

# ČESKÉ VYSOKÉ UČENÍ TECHNICKÉ V PRAZE

#### Fakulta stavební Katedra ekonomiky a řízení ve stavebnictví

# Analýza a návrh na zvýšení konkurenceschopnosti podniku

# Analysis and proposal to increase the company's competitiveness

Bakalářská práce

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Studijní obor: Management a ekor	nomika ve stavebnic	tví	
II. ÚDAJE K BAKALÁŘSKÉ PR	ÁCI		
Název bakalářské práce: Analýza	a návrh na zvyšení k	onkurenceschopnost	i podniku
Název bakalářské práce anglicky:	Analysis and propo	sal to increase the co	mpany's competitiveness
Pokyny pro vypracování:			
1. Úvod	refer to distance of a		
<ol> <li>Shrnutí problematiky - teoretická</li> <li>Analýza současné situace</li> </ol>	vychodiska prace		
<ol> <li>Vlastní návrh řešení</li> </ol>			
Závěr     Seznam použité literatury			
7. Přílohy			
Seznam doporučené literatury: Tony C. Adkins - Case studies in pe corporate strategy; John Kelly, Steve Jméno vedoucího bakalářské práce:	en Male, Drummone	I Graham - Value ma	
Jineno vedoucino bakatarske prace.	Doc. Ing. Ales To	nek, CSC.	
Datum zadání bakalářské práce: 2	7.02.2017		oakalářské práce: 28.05.2017 datem v časovém plánu příslušného ak. roku
Podpis vedoucího prác	ce	F	odpis vedouciho katedry
III. PŘEVZETÍ ZADÁNÍ			
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## Poděkování

Chtěla bych poděkovat vedoucímu mé práce panu doc. Ing. Aleši Tomkovi, CSc. za odborné vedení bakalářské práce ve všech jejích etapách. Vyjadřují vděčnost za všechny jeho připomínky, užitečné rady, poskytnutou literaturu a motivování k práci. Taky bych chtěla poděkovat své rodině a svým blízkým za neustálou podporu.

#### Anotace

Bakalářská práce se věnuje analýze a návrhu na zvýšení konkurenceschopnosti podniku. Cílem práce je analyzovat současný stav zvolené stavební firmy a navrhnout optimální řešení pro zvýšení její konkurenceschopnosti vybrané. Práce se skládá ze třech kapitol. První kapitola vysvětluje pojmy související s danou problematikou. Druhá kapitola zahrnuje provedení analýz a zhodnocení současného stavu zvolené stavební firmy. Třetí kapitola vypravuje o možných variantech řešení pro zvýšení konkurenceschopnosti této stavební firmy.

#### Klíčová slova

Konkurence, konkurenceschopnost, marketing, konkurenční analýza, SWOT analýza, marketingový mix, Porterova analýza pěti sil, PEST analýza, finanční analýza, strategie

#### **Annotation**

The bachelor thesis deals with the analysis and proposal to increase competitiveness of the company. The aim of the thesis is to analyze the current state of the selected construction company and to propose the optimal solution in order to increase its competitiveness. The work consists of three chapters. The first chapter explains concepts related to the issue. The second chapter involves performing analyses and assessing the current state of the selected construction company. The third chapter discusses possible solutions to increase competitiveness of this construction company.

### **Keywords**

Competition, competitiveness, marketing, competitive analysis, SWOT analysis, marketing mix, Porter's five forces analysis, PEST Analysis, Financial Analysis, Strategy

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#### AIM, OBJECTIVES AND METHODS

#### AIM:

The aim of the bachelor thesis is to analyze the competitiveness of the construction design company and identify ways to improve it.

#### **OBJECTIVES:**

In accordance with the purpose, the following objectives have been set and analyzed in the work:

- Explore the theoretical foundations about competitiveness in construction area, knowledge
  which is necessary for the analysis of the construction design company, its competitors and
  the subsequent proposed solution;
- Analyze the current state of the construction design company, as well as its position relative to its main competitors;
- Analyze the external environment affecting construction companies and the assessment of the current market situation:
- Propose measures to improve the efficiency of the construction design company based on the analyses.

#### **METHODS**

To assess the current state of the company, the following methods will be used: horizontal and vertical analyses, cost and sales analyses and comparison analysis of main competitors. In addition, a PEST analysis will be carried out, which will help assess the current situation in the construction market. The results of analyzes of the internal and external environment will help to prepare the SWOT analysis, on the basis of which the company's business goals and a strategy for improving the competitiveness of the company will be developed.

#### **INTRODUCTION**

Competition is an integral part of any industry and the market as a whole. Competition is understood as rivalry in any field between individuals, business units that are interested in achieving the same goal. As practice shows, competition causes not only cruelty among companies, but also stimulates the improvement of the quality of goods or services, and also strives to meet the changing demands of consumers.

Construction is one of the largest and the most dynamic sectors of the economy in many developed and developing countries in the world. It is important to note that in addition to the dynamism the construction industry is also characterized by its specificity in terms of product. In the construction area, we rather talk about the service than about the product. The problem is that the service is intangible and hard to standardize. Another problem is that construction services, unlike cars and televisions, are difficult to promote and to assess in advance. To keep their positions, every firm needs to monitor the current situation on the market, its competitors, and also be able to respond quickly and effectively to every change on the market.

The relevance of the chosen topic is that in the current conditions of high competition on the market of construction services, firms need to constantly develop and improve in order to be competitive.

Because of high competition, it is necessary to choose the right strategy, which will contribute to the growth of the firm's competitiveness and the strengthening of its positions on the market. In order to correctly formulate the company's business goals and strategy, it is necessary to conduct both internal and external analysis of the environment, which will help the firm to identify its advantages and disadvantages in relation to competitors and in general. Wrong choice of strategy can worsen the position of the firm, or even lead to its bankruptcy.

This thesis focuses on assessing the current situation in the construction company PUDIS. This company was chosen for the reason that it operates in the field of civil engineering, which provides a special interest for me. Another reason is that the company has developed high-quality annual reports on the basis of which it is possible to carry out the necessary analyses. In addition, based on the results of applied analyses, various ways to increase competitiveness are proposed.

#### 1. THEORETICAL REVIEW OF COMPETITIVENESS

The theoretical part of this work introduces the basic concepts that are necessary to understand the chosen topic and for further analysis of the company and its competitors. Here we will mainly consider the concepts of competitiveness, marketing in construction, methods for estimating the competitiveness and concepts of strategic marketing planning.

#### 1.1 The concepts of competition and competitiveness

The Cambridge and the Longman dictionary explain the meaning of competition and competitiveness as follows:

Competition is a situation in which someone is trying to win something or be more successful than someone else. (Cambridge University, 2017).

*Competitiveness* is the ability of a company, country, or a product to compete with others successfully. (Longman A., 2003).

According to Il'ina V. (2008), the competition has both positive and negative aspects.

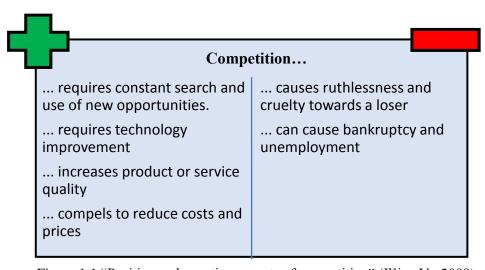


Figure 1.1 "Positive and negative aspects of competition" (Il'ina V., 2008)

In other words, competition is a rivalry between competitors, who are interested in achieving the same goals. Typically, such goals are to maximize profit and to get the consumers' preference. Despite the cruelty of competition, it also has several positive properties. These aspects are clearly shown in Figure 1.1.

#### 1.2 Specification of market and industry in construction

Competition usually covers the concepts of the industry and the market. It is necessary to understand the importance and the difference between these two concepts for developing a competitive strategy.

#### 1.2.1 Market in construction

The market is based on the needs of consumers and is limited by the ability of consumers to replace one product for another. Unlike industries, markets are temporary and characterized by "the law of one price". (Langford D., 2001).

**Note:** According to Krugman P. (2015), "the law of one price" says that in different countries the cost of identical goods should be equal if they are expressed in one currency. At the same time, it is assumed that the markets are competitive, and there are no transactional and transportation costs.

There are two types of market structures in construction, contracting and speculative construction. Both of these types have different economic forces.

#### Contracting.

A distinctive feature of this type of market structure is that the final product is required by the customer. The object is created in accordance with the individual design. The contractor determines the price before production. (Langford D., 2001). This form of the market structure has its advantage, for example, it carries less risks.

