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ÚSTAV EKONOMIKY

**ANALYSIS OF FIRM'S DIGITAL MARKETING
COMMUNICATION CHANNELS AND IMPROVEMENT
PROPOSALS**

ANALÝZA DIGITÁLNÍ MARKETINGOVÉ KOMUNIKACE FIRMY A NÁVRH ZLEPŠENÍ

MASTER'S THESIS

DIPLOMOVÁ PRÁCE

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Analysis of Firm's Digital Marketing Communication Channels and Improvement Proposals

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Goals of the Theses
Theoretical Foundations
Current Situation Analysis
Proposals and Contribution
Conclusion
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List of Appendices

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Brunec, J. (2017). Google analytics. Praha: Grada.

Kotler, P., Armstrong, G. and Opresnik, M. (2017). Principles of marketing. 17th ed. Harlow: Pearson.

Porter, M. (2008). Competitive advantage: Creating and Sustaining Superior Performance New York: The Free Press.

Ryan, D. (2012). Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generatio. 2nd ed. London: Kogan Page.

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Abstract

The diploma thesis elaborates on marketing communication channels of the selected company, with a focus on digital. The thesis is formed as data analysis and improvement proposal for the company, with the author's intention of implementation. The scope encompasses theoretical foundations, research on company environment and e-marketing data evaluation. The three discussed parts result in a set of proposals, including costs estimation and measuring proposal. The presented outcome is in the form of marketing promotion efficiency increase.

Keywords

Marketing communication, environment analysis, website, SEO, PPC, social media, data analysis

Abstrakt

Diplomová práce se zabývá marketingovými komunikačními kanály vybrané společnosti, s digitálním zaměřením. Práce je zkomponována na principu datové analýzy a návrhu zlepšení pro firmu, se záměrem implementace. Rozsah práce zahrnuje teoretická východiska, výzkum prostředí společnosti a anlyzu e-marketingových dat, sbíraných firmou. Na základě těchto částí je založen návrh vylepšení, včetně odhadu nákladů a návrhu monitorování. Výstup práce je ve formě zlepšení efektivity marketingové komunikace firmy.

Klíčová slova

Marketingová komunikace, analýza prostředí, webová stránka, SEO, PPC, sociální média, datová analýza

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DECLARATION OF ORIGINALITY

I hereby declare the originality of this master's thesis. The entirety of the thesis was elaborated by me, under the guidance of my supervisor. I declare that all sources were fully referenced, in accordance with the copyright law No. 121/2000 Sb., on copyright and rights related to copyright.

In Brno 27. 6. 2019

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Bc. Jakub Peša

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Introduction

The pursuit of revenue is the basis of the business. No matter the product or service, each company needs to attract the right buyers. This activity is ensured by marketing, which is progressively shifting towards digital channels. This phenomenon creates new opportunities in the international sphere and allows for a unique customer acquiring strategies, leading to a gain of competitive edge.

The main aim of this master's thesis is to propose an effective digital marketing communication strategy for a chosen company. The thesis aims to analyze the company's selected existing marketing channels and based on the outcome, provide a proposal for optimization and improvement. The goal is directed mainly towards foreign clientele, in the context of the firm's effort to acquire foreign business customers for its new facility. The theoretical part consists of a review of relevant literature. The analytical part contains the research of applied models and factors influencing the company. The practical part consists of the author's proposal for a marketing strategy based on conducted analyses. Apart from the primary aim, partial goals have been set. These goals will serve as a milestone for the proposal and as supporting improvements. The secondary goals are improving the general domestic digital communication channels, conducting a complete analysis of the company's environment and propose measuring and monitoring methods for the offered solutions.

The methodology will consist of both primary and secondary research. As for the primary research, three major tools, both qualitative and quantitative, were selected. Namely the Google Analytics, A/B testing and questionnaires. Secondary research will be conducted based on existing data and literature. The author will analyze all existing marketing channels of the company. As a next step proceed to select the channels most appropriate for the improvement, based on literature, market data, statistics and interview with the company's representative. Autor will then conduct research on the selected marketing channels and make a hypothesis for the optimal form of marketing communication channels. The author will proceed to create a proposal based on primary and secondary data. The solution will be submitted to the company's representative. The outcome of the thesis will serve as a digital marketing communication channel improvement proposal for the company, and if deemed beneficial, implemented.

1 Theoretical foundations

In this part, the author will cover the theory, models and frameworks related to the topic and discuss the tools used for data analysis. The theoretical part is structured from a wide, general perspective and gradually focused on the problematic of marketing communication channels and specific tools.

1.1 Marketing

People and firms are constantly developing a variety of activities, both formally and informally, which could be defined as marketing strategies. The importance of well-executed marketing is constantly growing, as well as its substance. The biggest changes in marketing could be seen in the latest technology, which is exponentially growing and connecting the demand with supply. (Armstrong, Kotler and Adam, 2017)

Although marketing has a firm basis of schools, definitions and models, Kotler and Keller (2013) state that the true substance of marketing is originality and willingness to risk a new approach. Good marketing is never a coincidence, even if perceived as such. Behind each successful strategy stands thorough planning, management and implementation of modern tools and techniques.

