value of opportunity</li> <li>Risks and returns of opportunity</li> <li>Opportunity versus personal skills and goals</li> <li>Competitive environment</li> </ul>	<ul> <li>Title page</li> <li>Table of contents</li> <li>Executive summary</li> <li>Describing the business</li> <li>Description of the industry</li> <li>Technology plan</li> <li>Marketing plan</li> <li>Financial plan</li> <li>Financial plan</li> <li>Organizational plan</li> <li>Operational plan</li> <li>Summary</li> <li>Appendixes</li> </ul>	<ul> <li>Determine the resources needed</li> <li>Determine the existing resources</li> <li>Identify the resource gaps and available suppliers</li> <li>Develop access to needed resources</li> </ul>	<ul> <li>Develop management style</li> <li>Understand key variable for success</li> <li>Identify problems and potential problems</li> <li>Implement control systems</li> <li>Develop growth strategy</li> </ul>

Figure 10 - The aspects of Entrepreneurship (Hisrich, Peters and Shepherd 2010)

The report focuses on the first aspect of entrepreneurship on its own way. The second aspect covers the development of a business plan. The main purpose of a business plan comes when the entrepreneur is trying to obtain the resources necessary to launch the business. The development of the plan is often very time consuming. However, it is a vital part of the entrepreneurial process without which becomes impossible to determine the resources required. Entrepreneur needs to determine the resources required in order to address an opportunity. Any resources that are critical need to be separated from resources that are just helpful. As resources are gathered by the entrepreneur he needs to try and hold as much ownership of the venture. He needs to protect his majoritarian ownership because often resources are traded for influence in the venture. After the resources are acquired the entrepreneur must use them to implement the business plan. Operational problems tied to growing the business needs to examined and implementing a managerial style, structure, determining performance measures. (Hisrich, Peters and Shepherd 2010)

#### c. What are the specifics of the Building industry?

This sub-chapter has the purpose to define the industry, explain the processes in the industry, explain what characterizes the building industry, what part the government plays in the construction industry, what is the role of supply and demand on the building industry.

Characteristics of the building industry – the building industry has characteristics that separately are shared by other industries but in combination appear in construction alone. (Hillebrandt 1984)

First, the physical nature of the product - the final product of the industry is large, heavy and expensive. Moreover, the output is almost always custom built to unique specifications and geographically widely distributed. The construction industry is also characterised by the use of many different materials and there is also a great variety of buildings and works provided by the industry. New buildings may include – Factories, Houses, dams, houses, roads, repair works and many more. (Hillebrandt 1984)

The construction industry is probably the industry that has the biggest impact on the economy of a country. The same can be said about the environment of a country. In Great Britain during the 1981 the construction industry was responsible for 10% of the country's' Gross Domestic Product (GDP) (Hillebrandt 1984). The manpower involved in the construction adds another reason why that industry is so influential to the economy of a country. (Hillebrandt 1984)

The industry is relatively labor intensive. The people working in the construction industry in Bulgaria are 350 000. The number of working people in Bulgaria are 3 500 000. That makes the construction industry responsible for providing for 10% of the population (Institure 2019). The numbers are similar to numbers of Great Britain– 7% (Hillebrandt 1984).

Finally, the construction industry is a customer to every other industry. An example for that might be a development program by a government that wants to create a Symphonic orchestra in a city without an Opera House. The building industry is stepping in. The industry has the task to design, construct and maintain the complex building required. The same example can be made for any other situation – a young family wanting to settle to a new home, a software company wanting more space in its office etc. (Hillebrandt 1984)

Demand is the requirements for goods and services that customer is willing to pay for. The determination of demand in the construction industry is very complex. That comes from the characteristics of the final product, the size of the projects, their long life, the investment requirements and the complexity of the whole construction process. There are 4 major requirements that have to be in place for demand to be created. (Hillebrandt 1984)

- There is a potential user of the building
- There is an organization/person ready to own the building.
- There is an organization/person ready to provide the financing for the project.
- There is an organization/person ready to initiate the process

All of the mentioned requirements have to be favorable in the same time for demand to be created. Thus, potentially there are 5 stakeholders involved – the user, the owner, the financier, the initiator and the government. The government is added in the mix based on the fact that the government has big influence on the environment in which demand is created. One the mentioned stakeholders in practice can have two or more roles. The different construction projects have different participants. In some case the construction process is complicated by adding other stakeholders – advisers. This adds to the complexity of creating demand.

The government has a great impact on the buildings industry. As previously mentioned it employs a big portion of a country's workforce and has a big contribution to the GDP of a country. The government is usually responsible for half of the work of the industry.

The work of (Fox and Skitmore 2007) – "*Key factors in the future development of the construction industry*" is mentioning 6 factors as most important for the development of the construction industry. Having determined the big role that the government plays in the construction industry it is important to note which factors have the greatest impact (Hillebrandt 1984). These are:

- Long-term vision and policy for the industry
- Basic resources and infrastructure (physical & institutional)
- Thinking the best and behaving the best (a best practice culture)

- Financial and human resources
- Techniques supporting high production performance
- A learning culture.

A short description of these factors is in order.

The Long-term vision and policy for the industry – The long- term vision and policies of the industry are set by the government and investors. The investors in the industry have to have trust in the return of their investment. If they do not have trust they would not release funds. Such trust can be achieved when information runs freely in the matter they would like to invest in. Creating environment of trust and transparency is up to the government. By creating trust the government produces policies that are influencing the development of the construction industry. Another factor might be that the construction projects are huge in comparison to the financial resources of the companies involved. Therefore, the companies are vulnerable when dealing with such projects. The risk falls on the investors, thus, the likelihood of initiating the project falls dramatically. On top, a good understanding by the government implies that a good performance measure of the industry is needed. Government has to implement policies that are based on reliable data; otherwise the policy might be out of touch with reality. Thus, creating more harm than good. Other factor affecting the long term vision and policy for the future is that there are other stakeholders affecting it. Research and Development (R&D) institutions like Universities and research institutes play a role with providing the business with the technologies required to improve their processes, services and products. In conclusion of this paragraph can be said that policies for good long tern vision are hard to come up with. It requires sufficient management skills with a high level of achievement. Furthermore, good coordination between the government and different departments is needed. (Fox and Skitmore 2007)

**Basic resources and infrastructure (physical and institutional)** - Quite clearly variables like basic resources and infrastructure are essential in both developing and developed countries. Not only a physical infrastructure for developing the future of the construction industry. An institutional infrastructure is required in order to provide support to the activities of firms and projects in the construction industry. (Fox and Skitmore 2007)

**Financial and human resources** - Investment and finance are essential to the development of the industry. This key component can be divided into 2 depending on the situation of the country that this issue is taken into consideration. First of all, developing countries experience lack of investment and financing. However, this is not the case with developed countries. The construction companies in the developed countries have to compete for investment across industries. Finally, it is a common problem and key aspect for development of good constriction industry that there is lack of rare skill from the market. (Fox and Skitmore 2007)

**Thinking the best and behaving the best (a best practice culture)** – in order the construction industry to achieve best practice, it must think the best. Interaction between government and contractors can encourage good ethical behaviour and it can push the participants into identifying good practice. The arguments behind is that the movement is a big client of the industry and that is why it should take the initiative and promote best practice behaviour. However, even if the government does not initiates thinking the best and behaving the best it is still important to do so. (Fox og Skitmore 2007)

**Techniques supporting high production performance** – different techniques are there to help the construction move forward. Prefabrication has the potential to reduce cost and time. Modern project management techniques as well as modern software technologies have the capability to improve quality, production time and cost. (Fox and Skitmore 2007)

A learning culture – By learning culture the author does not simply mean an individual wanting to improve their computer skill. He means that strive for learning in the building industry as a whole should exist. The different companies participating in the market should want to improve their processes and that can be done by learning and investing time and efforts. (Fox and Skitmore 2007)

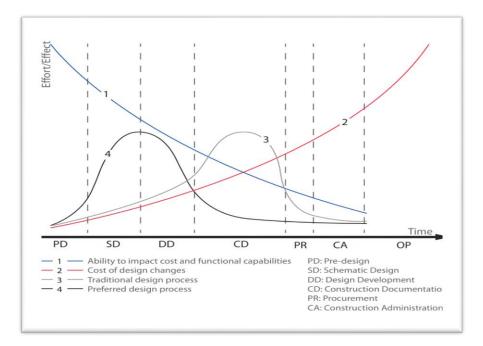
#### BIM

Building Information Modelling (BIM) is one of the most promising developments in the architecture, engineering, and construction industries. BIM is a virtual representation of a construction project. A virtual model of the construction project that is highly accurate. The BIM software support design through its phases, allowing better analysis and control than traditional processes. When completed, these virtually generated models contain precise geometry and data needed to support the

construction, fabrication, and procurement activities through which the building is realized. (Eastman, et al. 2011)

According to the authors Chuck Eastman, Paul Teicholz, Rafael Sacks, Kathleen Liston "BIM also accommodates many of the functions needed to model the lifecycle of a building, providing the basis for new design and construction capabilities and changes in the roles and relationships among a project team. When adopted well, BIM facilitates a more integrated design and construction process that results in better quality buildings at lower cost and reduced project duration" (Eastman, et al. 2011)

The figure underneath (See Figure 11 - Value added, cost of changes and current compensation distribution for design services ) shows several different things. Firstly, it explains how the standard construction projects are. The blue line numbered 1 is showing the Ability of the project team to influence a construction project. The more time passes towards the deadline the harder it gets to influence the project. The red line marked with 2 depicts the resources required to make changes when the project gets closer to the deadline. The closer you are to the delaine the more recourse you need for a change. Finally, the 2 wave lines numbered 3 and 4 depict the normal decision making process and the optimal decision making process. Line 3 – the normal decision making process has its curve bulging in the construction phase of Construction Documentation (CD) due to the fact that most of the decisions are taken then plus most of the money from an investor are released. That curve depicts the most of the decisions for projects are taken half way through the project. Building information modelling makes it possible for the decision making to be carried out in an earlier stage. Due to its standardised and streamlined documentation production capabilities makes it easier for the design team to produce the drawings required faster and easier with less mistakes. Furthermore, BIM gives the opportunity for the design team to foresee issues and eliminate them before the cost of change has increased. (Eastman, et al. 2011)





There are considerable advantages of precast constructions when mixed with the advantages that offer concrete (Irish Precast Concrete Association 2010). The author lists the most impactful in his view.

- The formwork on site is significantly reduced if not eliminated total.
- Wait time for curing the concrete is eliminated.
- The use of scaffolding is lowered with 90%.
- Most importantly, the precast concrete structures provide greater project control from managerial perspective. Most importantly the precast concrete element use provides 20% faster construction compared to normal in situ structure.
- When precast concrete structures are assembled they offer a stable working platform, thus reducing risks associated with highs and difficult places for work.
- Better quality control since the elements are produced in a controlled environment in a factory.
- Site labour intensity is greatly reduced because of the fact that there is no need for formwork and metal works.

• The clear span of the pre-cast elements is far greater than the in situ option.

**Pre-fabricated concrete in Bulgaria** - Bulgaria is a country where 1/3 of the population lives in precast concrete residential buildings. (National Statistical Institute 2011). The Bulgarian socialist government had provided a big amount of living space in the cities in the 2<sup>nd</sup> part of the last century. Bulgaria was transitioning from agricultural to an industrial economy and population of the cities exploded. This placed the government into a bad place. They had to find a cheap and fast solution. During that time the same problem occurred throughout the Eastern Bloc countries like Russia, Bulgaria, East Germany, Hungary and more. A common solution was implemented. Highly standardised pre-fabricated concrete residential buildings placed closed to each other were build. Things like design, comfort, aesthetics and energy efficiency were neglected in favour of price and speed of construction. The problem with heating would be solved by placing heat power plants nearby. (Zarecor 2014)

## d. How to create value?

A company can be seen as successful if it does not die in the first two years after its creation. Only 76% of the companies created in 2009 have survived until 2010 – a full year in the field of the construction in Bulgaria. That death rate is kept for the first 2 years of the life of a new company (Simeonova-Ganeva, et al. 2012-2013). However, the author choses to define success much more optimistically. Success is the point in which a company has achieved competitive advantage. That is the final goal to strive for. The company that the author wants to create has to have that strive for achieving competitive advantage. However, the term Competitive advantage has to be introduced.

Competitive advantage is a term used by Michael E. Porter to describe a superior position of a company compared to its competitors. Or as Porter puts it: "*Competitive advantage is a function of either providing buyer's value more efficiently than competitors (low cost) or performing activities at comparable cost but in unique ways that create more buyers value that competitors and, hence command a premium price (differentiation)*". (Porter 1998). However, the path that companies can take in order to achieve Competitive advantage is called Competitive strategy. Competitive Strategy can be defined in many different ways. This is way the writers of the Exploring Strategy book (Johnson, et al. 2017) explain each of the different theorists on the topic and they have their own definitions.

- Michael E. Porter describes in his book the term competitive strategy in the following fashion: "*Competitive strategy is about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value*". (Porter 1998)
- Alfred D. Chandler says that competitive strategy is: "...the determination of long-run goals and objectives of an enterprise and the adoption of courses of action and the allocation of resources necessary for carrying out these goals". (Johnson, et al. 2017)
- Peter Druker's formulates his definition of strategy in the following way: "*a firm*'s *theory about how to gain competitive advantage*". (Johnson, et al. 2017)
- Henry Minzberg describes it simply as "*a pattern in a stream of decisions*". (Johnson, et al. 2017)

Each definition mentioned covers an important aspect of strategy. Porter's definition emphasises the importance of differentiation and competition. Chandler's definition states on the

importance of a logical flow from determination of goals to allocation of resources. Peter Druker's definitions suggest that the strategy of a company is its way to victory. Minzberg however leaves the definition open in order to suggest that the strategy is less certain and uses the word pattern instead to allow the fact that strategies not always follow deliberate and logical plan instead the strategy emerges in more spontaneous ways. (Johnson, et al. 2017)

Depending on what the final goal of the enterprise a different definition might be suitable. For example, if Peter Drukers` understanding of Competitive strategy is adopted the goal would be achieve competitive advantage. Michael Porters` term suggest that differentiation is the goal of the company and a way to achieve it is through a unique mixture of activities. The unique mixture of activities will then create value.