#### Speculative construction.

A typical example in construction is speculative housing construction. Speculative construction is based on forecasting, response, or on creating demand. (Langford D., 2001). Simply stated, the speculative construction is a construction without having any buyers waiting for them. (Cambridge University, 2017).

Each type of market structure presupposes the availability and use of different skills. Contracting requires special and technical skills. Speculative construction needs to forecast and study markets, raise finances and land banks. (Langford D., 2001).

#### 1.2.2 Industry in construction

The industry in comparison with the market is relatively stable and is based on production technologies. A distinctive feature is also that the industry is determined by the terms of the demand. (Langford D., 2001).

There is competition between companies that produce similar goods or services in the industry. The structure and profit potential of the industry is determined by five main factors established by Porter (1998), which are depicted in Figure 1.2.

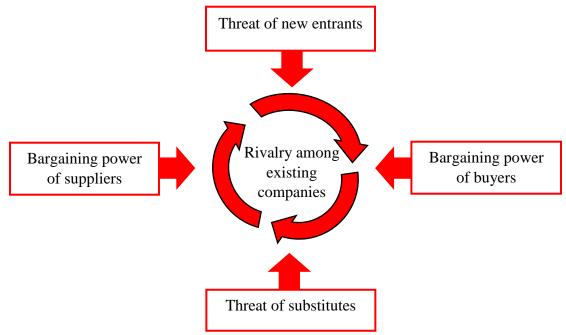


Figure 1.2 "Five forces driving competition" (Porter M., 1998)

Buyers are one of the main parts in construction, because they can direct competition rules using the choice of the procurement path. The construction industry is very closely dependant to *suppliers*, as it requires the constant use of materials produced by other industries. Powerful suppliers, as well as powerful buyers represent a risk of falling profits for us. The threat of entry means the possible emergence of new competitors, which directly depends on the presence or absence of entry barriers. It is believed that barriers to entry and exit are low, but due to the heterogeneity and peculiarities of the construction industry, they are rather difficult to determine. A *substitute* is a product or service that can perform the same function as ours. The last factor, *extent of competitive rivalry* describes the interaction of competitors and the interdependence between them. (Langford D., 2001). All the above five factors will be discussed in detail in Chapter 1.2.1.

#### 1.3 Marketing in construction

This chapter discusses the main issues related to marketing in construction: concept of marketing, customer orientation, main principles of marketing and internal marketing in construction.

#### 1.3.1 The concept of marketing

There is an incredible variety of marketing definitions.

"Marketing is the process of establishing customers' requirements for the purpose of satisfying them at a profit to the company"

(Langford D., 2001)

"The marketing concept holds that achieving organizational goals depends on determining the needs and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors do"

(Kotler P., 2012)

In other words, marketing is the process of identifying and satisfying the desires and needs of customers better than competitors in order to increase profits. These goals are achieved through the development of marketing strategies.

In most cases, marketing is the responsibility of top managers or directors of small or medium firms, but, in large companies there are marketing departments, which can be divided into geographical regions, customer types, project types or project sizes. (Tomek A., 2009).

Graham (2008) emphasizes that marketing combines at the same time organizational culture, strategy and tactics. (Figure 1.3) The task of creating and expanding these components at the same time is really complicated. So, it is not a surprise that the marketing reality often cannot fulfil these requirements.



Figure 1.3 "Components of marketing" (Graham H., 2008)

#### 1.3.2 Customer orientation

Marketing in the first place determines the target market. Then it focuses its attention on the needs of clients and seeks to satisfy them in order to achieve profit. Customer-oriented marketing puts customers at the center of their activities. (Langford D., 2001). Customer orientation means that the company will stay close to its customer and track its satisfaction with the product or service during all the time. Customer dissatisfaction should be discussed at all levels of the organization in order to identify problems and find ways to solve them. (Tomek A., 2009).

According to Langford D. (2001), the results of the research showed that about 95 percent of clients who were not satisfied with the service or the product did not complain and just stopped buying from this company. In this regard, there is a need to measure and monitor customer satisfaction.

There are millions of potential buyers of iPhones, while the construction market is limited by the number of present and future customers. There are only several clients that need roads in each country, which implies the great importance of the client-oriented approach, as well as the work with repeat customers. A lot of companies also work according to Pareto principle. (Tomek A., 2009).



Figure 1.4 "Pareto Principle" (Athinala, 2016)

#### **Pareto Principle:**

80% of your outcomes come from 20% of your inputs (Athinala, 2016)

Most companies work with a small number of key customers. Therefore, Pareto principle can be applied as follows: 80% of work is for 20% of clients. (Tomek A., 2009).

#### 1.3.3 The main principles of marketing

There are a number of basic and effective marketing principles that are suitable for the management of marketing ideas and actions. According to Graham H. (2008), these 6 principles help to understand how organizations should interact with their customers.

#### Principle 1: Focusing on customer

A high degree of customer orientation mainly ensures the long-term goals of the organization. That is why it is necessary to investigate the needs and requirements of clients. Customers are the main

and only judges of how well an organization meets their needs. From the client's side, a quality product will be considered as the one that will correspond to their goals.

#### Principle 2: Compete in markets where you can establish a competitive advantage

Choosing a market to compete on and where to focus your resources is a difficult and crucial task. It is very important to understand and answer the question whether we have the necessary skills and capabilities to compete in the chosen market. A huge number of companies enter a market, which seems attractive to them, but soon they cannot withstand the pressure of competitors and as a result they have to leave such market.

#### Principle 3: Customers do not buy products

Customers do not buy the product itself, they buy what they can get from this product. Often the technical qualities of the product are secondary. At the first place is what this product can do for them, whether it can solve their problem. Consideration of the market from the client side helps to assess possible opportunities and threats to us.

#### Principle 4: Marketing is too important to leave to the marketing department

The fact that only the marketing department should engage in marketing is a big misconception. Marketing should be the job of everyone. This is due to the fact that the marketing specialist can perfectly analyze the marketing information or calculate the market share, but have very little impact on the product or service.

#### Principle 5: Markets are heterogeneous

Markets are not homogeneous but heterogeneous. Most markets consist of different clients, submarkets and segments. For example, the first customers can buy a car for cheap transportation from point A to point B, the second for a comfortable or safe trip, others can buy to maintain their own image.

#### Principle 6: Markets and customers are constantly changing

The market is a dynamic and constantly changing system in which almost all products have a limited life cycle. The product exists on the market until there is a better way to meet the needs of customers. The life cycle of each product consists inception, growth, maturity and decline. That's why companies need to calculate and plan in long-term.

#### 1.3.4 Internal marketing

The company should be focused both on its employees (internal systems) and on its customers (external systems). Quality of service primarily depends on the company's employees. For quality work, staff should be carefully selected, and also trained and motivated to work. (Tomek A., 2009).

Internal marketing, implemented by management, helps create an environment to support and reward employees for quality work. (Langford D., 2001). The company providing the service is more successful if attention is paid not only to relations with customers but also equally to relations with employees. It is even believed that the organization will be better able to meet the demands of its customers, if employees are in the first place instead of customers. (Dwayne G., 1995).

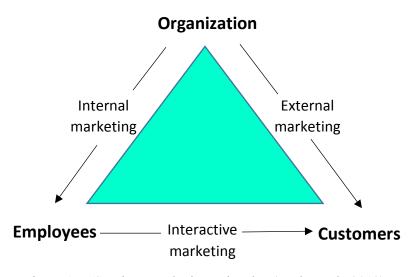


Figure 1.5 "Services Marketing Triangle" (Paul Busch, 2012)

There are different types of marketing in the service industry. These include external, internal, as well as interactive marketing (see Figure 1.5). *External marketing* includes the usual work of the company, such as: the development and formation of prices, distribution and supply of services to customers. *Internal marketing* concerns the training and motivation of the organization's employees, which in turn has a huge impact on improving the quality of customer service. *Interactive marketing* is characterized by how well the customer is serviced by the staff. (Kotler P., 2012).

**Note:** According to the results of research, the attitude of clients towards the quality of service directly depends on how employees perceive this service. The border between employees and customers is very blurred, as customers often associate the service they want to purchase with the employee who provides it. The task is to create an atmosphere in the firm through which each employee will strive to please the customer. (Langford D., 2001).

#### 1.4 Methods for estimating the competitiveness

Based on the article of the research journal (2015), there are many methods for assessing the competitiveness of the organization. These include a SWOT - analysis, a Porter's matrix and a 5P's method, which will be discussed below. There are also many other methods of evaluation. Each method has a number of certain advantages and disadvantages. There is no ideal method, which leads to the need to combine several methods at the same time in order to correctly assess the level of competitiveness of the organization.