The modern time requires the company to follow two main goals, generate profit and increase its value. This aim generally requires competitiveness between companies in the market, which is where marketing comes to its use. No matter the structure or value chain of the company, while considering a general company model, each firm consists of multiple departments such as production, sales, human resources, research and development and finance. All of these departments are reliant on the marketing department, which brings the demand for the company's products or services. Marketing, as a non-exact activity is heavily reliant on human resources, meaning capabilities and talents of the people performing the strategy. The marketing is also present in the society itself, as it often introduced new, unknown products to the market and improved the quality of life. (Armstrong, Kotler and Adam, 2017)

The basic definition of marketing Kotler et al. (2007) is that marketing is engaged in identifying and fulfillment of human needs. The author agrees and adds that marketing deals not only with the elementary and necessary needs, as elaborated by Maslow (1943),

but more often with human desire. American Marketing Association (2004) elaborates on marketing as follows. Marketing presents an activity, a body of institutions and processes, established for creation, communication, delivery and exchange of offers, which hold value for customers, clients, partners and the general public. These activities and processes require a considerable amount of work and ability. Marketing rises to its importance at the moment when at least one side of the potential transaction starts considering a purchase of product or service. Identifying this opportunity for a sale is the subject of **targeting**, which is discussed in the following chapters.

1.2 B2B and B2C marketing

Business to the customer, also referred to as the B2C, deals with the marketing aimed towards the end customers. One of the specifics of this relation is that the end customer often makes purchases based on emotions. This means that the company must focus not only on product specifics but also on its brand, public relations, and value added. Business to customer market is specified by short-time changes, trends and global customer concentration. The marketing strategy and channels directed towards end customers should be innovative, personal, adaptive and targeted. (Kotler et al., 2007)

Business to business relations, also referred to as the B2B, are in need of marketings same as the business to customer markets. The basic definition and attributes of business to business relations are much similar to the customer ones, the key factor is still the demand for products or services, in order to satisfy the customer needs. The customer, in this case the company or its representative, has to fulfill the needs of the company, be it an input of production material, services, finished products and more. The main differences between the two models are the market structure, form of demand, the type of product and often the process of decisionmaking itself, as the purchasing side must often consider multiple criteria before the purchase. (Kotler et al., 2007)

There is also a difference in the geographic perspective, as the business to business markets are often more geographically focused. The examples are the places with a certain concentrated industry, such as financial districts in metropolises, technological centers and industries tied to a certain location, such as extraction and agriculture. The demand is derived directly from the end customer and market demand, calculated by current trends or future expectations. The expectations are defined by factors, that influence the specific product, which is why a skilled manager can connect many market

factors and deduct an outcome they will have on the customer demand. Business to business markets is specific for its non-elastic demand in short time periods. That means that the demand of companies for the product is not affected by short time price changes. Business to business markets is also well known for its tendencies to fluctuate. That means that even a slight change of end customer demand can create a major change in business demand, as the companies intend to keep the costs as low as possible and ensure a stable product, service or material input quality and quantity. (Cannon, Perreault and McCarthy, 2008)

Another factor of difference, as discussed by Jakubíková (2013) is the complexity of the decision making behind the purchase, which is reflected in negotiations and extended decision-making terms. Due to the amount of money put into the transaction and many factors influencing the decision, companies usually take longer time while deciding to buy the product. The whole process is also more formal, as the purchase is defined and guided by certain parameters, rules, decisions and validations, as opposed to business to customer relations, where emotions often play a bigger role. One of the most important aspects is the long-term cooperation and good relations between companies, as many of them seek a stable business partner, capable of adapting the offers. The optimal marketing strategy should take all of the above factors into consideration and focus on specific product attributes, as the number of potential business partners is often limited.

1.3 Marketing and strategy

The author will discuss the marketing strategy from the perspective of a company, trying to enter a new market. Marketing strategy is closely related to the business strategy of the whole company and should be aimed towards complementing it. While analyzing the marketing communication channels with the aim of improvement, the company should realize which business strategy is being implemented, which market segments targeted and what are the specifics of the marketed products. There are a lot of various marketing strategies, each directed towards a general or specific goal, such as push and pull, brand awareness, public relations and more.

Cole (1997) identifies the market communication channels as a crucial part in both business to customer and business to business relations, as the channels are relevant both in general presentation of the company, as in the individual focused promotion. One of the most renowned models is Ansoff's (1965) market-entry strategies. There are four

elementary different strategies in the model, based on defining how the company plans to enter the foreign market and with which product.

Porter (1985) elaborated on Ansoff's (1965) strategies and created a new model, Porter's generic strategies. The model, while taking an alike approach, is also introducing a new factor of competitive advantage and scope. As stated by Porter (1985) a competitive edge is the source of a successful business strategy. In accordance with Armstrong, Kotler and Adam (2017), the success of marketing communication channels is often related to company efficiently using the competitive edge to its advantage.

The author, with relation to Ansoff's (1988) revisit to corporate strategies, where Ansoff stresses the importance of adapting the strategy to a modern market, would recommend a permeation of the general, renowned models with new models, stressing the focus on technology and e-commerce to adapt the communication mix to the current digital standards.

1.4 Targeting, segmentation, positioning

Companies which offer a different product or service on the open market, especially when focusing on both business to business and business to customer segments, might encounter a decision to focus their marketing activities to a specific clientele. According to Kotler et al. (2007), such company has to realize that it cannot attract all customers by a general marketing strategy. The decision of which products it wants to sell to which customer must be made and transformed into a market targeting, segmentation and positioning strategy. This type of marketing is described as an aim to fulfill the needs of various customer groups simultaneously.