There are tree generic strategies that companies can follow in order to achieve Competitive advantage according to Michael E. Porter - Overall cost leadership, Differentiation and Focus (Porter 1998)

**Overall cost leadership** strategy requires aggressive construction of efficient –scale facilities, vigorous pursuit of cost reduction from experience, tight cost and overhead control, avoidance of marginal customer accounts and cost optimisation in areas like R&D (Research and Development), service, sales force, advertising and so on. A great deal of managerial attention to cost control is necessary to achieve these aims. Low cost relative to competitors becomes the theme running through the entire strategy, though quality, service and other areas cannot be ignored. (Porter 1998)

**Differentiation** is the second generic strategy. The idea behind is to create a product or service that is perceived industry wise as unique. The approaches toward that strategy can vary but some of them might be: design or brand image, technology, customer service, features, dealer network and many more dimensions. Differentiation, if achieved is a viable strategy for earnings that are above average because it creates an easily defensible position. (Porter 1998)

**Focus** is the final generic strategy according to Porter. It requires focusing on a particular buyer group, segment of the product line, or geographic market. As with differentiation, focus may take many forms. Although, the low cost and differentiation strategies are aimed at achieving their objectives

industry wise the entire focus strategy is built around serving particular target very well and each functional policy is developed with this in mind. (Porter 1998)

According to Peter Thiel the overall cost leadership is very hard to achieve and the goal for a new company should always be to differentiate. The goal for that is to create a monopoly that dominates the market in its own specific mixture of value. Thiel gives as an example the biggest tech companies in the world as an example. Google, Facebook, Apple and Amazon are all know for their specific field of operation however their businesses overlap to a considerable amount as well. Google for example has the biggest share on the market when it comes to people using their search engine. Facebook is the leader in the social networking, Apple in mobile phone production and Amazon in e-commerce. In the same time each one of these companies are offering more than just their primary product. However, each of these companies is the dominant power in the industry when it comes to their primary service or good. (Thiel 2014)

This can be seen in the definition that Michael Porter gives for competitive advantage "*A unique mixture of value*". A company competing in the most vigorous of environments could gain a competitive advantage through offering a service no one on the market offers.

Unless there is a clear market niche and proper financing this is the way that a new company should go on. Perusing a market niche or creating a mixture of values is most likely to work and author deems that should be the direction for this thesis and the company itself. However how to go in that direction? How to lead a company in that can achieve that?

## 8. Final Problem Statement

The following chapter demonstrates a summary of the literature review, on the base of which the initial problem statement is further developed into a final problem statement. The final research question sets the focus of the group's specific analysis and the answer of which is considered as the main objective of this report.

## a. Summary of the literature review

The literature review showed how the modern economic system works and how it is related to the entrepreneurship process. The government does not have a direct play in the construction industry. Despite of that the chapter presented how the government is able to influence the economic markets. Furthermore, due to the specifics of the industry and the size of the construction industry it can be even easily influenced by the government. Moreover, the government has a big role in the developing the construction industry. The government can play the role of investor, partner and client and that serves as an example for good or bad practices throughout the whole industry. The government has big impact on the construction industry but that power is limited and has to be managed with care.

Construction companies can utilize certain modern practices in order to further their profit or competitive position. Even more, differentiation strategies can be used by companies to achieve competitive advantage.

## b. Final problem statement and research question

The initial problem statement: "*What are the prospects of starting a company in the environment of the Bulgarian construction industry*?" covers wide range of topics. Dividing it into parts will make it easier to answer. A sub set of question can be generated and answered and thus answering the main problem formulation of this master thesis. Building on that it can be said that the report is built on the first aspect of the entrepreneurial process - identification and evaluation of the opportunities. (Hisrich, Peters and Shepherd 2010). This leads to these-questions.

# MAIN Question: Identify and evaluate the opportunities for new business in Bulgaria in the field of the construction industry!

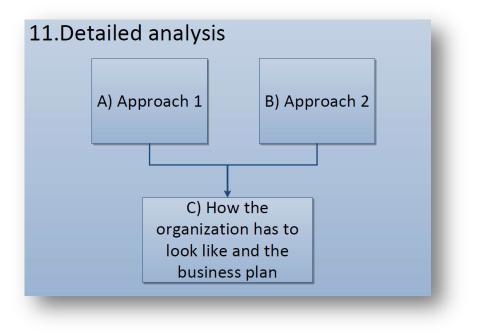
Question 1: Are there any niches for a new entrant company in the market of the Bulgarian construction industry?

Question 2: What are the biggest difficulties for companies in the field of the Bulgarian construction industry?

Question 3: What is the way for a new company to reach a competitive advantage?

## 9. Detailed analysis

As mentioned in chapter Final Problem Statement (See chapter Final Problem Statement) this chapter is decided into 2 parts – Approach 1 – Literature and data and Approach 2 – The field study. This is done in order to pursuit a two "roads" towards the final goal. (See Figure 12 - Structure of the chapter 9. Detailed analysis)



#### Figure 12 - Structure of the chapter 9. Detailed analysis

The first sub-chapter is the approach to the final problem statement that explores what does the literature and data have to say. The second sub-chapter is field study of the industry that consists of interviews with companies in the field of the Bulgarian construction industry. The results from the 2 approaches are then summarized in chapter Conclusion (See chapter Conclusion).

## a. Approach 1 - Literature and Data

This sub-chapter is devoted to the analysis of the Bulgarian construction industry. The approach taken here is trough analyzing it. The final goal is to try and understand if the conditions of the Bulgarian construction industry are suitable for starting a new company.

According to the book Exploring Strategy by Gerry Johnson, Richard Whittington, Kevan Scholes, Duncan Angwing and Patric Regner there are several layers of business environment - the Macro-environment, the industry, the competition and the organization itself. (See Figure 13 - Layers of the Business Environment ).

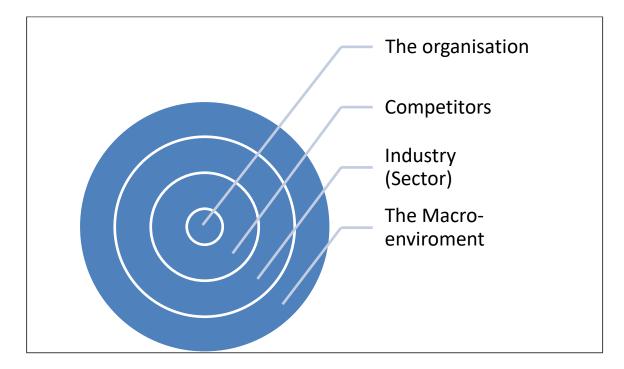


Figure 13 - Layers of the Business Environment (Johnson, et al. 2017)

Understanding the environment is crucial for the survival of organizations. By carefully analyzing the environment, companies are enabled to anticipate and possibly influence environmental change and potentially deadly for them factors. Analyses are conducted in the following way. The "onion" (representing the layers of building environment – see the figure on top) is going to be "pealed". That means that analyzing the macro environment is the aim of the sub-chapter.

In this sub-chapter the author endeavours to understand the macro-environment in the Bulgarian Construction industry. The macro environment "consists of broad environmental factors that impact to a greater or lesser extent many organisations, industries and sectors" (Johnson, et al. 2017). A way to analyze the macro-environment is PESTEL analysis. PESTEL "highlights six environmental factors. In particular: Political, Economic, Social, Technological, Ecological, and Legal" (Johnson, et al. 2017). That is where the name PESTEL is coming from.

The PESTEL framework is often utilized when analyzing the macro-environmental factors that have an influence on the organization. All the factors are interrelated and connected to both market and non-market aspects of strategy. Therefore, the aim of incorporating the PESTEL framework in the report is to discover how the Bulgarian government, economy of the country, societal factors, technological advancements, environmental policies and legal regulations impact on the companies and their development. (See Figure 14 - PESTEL analysis framework).

Р	Е	S	Т	Ε	L
Government policy Political stability Corruption Foreign trade policy Tax policy Labour law Trade restrictions	<ul> <li>Economic growth</li> <li>Exchange rates</li> <li>Interest rates</li> <li>Inflation rates</li> <li>Disposable income</li> <li>Unemploy- ment rates</li> </ul>	<ul> <li>Population growth rate</li> <li>Age distribution</li> <li>Career attitudes</li> <li>Safety emphasis</li> <li>Health conscious- ness</li> <li>Lifestyle attitudes</li> <li>Cultural barriers</li> </ul>	<ul> <li>Technology incentives</li> <li>Level of innovation</li> <li>Automation</li> <li>R&amp;D activity</li> <li>Technological change</li> <li>Technological awareness</li> </ul>	<ul> <li>Weather</li> <li>Climate</li> <li>Environmen- tal policies</li> <li>Climate change</li> <li>Pressures from NGO's</li> </ul>	<ul> <li>Discrimination laws</li> <li>Antitrust laws</li> <li>Employment laws</li> <li>Consumer protection laws</li> <li>Copyright and patent laws</li> <li>Health and safety laws</li> </ul>

#### Figure 14 - PESTEL analysis framework

The analysis is organised following the PESTEL framework and describing each of its topics (See Figure 14 - PESTEL analysis framework). Some of the topics shown in the figure are not included in the analysis further down. The author sees these topics to not have any impact on the country. Furthermore then can be similar to all countries (not giving Bulgaria any advantage or disadvantage).

#### Why PESTEL?

A number of reasons ought to be mentioned as for why the PESTEL Framework is deemed the most suitable for the study purposes of the report. First of all, conducting the PESTEL analysis is cost-effective because no programs or equipment is needed for it. However, a certain cost associated with it is the time spent on researching all the relevant areas. By implementing that framework, various influential factors that directly and indirectly affect the company are studied so none of them go unnoticed. That leads to a deeper understanding of strategic planning necessary for the success of the business. (Johnson, et al. 2017)

It is very important that the reasons for conducting PESTEL are clearly stated so that the results from it do not become overwhelming. Despite the above-stated advantages, the author the fact that the PESTEL framework poses some limitations. The external factors that are studied are changing at a fast pace which brings a particular uncertainty to the whole analysis. Because of the broadness of the investigated areas, the collected data amounts might cause confusion and loss of the purpose of the analysis. Other issues can be trustworthiness or poor quality of available information which often entail too many assumptions and not enough actual facts. (Johnson, et al. 2017)

## • Politics

Politics refers to the role of the state as a direct economic actor and other political forces, such as political movements, campaign groups or media. The Politics part of PESTEL consists of different parts: Government policy, Political stability, corruption, foreign trade policy, tax policy, labour law, trade restrictions. (Johnson, et al. 2017). Describing the political factors influencing the Bulgarian construction industry is performed by following the different parts of the political part of PESTEL. (Johnson, et al. 2017)

## **Political Stability**

The author deems that political stability can be described well with the Political Stability Index. The political Stability index "*measures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism. The index is an average of several other indexes from the Economist Intelligence Unit, the World Economic Forum, and the Political Risk Services, among others*" (Valev , Bieri and Bizuneh , The Global Economy 2018). The index measures how politically stable a country is on a scale from -2.5 to +2.5. Where -2.5 is a measure for weak political stability and +2.5 is for strong political stability. Bulgaria scores as of 2017 with 0.37. The movement of the index throughout the past years can be seen in the figure underneath (See Figure 15 - Political Stability Index for Bulgaria

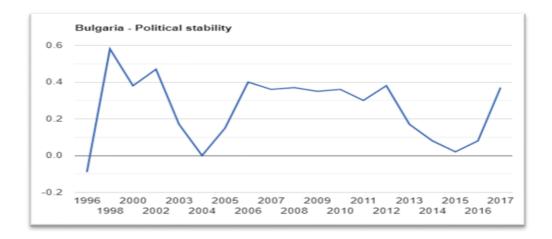
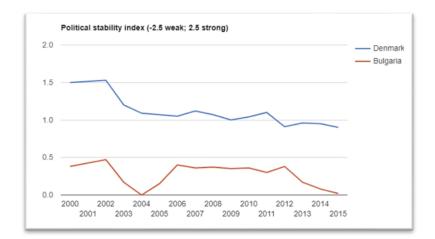


Figure 15 - Political Stability Index for Bulgaria (Valev, Bieri and Bizuneh, The Global Economy 2018)

However this can be better illustrated if the numbers of the Political Stability Index are compared with another country. For that purpose Denmark is used. In the figure underneath can be see how the 2 countries compare in that index. (See Figure 16 - The Political Stability Index comparison of Bulgaria and Denmark . In the figure with ease can be seen that the political environment of Denmark is more stable than that on Bulgaria. In other words there is a bigger chance of interruptions and destabilisations in the Bulgarian political environment than in Danish one.



## Figure 16 - The Political Stability Index comparison of Bulgaria and Denmark (Valev , Bieri and Bizuneh , The Global Economy 2018)

It has to be kept in mind that according to that same index the most unstable country the world – Yemen scores -2.96 and the most stable country – Monaco scores 1.65. With the fact that Bulgaria occupies the 73<sup>rd</sup> place in the world according to that index we can conclude that the political environment in the country is quite stable. Bulgaria even score better than other highly developed countries like Italy, The United States, Spain, France, South Korea and others.

## **Corruption**

Corruption in Bulgaria is a central concern for the society and politicians of the county for quite some time now. The last 20 years were the best in terms of international politics for the country as it managed to join the European Union, NATO and it is on the waiting list to join the Shengen Area (the country achieved the entrance requirements some time ago). Due to external and internal pressure many different anti-corruption measures have been implemented. However the country is still

systematically demonstrated very high levels of corruption. (National Integrity System Assessment -Bulgaria 2011)

## Foreign trade policy

Bulgaria is part of the European Union since 2007. That means that Bulgaria is part of the freetrade Euro zone. Trade with countries members of the European Union is without any tax. Furthermore, as part of the Union Bulgaria is receiving subsidies and help to develop its economy to European levels. The EU for 2017 has spent 1.89 Billion Euros. That represents 3.7% of the Gross National Income. In the same time as member of the Union Bulgaria is responsible for 0.4 Billion Euros in the European Union's budget. (Europa.eu 2017)

## Tax policy

Bulgaria is among the countries with lowest income and corporate tax in Europe. This is set to be at 10% and the value added tax is 20% that applies to virtually all goods and services (European Commision 2008). All taxes mentioned are flat. That means that they are set to a specific number and that applies to everyone. In countries like Denmark the taxes depend on the income or other numbers. It is also common practice that the administrative services are paid /taxed. For a comparison Denmark has a corporate tax of 22% and 51.95% (including 8% social security paid by the employee but excluding 0.42–1.48% church tax imposed on members of the national Church of Denmark). VAT tax is Denmark is 25%. That makes Bulgaria a good place for starting a business or investment. (European Commision 2008)

#### • Economics

Economic factors are such as: economic growth, interest rates, and exchange rates. They are important to understand by an organization because they affect the markets as a whole. They affect the economy and have severe consequences on business and markets. (Johnson, et al. 2017) A good example for that is the GDP grow rate and the unemployment % of the population. These both are factors affecting directly all businesses in a country.

#### Economic growth

Bulgaria has enjoyed a good economic growth between the years 2000 and 2008. The GDP of the country as of 2017 is 58.8 billion dollars (Valev, Bieri og Bizuneh, The Global Economy 2018).

GDP (Gross Domestic Product) is a measure of the size of the economy of a country. It is the total market value or all goods and services produced on the territory of a country during a year.