#### 1.4.1 Porter's five forces analysis

As already mentioned at the beginning of the work, the Porter's Model of industry competition consists of five forces. Graham H. and Nigel P. (2008) write that analyzing each of these forces helps managers understand the essence of competition in their industry.

#### **Industry rivalry**

An important aspect is the definition of actively strong and aggressive competitors. Graham (2008) says that the rivalry between competitors will be intense and aggressive if the following conditions exist:

- The competitors in the industry are similar in terms of size or market share
- Low market growth
- High exit barriers
- Low product differentiation
- High fixed costs

#### Threat of substitutes

Porter (1998) suggests that substitutes cause competition between industries, as well as between companies in specific industries producing substitutes. The appearance of a substitute can reduce the price of a product and the profit of a company. According to Graham H. and Nigel P. (2008), the substitute can appear both from a company that has just entered the market, and from a company that already exists for a long time on the market, but is constantly looking for new ways to fulfill the needs of its customers.

#### **Bargaining power of customers**

The strength of buyers, according to Porter (1998), leads to price reductions, while demanding a continuous improvement in the quality of the services provided. Kotler (2012) said that the reasons for the growth of the power of buyers may be that they are not a large number and they are well organized. Another reason is the homogeneity of the product and the insignificance of switching to another product. He also advises choosing such buyers who do not have much influence and are all tied to suppliers.

#### Threat of new entrants

This force directly depends on the existing barriers to entry into the industry and to exit the industry. Another important factor is the reaction of competitors to the new manufacturer. (Porter M., 1998). Combinations of entry and exit barriers are shown in Figure 1.6.

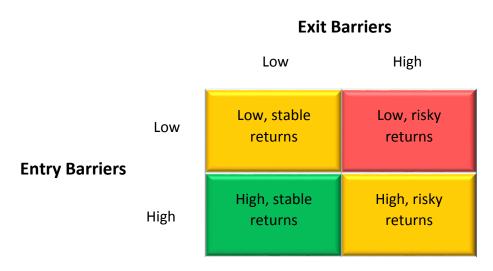


Figure 1.6 "Barriers Effect on Risk and Profitability" (Porter M., 1998)

According to Porter (1998) and Kotler (2012), the best combination is a *high entry* barrier and a *low exit* barrier. This will help the company, which failed to leave the market without obstacles. The worst combination, in their opinion, is the *low entrance* barriers and *high output*, accompanied by a small profit of the industry participants. *High* barriers to *entry and exit* imply a high profit, but also a high risk. Kotler (2012) also says that this is due to the fact that companies that do not thrive on the market need to stay on the market because of high exit barriers and rival with their competitors unremittingly. The last combination with *low barriers for entry and exit* corresponds to not very high but stable incomes. Companies can safely enter and exit the industry without using high costs.

#### **Bargaining power of suppliers**

Suppliers with power in the market can reduce the profit of the organization by raising the prices of their products or by reducing the quality of the products or services provided. Most often, this occurs with a small number of suppliers in the market, and also when the transition to another producer can cause large costs. Reduction of the power of suppliers can develop mutually beneficial relations with them and using parallel sources of supply. (Porter M., 1998).

#### 1.4.2 SWOT - analysis

According to Graham and Nigel (2008), the SWOT analysis consists of internal and external analysis of the company. Internal analysis considers the strengths and weaknesses of the company. External analysis includes opportunities and threats to the organization. The relationship between these factors is seen in Figure 1.7.



Figure 1.7 "SWOT Analysis" (Graham H., 2008)

#### 1.4.3 Marketing Mix 5P's

Kotler (2012) defines the marketing mix as a group of marketing tools designed to solve marketing problems. Langford (2001), in his book about strategic management, argues that the marketing mix in the service area consists of 5 constituents. There are: Product, Price, Promotion, Place, People.

#### > Product (Service)

In the construction area, we rather talk about the service than about the product. The problem is that the service is intangible and hard to standardize. (Tomek A., 2009). The task of the

marketer is to establish the function of the service and also to determine what benefits our service will bring to the client, in contrast to the competitors. This can be associated with price, time, quality, warranty, etc. (Langford D., 2001).

#### > Price

It is very problematic to set the price for the service before it is completed. (Tomek A., 2009). According to the Langford D. (2001), the price of the service is the main competitive advantage of the company among its competitors. It is necessary to establish the lowest possible price for the service without reducing its quality.

#### > Promotion

Since the services are not material, it is very difficult to represent them in contrast to any other tangible commodity, for example, machines, TVs, etc. The goal of promotion is to create a client's idea of the nature of the service. (Tomek A., 2009).

#### > Place

Groups of people engaged in design, provide their services to customers in their offices, client offices, or in the offices of the contractor. The website of the company should be given special attention, since the website is the face of any construction company. (Langford D., 2001).

#### > People

Company managers, architects, suppliers and other participants, which are in contact with the client, should be qualified specialists in this field and also take the necessary courses and training. (Langford D., 2001). Project success and quality of service depend on their interaction. (Tomek A., 2009).

#### 1.5 Strategic marketing planning

Strategic marketing planning involves choosing the core strategy, creating a competitive advantage and implementing the chosen strategy. It helps to determine what the business is doing now, what is happening in the environment and what should the business be doing. (Graham H., 2008).

#### 1.5.1 Business purpose or mission

First of all, it is necessary to determine the mission and vision of the organization in order to formulate a strategy. According to the MacDonald (2017), the goal of mission and vision is to summarize a company's business strategy in a form that can be easily understood by stakeholders. It is important to understand the difference between a mission and a vision.

The *mission* expresses the meaning of the organization's existence. It focuses on the present and describes what the company wants to do now. In contrast to the mission, which focuses on the present, the *vision* of the organization is to determine the future of the organization. It expresses what a company wants to be in the future. Sometimes people mistakenly think mission is the same as vision. (Beougher T., 2004).

#### 1.5.2 Core strategy

The main strategy is based on the analysis of the company, customers and competitors. The analysis is necessary to identify potential opportunities and threats to the company, as well as to determine the strengths and weaknesses of the organization. The correlation of strengths and weaknesses with opportunities and threats helps to formulate a strategy correctly, which is a great advantage of SWOT analysis. (Graham H., 2008). The ratio of these four components is shown in Figure 1.8.



Figure 1.8 "SWOT strategic implications" (Graham H., 2008)

Based on the SWOT analysis, the following types of strategies can be made (Wikipedie, 2017):

**SO** (maxi - maxi) strategy is trying to use as many strengths as possible to exploit opportunities.

WO (mini-maxi) strategy focuses on overcoming weaknesses to take advantage of opportunities.

**ST** (maxi-mini) strategy uses strengths to eliminate threats.

WT (mini-mini) strategy tries to overcome weaknesses and focuses on minimizing negative effects.

#### 1.5.3 Creating competitive advantage

Porter (1998), in his book "Competitive Strategy" identifies three main types of strategies: overall cost leadership, differentiation and focus. Each of these strategies can be applied alone or in combination. Competitive strategy helps to create a stable position, to get ahead of competitors and create opposition to the five competitive forces. (Graham H., 2008). The differences between the three types of strategies are shown schematically in Figure 1.2.

STRATEGIC ADVANTAGE

# Broad (Industry wide) Narrow (Market Segment) Product Uniqueness Low Cost OVERALL COST LEADERSHIP FOCUS

Figure 1.9 "Types of competitive strategies" (Porter, 1998)

#### Overall cost leadership

According to Kotler (2012), this variant of the strategy is characterized by constant monitoring and cost reduction on production and distribution, in order to establish lower prices than competitors and expand its market share. Cost control is in the hands of management. In spite of the fact that the goal of this strategy is to reduce costs, it is important to think about the quality, service level and other important areas. (Porter, 1998).

#### **Differentiation**

The strategy of differentiation involves the creation of a unique product or service in the industry. The uniqueness of a product or service can be in design, production technology, functionality, customer service, dealer network or other parameters. (Porter, 1998).

It is a very difficult task to distinguish the service from the general mass. The buyer should receive from us more than he expects. It is very important to provide the buyer with a better service than competitors. Organizations that regularly develop and improve their services have an advantage over competitors, but only temporary, as all innovations are soon copied by competitors. (Kotler P., 2012). If the level of service is lower than the client's expectations, then the client can move to competitors. But, if the service meets or even exceeds the client's expectations, the next time the client will contact our company again. (Langford D., 2001).