The first step to a successful targeted marketing strategy is customer segmentation. This method is a basis for the 4P model and is based on several factors. The general classification of customer groups is by its unique characteristics, quantity and quality of the product or service. Each customer group requires a different product, which is reflected by the company in a specific marketing strategy towards them. (Hanzelková, 2013)

Market segmentation works with customer groups, which are usually easily distinguished as a large part of the market, which is interested in a similar product or service. A smaller group, referred to as microsegments also exist. These groups require a

more focused and unique product or service, which might be accompanied by a limited supply, which creates an opportunity for companies able to differentiate its marketing strategy to a unique needs of each segment. The market segmentation is based on numerous parameters:

- The geographic segmentation – segmenting the market into groups based on the physical location of customers, such as cultural heritage, country, region and city.
- Demographic segmentation – creating groups by identifying customer age, gender, relationship or family status, income, profession, education, race.
- Psychographic – segmenting the market into groups based on parameters which are more complicated to summarize. Common examples are the social status, lifestyle, personality and other traits which identify the person’s position in the society.
- Behavioral – segmenting the market into groups based on analyzing customer behavior patterns. For example how often does the customer purchase the researched type of product. What are the main attributes the customer is interested in, such as price, quality, longevity. The level of skill, which is required to use the product. Frequency of use. Awareness of the products existence and attitude towards it. (Chaffey and Smith, 2011)

Market **targeting** is an activity which leads to choosing which of the researched segments to focus on. The decision is generally based on potential profitability and segment attractiveness. The market **positioning** is a final step of the targeting strategy. The company focuses on promoting the product in a manner that attracts each selected customer segment. This is a phase of engagement in the competitive struggle over the customers. Company has to create the ideal Marketing Mix to win over the competition in the selected market segments. Armstrong, Kotler and Adam (2017) propose the following process of targeting.

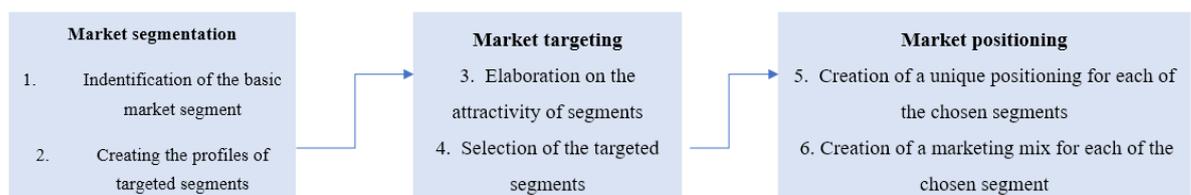


Figure 1: The process of targeting

Source: (Armstrong, Kotler and Adam, 2017)

1. Identification of the basic market segments. The firm elaborates which of the basic and advanced characteristics and attributes could a potential customer be interested in. The goal is to set up a basis on which to process the market into segments. The company conducts a general analysis of the present market segments and gains a general overview of the market.
2. Creation of targeted segments profiles, based on the pre-defined parameters from the previous step. The company identifies each unique potential group of customers and creates a segment profile.
3. Elaboration on attractiveness of segments. The company evaluates each of the selected segments by its attractiveness and assembles a form of a priority chart. Generally based on principles such as the potential profit, market growth opportunity or market penetration strategy.
4. Selection of targeted segments. The company chooses the most attractive segments, which will be a point of interest and the subject of market positioning.
5. Creation of a unique positioning for each of the selected segments. The company decides on an approach to each segment. This might be done based on previous research or a new, more in-depth analysis.
6. Creation of marketing mix for each of the chosen segments. This step is usually supported by using a model such as 4P or 4C.

1.5 Marketing mix

Cannon, Perreault and McCarthy (2008) have elaborated on McCarthy's initial proposal of the original 4P model, which integrates various marketing activities into four general tools of the marketing mix. The letters stand for unique characteristics of the marketing, which can be found during the product's journey from supplier to customer. Namely product, price, promotion and place. Armstrong, Kotler and Adam (2017) have further developed this model in their work, stating that due to the complexity and vastness of marketing today, certain approach changes are required. The altered 4P model is composed of people, processes, programs and performance. This idea initiated the creation of the complex 8P model. Cannon, Perreault and McCarthy (2008) stresses the importance of defining the target customers as the first step to create a marketing mix, and bases the whole model around the term "customer", which represents the ultimate

goal of the whole marketing mix. The author will use the renowned classical 4P model, with discussed alternations in mind.

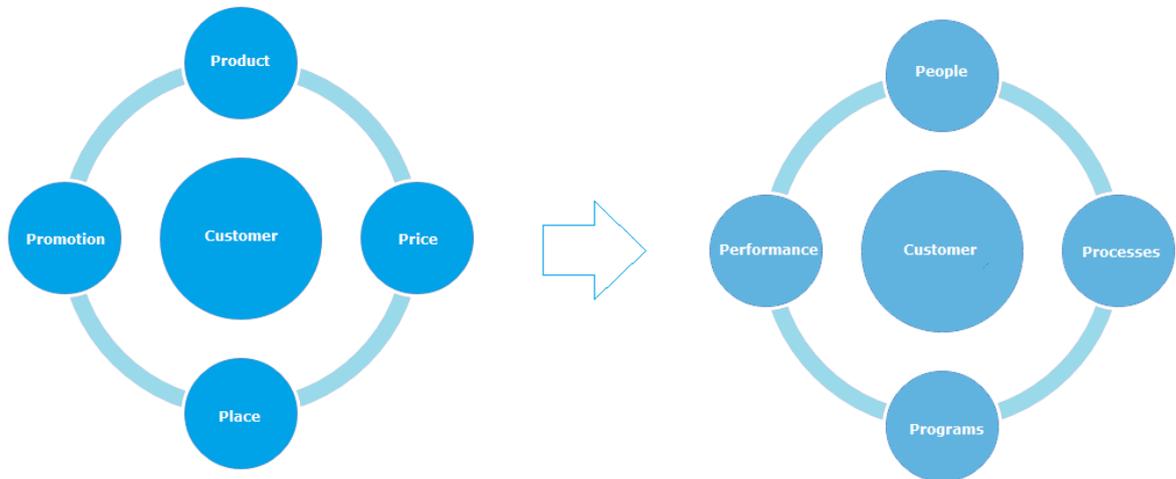


Figure 2: Original and modified marketing mix

(Source: Armstrong, Kotler and Adam, 2017)

Cannon, Perreault and McCarthy (2008) explain the variety of the term **product**, as by his definition, it is perceived as any tangible or intangible product, including services. Kotler et al. (2007) define the product as a mean to fulfill a want or a need. The product itself includes all value gaining activities performed before, during and after the business transaction. The example could be any physical product, which prior to being offered on the market undergoes precise planning, designing, testing and branding. Selling the product might also not be the final phase, as many products include additional services, warranties and other forms of customer support.