The economic crisis had a big negative impact on the economy of the country. This is easy to see in the figure under (see Figure 17 - Economic growth of Bulgaria and Unemployment rate). The blue line represents the unemployment rate in the country and the green and red bars the DGP growth. Recently the GDP growth rate has being rising and getting into pre-crisis levels. GDP grow rate is *"measures economic growth in relation to gross domestic product (GDP) from one period to another and adjusted for inflation. … The real economic growth rate is expressed as a percentage that shows the rate of change in a country's GDP, typically, from one year to the next."* (Silver and Chen 2018)

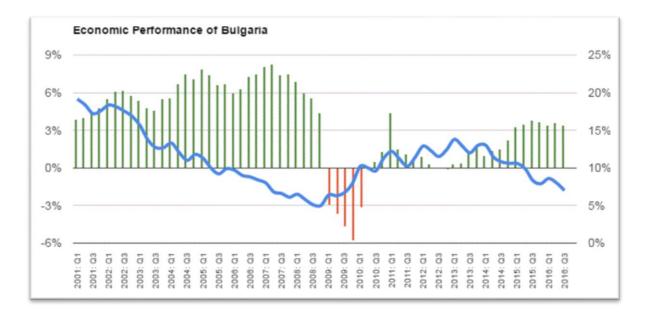


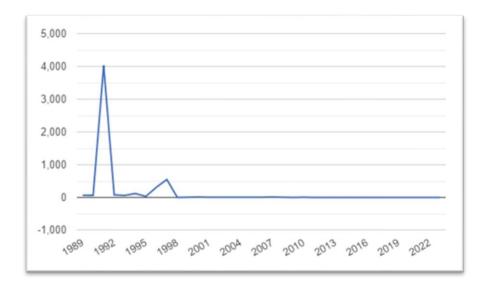
Figure 17 - Economic growth of Bulgaria and Unemployment rate (Valev , Bieri og Bizuneh , The Global Economy 2018)

#### **Exchange rates**

The term exchange rate represents the value of a currency of one country for the purpose of exchanging it to another. Bulgaria uses Leva as its currency. The Bulgarian national bank has tied the value of the Leva to the Euro with an exchange rate of 1.96 Bulgarians Leva for 1 Euro (European Central Bank 2018)

## Inflation rates

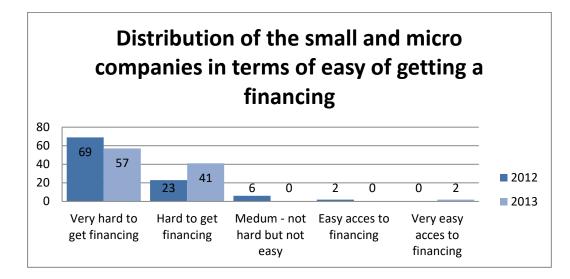
Inflation rate is the process of increasing the prices over time. This is resulting in fall in the purchasing value of money. The inflation rate is measured in Percentage – it measures the change in prices level over time. Thus the higher the inflation rates the lower the value of money (Investopedia 2018). The graph underneath represents how big the inflation rate of the Leva has been through the years (See Figure 18 - Inflation in Bulgaria ). As of 2018 the inflation rate of the Bulgarian Lev is 2,3%. (Valev , Bieri and Bizuneh, The Global Economy 2018).



#### Figure 18 - Inflation in Bulgaria (Valev , Bieri and Bizuneh, The Global Economy 2018)

The Bulgarian banking system now demonstrates predictability and high investor confidence. There are 31 banks with 50 billion of assets combined. The Bulgarian bank system managed to achieve that despite its collapse in 1996. (Bureau of Ecnonomic and Business Affairs 2013)

In Bulgaria the small and micro companies are having difficulties being financed (Simeonova-Ganeva, et al. 2012-2013). In a poll conducted from the National Statistical Institute the researchers found that most of the businesses find it very hard to get a bank financing (See Figure 19 - Ease of financing of SMC).



#### Figure 19 - Ease of financing of SMC (Simeonova-Ganeva, et al. 2012-2013)

According to the index of competitiveness in 2012 – 2013 Bulgaria is at 92<sup>nd</sup> place. The country does much better when it comes to index for "capacity for innovations" – taking 64<sup>th</sup> place. The negative tendencies that these indexes point out are the inadequate governmental support for innovations in the form of public orders for modern technologies. Furthermore it shows reduced productivity or number of scientist, engineers and people working in the industries associated with new technologies. (Simeonova-Ganeva, et al. 2012-2013)

## Social

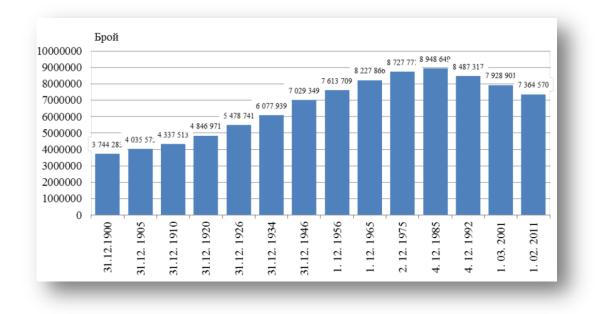
The social elements of the macro-environment have influence on the demand and supply in different aspects in the economy, social elements can shape innovativeness, power and effectiveness of organizations. (Johnson, et al. 2017)

As mentioned in chapter Literature review the Bulgarian workforce consists of 3.5 million people. The literacy rate is 98.8%. A high percentage of the country has completed a secondary form of education in technology, crafts or trade. However there is lack of skilled managers with Western management skills. (Bureau of Ecnonomic and Business Affairs 2013)

#### **Population growth rate**

Bulgarian population is the 2<sup>nd</sup> faster shrinking in Europe after Latvia (See Figure 20 - Population growth rate in Bulgaria ). The current population of the country is 7 364 570 people

(National Statistical Institute 2011). The Bulgarian government has made its Demographic policy among its highest priorities. In the Demographic policy the Bulgarian government is trying to slow down the population decrease and achieve stabilization in the long run. Increase of the life expectancy and decrease of the number of young people leaving the country are among the many points that the movement would like to achieve. The Bulgarian government is taking steps to change that fact. However, so far the measures put forward by the government are to a limited effect.



#### Figure 20 - Population growth rate in Bulgaria (National Statistical Institute 2011)

#### Age distribution

The census of 2011 shows the age distribution of the Bulgarian population (See Figure 21 - Age distribution of the Bulgarian population . In the picture a big negative side of the current age distribution can be noted. There are not many people under 20 years old. The majority of people in the country are between ages of 25 and 65. The retirement age in Bulgaria is 61 for women and 64 for men. With the total pool of 3 500 000 people in working age and participating in the economy the graph shows that this number is going to plummet fast in the upcoming 10 years. This is caused by several reasons. Firstly, the population growth rate in Bulgaria is -0.7. Second, the death rate of the country is high. Finally, people are migrating from Bulgaria. 2/3 of the population deficit is due to the negative

growth rate and the rest is due to migration. 175 244 people have moved out of Bulgaria for good in the period between the 2001 and 2011. (Institure, http://www.nsi.bg/en/ 2019)

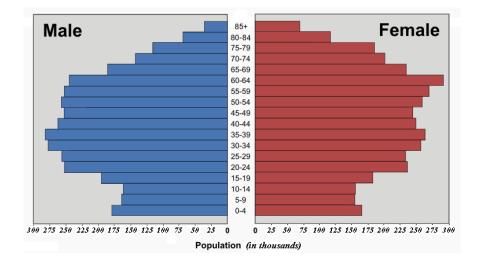


Figure 21 - Age distribution of the Bulgarian population (National Statistical Institute 2011)

• Technological

Research in technology directly affects the creation, understanding and dissemination of new information and communications technology. At the end of 2011, 57.6% of households in Bulgaria have broadband Internet access, which is one of the lowest rates in the European Union. The current spending of the Bulgaria on research and development is 0.96% of the GDP of the country. (See Figure 22 - Research and development expenditure of Bulgaria in% of the GDP over the years ) (Valev , Bieri and Bizuneh , The Global Economy 2018)

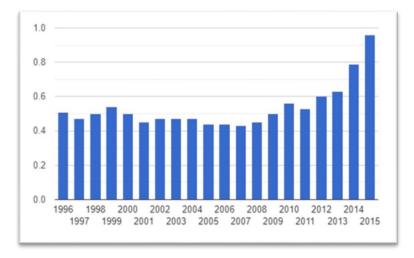


Figure 22 - Research and development expenditure of Bulgaria in% of the GDP over the years (Valev , Bieri and Bizuneh, The Global Economy 2018)

The expenditure of the country on technology however is a combination of Gove mental expenditure, business, higher education and non-profit organizations. The distribution of that expenditure in Bulgarian can be seen in the next figure (See Figure 23 - Distribution of expenditure on technology in Bulgaria)

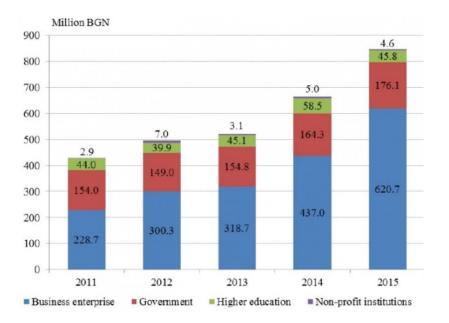


Figure 23 - Distribution of expenditure on technology in Bulgaria

The R&D intensity of Bulgaria is one of the lowest in the EU, Private R&D investment is the lowest in the EU, mostly as a result of sectorial specialization in low technology sectors and the current scarcity of medium and high technology companies. Moreover, by taking a look at the figure on top (See Figure 23 - Distribution of expenditure on technology in Bulgaria) it can be concluded that most of the research and development in the country is done by the private enterprises.

#### • Ecological

The ecological factors from the PESTEL analysis of the Bulgarian micro-environment are deemed to be out of the scope of the thesis. Data regarding the topic concerning the thesis were not found.

• Legal

The legal system of Bulgaria is described in the Constitution of the country from 1991. There are 3 levels of courts. There are 113 Regional courts around the country. Above them are 29 District courts. Finally there is the Supreme Court of Cassation serving as a last resort when a civil or criminal dispute could not be solved by the Regional or District courts. Problems associated with the Bulgarian Judicial system are the lack of resources. This often results in blocking and inefficient procedures that diminish the fast administration of justice. Corruption is a big problem. The judicial system of the country is among the least trusted in the country by the citizens of Bulgaria. Foreign and local investors often encounter sluggish bureaucracy, poor infrastructure, corruption, frequent changes in framework, lack of transparency and weak judicial system. (Beach and Kane 2008)

According to the Investigation of the "Entrepreneurship and the perspectives for development and innovation in the small and small enterprise and its sources" the governmental regulations have some bad influence on the small and medium business in a bad way. Their results (over 3000 companies polled) show that a big amount of small and medium companies are complaining about the administrative bureaucracy and the amount taxes they are paying. Almost all company reports that it is facing problems with administrative services and the often implemented changes in law. The report also reports of a market working "in the dark" – meaning that they do not pay taxes. These "black" markets are also in the way of the small and medium entrepreneurship in Bulgaria. Moreover, more than half of the companies in the country report having hard time getting the needed financing. (Simeonova-Ganeva, et al. 2012-2013)

## b. Approach 2 - The Field study

This sub-chapter can be viewed as a parallel study of the industry to the previous sub-chapter A) as mentioned in the beginning of detailed analysis (See sub-chapter Approach 1 – Literature and Data). However, it is impossible for the author to carry out Approach 1 and Approach 2 parallel in time. Thus this chapter is written and completed chronologically after the Approach 1 sub-chapter is completed. Moreover, some of the research conducted here is influenced by knowledge gathered in Approach 1 sub-chapter. An example for that are the questions of the interviews.

This sub-chapter starts with the design of the questions used in the semi-structured interviews. Next, the selection process of the companies interviewed and the validity of the study based on the size of the sample taken from the industry is presented. The validity of each company and the company representative is a matter discussed before each individual interview. Finally, a breakdown of each interview and the findings from it are defined. The findings from this sub-chapter are analysed and displayed in chapter conclusion (See Chapter Conclusion)

#### • Questionnaire design

The sources of primary data for the report are semi-structured interviews. It has to be noted that interpretivism is the chosen philosophy of science for this report (See

Methodology) meaning that all the information gathered is accumulated through the lenses of the author. The interpretation of the author added together with the fact that the person interviewed might have his point of view and interpretation of the world makes the final findings from the interviews – an interpretation of an interpretation. An example might be helpful to illustrate the point. A beam of light (the information) is manipulated by 2 lenses with the goal to point that light into a target. The 1<sup>st</sup> lens (representing the person interviewed by the author) is placed close to the source of the beam and the other lens (the author himself) is placed some distance apart from the 1<sup>st</sup> one. The results of that experiment might cause the beam of light to veer off completely and miss the target by a large margin or the lenses might be able to adjust their positions so the beam hit as close as possible to the target. That analogy shows what the author is trying to achieve with the semi-structured interviews. On the other hand a questionnaire might act like a stationary lens that cannot be moved, meaning that once the questionnaire is prepared and sent to the person being interviewed it is up to them to interpret the

questions (position the lens wherever they like). However, that is not the case with a semi-structured interview. A common understanding of the topics can be made while talking with the company representative and the direction of certain conversations can be steed into the required by the author area. Or if the beam experiment analogy is used – the lenses are being focused.

All of the interviewed companies in the report have the option to keep their names and confidentiality. An individual contract for preservation of information is offered to be signed between the author and the company (if requested by any side). By offering the confidentiality contract the author aims to gain the trust of the company representative so he/she answers the questions as truthfully as possible. Signing a confidentiality contract means to eliminate the fear in the company representative when it comes to questions regarding corruption, company wellbeing and competitive position. The prepared contract by the author can be seen in the Appendix of this report (See Contract for Confidentiality )

According to Seinar Kvale and his book InterViews (Kvale 1996) there are seven stages of an interview investigation: Thermalizing, Designing, Interviewing, Transcribing, Analyzing, Verifying and Reporting. The author keeps the same the process while conducting the semi-structured interviews. The theme is set in chapter Final Problem Statement (See Final Problem Statement). The design of the questions is completed (See underneath this paragraph) then the interviews are transcribed (See Data gathered - transcriptions and e-mail communication). Afterwards, the reporting of the findings is presented in this sub-chapter (See Interview reports). Finally, the verifying and reporting are conducted in chapter Conclusion (See chapter Conclusion).

As mentioned in the previous paragraph the goals for the thesis have to be kept in mind while designing the questions. However, if some of the information about a company participating in the study is missing an additional set of questions is required. That set of questions is called "general information about the company". Webpages of the companies that are chosen to be interviewed might be incomplete or show limited data. For example the size of the companies is often something that is not mentioned in the webpages and such information is important to the study. The "General information about the company" questions most often used are:

- How many people are hired in the company?
- What is the main line of work of the company?
- What financial resources does your company rely on?
- What are the long term plans of the company?
- How is the company finding and winning projects?
- In what region does the company operates?