#### **Focus**

This type of strategy is determined by focusing on a certain group of buyers, the type of product or for example the geographical segment of the market. (Porter M., 1998). According to Kotler (2012), focus strategy focuses on a narrow goal with greater efficiency or productivity, rather than on the whole industry.

As shown in Figure 1.10, each of these strategies has its own advantages, disadvantages and risks.

	Advantages	Disadvantages	Risks	
	Protect the company	Requires a high market share	Destabilization by technological	
hip	from five forces of	(= large start-up loss);	changes;	
ers	competition	Sometimes needs to change the	Copying experience or investing in	
sad		product itself to simplify its	the latest equipment by newcomers;	
Cost Leadership		production;	Incapability to react to necessary	
		Regularly monitoring	changes.	
		technological improvements.		
	Creates a strong	Unique product excludes high	Buyers may prefer to save money	
Differentiation	opposition to the five	market share;	instead of buying a unique product;	
tia	competitive forces	• Large costs on product research	Copying a product by other	
ren		and development, high-quality	companies;	
iffe		material or hard work with		
D		clients;		

•		• Too high price for consumers.	The demand of buyers for unique	
			products may decrease, which makes	
			its production ineffective.	
	Higher profit than	The choice between the level of	Competitors can enter an even	
S	the industry average;	profitability and volume of sales	narrower segment of the target market;	
Focus	<ul> <li>Helps to achieve</li> </ul>		A high difference in costs compared	
¥	differentiation or to		to competitors	
	reduce costs.			

Figure 1.10 "Advantages, disadvantages and risks of strategies" (Own processing according to Porter, 1998)

#### 1.5.4 Strategy implementation

The last step in strategic marketing planning is the implementation of the chosen strategy. This can be done with the help of a marketing mix, organization and control. (Graham H., 2008).

#### Marketing mix

All five elements of the marketing mix (product, price, promotion, place, people) should be designed and reviewed in accordance with the chosen strategy. Designing an element in isolation from strategy can contribute to contradicting each other. (Graham H., 2008).

#### **Organization**

The implementation, as well as the effectiveness of the strategy directly depends on the marketing plan and marketing department. There are two forms of organization: functional organization and product (or brand) management. (Graham H., 2008).

A functional organization is a kind of organization that consists of specialists in the different marketing activities reporting to a marketing manager. The goals of functional organization are: sales management, advertising and promotion management, market research and new product development. Product (or brand) management means that a product manager is responsible for all the marketing activities of a particular product. (Graham H., 2008).

#### Control

Monitoring and controlling have an important role in the marketing implementation. The first way of controlling is a market performance, which measures sales, market share, customer attitudes and

loyalty. Another way of controlling is a financial performance, which is measured through monitoring of product contribution relative to the resources employed to achieve it. (Graham H., 2008).

#### 1.6 Summarizing

Competition is a rivalry between competitors, who are interested in achieving the same goals. It is closely linked to markets that are temporary and based on the needs of consumers, as well as with an industry that is relatively stable and based on production technologies.

Marketing is an integral part of any organization and represents a process of meeting customer needs better than competitors to increase profits. The company should be focused on its customers and look at the service from the perspective of the client, but at the same time do not forget about their employees, because quality of service primarily depends on them.

There are many methods for assessing the competitiveness of an organization. One of the most popular methods is the SWOT analysis, which is based on the analysis of the internal and external environment, and also determines the strengths and weaknesses of the organization, as well as opportunities and threats. Also, one of the most famous methods are 5 P's and Porter's matrix.

Strategic marketing planning involves choosing the core strategy based on SWOT analysis; creating a competitive advantage which helps to create a stable position, to get ahead of competitors and create opposition to the five competitive forces; and implementing the chosen strategy with the help of a marketing mix, organization and control.

# 2. ANALYSIS OF THE COMPETITIVENESS OF THE CONSTRUCTION DESIGN COMPANY PUDIS

#### 2.1 Brief description of the activities and management structure of PUDIS

It is necessary to learn as much information about the company as possible. This information will give us an opportunity to analyze the present situation in detail and understand the company position in relation to competitors. Based on the results obtained, it will be possible to propose a method for improving the competitiveness of the organization.

#### 2.1.1 Company basic data

Name of the company: PUDIS a.s.

Date of registration: 1.05.1992

Legal form: Joint-stock company

Basic capital: 24 914 000 CZK

Main scope of business: Design works in construction

Other scopes of business:

- Carrying out surveying activities
- Assessment of environmental impacts
- Geological work
- Construction, modification and removal
- Performing blasting and fireworks
   (Ministerstvo spravedlnosti ČR, 2015a)

# History of the company

The PUDIS joint-stock company has a fifty-year history and builds on the activities of the Project Institute of Transport and Civil Engineering (**P**rojektový Ústav **D**opravních a Inženýrských **S**taveb), which was founded in 1966. Then, in 1992, the Project Institute of Transport and Civil Engineering was privatized as a joint-stock company. For the next seven years, the company existed under its historical name with the attribute a.s. The abbreviation "PUDIS" became the official name of the company in February 1999. (PUDIS, 2017a).



Picture 2.1 "The logo of PUDIS company" (PUDIS, 2017)

#### The main achievements of the company

- The "Millennium Construction" Charles Bridge. PUDIS was signed under the project of as a general contractor.
- "Building of the 20th Century" Prague Metro and the Nusel Bridge. PUDIS was the general designer of the underground tramway in the Nusel Bridge.
- "Transport Construction of the Year 2005" Mrázovka Tunnel. The company has been involved in the production of conceptual variants, preparation and implementation and has also become a general designer.
   (PUDIS, 2017a)

#### Certification

PUDIS has established and maintains quality management systems, environment and work safety according to the requirements of the ČSN EN ISO 9001: 2009, ČSN EN ISO 14001: 2004 and ČSN OHSAS 18001: 2008 standards. (PUDIS, 2017b).

#### 2.1.2 Organizational structure

The organization has a matrix organizational structure. The vertical breakdown is based on the linear organizational structure and the horizontal breakdown corresponds to the project and process teams. As shown in Figure 2.1, the organization's management is divided into strategic and operational management. The company is strategically managed by the Board of Directors. The supervisory function has a supervisory board. Operative management is organized by departments of general manager, business department, production department and economic department. The production department is further divided into individual working groups according to their professional orientation. (Výroční zpráva a.s. PUDIS, 2015).

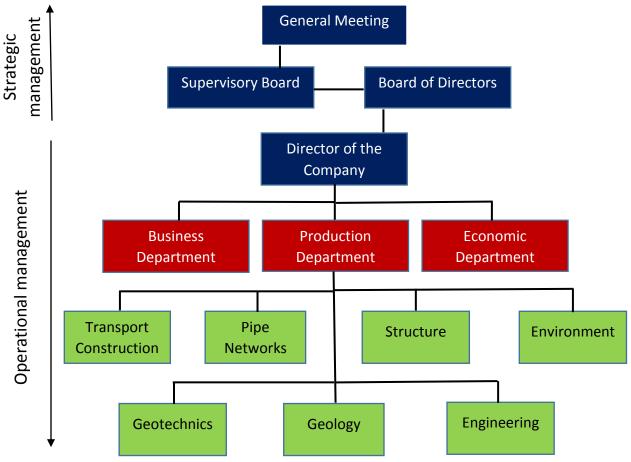


Figure 2.1 "Organizational structure of PUDIS" (Výroční zpráva a.s. PUDIS, 2015)

#### 2.1.3 Characteristics of the company's competitors

For further comparison two companies were selected, INFRAM and SATRA. The main criteria for choosing competitors was that they should have the same specialization and business scope and have approximately the same number of employees. Table 2.2 clearly shows the number of employees in 2015 of each of the three companies.

2015	PUDIS a.s.	INFRAM a.s.	SATRA s.r.o.
Number of employees	63	62	49

Figure 2.2 "Number of employees in the companies"

#### **INFRAM**

The joint-stock company INFRAM was established in 1996 and has a twenty-year tradition. (INFRAM, 2017).

Main scope of business: Design works in construction

#### Other scopes of business:

- Accounting consultants, bookkeeping
- Performance of surveying activities
- Providing health and safety services at work
- Construction, modification and removal (Ministerstvo spravedlnosti ČR, 2015b)



Picture 2.2 "The logo of INFRAM company" (INFRAM, 2017)

INFRAM has established and maintained a quality management system according to the requirements of ČSN EN ISO 9001: 2009, a health and safety management system certificate according to the requirements of ČSN OHSAS 18001: 2008. INFRAM has also implemented and maintained an environmental management system according to ČSN EN ISO 14001: 2005. (INFRAM, 2017).