Price represents the market value of the product. This value often corresponds to the point where demand meets the supply, creating a general price level for the product category. The other means of price creation might be products with a strong branding background, products offering a different quality or quantity attributes or a company willing to negotiate the prices. The basic variables of price are price list, discount, terms of payment, credit and compensation.

Promotion represents the activities aimed towards customers, with a goal to change a potential customer into a customer. Cannon, Perreault and McCarthy (2008) describe the promotion as *''any method which communicates to the target customer''*, highlighting that an effective promotion might increase the value of the product, and become a product itself. The marketing promotion has many direct and indirect forms, lately including an

evolving sector based on modern technology. The campaign doesn't have to be focused directly on selling the product, as in many cases it is used to mark the brand into the human memory, often unconsciously. People generally tend to purchase from a brand they have an association with.

Place represents the means of product distribution or logistics, as the main goal is to deliver the product to the customer. Cannon, Perreault and McCarthy (2008) define the place as "*getting the right product to the target customer*", meaning the company has to determine where, how and by whom to sell the product. Companies use a variety of direct and indirect methods to distribute the product. The basic variables in product distribution are the distribution channels, product availability, range of products, point of sale, stock and transportation.

People represent the internal human resources of a company, highlighting the importance of the human factor in marketing. Based on this redefined model, people are indispensable assets to a marketing strategy. Marketing itself is limited and defined by the capabilities of people performing it. This approach is reflected in the mindset that marketing department must understand its potential customers as human beings, not only assets on road to reach profit. (Kotler et al., 2007)

Processes are a direct reflection to human creativity, discipline and structure of the company performing the marketing strategy. While creating a marketing strategy, performing decisions and brainstorming ideas, it should be of utmost importance to avoid any barriers to thinking, originality and daring. Modern, forward and innovative thinking must be supported and developed to provide an optimal space for marketing creation. This point is further pressed by the recent exponential development of technology, leading into many new, unorthodox marketing opportunities. By creating the optimal process environment, the company enables long-term success in customer relations. Reaching the highest stage, in combination with adequate human resources often leads to innovative marketing approaches and ideas, which often set a new standard in customer's perception. (Kotler et al., 2007)

Programs represent all activities of the company, aimed directly or indirectly towards its potential customers. This category envelops the basic 4P model, as well as numerous other marketing activities, which might deviate from the definition of standard marketing. The parent concept is synergy. Regardless of the offline or online execution, standardized

or innovative approach, all of the segments must be integrated in a manner that allows the whole strategy to surpass the basic sum of all segments and fulfill all goals set by the company, hence synergy. (Kotler et al., 2007)

Performance is defined as an aspect aimed to grasp the spectrum of variables, which have a direct or indirect impact on the marketing, finance and the company as a whole. The most monitored parameters are generally profit generated by strategy, the return of marketing investment, related change in company value and resources, impact on public image and ethics. The first, numerically measurable and mostly internal part has a direct connection to the above-mentioned company goals of profit gain and value increase. The later part is related to the external environment of the company, and often has an unmeasurable impact, as the public image of the brand changes according to how the firm presents itself and its products. The relation between these two aspects can be found in company value or profit decrease or increase. It is often challenging to monitor this aspect of performance. (Kotler et al., 2007)

1.6 Marketing communication

Marketing communication mix is a part of the original marketing mix, discussed by Cannon, Perreault and McCarthy (2008). The first goal of marketing communication is to deliver all the needed information about the offered product or service to the targeted customer. The second goal, which comes into the equation after successfully obtaining a customer is to be able to keep the customer. Therefore companies have to learn how to efficiently communicate and sustain a customer.

At present, various communication channels and approaches exist, progressively enriched by digital communication tools. It cannot be said that one channel is the best performing one, as each channel has different characteristics, target audience and applications. The company has to find the right variation of channels, which pique the interest of the targeted market segments and are an ideal solution for the unique product or service. The company also has to take into account the segmentation of business to business or customer relations. The communication channels can be divided into mass communication channels and targeted channels, as well as traditional and digital. (Hanzelková, 2013)

The main question is not if to communicate, but how to communicate, to whom and how much to spend on communication. The companies can choose between establishing its own marketing department or outsource through marketing specialists or agencies. It is important not only to establish communication, but to maintain good relations and image. The importance of creating a communication network and a stable customer base is not to be underestimated, as both the business and end customers tend to spread the reputation of the company, which can have a major positive or negative influence on the business. Considering the current state of online presence and social media, it is exceptionally important to create and maintain a good brand image. (Frey, 2011)

The marketing communication mix as a whole is generally composed of a specific combination of communication channels, targeted towards specific market segments and customers. The usual means are public relations, advertisements, direct marketing, sales support, personal sales and lately the digital marketing. (Chaffey and Smith, 2011)

One of the main issues of marketing, related to the cost, is how to measure the efficiency and return of investment. Not all communication channels are exactly measurable and are often facing a complication in transferring its success and effectivity into numbers. The author will include related measuring tools to the exact communication channels. Although many modern communication channels are already included in the classic communication strategies, the author will divide the channels into traditional and digital, which will encompass the relevant modern approaches and is suitable for this paper.