The next set of question is based on the goal of the author to gather as much relevant data about the circumstances of starting a venture in the conditions of the Bulgarian construction industry.

- Who created the company? Education? Background? Previous Experience?
- What capital was used in the creation of the company?
- What do you have to say about the process of starting a company?
- Is there anything special in the conditions surrounding the creation of the company?
- What are the biggest challenges that you have encountered since the company was created?
- Are there any circumstances in which your company has experienced corruption or had to participate in it?
- Have your company experienced any difficulties acquiring raw materials?
- Have your company experienced any difficulties with hiring qualified personal?

The final 3<sup>rd</sup> set of questions is directed towards the identification and evaluation of possible opportunities existing in the field of the Bulgarian construction industry. They are as follows:

- Are there any niches that you can see are not utilized or exploited by participants in the industry?
- What do you believe is the future of the Bulgarian construction industry?
- What products or services are going to be valued in future by the participants of the Bulgarian construction industry in your opinion?

## • Which companies to contact?

With the questionnaire formulated the next step is to pick the companies for interviews. A proper sample of the companies of the country is taken for the thesis to be able to conclude on any matter with good validity. For that purpose the author aims to interview as many companies as possible. 30 companies have been reached by mail and 10 by personal contacts. 5 in total company representatives replied and agreed to participate in the study. Therefore, a validity of the findings from the interviews and the 2<sup>nd</sup> approach of this thesis are matched with the same findings from the Approach 1 in order to be taken as truly existing in the field of the Bulgarian construction industry.

Region of operation, size of the companies and method of acquiring the contact of a company are factors that play a role in the proper sampling of the industry. They can all affect the study results and findings. A short description of these 3 factors is in order. Understanding their influence on the study and keeping them in mind is the authors` way of making sure that the objectivity of the study is not compromised.

#### **Region of operation of the companies selected for the study.**

Sofia as capital of Bulgaria and home to 1.2 million people is the center of the Bulgarian economy. According to the National Statistics Institute of Bulgaria 900 000 employed people live in Sofia (Institure, http://www.nsi.bg/en/ 2019). That number is far greater than any other region of the country and makes the region highly active in terms of economic activity. Most companies are based in Sofia due to the advantages the location has: close proximity to other businesses, big pool or university graduates, and the population density makes it easy to find personnel and the demand is higher. Hence, he reasons that the author extensively focuses on that area. Sofia is located in the end of the Thracian Valley – the center of the Bulgarian economy. Other cities located there are Plovdiv, Pazardzhik, Stara Zagora and Burgas. The regions that are excluded are Northern Bulgaria and South East Bulgaria. Due to their geographical location and isolation these regions are considered by the author to be of little significance.

**The size of the companies** interviewed is from micro to medium. That means that the count of workers is from 1 up to 250 (Simeonova-Ganeva, et al. 2012-2013). The aim of the author is to examine the small, micro and medium companies keeping in mind that a potential new company has to

go through a period of establishment and development. The construction industry is big economical force of a country's GPD usually 5-7% of a country's' GDP (Sohail and Cavill 2008). There is huge variety of trades in the industry as well - contractors, engineers, architects and many more specialized companies doing their work. This thesis does not put any restrictions in these terms. All companies participating in the industry are examined as well as potential niches from the whole industry.

## The way the author acquired the contacts.

The Author constructs a generic e-mail (see E-mail). The e-mail is then specialized for each contacted company based on the information known about it. The general pools for contacts used are yellow pages websites. Before contacting a company the author conducts a small screening investigation to exclude companies that are not in the construction industry. Some have a webpage; some have listing on the websites. However, not all companies interviewed are found that way. Several companies are contacted trough personal to the author contacts.

The way contacts of the companies participating in this report matters because it might have been selective of unknown to the author factors. When a commonality is found between the companies investigated is presumed to be an objective finding. However, the fact that only certain companies agreed to participate in the study might speak a commonality between these companies as well. A proper or "undisturbed" sample would be considered to be from: all aspects on the construction industry, all possible sizes, doing well financially, doing bad financially, and all possible locations that play a role in the development of the company. However, due to the limited amount of companies agreed to participate of the study it has to be kept in mind that this might affect the results. Even by sheer luck the results found in that sample might show something that is not the objectively true for the construction industry of Bulgaria.

## • Interview reports

In this sub-sub chapter the author presents the results of the interviews carried out. A small introduction to the company is presented. Furthermore, a justification of why these company representatives are a valid source of information is defined.

## Interview 1 - CHIMCOMPLECT-ENGINEERING COMPANY

The interview is conducted on 22<sup>nd</sup> of December 2018. The company is approached via mail. The author finds the contact of the company in a yellow page website. After a fast web search the author deemed it like a good company for an interview. It is a medium size firm located in Sofia and existed for 56 years on the market of the Bulgarian construction industry.

The contact person is Julia Takucheva. She is holding a position of a marketing and sales director. She is working in the company for 18 years. Her position combined with the fact that she has been working in the company for so long makes her experienced, valuable and trustworthy. The full interview can be seen in Appendix (See CHIMCOMPLECT-ENGINEERING COMPANY - SOFIA). Located underneath are the findings from that interview (See Table 1 - Findings from interview 1).

N:	Findings
1	The company was founded in the time of socialism
2	Experiencing big troubles with hiring new personnel – engineers and welders
3	Has to train its own workers
4	Has a strong policy against corruption and has seen it
5	Their competitors are cutting corners – working with unlicensed software
6	Does not have mission, vision or strategy – seems like they are working without a purpose
7	Big troubles in the economic crisis of 2008

#### Findings

Table 1 - Findings from interview 1

### Interview 2 – Beton Expert 00D

The interview is conducted on  $2^{nd}$  of January 2019. The company representative, owner and CEO – Vencislav Lichev is approached via personal massage on social media. The author finds the contact of the company representative via common friends. It is a small size firm located in Sofia and existed for 10 years on the market of the Bulgarian construction industry. The company has been founded 10 years ago during the height of the 2008 economic crisis.

The contact person is as previously mentioned was Vencislav Lichev. He has created the company and running it. He does not have an education related to the construction or engineering industries. However, he has a lot of experience in the field that his company is aiming – 15 years as a COO of 4 Batch companies and 4 years running a similar laboratory. His experience and knowledge are deemed very useful by the author and thus makes a great source for an interview. The full interview can be seen in Appendix (See Beton Expert OOD). Located underneath are the findings from that interview (See Table 2 - Findings from interview 2).

#### Findings

N:	Findings
1	The company was founded in the time of the economic crisis in 2008
2	Troubles finding educated workers – has to train them in the company or send them on courses
3	Innovation and optimization seems to be behind the success of the company
4	Has seen corruption but never participated it.
5	Exploited a niche in the industry
6	Holds ¼ of the market
7	Has a goal to become the leader in the country
8	Avoids working with companies that are deemed unsecure or related to corruption
9	Hard for the company to find investments – EU funds are associated with corruption and the banks
	do not provide enough investment
10	Bureaucracy slows down and puts stress on the companies
11	The owner has no education associated with the construction industry or engineering
12	The owner believes that the quality of production will be valuable and a niche in the Bulgarian
	construction industry
13	Is not aware of any companies producing pre-fabricated concrete elements
14	The company was started with the personal capital of the owner

 Table 2 - Findings from interview 2

#### Interview 3 – Enola M E00D

The interview is conducted on  $2^{nd}$  of January 2019. The company representative, owner and CEO – Mariyan Madin is contacted via e mail. His contact is found in the yellow pages. It is a small size firm located in Plovdiv and existed for 15 years on the market of the Bulgarian construction industry.

Mariyan has created the company and running it since. He does have an education related to the construction industry. He has graduated from the University of Architecture, Construction and Geodesy. Moreover, Mariyan has a lot of experience in the field – working for 15 years in other companies before he created his own. His company is a small contractor with variable numbers of employees varying from 5 to 25. His experience and knowledge are deemed very useful by the author and thus makes a great source for an interview. His experience and educations are considered valuable for this thesis. The full interview can be seen in Appendix (See Enola M EOOD). Located underneath are the findings from that interview (See Table 3 - Findings from Interview 3).

#### **Findings**

N:	Findings
1	The employees of the company are not hired on permanent basis. The numbers of people working is
	depending on the amounts of projects.
2	The company was started with own capital
3	Experiences corruption from investors $-10\%$ - 20% of the projects are won with a corruption deal. "I
	am going to give you the project but you have to give me 10% from the profit"
4	Governmental and municipal administration is slow and affects the company
5	The market values only low price bids
6	The company has difficulties finding workers
7	Had troubles with bad payments from investors
8	The economic crisis hit the company very hard
9	No mission, vision or strategy – "we are just surviving"

Table 3 - Findings from Interview 3

## Interview 4 – IRchitechts/Dare

The interview is conducted on 5<sup>nd</sup> of January 2019. Dare is a micro Architects company located in Sofia, Bulgaria founded by Slavcho Filipov. The company does mostly interior design for multi-story residential buildings and office buildings. On top of that some architectural design for single family houses helps the company.

The owner has experience with his previous company which he co-founded and worked in for 2 years. Slavcho also has 5 years of experience working for other companies before he and his university colleagues from The University of Architecture, Construction and Geodesy decided to try on their own. The full interview can be seen in chapter Appendix (See IRchitect/ Dare). Located underneath are the findings from that interview (See Table 4 - Findings from interview 4).

## Findings

N:	Findings
1	The company has no mission, vision or strategy
2	Trouble finding suitable educated workers – has to teach and educate its own workers
3	The universities are not providing any education on entrepreneurship or economy
4	Competition often bribes governmental administration in the benefit of the client – like a service

Table 4 - Findings from interview 4

## Interview 5 - Herkal OOD/ Multi Plan Bulgaria OOD

The company representative is contacted via author' personal connections. The contact person – Nayden Kochev is a 27 years old construction engineer graduated in the United Kingdom. He has recently created a new company that produces detailed drawings for production. Multi Plan OOD is his cooperation with an Australian investor. Their area of work is related to the production of steel constructions. Nayden has been involved and worked in his father company – Herkal OOD for 7 years now. He has positions in both companies. CEO of Multi Plan OOD and is responsible for project selection and customer relations in Herkal OOD.

Herkal is a metal frames and construction production company based in Peshtera, Bulgaria. The company was governmentally founded in the 1960 and bought on an auction from its current owner in 2003. The original purpose of the company was maintenance of big machinery like bulldozers or cranes. After the new owner acquired the company he changed the main occupation of the company. Now they work mainly for markets outside of Bulgaria. Most of their projects are for the mining industry of Australia. The interview was conducted on the 5<sup>th</sup> of January 2019 and can be seen in chapter Appendix (See chapter Herkal LTD. Steel Structures/ Multiplan 3d steelwork). In the figure underneath the findings from the interview are summarised (See Table 5 - Findings from interview 5)

#### Findings

N:	Findings
1	Herkal OOD was a governmental company bought cheap from its current owner
2	Herkal and Multi Plan avoid corruption by not taking any public projects
3	Both companies outsource production and design for companies outside Bulgaria
4	Herkal is able to get loans from banks due to its big fix assets.
5	Multi Plan is not able to take loans – it has no fixed assets.
6	Herkal has difficulties with payments from clients inside Bulgaria
7	Both companies have difficulties with finding skilled workers – welders, designers, engineers.
8	Herkal is not able to compete on price in the Bulgarian market – the steel construction in the country is
	cheaper that the Chinese steel structure production with 10%
9	Both companies are having plans for doubling their capacity for work
11	Both companies have a lot of work and no difficulties in that regard

Table 5 - Findings from interview 5

## 10. Conclusion

This chapter aims to summarize the findings of the thesis, conclude on the analyses made by the author and give an answer to the Final Problem Statement.

The chapter starts with conclusion from Approach 1 – Literature and Data. Second, the conclusion from Approach 2 – Field study is presented. Thirdly, the data and reflections from the conclusions synthesized are presented. Due to the limited amount of interview conducted in this thesis the author deems best to compare both results in order to determine if the findings are objectively true. Next, an Answer to the Final Problem Statement is given.

## a. Conclusions from Approach 1 - Literature and Data

Approach 1 – the Literature and Data is made with the help of PESTEL analysis and of different data sources about Bulgaria. This part of the conclusion chapter is concluding on the findings from the PESTEL analysis.

According to the PESTEL analysis performed by the author (See sub-chapter Approach 1 – Literature and Data) there are some problems with the Bulgarian micro-economy when it comes to starting a new business. However there are some positive sides as well.

The micro economic situation in Bulgaria: The weakness of the micro and small businesses in the country is that it is driven by the cost reduction and not innovations. The economy can grow extensively but it is susceptible to economic crisis such as the one in 2008. This happens because the small and medium business cannot come up with innovative solutions to solve its problems. The continuous unsafe economic situation and the accompanying policies from the governments with hard budgets led to decreasing the buying capability of the Bulgarians. It decreased the demand and sharply increased the unemployment which led to huge difficulties for the small and medium enterprises. This situation was even made worse when the government was unable to pay on time for some of the orders it made. The negative effects of that can be seen in the increase of the debt between the small and medium companies and the bad record they made when paying their back loans. (Simeonova-Ganeva, et al. 2012-2013)

**Positive -** Bulgaria has a favorable foreign investment environment. The low flat corporate and income tax are the main factors behind this – 10%. VAT tax is 20%. Many different sectors of the Bulgarian economy have already experienced the positive sides of these policies. The cost of the labor is low relative to the whole European Union. There are no restrictions on foreign ownership and the European Union is spending 20 Billion Dollars in different funding programs.

**Negative** -The judicial system is slow, bureaucratic and corrupt. Although the government has taken steps towards reducing corruption the corruption records are still looking problematic. The education of the Bulgarian workforce is lacking. Universities are stimulated to produce as many students as possible without any regard for quality of education and research. Furthermore, the economy of Bulgaria is susceptible to global economic crisis.

# **b.** Conclusions from Approach 2 – The Field Study

Approach 2 – The Field Study – conducts interviews with 5 companies in the field of the construction industry in Bulgaria (See chapter Interview reports). 5 semi-structured interviews are conducted and the findings of them are analyzed below.

The findings from the interviews are plotted in a table (See Table 6 - Negative areas of investigation). The results from the different interviews are added together to create the Index result. There are 5 interviews conducted meaning that the highest score can be 5. If a finding is repeated between 2 interviews then the index results is 2 out of 5. Therefore, the maximum score can be 5 out of 5. The more points an area of investigation has the more it has occurred in the findings from the interviews.