The company is an active member of Czech Association of Consulting Engineers (full member of EFCA and FIDIC), International Concrete Repair Institute based in the USA, Union of Building Entrepreneurs in the Czech Republic, Infrastructure Development Association and others. (INFRAM, 2017).

#### **SATRA**

SATRA is a limited liability company founded in 1991. (SATRA, 2017a). In 2014, the company entered the TOP-100 of the most reliable companies in the Czech Republic. (SATRA, 2017b).

Main scope of business: Design works in construction Other scopes of business:

- Construction, modification and removal
- Geological work
- Providing health and safety services at work



Picture 2.3 "The logo of SATRA company" (SATRA, 2017)

(Ministerstvo spravedlnosti ČR, 2015c)

The company has a QESMS policy that focuses on quality, environmental protection and safe working conditions. The aim of the company is to satisfy customer requirements, especially regarding quality and delivery time. The policy of QESMS helps the company INFRAM to constantly improve its activities. In addition, the company consists of qualified and certified professionals with approximately twenty years of experience, and also works only with trusted contractors. (SATRA, 2017c).

The company, as well as PUDIS and INFRAM, holds certificates according to ČSN EN ISO 9001, ČSN EN ISO 14001 and ČSN OHSAS 18001. Moreover, the company has a certificate of the National Security Authority that allows individual specialists of the company to work with confidential information. (SATRA, 2017b).

## 2.2 Analysis of the financial situation of "PUDIS"

This chapter presents the results of studies of the financial situation of the company over the past five years. Vertical, horizontal and comparative data analysis will be for 2011-2015, as data for 2016 are currently unavailable.

#### 2.2.1 Horizontal Analysis

Horizontal analysis is a financial statement analysis technique in which absolute change and percentage change in value of each line item of a financial statement is calculated over one or more accounting periods. Horizontal analysis may be performed on any financial statement i.e. balance sheet, income statement, cash flow statement and statement of changes in owners' equity. (CzechTrade, 2017).

The absolute change helps determine how many units the item has changed over time. It can be calculated using the following formula (CzechTrade, 2017):

Absolute change = 
$$index_t - index_{t-1}$$

The percentage change helps determine how many percent the item has changed over time. It can be calculated using the following formula (CzechTrade, 2017):

$$Percentage\ change = \frac{Absolute\ change}{index_{t-1}}\ x\ 100\%$$

#### Horizontal Analysis of Assets

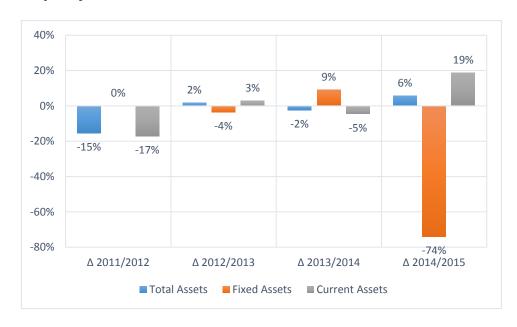


Figure 2.3 "Horizontal Analysis of Assets [%]"

#### **Total Assets**

Based on the above Figure 2.4, it can be stated that the quantity of total assets declined significantly in 2012 and then two years later it started to grow again. In 2012 and 2013 there were no significant deviations.

#### **Fixed Assets**

A significant deviation in fixed assets can be observed only in the last year. In 2015, fixed assets decreased by as much as 74 percent compared to 2014. According to the annual report (2015), the reason for this is splitting the property for the new residence Na Palouku s.r.o.

#### **Current Assets**

On the contrary, current assets increased last year. Their increase was 19 percent compared to 2014. According to the balance sheet (2015), this is due to the fact that the amount of short-term and long-term receivables and inventories decreased during this year. At the same time, short-term financial assets have increased, which is positive for the company, as it is known that money is the most liquid item in the balance sheet.

#### Horizontal Analysis of Liabilities

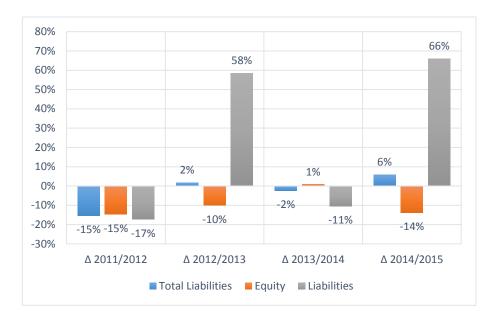


Figure 2.4 "Horizontal Analysis of Liabilities [%]"

#### **Total Liabilities**

Based on the percentage changes shown in Figure 2.6, a significant reduction in total liabilities can be observed in 2012. Their decrease was 15% compared to 2011. In 2013 and 2014, significant changes were not registered. In the last year, the volume of total liabilities increased by 6%.

#### **Equity**

It was also noticed that equity is constantly falling. This is due to the fact that in 2012 and 2013 the company had losses and had to be covered by profit of previous years (see Figure 2.7). In 2014, the company covered the loss in 2013 and reached a small, but positive economic result. The decrease in equity was facilitated by the appearance of a new residence Na Palouku and the decision of the general meeting on the payment of dividends this year.

#### Liabilities

It is possible to observe a decrease in liabilities in 2012. The reason for this is a reduction in liabilities to shareholders, employees, insurers and the state, and in 2014 a reduction in accounts payable. On the contrary, in 2013, we can see the growth of liabilities due to short-term payables. In 2014, we can see the enormous growth of liabilities, which is caused by an increase in short-term liabilities from business relationships, liabilities to partners and insurance companies.

<b>Balance Sheet</b>	2011	2012	2013	2014	2015
<b>Total Liabilities</b>	75507	63912	64981	63461	67178
Equity	62247	53062	47716	48092	41453
Registered capital	24914	24914	24914	24914	24914
Funds from profit	5168	5153	5153	5027	5027
Reserves	0	0	0	0	0
Profit / loss of previous years	31298	32000	22996	17648	2508
Profit / loss of the current period	867	-9005	-5347	503	9004
Liabilities	13114	10841	17175	15368	25501
Reserves	0	0	242	313	388
Long-term liabilities	0	0	0	429	502
Short-term liabilities	13114	10841	16933	14626	24611
Bank Loans	0	0	0	0	0
Accruals	146	9	90	1	224

Figure 2.5 "Total Liabilities During 2011-2015 Years [thous. CZK]"

#### 2.2.2 Vertical Analysis

The essence of vertical analysis is that the total amount of the enterprise's assets or liabilities (analysis of the Balance Sheet) or sales (analysis of the Profit and Loss Statement) is taken for one hundred percent, and each article of the financial report is represented as a percentage of the whole value. In addition, this method can track changes over time, as well as for analysis with existing competitors. (CzechTrade, 2017).

Simply stated, the using of vertical analysis helps determine the percentage of individual elements in the whole structure. It can be calculated using the following formula (CzechTrade, 2017):

$$Percent share = \frac{index}{total (assets, liabilities or sales)} \times 100\%$$

The disadvantage of vertical as well as horizontal analysis is that the analysis only states the changes, but does not indicate what caused these changes. The analysis only allows to orient in the given enterprise and to identify problem areas, but with the availability of a qualitative annual it is possible to determine what caused the significant changes. (CzechTrade, 2017).

#### Vertical Analysis of Assets

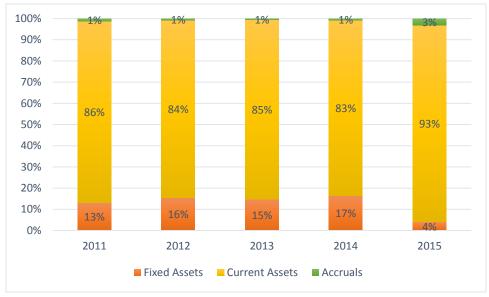


Figure 2.6 "Development and percentage distribution of Assets [%]"

#### **Current Assets**

From the above Figure 2.8, it can be seen that the current assets have the largest share in the structure. For the years 2011-2014, the value is approximately the same and amounts to an average of 84 %. In the last year, there is an increase to 93 %.

#### **Fixed Assets**

The value of fixed assets in 2011-2014 is approximately the same and is around 15%. Their share in the structure is irrelevant. In the last year, their share was only 4%.