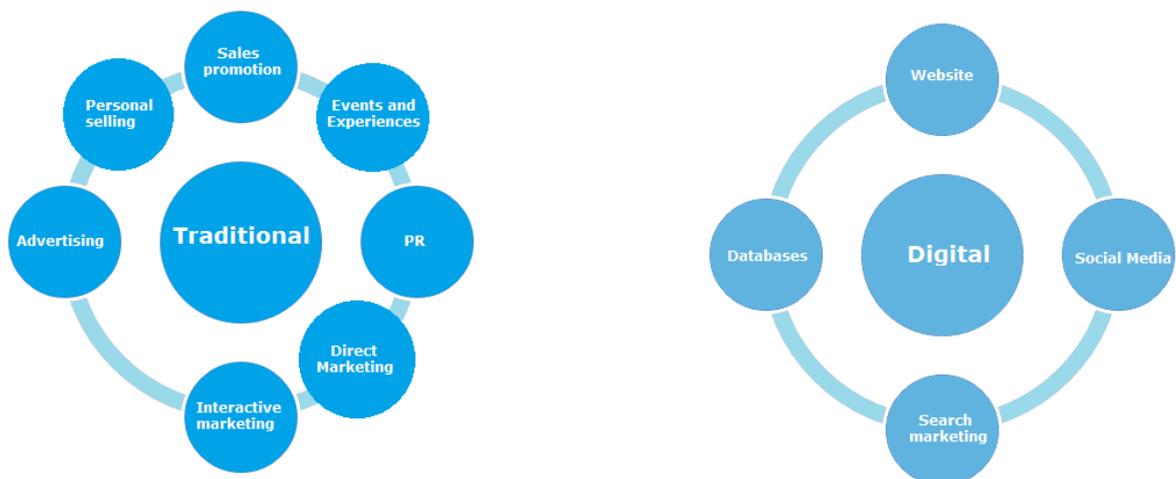


Figure 3: Traditional and digital market communication channels
(Source: author: according to discussed research)

1.6.1 Traditional marketing

Advertising present various forms of non-personal promotion of products, services and the brand itself. It is a transfer of thoughts towards a general audience. Advertising can be divided by time effectiveness, the most general being long-term advertisements running without interruption in the same or slightly alternated form. Pulsating, which is specific for adapting the frequency of the advertisements throughout the year. And an impact, which is a one-time advertisement, directly targeted towards a specific market, events or product. Based on nature, the advertisement is divided into informational, persuasive and reminding. The aim of the informational is to transfer a message about a new product, service or specific information to the customer. The aim of the persuasive is to further enhance the knowledge of a product, of which a customer is already aware. The aim of the reminding advertisement is to maintain the product or service in the customer's mind. (Foret, 2013)

Personal selling is the direct opposite of advertising. Personal selling is defined by direct personal contact with the target audience, with the goal of selling the product or service as well as promotion. Many methods of personal selling are unpopular by potential customers. Business to business relations is often established at venues and meetings. (Foret, 2013)

Sales promotion represents offers limited by a given time period, which aims to support the attractivity of the product or service, mostly by setting up a different price policy and sales bonuses. Foret (2013) discusses that sales promotion is in many cases more important than the advertisement itself, as in principle it is nothing more than giving certain benefits to the interested sides. Sales promotion can be divided into two categories, with an aim on customer or business partner. Customer sales promotion aims to generate a profit by selling the product or service and acquiring a customer from a competitor, which makes it a short-term strategy. The business sales promotion aims to establish a partnership between companies, by means such as offering the product portfolio in their subsidiaries, which is specific for a long-term strategy.

Public relations are one of the key factors for each company to keep a positive brand image. The goal of public relations is to build a strong, trustworthy brand amongst all desired market segments. The main issues are promoting the brand in a positive way and disproving false accusations and information. The basic public relation strategies are

directed towards the targeted market segment or customers. There might also be a need for public relation management outside the company's markets of interest, as due to the spread of social media and independent news channels, false information can spread even to non-related groups and markets. (Foret, 2013)

Direct marketing is a strategy used to directly approach targeted markets or customers. It is often specific for business to business relations, but not unique. The customer of choice is selected based on a careful analysis and serves to either become a one-time buyer or a long time business partner. (Foret, 2013)

1.6.2 Digital marketing

Ryan (2012) discusses that the media of digital marketing have exponentially expanded its influence in a short amount of time. The variety of tools the digital marketing offers and recommends each company to carefully analyze its goals, strategy and targeted market, which will be the basis for choosing the optimal digital marketing tools. As opposed to traditional, physical forms of promotion, digital marketing tools doesn't require any physical space (not including hardware) and are precisely measurable in the form of price to performance ratio and many other data.

Kotler et al. (2007) discuss the **website** as a tool with virtually unlimited geographical reach, which can be used as a powerful marketing tool. The company's webpage serves many purposes. Such as to present the company itself, its vision, history and various aspects. Also to sell the products and services, and to promote. The website can be also supported by various tools, which aim to increase the number of visits, analyze them and connect the site to other media. The website can be precisely monitored and gather data about the visitors, which serve to further analysis. In the following chapters, the author will discuss the relevant digital media and tools, which are recommended to use alongside the website.

Chaffey and Smith (2011) define human as a social being, with tendencies to the group and be influenced by the majority. This is where **social media** comes into the equation, as building a community is one of the most efficient marketing tools, even more so when aimed towards generations adapt in technology. Kotler et al. (2007) recommend a simple general strategy, which is to strengthen the company's relationship with the customers and maintain a positive brand image. The primary aim of social media is therefore not to sell, but to communicate.