	Negative areas of investigation	Interview	Interview	Interview	Interview	Interview	Index
		1	2	3	4	5	Result
1	Experienced loss because of corruption	X	X	X	X		4/5
2	Has troubles finding work	X		X	X		3/5
3	Has to educate/train its own personal	X	X	X	X	X	5/5
4	Hard to compete on such low prices	X		X	X	X	4/5
5	Does not have mission, vision or	X		X	X		3/5
	strategy						
6	Had big troubles in the economic crisis	X			X		2/5
7	Difficulties finding financing from		X	X	X		3/5
	banks/ EU money						
8	Has troubles with bad payments from	X	X		X	X	4/5
	clients/investors/partners						

 Table 6 - Negative areas of investigation

The results from the table show that every company has experienced troubles finding trained personal and 5 out of 5 interviewed companies have to train their own workers. The next in weight according to the index result are the 4 out of 5 factors. These are:

- Experienced loss because of corruption
- It is hard for the company to compete on very low prices
- Experiencing troubles with payments from clients/investors or partners

The same process of index result creation is now repeated but with the positive findings from the interviews. The results look like: (See Table 7 – Positive areas of investigations)

	Positive area of investigation	Interview	Interview	Interview	Interview	Interview	Index
		1	2	3	4	5	Results
1	Has mission, vision or strategy		X			X	2/5
2	Enjoys growth and surplus of work		x			X	2/5

Table 7 – Positive areas of investigations

The results can be interpreted in the following ways: If a company has a mission, vision or strategy they are more likely to succeed in the field of the Bulgarian construction industry. The option where the company has a surplus of work can be left out due to the obvious reason that any company will enjoy comfortable spot in the market if they have surplus of work.

No pre-fabricated construction in Bulgaria. Pre –fab is very fast, and cheap relative to in situ methods (Irish Precast Concrete Association 2010)The country has a lot of pre-fabricated buildings; however the construction of pre-fab buildings has been stopped (Becomes clear from the conducted interviews). Negative sides – the popular opinion is negative, often associated with poor quality and conditions

# c. Compiled conclusion for both Approaches

However, as mentioned in sub-chapter Approach 2 – The field study (See sub-chapter Approach 2 – The Field study) the findings from the interviews by themselves cannot be considered the objective truth due to the small sample of companies the author examined. That is why a comparison of the finding from Approach 1 – Literature and Data (See sub-chapter Approach 1 – Literature and Data) is made to determine what the objective findings are (See Table 8 – Comparison of findings from Approach 1 and Approach 2).

	Findings from Approach 1	Findings from Approach 2	Conclusion
1	Slow administration and	Almost all participant in the study	Corruption exists in Bulgaria and it is bad for the
	Judiciary system	reported losses due to corruption	business. The data shows it and it is completed by
			the field study
2	Corruption in the Judiciary	Companies have to invest a lot of	Both interview and PESTEL show the same. The
	system and governmental	time and money for training	finding then is considered to be objective truth
	administration	personal	
3	Low quality of University		
	Education		
4	Economy susceptible to	Companies are experiencing	The findings from the interviews are correct.
	economic crisis	troubles in times of economic	
		crisis	
5	Different subsidies from the	Companies find it difficult to get	There is not coherency in both statements. This
	EU are available for	financing from Banks/EU money	may be due to the fact the specific companies have
	Bulgarian businesses to take		experienced troubles with financing or the data
	advantage of. On top of that		does not show the real picture
	the government has a policy		
	of encouraging the small and		
	medium businesses.		
6	No such thing was found in	Companies are experiencing	That means that further investigations
	the PESTEL or literature	troubles with unreliable	might have been needed in that area.
	review	partners/investors/clients	However it a big potential treat to any
			company.

Table 8 – Comparison of findings from Approach 1 and Approach 2

# d. Answer to the Final Problem Statement

As stated in chapter Final Problem statement (See chapter Final Problem Statement) answering a set of questions leads to the fulfilling the purpose of this master thesis. As the conclusions are presented previously in this chapter the author is able to combine the knowledge gathered and analyzed from the analysis (See chapter Detailed analysis) and answers the questions. Each question is presented and the answer to it is presented afterwards.

# MAIN Question: Identify and evaluate the opportunities for new business in Bulgaria in the field of the construction industry!

# Question 1: Are there any niches for a new entrant company in the market of the Bulgarian construction industry?

Yes there are niches. An example for niches that actually exist might be:

- Any pre-fabrication method for single family housing or residential buildings due to the lack of such on the Bulgarian market they would be considered to be a differentiation. In combination with the benefits that pre-fabrication gives compared to normal methods there is a big potential.
- Outsourcing design or production to Bulgaria. Bulgaria offers great opportunities for outsourcing. Western Europe countries' are already investing in the country. The low taxes combined with the location of the country and the low wages the Bulgarians workers compared to its western counter parts the country seems like the logical place to outsource. A company that can work in the fields of design and production for a company in a high labor cost country like Denmark, Germany, Norway, Sweden, Nederland's, Finland, etc. can offer a symbiotic relation in both design and production.
- Potential other niches
  - Quality a topic that comes up in the interviews is the possibility of a contractor company that focuses on high quality execution. The Bulgarian economy is growing and the financial situation of the Bulgarian is getting better by the day. A new market

for high quality construction with high quality materials is sure to be a good area for investment.

 Other not seen niches – Bulgaria is a developing country. That combined with the fact that the free-market economy has existed only for 29 years are suggesting that not every niche is filled yet.

# Question 2: What are the biggest difficulties for companies in the field of the Bulgarian construction industry?

- Working with bad clients/partners/ investors (waiting too long for payments/ not receiving payments for delivered services or goods) all companies have experience that phenomenon. Furthermore, the findings from the PESTEL analysis suggest that this is also the case. The reasons for that practice are out of the scope of this this thesis. However, a speculation from the author is made on the topic. It is possible that the education processes of the universities and professional schools are not sufficient to alert the future entrepreneurs of that risk. Moreover, there is not entrepreneurial education imbedded in technical courses and educations. Whatever the reason that causes bad payments between stakeholders in the construction industry the lack of entrepreneurial education has to be kept in mind when starting a new company in the field of the Bulgarian construction industry.
- In areas with direct competition it is hard to compete Bulgaria has an economy that is based on economies of scale not on innovation. The companies that are using Differentiation as a strategy are not so many. This speaks for a lot of companies trying to compete on the market with Overall Cost Leadership strategies leading to drops in the prices of goods and services but also takes a toll on the companies participating in that rivalry. They always have to find a way to cut on spending and to increase productivity. Competing with such companies in any case will require big investments and even then the results will not be certain.
- Corruption all but one company representive spoke about corruption. Moreover, the data from
  PESTEL suggest that Bulgaria is the worst country in that regard in Europe. Different practices
  of corruption were discussed during the interviews and the author can say with confidence that
  the once that did not have to deal with it have it much better. There are 2 ways that companies

avoid being affected by corruption practices. Not working with the Bulgarian market or having the luck not to be involved in the daily business with either governmental institutions or big construction projects. Corruption proves to be one of the key factors that holds the Bulgarian construction back. If a new company is to be established there that has to be kept in mind.

• Having to educate/train its own workers – the Bulgarian Universities do not provide training and education suitable for work right after graduation. This factor is also based on the interviews where 5 out of 5 companies complained about it.

# Question 3: What is the way for a new company to reach a competitive advantage in the field of Bulgarian construction industry?

Through innovation/ optimization – In Bulgaria more than everywhere that is the case. Companies competing on the Overall Cost Leadership bases are plenty and differentiation, innovation and technology use is low. The interviewed companies that are successful are the ones that break the "mold". A new company in the field of the Bulgarian construction market will be best suited to exploit the low prices of labor in the country and the high paying markets of Western Europe. Bulgaria is part of the European Union so markets are easy to reach. Focusing on the Bulgarian market would involve investment into pre-fabrication or modern management principles.

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## **11. Reflection**

This chapter evaluates the findings of the final research question and possible directions for the report. The chapter starts with a short evaluation of the findings of the thesis. Then it proceeds to explain different approaches, tools and analysis that the author could have taken to achieve the goals of the thesis. Finally, the potential weak points of the report are brought up by the author.

The findings of the report suggest that there are good prospects for stating a company in Bulgaria with positive chances of achieving competitive advantage sometime in the future. Taking a step back and looking into the research from a distance makes findings seems plausible and ever more - true. Having in mind the basic limitations of the project – small sample of companies asked for interviews and lack of deeper analysis the industry and the competitors on the market it still looks logical that there are potential niches.

The structure of the thesis could have been reversed. Deductive approach could have been explored. An example of that might be a scenario analysis in which the author assumes a possibility and then test it with imperial data or interviews. Furthermore, tools like Porters 5 forces could have been used to determine the market dynamics on an industry level. Then competitor analysis could have been done to identify any direct rivals and their intentions. Furthermore, deeper investigation on a possible new venture could have need produced. The report covered the 1<sup>st</sup> step from 4 in the entrepreneurial process. The last 3 steps are a good idea: Creation of Business plan, Resource plan and Management of the Enterprise.

An expansion of the current analysis is also a direction that the report could have exploited. An example for such is a deeper investigation into the legal procedures in Bulgaria for starting a company. Only small descriptions have been carried out in PESTEL. Expanding the knowledge gathered in PESTEL would help the author with creating a company.

The initial intention of the author was to conduct at least 10 interviews. Due to the limited time for the thesis that became impossible. A bigger pool of companies would have given a better understanding of all topics examined in the interviews. Furthermore, the findings would have been closer to the objective truth.

Many different subjects proved to be interesting to the author during the investigations for this thesis but due to scope of the report were not covered or not in the depth the author would have liked so. Subjects like:

- The Corruption in the construction industry especially in Bulgaria
- The origins of the corruption in the construction industries of developing countries
- Ways to deal with the corruption in the Bulgarian construction industry (or any developing country)
- BIM in Bulgaria (BIM in Developing countries)
- The possibilities for Danish companies in Bulgaria
- The possibilities of the Danish companies hiring Bulgarian (Romanian) construction workers.
- How was the privatization of the governmental companies in Bulgaria conducted?
  - $\circ$  Were there any corruption practices associated with it?

## 12. Acknowledgments

The master thesis is the culmination of many years of educational process for me. I came to Denmark in the age of 18 with the sole idea of completing a master degree in science and technology. This was possible to achieve with the help of many people.

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## 14. Appendixes

This chapter is not to be considered as a part of the main report. It serves the purpose to store data gathered or forms prepared by the author in help of the main report effort.

#### a. E-mail

Hello,

I am Stoyan Bakardzhiev, student in Aalborg University, Denmark. Management in the Building industry is my field. Currently I am conducting a research regarding the conditions of the Bulgarian construction industry for my master thesis and I would like to ask you some questions. The questions are going to be regarding the creation of your company and your perception of the industry as of now. The report's headline is:" *What are the prospects of creating a company in the environment in the Bulgarian construction industry*". In relation to that topic I will try to analyze the construction industry of the country. The political, economic, social, technological, ecological, and legal factors influencing the construction industry will be analyzed.

I hope that this message will reach to the managerial staff of your company that is familiar with the conditions surrounding the creation of you company.

I am aware of the fact that the information given to me could be regarded as private property or sensitive for the company itself or the owners. That is why I would suggest that we sign a contract (tool often used by my University) with witch I can declare that the information provided to me will not be used in any other way except for the creation of the thesis.

In exchange for the information given to me and the answered questions I can provide the report when it has been finished. The thesis must be submitted on 10<sup>th</sup> of January to the University of Aalborg. This means that I can translate and send the report two to three days after the fore mentioned date.

I hope that you consider my proposal or forward my request to someone in your company that will. In that case please respond to this main and I will follow up with the questions that I need answers to.

I hope I hear from you soon.

Best wishes

Stoyan Bakardzhiev

# b. Contract for Confidentiality

# Confidentiality Agreement

(Student Project Cooperation)

Between: Stoyan Bakardzhiev

Student in the Department of Civil Engineering

Aalborg University

And: Company name:

Address:

Representative:

- 1. Background and purpose
  - This agreement confirms that the student carries out a Student Project with the Tittle "What are the prospects of creating a company in the environment in the Bulgarian construction industry?" in partial cooperation with the fore mentioned company.
  - The company is aware that the student must submit a written report as well as take an exam for the Student Project, which implies that the student must meet a number of learning objectivities that can affect the student project.
- 2. Use of knowledge and confidentiality
  - Trade secrets refer to the information the student and Aalborg University receive in connection to the Student Project from the Company's business, products, operations, facilities, manufacturing, methods, intellectual property, research, know-how and legal standings. Trade secrets must be marked "CONFIDENTIAL". If exchange orally must be recorded in writing and marked "CONFIDENTIAL" as well.
  - Trade Secrets may only be used for carrying out the Student Project.

- The obligation of confidentiality terminates 5 years after the Student Project is completed or terminated.
- Any sensitive personal information is to be marked with "SENSITIVE PERSONAL INFORMATION" and may not be published.
- Any disputes between the parties in connection with the Student Project must be settled amicably. If the parties fail to reach amicable settlement the matter is referred to the ordinary courts and shall be governed by the Danish Law

The Student:
Signature:
Date:
The company representative:
Signature:

Date

### c. Data gathered - transcriptions and e-mail communication

The author is marked in the interviews with – Stoyan for east of reading thought the conversations.

#### CHIMCOMPLECT-ENGINEERING COMPANY - SOFIA

The company is located in the capital of Bulgaria - Sofia on boulevard Aleksandar Stamboliiski 205. The author reached out to the managerial staff of the company and appointed an interview with the director of sales and marketing - engineer Julia Takucheva. The company deals with design and overseeing of pre-investment research: geological, hydrological and geodetic, Evaluation of operative projects, Design of gas pipelines, water treatment plans, Feasibility Studies and more. Web site: <a href="https://www.chimcomplect-eng.bg">www.chimcomplect-eng.bg</a>

#### Transcript from the meeting

Stoyan: Hello, it is me Stoyan. We have exchanged some e-mails and we scheduled a phone call for that time of the day.

Julia: Yes, that is correct. Hello to you. You must be the student who have e-mailed us?

Stoyan: yes that would be me. Thank you very much for agreeing to participate in my small research.

Julia: Let see how I can be helpful to you.

Stoyan: I will start the interview off with some information about me. I am 26 years old. I born in Peshtera, near Plovdiv (the 2<sup>nd</sup> biggest city in Bulgaria). When I was 18 with my parent decided that it is best for me to study abroad and I have spent 8 years since in Denmark. I am currently studying Management in the Building industry in the University of Aalborg. All this I do with the intentions that I could start my own construction company.

Julia: The construction industry is an interesting field of work plus it can be said that the people working in are valuable workers.

Stoyan: My thesis aims at analyze the Bulgarian construction industry and to understand how it develops and if it is a good place investment. It seems to me from your webpage that the company that you representing and working for is a big one or at least major in the Bulgarian market. Is that the case?