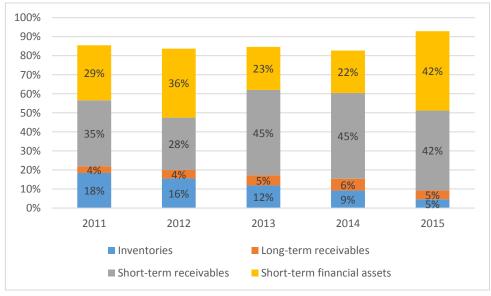


Figure 2.7 "Development and proportional distribution of Current Assets [%]"

Figure 2.9 shows that every year the number of inventories decreases, which is positive for the company, because the resources in inventories are considered to be the least liquid. Short-term receivables have the largest share. Thus, it has a negative impact on the company, since unpaid debts negatively affect the company's liquidity. Long-term receivables constitute a small part of the structure, which is positive for the company. Also positive is the fact that last year short-term financial assets increased. Short-term financial assets are the most liquid element in the structure.

#### Vertical Analysis of Liabilities

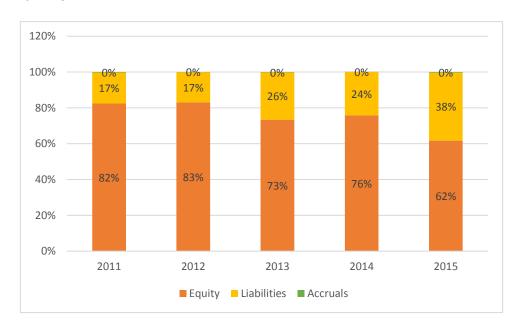


Figure 2.8 "Development and percentage distribution of equity [%]"

The above Figure 2.10 shows that the largest share belongs to equity. This is a positive fact for the company, since it is known that equity is more expensive than foreign capital. Foreign capital is cheaper because interest rates are the costs, but dividends paid out of equity are unallowable costs. Although the share of equity is more than foreign, it should be noted that the share of foreign capital in comparison with their own is growing. The growth of foreign capital has a negative effect on the company.

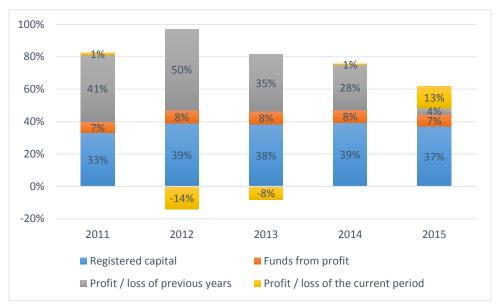


Figure 2.9 "The ratio of short-term and long-term liabilities [%]"

During 2011-2014, the company has a significant share of profit of previous years, which is very good for the company, because the profit of previous years is the highest item of equity. From the Figure 2.11 we can see that the company had to cover the losses in 2012 and 2013. In 2014, after the loss has been settled, the company had a small share of profit of the current period. Last year, the company had a decent profit of the current period. A small share of retained earnings tells us that the company had to pay dividends this year.

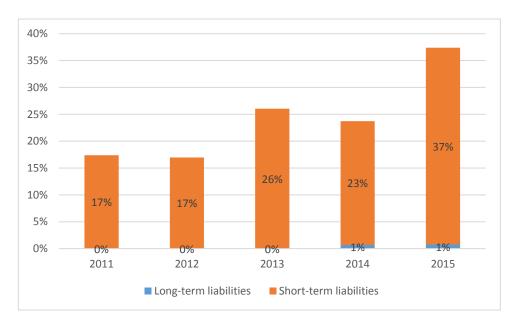


Figure 2.10 "The ratio of short-term and long-term liabilities [%]"

A significant share of the company's structure has short-term liabilities (see Figure 2.12). This may mean that the company postpones the repayment of its liabilities to a later date and instead uses the money for investment. Long-term liabilities have an irrelevant share. During last two years, their share has risen to 1%. By 2014, their share did not exceed one percent.

# 2.2.3 Cost and revenues analyses

# Cost Analysis

As it is shown in Figure 2.13, most of the costs, around 97%, consist of personnel costs (salary costs, payment to owners and shareholders of the company, health insurance costs, social security costs) and consumption costs (consumption of materials, energy, services). The remaining costs are an insignificant part of the company's cost structure.

In 2012 and 2013, the company had two years of loss-making and had to reduce investment and personnel costs, which we can see in Figure 2.13.

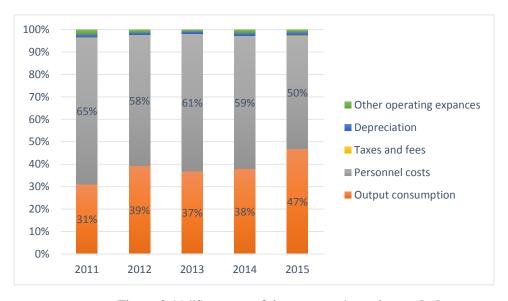


Figure 2.11 "Structure of the company's total costs [%]"

# Revenues Analysis

Figure 2.14 shows that most of the company's revenues are revenues from own products and services. Revenues from sale of fixed assets and material were significant only during the last year. Total revenues during the first two years were approximately the same, but the following two years showed a significant decline. In 2015, the company had the largest revenues for the reporting period.

PUDIS a.s.	2011	2012	2013	2014	2015
Revenues from own products and services	71492	73455	63473	67466	91734
Revenues from sale of fixed assets and material	11	39	1	432	4820
<b>Total Revenues</b>	71503	73494	63474	67898	96554

Figure 2.12 "Structure of the company's total sales [thous. CZK]"

# 2.3 Comparison analysis with competitors

This chapter deals with a comparative analysis of PUDIS with its two competitors working in the same area, INFRAM and SATRA company. The comparison between these companies will be mainly based on the result of the ordinary business, profitability, liquidity and the success of procurement.

#### 2.3.1 Indicator of the profit / loss from ordinary activities

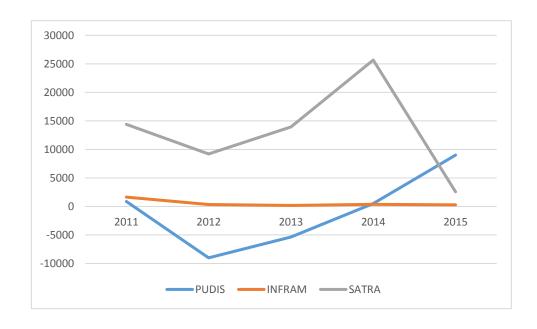


Figure 2.13 "Development of profit / loss from ordinary activities [thous. CZK]"

#### **INFRAM**

As shown in Figure 2.15, the profit from the ordinary activities of INFRAM decreased in 2012 compared to 2011. During the 2012-2015 period, significant changes in profits were not detected. It can also be noted that, during the last five years, the company has not made any losses compared to PUDIS.

#### **SATRA**

Based on the Figure 2.15, SATRA has a higher profit than Pudis. The company also had a lower profit in 2012 than competitors, but unlike PUDIS, the company did not make a loss. Only during the last year, we can observe a significant decline in income. This decrease is related to the creation of accounting amendments for short- and long-term receivables. The amount of the allowance reflects the risk arising from the possible non-recovery of the receivables.

#### **PUDIS**

PUDIS, unlike its competitors, was in loss for two years, but after 2013 we can see the growth of the profit from ordinary activities, and we can see that in 2015 the profit of the company exceeded the value of the result not only of INFRAM but also of SATRA company.

#### 2.3.2 Liquidity indicator

In practice, there are following liquidity indicators: Current Ratio (CR), Quick Asset Ratio (QAR) and Cash Position Ratio (CPR). We will analyze only Cash Position Ratio as it is considered that this liquidity indicator is the strictest. CPR measures the company's ability to pay the debts according to the most liquid assets. (Jadviščák D., 2011).

$$Cash\ Position\ Ratio = \frac{Financial\ Assets}{Current\ Liabilities}$$

As shown above, Cash Position Ratio is expressed as the ratio of financial assets and current liabilities. Short-term financial assets include cash, bank accounts and short-term financial assets. The recommended value for a financially successful company should be between 0.2 and 0.5. (Jadviščák D., 2011).

<b>Cash Position Ratio</b>	2011	2012	2013	2014	2015
PUDIS a.s.	1,67	2,14	0,87	0,97	1,14
INFRAM a.s.	0,64	0,88	0,74	0,73	0,59
SATRA s.r.o.	0,48	0,96	0,61	0,56	0,68

Figure 2.14 "Development of liquidity indicators [-]"

All three companies have the value of CPR which exceeds the recommended value. The value above the level of this range means inefficiency of finances that could be more appropriately invested. CPR is an important indicator primarily for creditors. Compared to competitors, PUDIS has the highest liquidity ratio, which means that the company has a less healthy financial position than its competitors.