Search marketing or search engine optimization, also referred to as **SEO**, is a tool for improving a company's presence in organic search. SEO is generally composed of URL, webpage titles, meta tags, backlinks, keywords and any further means to match the website's characteristics with popular searches. The basic principle is that of a specialist company, offering a paid service to websites, who wish to be more visible. The most used SEO is directed towards Google. Mitchell (2012) discusses that SEO is optimally used in combination with the well-programmed website, including a precise set of keywords in the website's code, which increases the website's organic search presence even further. A well-optimized SEO makes the webpage to be displayed as one of the top results in the organic search. (Mitchell, 2012)

PPC advertising is a form of advertisement, which is paid not for displaying the advertisement, but per click on it. This means that the company measures an exact number of visitors, categorized by their origin. This principle benefits the companies, as they pay only for relevant visits, as the visitors are people with interest in the brand or product, which presents a higher chance of customer conversion. The most popular PPC service is offered by Google, as the leading search engine provider. The exception might be the Czech market, which is still heavily influenced by Seznam. The promoted site is generally shown alongside several other sites as the first search results on top of the list. (Mitchell, 2012)

1.7 Environment analyzes

Capon (2009) observes that regardless of the nature of the organization and its product or service, it cannot seclude itself from the environment that directly or indirectly influences it. Capon (2009) agrees with Quinn (1980), advising companies to employ a strategy of a permanent perception and understanding of the company environment, which is necessary in order to operate efficiently. Kennerley and Neely (2003) recommend the companies to use measurement systems, which are relevant and appropriate to the matter, to track the ever-changing company environment and connect the results to their strategies. They suggest adapting the measurement system to the issues of current importance, such as devising a new marketing strategy, improving marketing communication channels or entering a new market.

These statements are best summarised by Balogun and Hailey (2008), who point out that when the company is in need for a strategy enhancement, the stepping stones for success

are strong information network, analysis of influencing factors and a marketing strategy suiting the organization's specific context. The analysis of the company's environment is generally performed in three respective levels, the macro-environment, industry environment and company's microenvironment, **the author will elaborate on the marketing analyses as a standalone category.**

The **macro-environmental** analyses, such as PESTLE, deals with the widest, most general national and international environment. The factors that influence the company at this level are in most cases out of the firm's reach and cannot be changed by the company, only adapted to.

The industry analysis refers to the company's research of its specific industry or industries it is engaged in. One of the most common tools is Porter's five forces model and analysis of the key success factors of the industry. This environment is within the company's reach of influence, not only adaptation. The company must have knowledge of industry trends and competitive factors.

The micro-environment analysis is performed on an internal level, as opposed to the two previous external levels. The tools used are for example Porter's Value chain and analysis of the company's competitive edge. It is recommended to summarize all performer analyzes into a tool such as a SWOT chart, which displays the company's attributes in a brief manner.

In summarization, the company, while devising a new strategy or improving an existing one, is highly recommended to perform a thorough research regarding all the influencing factors. As an example, while improving the marketing communication channels, such analysis might connect the task of one department responsible to the whole company and its environment, as the marketing is connected to the company's profitability in general. A company that fully realizes the correlation of its actions and links between the marketing and other departments will have a notable improvement in efficiency, which might lead to a competitive advantage. (Manktelow, 2005)

1.7.1 Macro environment analysis

As stated by Dessart and Bontoux (2017) globalization changes the world economies towards a more interdependent state, and environment suited for international trade is created. Levitt (1983) coincides by observing the changing nature of the various national

economies, which are being driven together by technology, making a demand for goods and services homogenous through the globe. Wright and Etemad (2001, p.151-154) agrees, pointing out that common demand for homogenous products and services, also transcribed as needs, combined with opportunities of globalization results in companies expanding abroad. They also highlight the main reasons for companies to operate abroad, meaning processing any operations across the borders. The values being sought are profit, reduction of risk and company growth. This occurrence in general means that each company, regardless of its national or international nature is directly or indirectly influenced by the global and local environment and must take necessary precautions. The general term for this environment is macro. One of the tools suited for the analysis of such an environment is the PESTEL analysis.

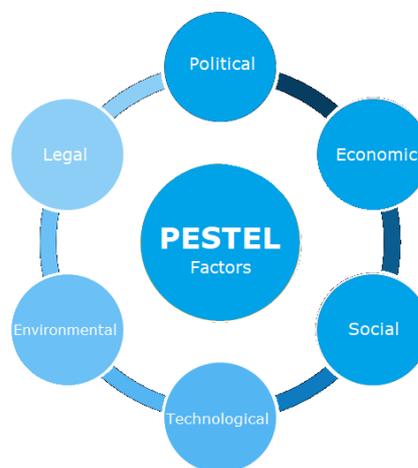


Figure 4: PESTEL Analysis

(Source: author: according to discussed research)

PESTEL analysis is a framework widely used throughout the globe, regardless of the company type. Kotler and Keller (2013), in unison with Wong, Saunders and Armstrong (2007) highlight the fact that some companies, whose size or operations have an influence on building the national economy might have the power to influence some of the macroenvironmental factors, as opposed to the minor companies which represent the numerical majority of the market. Its main purpose is to evaluate the company environment and its aim is to adapt the company to the realities of the market, both national and international. Manktelow (2005) states that by understanding the environment, the company can utilize opportunities and diminish threats. The PESTEL environment analysis is composed of six main sectors, the political, economic, social, technological, legal and environmental. The description of the sectors is as follows:

Political factors

Each company is influenced by the current and general long-term political situation. In the case of an international company, it also has to abide by the politics of the markets, countries and organizations it is a part of. The main subjects of the political environment are government policies (fiscal, economic, monetary, ..) and the settings of market and economy (free, mixed, planned, ...). Some countries might be more beneficial towards certain industries and otherwise, offering support in the form of research and development, financial support or restrictions towards foreign trade. The elements such as political stability, rate of corruption and membership in global organizations should be also taken into consideration whilst performing the market research. (Hanzelková, 2013)

Economic factors

The company is influenced by the current and future state of the national and global economy. Factors of importance are the phase of the domestic and global economic cycle, reflection of the political situation into economy, the government economic and monetary policy, government fiscal policy, balance of payment, inflation rate, capital market status and more. As mentioned above, the majority of small to medium companies hold virtually no power to change any aspect of the national economy. The only choice is to adapt to the turbulent market and deploy a pre-emptive strategy to estimate the development of the economy. The company should track indicators such as the GDP, tax rates, inflation, exchange rate and purchasing power. (Jakubíková, 2013)

Social factors

Mankeltow (2015) says that the main reason to analyze the social-cultural factors is to grasp the customer behavior and use it to the company's advantage in fulfilling its goals. The most related factors are the political system and its influence on the people, demographical factors, the general socio-cultural mood in the market, lifestyle and life to work balance ratio, and other factors relevant to the reason for performing the analysis. The factors can be divided into several levels, with the national culture, roots and tradition being the strongest one, from which other factors unfold. (Marmol, Feys and Probert, 2015)

Technological factors

The change of technology, represented by innovation, is one of the major driving forces of the companies, used to achieve a rise in profits, market share, company value and other set goals. Marmol, Feys and Probert (2015) describe the influence of technology as the force of moving forward. The factor of technology could change the industry, economy or the world in a small amount of time and the companies which fall behind and do not innovate and adapt tend to lose their competitive edge. Technological factors, also referred to as the factors of innovation, represent the trends in the research and development fields. Capable management is able to distinguish to which trends to invest, which can lead to a critical advantage on the market. Technologies as the internet and the technologies of the upcoming fourth industrial revolution are predicted to bring a change to almost all industries. Trends such as the frequency and speed of technological changes, manufacturing, logistics, storage, communications, and information technologies.

Legal factors

Each company, without exception is tied or limited to a certain degree by the national and international legislative and laws. Domestic companies must take into account laws regarding basic establishment and definition of market and rules, taxing systems, environmental policies and many other laws. In the case of the company operating on an international level, starting from simple export and import to the fully owned subsidiaries, the number of laws it must submit to is even greater. Marmol, Feys and Probert (2015) describe the tax incentives as one of the major factors to be considered whilst planning to develop a new strategy or enter a new market.

Environmental factors

The factors of the environment's influence on the company and vice versa. The company has to act according to environmental laws. Currently, the question of human impact on the environment is more pressing than ever. Companies must consider its externalities and influence of their actions towards the environment not only locally, but also in a global perspective, and apart to the policies concerning the reduction of environmental impact, preservation and renewal. Manktelow (2005) also states that due to the Technological Innovation, which led to a massive spread of social media, free press and influencers, the company should pay attention to the environmental impact more than ever, as it can directly influence the brand and public opinion towards the company.

1.7.2 Industry analysis

Manktelow (2005) describes industry analysis as an approach aimed at grasping the company's position towards the industry, competition and business partners. One of the tools is Porter's five forces model, which analyzes five respective areas of the firm's industry environment. The goal of the analysis is to grasp the aspects and situation of the industry and realize the connections and relations between the interested parties. The company can distinguish and measure industry performance, competition and importance of various factors. The outcome of the analysis is to grasp how the industrial environment connects to the other levels and how to use the researched data beneficially, as to improve the company goals. The main variables of each industry are competition, competitive advantage, concentration in the industry, possible profitability and transfer costs. Porter analyzes five main forces in the industry.



Figure 5: Porter's five forces model

(Source: author: according to discussed research)

Competition

The basis and core of the model. To enter the market means to enter the competitive rivalry. Fights between competitors are on a daily basis, with each company having its own aims, such as the increase of profit, market share, brand promotion or simply to keep the current profitability. The main tools of competition are price, innovation, marketing and services related to the product. (Michaux, Cadiat and Probert, 2015)

Bargaining power of customers

Describes the degree to which the customer has power over the company. The main tool of customer relationship is a negotiation. The lower the number of potential customers, the higher their power, and vice versa. Customer with a strong position can dictate the price, quantity, logistics, additional services and terms of payment. Customer with a strong position can even choose between multiple companies and create competition over the product or service. (Michaux, Cadiat and Probert, 2015)

Bargaining power of suppliers

The bargaining power of suppliers, similar to customers, is directly connected to the number of suppliers and rarity of the material or service. A supplier with a strong position can dictate similar conditions as the customer. The main variable whilst searching for a buyer is generally price, followed by reliability and terms of payment. A relevant factor is the switching costs of the company, as switching to a different supplier might be expensive and complicated, which strengthens the supplier's position even further. (Michaux, Cadiat and Probert, 2015)

The threat of new entrants

The company should keep an eye on the potential competition, as any blank space on the market can be taken over immediately by a new entrant. These companies are generally starting businesses, who identify an available space on the market, or already established companies, penetrating new markets. The more innovative and reliable the market is on research and development, the more likely it is for new entrants to enter the market, as the shift in technology is rapid and new technologies create new business opportunities. This is one of the main reasons why the company should invest in its own research and development. The new entrants might offer different product quality and specifics, price policy and generally a higher customer value. Industries with a high risk of new entrants have usually low entry barriers, which must be identified in each different industry. (Michaux, Cadiat and Probert, 2015)