Julia: I believe can proudly say -Yes. The company has been existing for 56 years up to this date. We are the leaders in the Bulgarian industrial engineering design. Our main field of work is design for the chemical industry, gas transportation, some foods processing plants. You can say that we serve the investment sector by providing them with the design and preliminary investigations.

Stoyan: How many people are employed for your company?

Julia: 55 and all of our workers are working with design from all fields - architects, layers and all kinds of engineers. 14 types of engineers in total.

Stoyan: What kind of financial resources does your company have?

Julia: the company is a private property and has only its profits as a resource. Anything more does not seems necessary so far since we do not invest any of the capital we generate in projects. We are being hired for specific design tasks only. Investors are contacting us for feasibility studies and preliminary calculations then may be for the design itself.

Stoyan: I assume there is competition. Can you tell me a bit more about your competitors? What is the process of biding and wining projects?

Julia: The investor deals with that process. They are the ones calling us. In Bulgaria there are no other company like us. We are the biggest company so far. However there are competitors who do similar jobs as us. In these terms we have serious competitors, but with smaller teams. They might be a bit more specialized in a field of the industry. They are seriously undermining our prices. The reason for that might be that they have less expenses. For example all the design nowadays is made with computer software. There is no design on paper anymore. It is all about the speed of the design and calculations that the software can provide. So back on point. We know that our competitors do not invest in any software. They use but not licensed software products.

Stoyan: Are they pirating the software?

Julia: exactly, they use them as well but do not pay for it. That might be possible for them because our direct competitors are using workers part time or hiring smaller companies for that. That is how they avoid paying taxes for the workforce as well. They outsource the work. There is also a practice for

some companies to declare to the tax agency a salary of a worker of theirs to be less than they pay him actually. That is how the tax that the company pays is lower. All of the said so far we cannot do. Our company is far too big and the government is going to notice. However our smaller competitors are exploiting it. That drops the price that they can ask for. We have expenses for out building as well.

Stoyan: Do you have a region for work? I assume you have projects all over the country.

Julia: we work without any limits - the whole country. We mostly do designs for the chemical industry and there are several big chemical plants around the country. There is our focus as well.

Stoyan: What kind of education are your workers have? I assume it master or higher?

Julia: As long as they have a lot of experience. Sometimes we overlook the education in favor of experience. It is hard to find people with the right kind of experience. We are looking for people like that. We do not have young people in the company that are capable of doing the job. Furthermore there is no possible way that we hire someone without training as well.

Stoyan: So can we say that the universities are not producing qualified qualified workers for your company?

Julia: yes that is the case. It is quite hard to find good workers. Well I guess for a bigger salary more people will be willing to do it. After all what we do it unique. All design works in the construction industry is like that. No two projects are the same. In the past 4 years we had to design 4 pressure plants that receive high pressure gas and reduce it for commercial use. They all do the same on paper. The same engines, turbines and parts overall but there are 4 different project with their own difficulties. All of them we had to solve in a different manner and with different solutions. The work is unique but the pay is small. I guess that is pushing away the young people. We recently compared out work with a German company doing business there. The pay was enormously different. There are a lot of engineering companies in Bulgaria working for companies abroad. They outsource they services all around the world. That is the so may be because we (Bulgarians) take less money for the same job as the Europeans.

Julia: What is the next question?

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#### Stoyan: How about corruption?

Julia: Well that is part of the construction industry I guess. We as a company have moral standings against it. Most of the bigger companies like us usually have a small "moral code" - contract that some companies sigh. We do not have it written but we have never done any corruption practice. Our traditions as company are against and we do not and will not participate in it. There has been biddings in which we participated and we have been removed from the competition unjustly - we assume that a company used a bribe to win that project. We accept it and deal with the fact that there is some corruption in the industry. Some years we had to cut down on personal or force some of our workforce on part time terms. That might be a cause of corruption or the bad economy. We are not certain. However we survived. That is what we are proud of mostly. We never used illegal practice and we survived for so long. Keep in mind all bad economic times that our country went through. It was hard to let go some of the people who have been educated in the company.

Stoyan: Can you tell me a bit more about yourself?

Julia: I am 60 years old, I work for that company for 18 years now. I am in charge of the marketing of the company and project selection. Before that job I worked 23 years in HIMIMPORT - a company trading with chemical components produced in Bulgaria - exporting them abroad.

Stoyan: are you familiar with the conditions surrounding your current company

Julia: yes, it was the time of the Socialism in Bulgaria. During the 1950's the government wanted to develop the chemical and heavy industry in the country. For that purpose the creation of big power plans was necessary and industrial designers like us had to be employed. The government had just allowed some private companies to be created and that is how ours was born. The government provided the initial funding to the founder of the company who was a graduate of the University of Technology in Sofia.

Stoyan: I have four question left for you. 1<sup>st</sup> - what are the long term plans for your company?

Julia: everything will be decided by the people still working in the company after 5-6 years. This is because most of the workers we have are around the age of 60 and soon are to be retired. We see the

distant future op to 5-6 years and if we do not replace the people who are going to retire the company is for a bad time. I personally think that the future will be good. Management is one the critical areas. It is crucial for any company we have to think for new workers as well.

Stoyan: how about company strategy and vision, any goals,

Julia: No what so ever. I guess one of my jobs would be the creation of something like that but we are getting pre-occupied with projects and we think as a company only in the immediate future.

Stoyan: Is there a part of the industry that is lacking. Causing troubles to your company.

Julia: I can say that my colleagues are having a lot of trouble finding welders. We suspect that most of the then go and work abroad as they are paid low. The quality of the welds being done nowadays is bad and we find it very difficult to find welders in general. All the material we can find easy. The Chinese goods are not bad quality anymore plus the price is good. There is abundance of materials and suppliers - we are not worried about that. It was a different story during the socialist years.

Stoyan: Finding workers can be mentioned in that regards as well right?

Julia: To some extend yes but I guess we have to invest more into more and better people. We are taking a lot of visitations and interns from the Technical University of Sofia however they decide to go for other better paying jobs.

Stoyan: are there niches that are not filled in the Bulgarian construction industry

Julia: I do not have the knowledge to judge that.

Stoyan: I do not have any more questions, and would like to thank you very much for the time spend around Christmas.

Julia: I hope I was useful, you can ask me any question. Just call. Bye

### Beton Expert OOD

The company is located in the capital of Bulgaria - Sofia. The author managed to get the contact of the owner and creator of the company via common friends – Vencislav Lichev. The company deals

with laboratory testing of concrete samples and providing supplements for concrete Batch companies. It has 4 employees and it has been able to double its revenue 6 times over the past 6 years. The company was created in 2008 in the time when the economic recession happened.

Soyan: Hello, Vencislav nice to hear from you.

Vencislav: Hello

Soyan: What is your company doing?

Vencislav: We do laboratory testing of concrete. We test the most basic construction material. We are working with the manufacturers of the concrete. The so-called Batch plants. We run a laboratory and on top of that we do consulting.

Soyan: How big is the company?

Vencislav: Quite small we are currently 4 and me.

Soyan: what is you background? For creating a company you surely need some experience or education.

Vencislav: Typically Bulgarian I have studies something completely unrelated. I have however quite some experience in the field. I have been a COO of 4 Batch plans. Later I worked for a laboratory similar to the one I own now. I gathered some experience with sale of construction materials – mostly concrete after the laboratory job I had. 10 years ago I started my own company – Beton Expert OOD.

Soyan: It seems like you have a lot of experience in the construction field.

Vencislav: I have also worked with the Bulgarian Institute for Standardization from the time it was founded and I am still a member. That organization is responsible for creating different standards in the construction industry. Soyan: I see. How does you company gets work. How do you win projects or companies to work with?

Vencislav: I have created a new market niche. The service that my company offers is not offered by anybody else. I think my previous experience showed me how I can do it. My laboratory is the only

one that goes to the Batch factories and gathers the samples for testing. That is an important process for the Batch factories. By law they have to make sure a sample is taken every day. That sample has to be analyzed and tested to prove its strength.

Soyan: What about the competition are they not doing the same?

Vencislav: NO, they are basically run as laboratories only and they sit on a chair waiting for the Batch factories to contact them and bring their samples. We are also investing a fair bit into research and development of our laboratory. The software of the machines that test the concrete is something that we improve. For example now from 5 minutes it takes us only a few seconds to issue the papers required the Batch factory needs.

Soyan: It seems that you have placed your company quite well on the marked. Do you have a long term plan for it? An example would be to be the leader in the country when it comes to laboratory concrete tests.

Vencislav: By my rough estimation there are 400 Batch companies in Bulgaria we are working with 64 of them. When we subtract a part of them which are working with their own laboratories and some that cannot hire us for other reasons I can conclude that we are currently working with ¼ of the market in Bulgaria. So basically we are trying to become leader in that market. We work on very low prices and we rely on turnover. The more companies we work with the better for profit. I can say with quite some confidence that we do not have competition when it comes to price of our service. I often go around Batch factories and present what my company can offer but not all of them see the benefit of it. It is interesting though that when I manage to persuade one Batch factory – all the surrounding factories join as well. I believe that comes from the poor economic education of most of the people I work with. They cannot see the benefit of the service i offer to them.

Soyan: What region the company covers?

Vencislav: The whole country basically. We are lacking in the capital region. We cover all the far destinations. If they are far from Sofia it is most likely they work with us.

Soyan: I guess you do not serve in the capital because most of your competition is based there. Then your company covers the rest of the Batch factories that want to save for transport.

Vencislav: 90% of the laboratories that we compete with are located in Sofia. We do not serve the capital because there are the biggest companies in Bulgaria. We avoid working with them. It is well known in the industry that they are making bad payments or no payments in the later stages of projects. We work with small and medium partners. We have some big partners but just a few.

Stoyan: How come the big companies in Bulgaria are avoiding paying?

Vencislav: The biggest companies in the construction industry are owned by well-known politicians. They do not pay when the end of the project comes along. They use a company in between for the contracts and payments. That company usually is registered by a very poor person who is bribed to do it. When the time for payments comes that fictitious company ceases to exist and no one gets their money. It is a bad practice but most of the companies do not check who are they going to be working with and after they sign the contracts they are risking their companies.

Stoyan: I have encountered this in my previous interviews for this thesis as well. It was a construction company in Sofia – a contractor company. They are doing physical work in the field. They have experienced the same. Big companies are trying to kill smaller contractors by not paying them in the later stages of a project.

Vencislav: That is right. It is because they are the once who can get funded by the European money. They are under a political "umbrella".

Stoyan: Ok, that seems like something good to know.

Vencislav: Yes but keep in mind that these are the biggest companies. Small and micro businesses are not in that game. We (all small and micro companies) are picking up the crumps.

Stoyan: I understand. The small and micro businesses in the industry are picking up the crumps but these are enormous interruptions for the small companies as well. Now you have to invest time, money and brain power avoiding these schemes. Plus not being able to participate in certain bids is losing the small business potential gains. Smaller companies could grow faster and effective. How would you

evaluate the condition of your company at the moment? It has been 10 years since you have started the company. What are the biggest challenges you have faced?

Vencislav: To be honest we have not encountered big challenges. There is no such think. We are a small company and we are mobile (being able to change easy). There is an advantage of starting a company during a time of economic decline. I have started the company 2009 when the economic crisis was felt the hardest in Bulgaria. Then your only thought is optimization of the company processes.

### Stoyan: I see.

Vencislav: We have been doubling our revenue for 6 years now. That is financial data. I cannot complaint. Bulgaria is a good place for business.

Stoyan: I am happy to hear that kind of an opinion as well. I have conducted several interviews so far and they had a different opinion.

Vencislav: We Bulgarians love to complain.

Stoyan: I have the same opinion. In our words Bulgaria looks much worse than it actually is. I also thing that companies like yours (young) have the ability to grow and create innovation. That of course would take a proper knowledge and education.

Vencislav: Yes I agree. However on the other side are the poorly led companies. There is a lot of examples of companies that died because of stupidity. There was this big company located in Plovdiv – Arnaudov OOD. They had even some Batch factories in the outskirts of the city.

Stoyan: I have seen several construction sites in the city with their banners and some advertisements. That was some time ago though.

Vencislav: Their Batch factory was very big and modern. I went to offer them our services. I pitched them and made clear that our service is going to be much faster than the competition. On top of that the price of the service was going to be 4 times smaller. They turn it down, because they were working with a company for some time and they have made relations with them. I think that was a bad decision

on their part. That company failed short after. It may be because they were favoring partners that were expensive and slow. They did not follow the innovation on the market.

Stoyan: If you ask me they had to fail. Now space is created for new businesses with new ideas and they can innovate.

Vencislav: I agree with you. In a market economy that has to be the process. However, we previously mentioned the companies of politically related people.

Stoyan: Then the marker economy stops to work.

Vencislav: Yes, that is the bad think when it comes to the money the European Union sends to Bulgaria. They do not reach the small and micro business. We could use some of the Euro money and renovate the machinery and building that we are in – we would. It would take us only 100 000 bgn. We would be able to offer new services and products. We could also hire more personal. However, we have to do it with our own capital. That can happen but quite difficult.

Stoyan: How about financing from banks or other investors?

Vencislav: The financing of small and micro businesses from banks sucks. I do not know anybody with a small company that uses bank financing.

Stoyan: Why is that not happening?

Vencislav: They only offer up to 20% - 25% of their turnover. Plus the rates are bad. These money are not enough and it does not makes sense to get them. There are some programs and initiatives from the government that try to stimulate small and micro business but it is quite hard to get financing from them as well.

### Stoyan: I see.

Vencislav: I am a member of a right-leaning political party and we advocate the freedom of the business. However, even when the party won the municipal elections it was impossible for the small business to get financed. It must be a bigger issue there.

Stoyan: I have the opinion that Bulgaria is left leaning country. Like the rest of Europe.

Vencislav: Yes I think that is correct. Furthermore, the concept of socialism has proven to be bad economically. Our country bankrupted several times. The same happen with the USSR.

Stoyan: Do you think that your company has not faced bug challenges because you created it in the time when the economic crisis was the worst for the country? In a way you have faced the biggest challenge without knowing.

Vencislav: No I don't think so. I believe that each company creates its own challenges. Each company has the responsibility to watch over its own money and future. A simple rule is "*Do not start a project when you are in doubt that you are going to get paid*". Optimization is quite important as well. A relative of mine was running a company producing caps for bottles. They were the biggest such company on the Balkan Peninsula. They were thriving before the 2008 economic crisis. They were hiring a lot of people to maintain their production goals. When the crisis hit them they had to let go almost half of their personal. In 2010 they had the same production as in 2008 but with half of the workforce of 2008. They were not optimizing their production and that almost killed them in 2008. They were on the wave of the growth and were not thinking about optimizing. I have started my business during the crisis. That is why optimizing the process of the company is always a priority. You have to innovate all the time.

Stoyan: I see. How about other forms of corruption? With government officials or may be competitions over a project?