# 2.3.3 Rentability indicator

Rentability indicators help determine how effective our business is. In practice, there are following rentability indicators: Return on Assets (ROA), Return on Capital Employed (ROCE), Return on Sales (ROS) and Return on Equity (ROE). We will analyze only Return on Sales because this indicator is very important for comparison with competitors. (Jadviščák D., 2011).

ROS indicates how much CZK of the net profit is attributable to CZK of sales. It can be calculated using the following formula (Jadviščák D., 2011):

Return On Sales = 
$$\frac{EBIT}{Sales} \times 100\%$$

For ROS we use EBIT (Earnings Before Interest and Taxes). This indicator is highly dependent on the industry and should be in the range of about 2% to 50%. Required value should be above 10%. (Jadviščák D., 2011).

Return on Sales	2011	2012	2013	2014	2015
PUDIS a.s.	2%	-12%	-9%	0%	10%
INFRAM a.s.	2%	1%	1%	1%	0%
SATRA a.s.	15%	10%	16%	19%	2%

Figure 2.15 "Development of rentability indicators [%]"

Figure 2.17 shows that the company PUDIS has a 10% ROS only during the last year. In previous years, the ROS value is lower than the required value. INFRAM company also has low ROS indicators. Apart from the last year, only SATRA has the indicator above 10%. According to Fincentrum a. s. (2017), the low value of the indicator means that the prices of products or services are relatively low.

## 2.3.4 Success in public procurement

Success in public procurement is important for every construction company. To get a public contract is even more important for a company that works in civil engineering area, because these structures are mainly financed from state budgets.

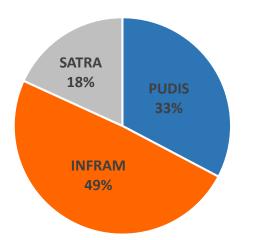


Figure 2.16 "Public won contracts in accordance with the number [%]"

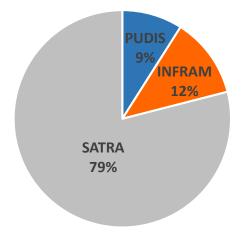


Figure 2.17 "Public won contracts in accordance with the price [%]"

From the Public Procurement Information System (2017), the success of the companies in the procurement during 2011-2016 years was found. Figure 2.18 shows that INFRAM has the largest share relative to the number of public contracts. SATRA has the smallest number of won contracts, but that does not mean the company earned less than its competitors.

As shown in Figure 2.19, the share of public won contracts relative to the price of SATRA company is much higher than that of its competitors. This is largely due to the work on the Blanka tunnel project, which cost a lot of money. PUDIS, in comparison with their competitors, has the lowest share in public won contracts relative to the price.

Figure 2.20 shows the number of contracts and their total price divided by types of limit (above threshold procurement and below threshold procurement) during 2011 -2016 years.

	PUDIS		INFRAM		SATRA	
Type of limit	Number	Price	Number	Price	Number	Price
Above procurement	7	55 249 153	16	93 348 368	8	687 753 777
Below procurement	11	23 497 600	11	14 005 130	2	2 095 390
Total:	18	78 746 753	27	107 353 498	10	689 849 167

Figure 2.18 "Number and price of public contracts by type of limit"

# 2.4 PEST analysis

PEST analysis is an analytical technique used to strategically analyze the external environment of the organization. PEST analysis consists of analysis of political, economic, social and technological factors.

#### **2.4.1 Political factors**

The company's activities are affected by countless differently oriented legislative requirements. 2014 brought a number of important legislative changes, which directly affected the company's activities. First of all, the new Civil Code came into force, replacing part of the Commercial Code or the law on business corporations. In the second half of 2014 there were also changes in the law on accelerating the construction of transport infrastructure, which is necessary to ensure financial activities. (Annual report PUDIS a.s., 2014). In 2015, legislative changes included the interpretation methodology for obtaining property rights, that is, for the purchase of land intended for the construction of transport infrastructure. (Annual report PUDIS a.s., 2015).

#### 2.4.2 Economic factors

The Czech construction industry is currently not in a good shape. After two years of growth (2014 and 2015), the annual index is again in negative numbers. During the period from January to August, Czech construction in relation to last year fell 10.2% in its output, of which the contribution of civil engineering construction was negative 15.6%. Compared to the same period of the previous year, the total value of the contracts awarded decreased by 37.9% from the beginning of the year to the end of August 2016, of which 42.1% are in civil engineering. (Matyáš V., 2016).

The key factor in the unpreparedness of public procurement, particularly in the field of transport infrastructure, is complicated permitting processes, including the Environmental Impact Assessment (EIA) process. The budget of the State Fund for Transport Infrastructure is very positive for the coming years (2017 - 82.1 billion CZK, 2018 - 96.3 billion CZK, 2019 - 104.6 billion CZK). (Matyáš V., 2016).

#### **2.4.3 Social factors**

The main social factor that affects the company is the availability of skilled labor. The labor market in 2015 has changed significantly. With economic growth, the demand for personnel exceeds supply in the labor market, where there is a shortage of candidates, especially professional and competent workers. (Metrostav, 2015). The shortage of labor forces the company not only to increase wages, but to offer the present and future employees various business advantages and benefits. It is expected that wages can increase by four per cent annually. (Ladislav Kučera, 2017).

# 2.4.4 Technological factors

At the current pace of development and technological obsolescence, investment in this area is inevitable. According to annual report, the PUDIS company does not carry out any research or development. Construction companies need to invest a significant amount of investment in various software and programs that facilitate and accelerate the activities of the entire company.

# 2.5 SWOT analysis

Based on the results of our analyses and available annual reports, we can create a SWOT analysis that will help us identify not only the strengths and weaknesses of the company's internal environment, but also potential threats from the external environment and new opportunities for company development.

Strengths	Opportunities
Long-term experience of the company	New future projects
Certification	Collaboration with partners
• Growth in profit	Positive state budget
Qualified workers	
Fast response to changes	
Weaknesses	Threats
Absence of mission and vision	Legislative changes
<ul> <li>Inefficiency of finances</li> </ul>	Competition on the market
<ul> <li>Two years of loss</li> </ul>	Complexity of obtaining building
<ul> <li>Success in public contracts</li> </ul>	permissions
	Market instability

Figure 2.19 "SWOT – analysis of PUDIS"

#### 2.5.1 Strengths

# • Long-term experience of the company

In the spring of 2016, the company celebrated its 50th anniversary. During this time the company participated in the development of a large number of projects and thus gained a good reputation on the market.

#### • Certification

PUDIS has certificates confirming the introduction and maintenance of a quality management system, environment and work safety according to the requirements of the ČSN EN ISO 9001: 2009, ČSN EN ISO 14001: 2004 and ČSN OHSAS 18001: 2008 standards.

#### • Growth in profit

From the analysis of profit from ordinary activity, it can be seen that after two years of loss the company is in good condition and year after year the profit is growing.

#### • Qualified workers

Professionalism and quality of the company's services is directly dependent on the quality of the employees working in the company. PUDIS builds a team of independent, qualified and motivated specialists.

#### Fast response to changes

Along with years of losses, the company began to make changes accordingly. The company intensively reduced investment and operating costs. The company also reduced the number of employees in both manufacturing and service sectors in order to reduce costs.

#### 2.5.2 Weaknesses

#### • Absence of mission and vision

It is important to understand the meaning of the company's existence and to know where this business is going and what it wants to achieve. According to e-Magazine "The World of Successful" (2017), starting a business without a vision and meaning of its existence is like going for a trip and not knowing where.

# • Inefficiency of finances

According to analysis of liquidity indicator, PUDIS's liquidity value exceeds the recommended value. This means that the company is using its finances inefficiently and should invest more appropriately.

#### • Two years of loss

The low demand, market prices and complexity of obtaining building permissions affected the whole construction sector. Due to these causes, PUDIS noted two years of loss-making.

#### • Success in public contracts

From the analysis of success in public procurement, it has been found that over the past six years, the company has received less public contracts than its competitor INFRAM. Certainly, the company has received more orders than SATRA, but from the point of view of the public procurement price, PUDIS company is in the last place.