Vencislav: Yes, I wanted to apply for a funding from Euro money. So I had to deal with applying. You cannot even bribe then. They refused because I was unknown to them, so even a bribe was not an option. They have a circle of people who can bribe their way in.

Stoyan: You were looking for a capital to grow your company and you were denied?

Vencislav: Yes. Well I have found my own market niche and the government is out of my business. The clients we have are the biggest influence on my company. Back in the days (before 1989) laboratories like mine had to be certified much more than they are now. 2-3 types of documents were

issued. Some of them are still in used today. However they are not mandatory. Not all of people in the business know that.

Stoyan: So what drives the quality of your service up?

Vencislav: As long as I cover the requirements for calibration of the test machinery and methodologies for test results they are not dealing with me. There is some bureaucracy leftover from the socialist days. That would just cost us. Some old construction companies are still looking for them. I find it useless and unnecessary since the test of my lab is already at that level. We are working where the administration is the least setback for us.

Stoyan: So the competition and the clients are what are driving you to innovate?

Vencislav: The clients yes, not the competition. The competition is not flexible. Those waiting for the Batch companies to contact them are going to be driven out of business.

Stoyan: Is there a part of the industry that is lacking behind?

Vencislav: Well the road construction seems to be a bad area for the Bulgarian construction.

Stoyan: How about something that affects you directly? Are there well educated people you could hire? What are backgrounds of the people working in your company?

Vencislav: It is not possible to find properly educated people. For example, there is competitor laboratory in Plovdiv. They had 2 renowned specialists working in there. They were quite old and after they passed away the laboratories had to close down. Another example might be a company that wants to invest in construction and they wanted to create a laboratory like mine. They invested quite some money and now they have no one to run it.

Stoyan: I see that problem re-occurring from previous interviews.

Vencislav: Yes it is a big problem. There is no one with previous experience or related education.

Stoyan: How about the people that are working for you now. How did you find them?

Vencislav: After we hire them we sent them to courses in capital.

Stoyan: To a private courses or university courses?

Vencislav: Private courses. Companies in Bulgaria educate their own personal. The education they receive in university seems irrelevant.

Stoyan: Are there anything worth noting in the prices on the market that you deal with? A lack of a raw material might be an example.

Vencislav: Related to my company no. But some of the raw materials for concrete seem to be poor quality – gravel and sand. There was a rise in the price of the sand from 6 to 8 bgn. I think it is because of the fact that this year was the best for the Bulgarian construction industry ever. There was a lot of construction going on and there was increased demand.

Stoyan: Best year for the Bulgarian construction ever? How so?

Vencislav: I work with the Batch factories and the concrete is the main material used in the construction. I am aware of the quantities they produce. I have not seen such a production before.

Stoyan: It seems to me that the construction in Bulgaria is done mostly with concrete. The core structure of the all buildings is made with concrete and then the walls made with bricks

Vencislav: Yes that is correct. This is our way of construction.

Stoyan: Are you aware of the pre-fabricated concrete panel elements production in Bulgaria? Sure someone with your occupation must be dealing with a company producing them.

Vencislav: I am working with companies producing concrete bricks, pavements and other small products. I know only several existing companies that produce concrete elements. But the do bridge elements, huge columns or arches – old governmental companies. These companies are having really bad time. I believe it is because of the new metal constructions that entered the market.

Stoyan: How about pre-fabricated concrete elements for residential buildings?

Vencislav: I do not think that is still made in Bulgaria anymore.

Stoyan: Are there niches that are not exploited in the industry?

Vencislav: There are for sure.

Stoyan: You have found one.

Vencislav: Yes, I think I am in one now. May be the quality is something that can be profitable. Quality is something the Bulgarian construction is going to value more and more. The financial situation of the Bulgarians is improving and they can afford something better.

Stoyan: Sounds logical to me. I have no more questions. I think I have received enough information from you so far. I have structured my thesis in a way these kinds of interviews are providing me with the data I need.

Vencislav: I hope I was useful.

Stoyan: I can offer you my report in exchange for the information that you have provided me with.

Vencislav: Yes that sounds nice. I would like to read it.

Stoyan: I graduate after a month I will be able to send you the report.

Vencislav: Sounds amazing, I wish you luck.

Stoyan: Good bye.

Vencislav: Good bye.

#### Enola M EOOD

Location of the compant - distr. TRAKIYA Bl. No 50 --- 4023 Пловдив Южен централен район за планиране Bulgaria

Stoyan: Hello, I am pleased to hear from you.

Mariyan: Hey, good day

Stoyan: I would like to start my interview with some general questions about your company. When did you create it and how many people are working for you?

Mariyan: I founded it exactly 15 years ago. The number of people working for me varies a lot. Sometimes when there are less projects to work on we go down to 4-5 people. However, it happens that we have 20 people working as well. It all depends on the work we have.

### Stoyan: I see

Mariyan: When we do not have enough projects we have less people working.

Stoyan: Can I get some information about you? What is your background? Do you have an education related to the construction industry?

Mariyan: I have an education from the University of Architecture, Civil Engineering and Geodesy based in Sofia and I graduated as a Construction Engineer.

Stoyan: How about previous experience?

Mariyan: Yes I worked for construction companies for around 15 years before I started mine.

Stoyan: Have you used your own capital to start your company?

Mariyan: Yes my own

Stoyan: What are the long term plans for your company? Are there any strategy or vision?

Mariyan: No, that seems to me that is something for big companies. Not like mine. We just survive.

Stoyan: What region is the company operating in?

Mariyan: Around Plovdiv (the 2<sup>nd</sup> biggest city in Bulgaria) and the surrounding towns.

Stoyan: How do you find projects to work on and how do you win them?

Mariyan: I find them all through contacts – people and friends that work in the industry. Sometimes it is people who I have worked before with.

Stoyan: How about the bidding process?

Mariyan: That always happens because always the lower bidder is selected to do the job. The companies submit a bid and then the winner is announced.

Stoyan: How is the financing of the company working?

Mariyan: Usually the following happens. We do not use our funds to do projects or construction with. We rely on money played in advance usually that is 30%. The other way we found is that if we do VVS jobs the supplier of materials is letting us get what we need and after we get played we send them their part.

Stoyan: Can you explain a bit more about the money you get advance and then you work with?

Mariyan: They give us 30% of the money for our work and then we can buy the supplies and materials. The usual way of work is that. They provide you with the money for the materials and I have to pay the workers.

Stoyan: What is the condition of your company right now?

Mariyan: We are trying to survive. This year was quite hard for me. We did not have enough projects.

Stoyan: What were the biggest difficulties that you have to overcome so far? Were these difficulties years like this one and the lack of work?

Mariyan: Yes, finding projects to work on the biggest challenge we have seen. It has been a challenge always. The other issue we have sometimes is partners that are not paying on time.

Stoyan: Are there cases in which you have not gotten the money at all

Mariyan: Yes, there were a couple of these as well.

Stoyan: Do you investigate the companies that you go in a deal with beforehand?

Mariyan: Yes, I do so.

Stoyan: I am asking this because I have conducted several interviews so far and that seems like something that companies are not doing.

Mariyan: Right after the economic crisis there was a lot of debt between companies accumulated. It was mostly in the construction industry. I cannot remember how big of a number the government says it was. There were rumors that if one of the big companies bankrupted and did not pay its debts a chain reaction will follow and a lot of companies in the construction will fail. We were in that situation. We owed money and a couple of companies owed us. We did not have the money to pay our debt and we were relying on the company that owed us.

Stoyan: I saw some evidence for what you are speaking in a document from the ministry of finances. It also said that the government had troubles paying its debt to businesses that they hired for governmental projects.

Mariyan: Yes it is all connected. I remember the times. I saw the minister of the finances on the news saying that they were going to delay the money because the government did not have it. The municipalities are on governmental subsidies. That meant that the municipalities could not pay for the work as well. It is all a chain.

Stoyan: How did your company felt the financial crisis in 2008?

Mariyan: I had 2 companies back then. One of them failed and the one that I am having had a lot of troubles finding work.

Stoyan: In what way the crisis affected your companies?

Mariyan: There was no financing for projects.

Stoyan: Is there a lack of qualified workers?

Mariyan: Yes that is a big issue now. Most of the good workers that we had are abroad. Mostly they are working in Germany.

Stoyan: What types of workers do you hire in terms of education?

Mariyan: Skilled labor, Construction workers. No one with a master. But we have a deficit of workers. The volume of work is high above the supply of work force.

Stoyan: Is that raising the price of labor?

Mariyan: Certainly Yes.

Stoyan: Do you have problems with materials, high prices or bad quality.

Mariyan: No, not at all.

Stoyan: How about niches in the construction industry that are not exploited?

Mariyan: I do not see any.

Stoyan: ok. It is one of the more vague questions I have. Do you invest in innovation or improving the processes in your company? May be that can lead to better performance?

Mariyan: Only work organization - scheduling and communications.

Stoyan: Do you have gypsies working in your company?

Mariyan: No, but they are coming to fill the missing skilled workers. Other companies are using them for insulating projects. Most of the workers doing that are gypsies.

Stoyan: The most interesting topic is the only thing left on my agenda - Corruption. Have encountered any corruption?

Mariyan: Yes there is corruption and it is normal. "Hey give me the project and I will give you 10% of the profit"

Stoyan: It that happening often?

Mariyan: Let's say it is a normal practice

Stoyan: Can I generalize and assume that this is 50% of your projects?

Mariyan: No not that much -10% up to 20%

Stoyan: How about the governmental administration? Is that making any troubles?

Mariyan: Yes they do. In general it seems they work slowly. They are often over the timeframes that they have for decisions.

Stoyan: What would that mean? Can you give me some examples?

Mariyan: Well for example a building permit has to be issued for 2 weeks. The decision has to come out in 2 weeks. They are often late with a couple more. That happens for a number of reasons. They are understaffed or may be even some subjective reasons.

Stoyan: How about corruption with the governmental administration?

Mariyan: I have not experienced it personally but I know it is there. Sometimes they will slow their decision for a permit and make hits, direct or indirect, for a bribe. They would threaten with inspections.

Stoyan: Ok I do not have any more questions. That was everything I wanted to speak with you about.

Mariyan: Super I am glad I helped. If you need something more just call.

Stoyan: Bye.

Mariyan: Bye

#### IRchitect/ Dare

In 2015 Slavcho Filipov created a company with 6 fellow students from university. The company split in 2017 in several smaller architectural design companies. His current company –Dare is doing Interior design. Slavcho has graduated from the University of Architecture, Construction and Geodesy in Sofia and has several years of experience working in his own company.

Stoyan: Hello, and thank you very much for agreeing to participate in my small research

Slavcho: You are welcome, no problem

Stoyan: I am writinh my master thesis on the topic of – *What are the prospects of creating a company in the environment in the Bulgarian construction industry*? And I am analyzing the Bulgarian construction industry.

Slavcho: Okey.

Stoyan: Our common friend told me that you have your own Architecture Company. All he said that you had several architects working for you and it seemed to me that you could help me with an interview.

Slavcho: Yes, I created a company with several friends from the University. The company was founded in 2015 and worked until 2017. Is my case still relevant for you? I can still tell you how the things developed. Our work was in quite small scale and I was doing mostly architecture design. I have worked with several companies in my University studies and they are outsourcing some of their work to me.

Stoyan: I see how many people are working in your company right now?

Slavcho: Now 2, in the summer we are more, then I hire students. Otherwise in the 1<sup>st</sup> company IRchitects we were 6.

Stoyan: Are there any long term plans for you company?

Slavcho: No, unfortunately no. I am even thinking of working for a short while abroad. I feel like changing the environment for a bit. Afterwards, I am going to change my career towards furniture design or product developments – not so much architecture development.

Stoyan: Have you had any problems with the workload being not enough?

Slavcho: Yes of course, when we started no one knew us and it was hard getting work. That is why we worked on very low prices. The work was coming from personal interactions and then started investing in advertisements. But from the start up to now it has always been hard to find work.

Stoyan: Did you saw some change in the volume of work?

Slavcho: Yes we did. Keep in mind that in architecture the wheel turns slow. From the moment that we do a design until the building is done takes quite some time - from a year to several years. The good result and the benefits of this are slow to come for an architecture company. After this happens it is considerable easier.

Stoyan: So your plans are to close down your business and then travel abroad?

Slavcho: Yes I will redirect all my clients to my old colleagues from our 1<sup>st</sup> company – Irchitects.

Stoyan: Can you tell me a bit about yourself – education and experience?

Slavcho: I have graduated University of Architecture, Construction and Geodesy in Sofia. I had no previous experience with my own company. I had experience working as a designer in architecture companies but only that.

Stoyan: How about any other difficulties except finding work? Have your company faced other difficulties?

Slavcho: hmm Yes, We had some troubles what to target as a company. Should it be office buildings, interior design or pre-fab structures – we went though many different ideas. Since then the world pushed us in different direction but that was hard in the beginning. That was the 1<sup>st</sup> problem. The second problem was the internal workings of the company. We were 6 people as founders of the company. I do not recommend that to anyone. I think up to 3 are optimal.

Stoyan: You were 6 owners in the IRchitect?

Slavcho: Yes we were colleagues in university and we decided to give it a go. Now the initial company has split into 3. The decision process was slow and we had to break that up. Other difficulties - I would say no. We did not have more trouble with administration more than anybody else. Bulgaria as a country has its things that are given for all.

Stoyan: I have made some interviews before and some of the companies were telling me about how the governmental administration is slowing them – like building permits.

Slavcho: That is a big issue, yes. It starts with the laws themselves – they are not written properly. The used language is somewhat easy to be interpreted differently and according to the wants and needs of the decision taker. I believe that is made intentionally. That is how people with proper connections can make their way through. That has been so for a long time now. On top of that you can add that the municipal workers and decisions they have to take are slow. It is very rare that someone is actually doing their job on time and trying to help. Even then when you have to go to the next step in the administration they are going to slow you down. That did not affected us because we were doing interior design but in my architecture experience was a big issue. That takes a lot of time. Time is money and that is how you lose a lot of money doing something useless.

Stoyan: The 6 of you created the 1<sup>st</sup> company in 2015 and then you split in 2017?

Slavcho: Yes exactly

Stoyan: How were you finding and winning projects?

Slavcho: We started with asking friends and colleagues then Facebook add and Google one.

Stoyan: In what region? Sofia?

Slavcho: All in Sofia and if we had a project in the country we would find out that it is actually a person from the capital investing in the country. So basically it was only in Sofia. It is hard to get jobs from anywhere else.

Stoyan: I found some data from the ministry of the financing that showed clearly that Sofia is the center of the Bulgarian economy. It seemed that it is going to be so in the future as well.

Slavcho: Yes, that is the case. Plovdiv is the industrial capital I would say. I saw data that there they had more Building permits issued for last year. However, most companies are based in Sofia.

Stoyan: From all the interviews the topic of Corruption is always the most interesting. This is so because I have interviewed different types of companies and they all have different versions of it. How about you? Have you encountered it?

Slavcho: No I have not. We have done small projects only and our company is quite small. We are just preparing for a bid competition for a big building. For projects with the size of a single family house of a couple of single family houses no one was interested in that and even if they were interested we have turned them down. In short – no we have not encountered it. I have witnessed our clients who want to do something illegal to do it. They found the person who could give them the dispensation but we had nothing to do with it. This is something that happens all the time.

Stoyan: So your client went to the municipal administration and bought a permit for construction that was illegal?

Slavcho: Not exactly illegal, for dispensation. That can make the building with a larger footprint of higher building. There are architects who can do that for you. They have connections and they can find people who can give their client the dispensation they want. Investors know that. They know the difference between me and these architects. If they come to us we have no way of helping them break the law in that way. For example we can imagine a project in the Sofia city center. We could make a building with 6 stories –these are the regulations. However, certain architects can offer 8 or 8 stories. There is this famous case for a building in the center of Sofia besides the National Palace of Culture. The building is ugly and huge. There was a media scandal because of it. The government even made an amendment in the law specifically for this building.

Stoyan: I have not heard specifically about that building but it seems to that the corruption is in the Architecture as well.

Slavcho: Yes for sure.

Stoyan: Is there a tendency of that changing?

Slavcho: Yes it happens slowly. The things are better now than several years ago. The Architect of the City Sofia changed for a better one. He is not the best but he has some good points. Transparency laws are implemented more and more. However slow the electronic administration is coming along it will happen one day and that could push back on corruption.

Stoyan: What is the common opinion of you, your colleagues and friends in the industry about it? Don't you think that corruption is very bad for small and medium businesses?

Slavcho: Oh yes, I feel discriminated because I cannot participate in governmental projects - even the ones from the municipality. They are all given to the same companies. That makes us poop and unhappy. Lots of companies in around the world have started with such projects. We cannot do it.

Stoyan: It does not give you the opportunity to grow.

Slavcho: These are a lot of money going into people with connections

Stoyan: You have only a couple of workers but have you noticed a shortage of qualified people - for example when you have to hire somebody?

Slavcho: I believe that is the case in Architecture but it is relatively small compared to other branches. There are many universities in Bulgaria and they all produce a lot of students that are not very capable. But if you find a smart person you can invest in him and in 9 mounts to 1 year they can become good. The situation in contracting I have heard is the really bad.

Stoyan: Do you have any personal experience with that? Did you have to teach someone and had to expend resources for 1 year and team them?

Slavcho: Yes I am currently doing it. I am teaching a recent graduate for half a year now. It is not pleasant but has to be done – you cannot do everything by yourself.

Stoyan: Can you tell me a bit more about your employee? Is he a student? And what are you going to teach him – may be the things you have leaned after your graduation?

Slavcho: Yes is graduating very soon. And Yes to the second question. The things I have found useful from the university are more abstract and more in the line of esthetics and ways of thinking. The technical part is something you learn after university. I am still learning that as well. Presentation skills – we have to get them after university and technical skills.

Stoyan: Have you had any courses on Entrepreneurship, strategy or economy in the university?

Slavcho: No nothing like that. We just had one economic class but it was so outdated that they even promoted socialism. We managed this company because of my friends went through a private learning course for entrepreneurship.

Stoyan: I have found some data suggesting that the education for entrepreneurship and economy is not thought in schools for technical abilities. It is kept for purely economic universities. They do not teach how to start and mange a company to the people with the ideas like Architects, Engineers or Construction.

Slavcho: Yes this is exactly the case. People are trying to compensate it with courses and self-learning. There is a course now in January I intend to join. There are almost no architects entrepreneurs in Bulgaria and that seems to be the reason. Most of the work in a relative small family companies and they do not have the knowledge and motivation to grow them. Most of my fellow architects do not consider their architecture practice as business but as a form a form art. Moreover they do not think as entrepreneurs.

Stoyan: I asked that question that because in my previous interview I had only 1 person that went through a university or any education related to the construction industry. I have only 1 question left. Do you see any niches in the industry that are not exploited?

Slavcho: I think so yes. Actually, for sure.

Stoyan: I can share my findings so fat. It seems that several of the contact people I had share the opinion that high quality construction and material are going to be more and more viable in the Bulgarian construction. The economic situation of the Bulgarian people is changing and so their preferences. That is something you might have seen as well.

Slavcho: Slowly but yes. Several of our clients are requiring us to design with higher than the normal level. I think there is a big niche in construction and investment in small single housing used for vacations -the so-called Bungalows in Bulgaria but in small scale. Not like the big resorts we have on the see side and mountains. The vacation places for Bulgarians have to be close to nature and quiet.

Stoyan: You mentioned in the beginning of the interview that you had troubles orienting you company toward a specific market. Then you mentioned something about pre-fabricated elements. Can you tell me more about that?

Slavcho: We thought that the pre-fabricated elements from wood or metal would be something that is valued by the market. Even some pre-fabricated concrete for the garden or barbeques.

Stoyan: concrete elements?

Slavcho: Not to that extent, we know some companies doing that so we were not that hyped about concrete.

Stoyan: Have you come across construction of buildings with pre-fabricated concrete elements?

Slavcho: Only single family housing and villas.

Stoyan: Here in Denmark the construction is based around the pre-fabricated concrete elements. It is widespread. Almost every building is made like that. There is also quite the competition between companies who can do it. The education for that type of construction was implemented in my bachelor's degree. So I was just wondering if the exist and somebody uses them in Bulgaria?

Slavcho: If it a multi-family residential buildings - no. That went out with the socialism. There are no companies that produce them anymore. Is that the case with all buildings or just residential?

Stoyan: All kinds of buildings are made like that. The way they do it here is the following. There are 3 layers that the wall is made out of. The inner layer is the load bearing and the pre-fabricated one. In the middle layer is the soft insulation most often mineral wool. Finally the outer layer or the façade is added. The façade is attached to the inner layer with thin metal sticks. They are holding the façade to the inner layer. That method is quite old. Even 50-60 years old buildings are made with 3 layers. Sometimes even the medium layer is left empty – the air is acting like insulation. Like a process it is quite fast to build. 50% of the construction is the foundation and the rest is the assembly of the structure itself.

Slavcho: How is that affecting the cost of construction?

Stoyan: I cannot tell you right now but I can find a webpage describing the prices of the residential buildings. I am going to send it to you after we conclude the interview.

Slavcho: That sounds nice.

Stoyan: I have no more questions. Thank you very much for the interview and I am going to send you my report as soon as I translate it to Bulgarian.

Slavcho: Thank you, Good bye!

Stoyan: Good bye!

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Stoyan: Hello Nayden, thank you for agreeing to do the interview with me. Nayden: you are welcome.

Stoyan: Well I am writing my master thesis on the topic: What are the prospects of creating a company *in the environment in the Bulgarian construction industry*. For that I am doing analysis of the industry and several interviews like this one now. The questions I ask as related to the creation of the company and the struggles it had.

Nayden: I have my company for 8 months now.

Stoyan: Did you now worked for the Hercal Company?

Nayden: Yes, I have started a new one since then.

Stoyan: Have you split Hercal into several companies now?

Nayden: No, my father is dealing with Hercal alone now I started my own in cooperation with an Australian company in Sofia.

Stoyan: Ok that sounds great. Asking you for both will help me even more. Let's start with the old one. I would like to start with some general information about the company. When it was founded? How many people work in it? What is the general occupation of the company?

Nayden: It was originally founded around 1960. 60 people are working with us now. It varies a bit but for the most part in last 5 years there were around 60. The main occupation is production of metal constructions.

Stoyan: Do you do any design there?

Nayden: No, only production.

Stoyan: So your new company is making that design.

Nayden: Yes, we do other design mostly. But the design for the production company is made from people abroad – in Australia. In there we produce metal constructions for the mining industry in Australia.

Stoyan: It was created in the 1960 right?

Nayden: Yes that is correct. Then at 2003 my father bought it and changed the purpose from maintenance of big machinery to production of steel elements.

Stoyan: I assume the government created the company in the 60ties right?

Nayden: Yes it was a socialist company.

Stoyan: Any long term plans for that company?

Nayden: We are focusing the market outside of Bulgaria. We would like to double the production as of now. That is plan for the next 5 years. Ah and a new building 3 decare (3000 square meters) will be made to house the new production.

Stoyan: How is the company finding and wining projects?

Nayden: That is a hard question now. Well after a while people know you and send you requests for pricings. For the projects abroad I am doing investigations and we do bids on them. We do not participate for governmental projects. Only private investors.

Stoyan: What region do you cover?

Nayden: All around the world. We have not had any projects in Asia.

Stoyan: How would you evaluate the company financially?

Nayden: Financially what do you mean by that? You can use a lot of measures.

Stoyan: Growth

Nayden: Well 7/10 I guess. Good.

Stoyan: how do you get financing for projects?

Nayden: It works the following way. We get a project and then we apply for financing from a bank. We have a contract with a bank and quite a good relationship with one. They provide the financing for the materials and then after we deliver the product we are getting played.

Stoyan: it seemed to me that banks give such loans hard? How do you deal with that?

Nayden: We have a lot of fixed assets. So the banks trust us when we apply for a loan. They do not give them as easy to companies with no fixed assets. An Example might be a design company. They do not have any fixed assets.

Stoyan: can you give me some more info for your father – the founder of the company. Does he has any education in the construction industry?

Nayden: No he has master in economics.

Stoyan: how about experience before the founding of the company?

Nayden: before he took over the company he worked in a company producing satellite dishes – so I guess no.

Stoyan: Are you familiar with the biggest difficulties that the company faced?

Nayden: Oh yes. Definitely.

Stoyan: can you tell me a bit more about them?

Nayden: Delayed payments from clients. Bulgarian clients mostly. Some payments had to be to done to us in 1 month and they did it 6. However the biggest problem is that there is no one wanting to work it.

Stoyan: I found a company in Sofia that is having troubles with finding welders.

Nayden: Exactly. That is what I meant. There are not that much welders in the country. We know them all I guess. My estimation is that there are like a 1000 welders in the country. We even had to hire a company from the Nederland's. The problem with that was that they take too much money per hour for a worker.

## Stoyan: Other issues?

Nayden: It seem that the market crazy. But that topic is quite long.

Stoyan: What do you mean by that? Just in shot.

Nayden: There some of our competitors that are trying to kill everybody else with low prices. They bid so low that the price sometimes is even lower than the materials only. These are bigger companies but I believe they are making money in other ways as well. The prices they put forward that we have to compete with are just so incredibly low.

Stoyan: What is their motivation then?

Nayden: May be killing us. I don't know. That is why we do not work with Bulgarian projects anymore. There is no profit in that. Their prices are 10% lower than the Chinese.

Stoyan: Do you see a vital material lacking in the industry?

Nayden: No materials cheap and abundant. We do 2000 tons of steel a year. We can order 20 000 a month with ease. The suppliers have no trouble even with that number.

Stoyan: I have no more questions for this company. Let's switch to your new company. I am going to start with the same questions. How many people are working for you?

Nayden: 8 as of now.

Stoyan: The basic occupation?

Nayden: Cad design for production of steel constructions. CAT CAM.

Stoyan: Do you have to deal with any governmental or municipal administration?

Nayden: No what so ever. We do production. Our clients do that. Plus our work is for Australia and all the calculations are done there.

Stoyan: can you give me some more information for you?

Nayden: I have studied in England and graduated as a construction engineer. I have worked in my father's company since I was 13. I worked everything – welding, operator on site and more. Ever since I came back from abroad I worked in customer relations. I contact them and I am responsible for the communication with them.

Stoyan: What projects in the new company? How do you find them? Do you do the design for Herkal – the production company?

Nayden: No we do not work for them. That company is half mine and the other half belongs to investors from Australia. They decided to expand and I provide some of the work here for them. They find us work and we do it.

Stoyan: The name of the company?

Nayden: Multi Plan Bulgaria OOD

Stoyan: any long term plans for that company?

Nayden: yes I hope we manage to grow to 60 people in the next 5 years.

Stoyan: Do you plan to work for Bulgaria?

Nayden: No, Only if it is a foreigner investing in Bulgaria.

Stoyan: Have you encountered corruption? I guess that question goes for both companies.

Nayden: No. That why we do not work any governmental projects. These projects are full of shits like that.

Stoyan: How about witnessing.

Nayden: Directly no. I can just speculate about it.

Stoyan: No that is fine. I am interested if you participated or witnessed directly. Do you see any niches in the Bulgarian construction industry?

Nayden: it seems everything is full - Too many companies. The quality drops because everyone competes on price and there might be good idea actually for some control.

Stoyan: what do you mean by control?

Nayden: Well a quality assurance company providing quality checks.

Stoyan: it seemed that most of the companies in the market are competing on price. Does that make it good to invest in quality production?

Nayden: No one cares about quality. That is why the Bulgarian market is bad.

Stoyan: What about the people that you hire? What is their background?

Nayden: in the production or in the new one?

Stoyan: both. We can start with Hekal.

Nayden: Well there are 15 trades working there. Which one?

Stoyan: Education wise and experience.

Nayden: We do not care about education. We meet the worker and then we decide based on personality and manly experience.

Stoyan: How about your new company?

Nayden: We hire only construction engineers and machine engineers.

Stoyan: Are they all educated from the University of Architecture, Construction and Geodesy?

Nayden: Almost all yes. And then we still have to train them. It does not matter if they are to graduate or just graduated. But I hire people who make good immersion and will to work and with no experience. If they have experience from before it might not be good. You know how we Bulgarians are

Stoyan: who provided the funds for both companies start capital?

Nayden: In the new one – Me. For Herkal my father took loans and some credit from a bank but mostly him. It was not a lot of money him. The privatization process made the initial investment quite small.

Stoyan: It takes me longest usually to discuss corruption but since you have not experienced any and are trying to stay away makes it faster.

Nayden: Yes the governmental projects are bad for us. Ah I experienced only 1 problem with my new company. It took far too long to register it. It took me 2 months to do it.

## Stoyan: How is that?

Nayden: Well for registration I they required a set of documents. The process with investors from abroad is that we had to issue some documents from there. It took some time to do so. Then I went to register it. The administration told me that I was missing something and I we had to go again trough Australia. That process repeated itself at least 4 times.

Stoyan: I see. Do you have troubles finding work in any of the companies?

Nayden: That is Ok. However keeping the work flow constant is hard. Sometimes we have too much and sometime not at all. There is a period in the year that we can find 5 times more work than we can do. On the other hand there are periods when we have nothing.

Stoyan: Thank you very much for the information. I can offer my project in exchange for the information you provide for me

Nayden: I hope I was useful.

Stoyan: You were. Thank you and bye

Nayden: Bye