#### 2.5.3 Opportunities

# • New future projects

PUDIS would like to participate in the preparation of the remaining part of the city circuit, which will soon begin. The company would also like to participate in the preparation of Metro D, and work on projects designed to eliminate the noise pollution generated by urban traffic.

## • Collaboration with partners

Currently, many companies are working on projects together with partners. PUDIS together with partners PRAGOPROJEKT a.s., AF-CITYPLAN s.r.o. and others are involved in the development of the R35 highway project and also on other projects.

#### Positive state budget

It is known that in the construction industry most structures and constructions are financed from the state budget. The budget of the State Fund for Transport Infrastructure is very positively set for the following years (2017 - 82.1 billion CZK, 2018 - 96.3 billion CZK, 2019 - 104.6 billion CZK).

#### 2.5.4 Threats

#### • Legislative changes

Construction is characterized by constant changes in legislation. In 2014, the new Civil Code entered into force. Changes have also been made to the law on speeding up the construction of transport infrastructure, which is essential for the property-related activities provided. In 2015, there was a fundamental change in the interpretation of the methodology for property preparation.

#### Competition on the market

Traffic engineering is characterized by strong competition. The main problem is that large companies are already stabilized on the market and they are main suppliers in this field. Such companies are: HOCHTIEF, EUROVIA, METROSTAV, STRABAG and others.

#### • Complexity of obtaining building permits

The key factor in the unpredictability of public procurement, particularly in the field of transport infrastructure, is complicated permitting processes, including the Environmental Impact Assessment (EIA) process. The World Bank of the Czech Republic has now confirmed that in the Czech Republic the process of obtaining building permits is one of the slowest in the world.

#### • Market instability

After two years of growth (2014 and 2015), the year-on-year index again moves in negative numbers. In the months January to August the performance of civil engineering works dropped by 15.6 %. For civil engineering, compared with the same period of the previous year, the total value of orders awarded decreased by 42.1 % from the beginning of the year to the end of August 2016.

# 2. 6 Summarizing

PUDIS is a joint-stock company, which has been active on the construction market for fifty years. The decisive scope of business is design works in construction. The company is also developing in other areas of its activities and it also has various certificates. The main company's competitors are INFRAM and SATRA. All three companies have the same business scope and have approximately the same number of employees.

Based on the results of a horizontal analysis, it was found that during the last year there was a significant reduction in fixed assets, which is connected with splitting the property for the new residence Na Palouku s.r.o. The increase in short-term financial assets is positive for the company, as it is known that money is the most liquid item in the balance sheet. The reason for the fall in equity is two years of losses, which the company had to recover from.

In accordance with a vertical analysis, it was found that the amount of inventory decreases, which is positive for the company, because the resources in inventory are considered to be the least

liquid. Another positive fact is a small share of long-term receivables and increasing short-term financial assets. Short-term receivables have negative impact on the company, since unpaid debts negatively affect the company's liquidity. Largest share belongs to Owner's Equity, which is also positive, as it is known, that Owner's Equity is more expensive than foreign capital.

Most of the company's costs belong to the costs of production personnel costs (salary, health insurance etc.) and consumption costs (services, energy). After two years of loss-making PUDIS had to reduce investment and personnel costs. As for sales, last year PUDIS had the largest sales for the reporting period.

Compared to competitors, PUDIS was in loss for two years, but after 2013 we can see the growth of the profit. In 2015 the profit of the company exceeded the value of the competitors' result. An increase in the liquidity indicator means inefficient finances that could be more appropriately invested. The liquidity indicator corresponds to the required value only in the last year. PUDIS, in comparison with their competitors, has the lowest share in public won contracts relative to the price. This is one of the most negative factors, as it is known that the structures in civil engineering area are mainly financed from state budgets.

According to PEST analysis, environmental factors were identified that have a direct impact on the firm. The company's activities are affected by countless differently oriented legislative requirements. As for economic factors, the Czech construction industry is currently not in a good shape. After two years of growth (2014 and 2015), the annual index is again in negative numbers. It is also necessary to mention, the demand for personnel exceeds supply in the labor market, where there is a shortage of candidates, especially professional and competent workers.

# 3. MEASURES TO IMPROVE COMPANY'S COMPETITIVENESS

Based on the results of the analysis, a strategic plan was drawn up for 5 years. The plan includes the company's overall strategy and strategic plans. The plan does not deal with the details and plans of the widely-aggregated activities that will be held during this time.

#### **Strategy**

Based on the results of the SWOT analysis, I can recommend the application of the mini - maxi strategy, which aims at overcoming the weaknesses so that the opportunities can be exploited.

#### **Strategic intentions:**

#### 1. Creating a mission and vision of the company

Mission and vision adds value to the existence of an organization, makes its staff more purposeful and also indicates where the business is going.

## 2. Introducing the perfect tender system

It is known that the main factor for the choice of supplier is the bid price. A better bidding system can be introduced as a proposal to improve company's competitiveness. I would recommend implementing and investing into calculation software, as well as into training employees who are directly involved in the preparation of a tender.

#### 3. Improving operational efficiency

Reach moderate revenue and profit before tax according to the below table.

	2015	2020
Sales	88 082 000 CZK	100 000 CZK
Profit before taxes	9 128 000 CZK	12 000 CZK

#### 4. Improvement qualifications of workers

Education and development of knowledge and skills of all groups of employees.

#### 5. Enhance the image of the business

Participation of corporate representatives in public events (exhibitions, seminars, membership in business associations, universities councils), providing information on the completion of projects, employees, social and environmental activities.

# **CONCLUSION**

The thesis deals with the issue to increase competitiveness of the company. Its aim is to analyze the current state of the company and propose an optimal solution to increase competitiveness of the chosen company, which is PUDIS a.s.

PUDIS is a joint-stock company, which has been active on the construction market for fifty years. The decisive scope of business is design works in construction. The company is also developing in other areas of its activities and it also has various certificates. The main company's competitors are INFRAM and SATRA. All three companies have the same business scope and have approximately the same number of employees.

The first chapter is devoted to the theoretical foundations regarding competitiveness in construction area. It includes the basic concepts of competition, market, industry, marketing, and it also introduces methods for assessing competitiveness and strategic marketing planning. Knowledge of this theoretical review was necessary for the analysis of the construction design company, its competitors and the subsequent proposed solution. Theoretical review was developed with the help of Czech and foreign information sources. Thus, the first established objective of this bachelor thesis was fulfilled.

The second chapter was focused on the analyses of the company's internal and external environment. Internal analysis researched current state of the company, as well as comparison with its main competitors in this field. To assess the current state of the company, the following methods were used: horizontal and vertical analyses, cost and sales analyses and comparison analysis of main competitors. For external analysis, a PEST analysis was used that identify political, economic, social and technological factors.

Based on the results of analyses, it was found that the company has a number of both positive and negative factors. A detailed overview of the advantages and disadvantages has been described in chapter two summary. The output of these analyses was SWOT analysis, which identified the strengths and opportunities that the company should take advantage of, and vice versa, the weaknesses and threats that the company must overcome. The development of these analyses has made it possible to achieve other established objectives of the thesis.

According to PEST analysis, environmental factors were identified that have a direct impact on the firm. The company's activities are affected by countless differently oriented legislative

requirements. As for economic factors, the Czech construction industry is currently not in a good shape. After two years of growth (2014 and 2015), the annual index is again in negative numbers. It is also necessary to mention, the demand for personnel exceeds supply in the labor market, where there is a shortage of candidates, especially professional and competent workers.

The third chapter was focused on proposals to increase the company's competitiveness. As a result, a mini-maxi strategy was proposed, which aims at overcoming the weaknesses so that the opportunities can be exploited.

The first step to increase company's competitiveness is to create a mission and vision of the company. One of the main changes is to introduce a better tender system, because in comparison with their competitors, PUDIS company has the lowest share in public won contracts in accordance with the price. Success in public procurement is very important for the company, because civil engineering structures are mainly financed from state budgets. The third strategic intention is to improve operational efficiency, whose aims are to increase sales approximately by 15 % and profit by 30 % by 2020. Another proposal is an improvement qualifications of workers and to enhance the image of the business. Public events, social and environmental activities and providing information about completion of projects and employees will help create a solid position on the market. Thus, the last established objective of this bachelor thesis has been fulfilled.

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# **LIST OF ABBREVIATIONS**

ROS Return on Assets

ROCE Return on Capital Employed

ROS Return on Sales

ROE Return on Equity

EBIT Earnings Before Interest and Taxes

CR Current Ratio

QAR Quick Asset Ratio

CPR Cash Position Ratio

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