The threat of substitute products

Substitute, also referred to as an alternative, is a product or service which might the customer chose instead of the product offered by the initial company. The substitute generally fulfills the same or higher needs and creates the same value added to the

customer. No to be mistaken by a product with the same attributes from the competition, the substitute is in its core a different product or service, offering an innovation, quality improvement and lower price. The substituted present a threat to the whole industry, as it creates pressure on the current product portfolio, forcing the companies to reduce prices or improve the products. In some cases, substitute might completely replace the original product or service. (Michaux, Cadiat and Probert, 2015)

1.7.3 Microenvironment analysis

Internal analysis, represented by tools such as Porter’s value chain, competitive edge analysis and summarized by SWOT chart. As stated by Porter (1985), each part of the value chain analysis serves to distinguish between the company’s departments and processes and specify the value added by them. Manktelow (2005) adds that by analyzing the department and its respective activities in the company, supplemented by calculating the value they create, it is possible to present a uniquely suited product or service to the target customer. Further microenvironment analyzes might be focused on a specifical area, such as marketing.



Figure 6: Porter’s value chain

(Source: Manktelow, 2005)

1.8 Data measuring and methodology tools

As the main aim of the paper is to analyze selected marketing channels and offer improvements based on related literature, models and testing, the author has selected two main tools for the task, which will serve as quantitative analysis. The first being Google Analytics software, the second being A/B testing. As for the qualitative analysis, the author composed questionnaires and discussed the required specifics with the company’s

representative. By using both qualitative and quantitative methods, the author aims to create complex and thorough research.

1.8.1 Google analytics

Google Analytics is an online analytic tool created and operated by Google. The tool is free of charge when used below a certain data limit. Not exceeding the limit is generally secured by optimized settings. Upon exceeding a set data limit, the company is required to purchase the paid license.

Google Analytics is an optimal example of using the SMART approach, as it corresponds to all its aspects. This tool serves mainly to the website owners, authorized users, online agencies, marketing specialists and other users interested in data analysis. Its main function is gathering a highly precise statistical data concerning the visitors of the monitored website. The tool is able to display and analyze both real-time and historical data, such as: conversion, user behavior, time spent on a webpage, sales, user preferences and many more. This paper will be elaborating and testing on the data gathered by web browsers, on both desktop and portable devices. Google Analytics also offers in-application data measuring, which is irrelevant to the analyzed company. Therefore, the basic principle is gathering of analytical data from the measured website, its processing and displaying the relevant results, as by parameters set by the administrator. (Brunec, 2017)

From the point of view of the web owner, in this case the company, which is trying to promote its products or services, it is highly important and valued to be able to effectively gather, process and analyze the relevant visitor data. The most relevant data categories are for example the geographic location of the visitor, browsing history, webpage navigation tendencies, time spent on the website and more.

This information, in hand of a capable analyst can become a stepstone for improvement or creation of marketing strategy, leading to an increase in profits and company value. The most common outcomes of this data analysis are the subsequent webpage modifications, and improved effectiveness of advertisement focus. Namely shifting the investments into the most used channels and types of advertisement, which leads to an increase of webpage visitors. (Brunec, 2017)

1.8.1.1 Process of data gathering

Defining the measured parameters

The first step to effective use of Google Analytics, after the initial implementation of the software to website, is defining the measured parameters. Each company differs and generally focuses only on relative data. It is recommended to define, which type of information is important and in which form should be gathered. The defined parameters should be a reflection of the aims of the website, such as converting visitors to clients, increasing the number of visitors or making the webpage easier to navigate. When the first step of defining the key parameters is complete, the firm can proceed to define the goals of measuring. (Brunec, 2017)

Goal definition

As elaborated above, the measured data should correspond to the aim of the website. It is insufficient and not recommended to just state vague goals and expect effective results. Ryan and Jones (2008) recommend using a SMART method to define the goals. SMART is an acronym, standing for specific, measurable, acceptable, realistic and timely. These are the specifics, which should be present in each goal definition. A well-defined goal should have an exact numeric value and be time relative. After defining the goals of measuring, the company is eligible to proceed to define the key performance indicators. (Clifton, 2012)

Key performance indicators

The term key performance indicators are not exclusive for Google Analytics, it is an analytic tool, widely used in many business and everyday life occasions, knowingly or not. The basic definition of KPI is any measured data, in a given time, such as the quantity of production, visitor conversion ration, profit increase and more. These data are processed and generally compared with other data samples from a different time. Admittedly, the actual programming of KPI is generally not as simple as perceived by the definition, as each company has different measuring parameters and the total complexity of the website might pose a challenge. This point marks a company that is prepared to start gathering data. (Clifton, 2012)

Data measuring

As the parameters of data measurement are set, the next step to implementing Google Analytics is to start gathering and measuring the data itself. This process can be done real-time and is automatically saved in set periods of time. The other option is measuring the data retrospectively, which might be done only if Google Analytics were previously implemented to the webpage. This case is usually for newly set parameters, which are enveloped in the historically recorded data. The company must understand that gathering the data is only the first step to create a relevant conclusion, which is a role of data analysis, a task for the human factor. (Brunec, 2017)

Data analysis

The data analysis is done through the Google Analytics graphic interface, which is generally referred to as intuitive and user-friendly. The software itself is capable of recognizing and categorizing most of the basic data parameters and creating an autonomous display of data. More specific or detailed reports are compiled manually, from previously set parameters. It is highly important to realize the connection between gathered data and its meaning. A skilled data analyst can perceive the importance of data which seems relatively unimportant or not relative. Beside of the key performance indicators, the analyst can realize an error in data or website, which directly influences the indicators. (Brunec, 2017)

Improvement and evaluation

The last, and for long term users also first step of the analysis is the actions taken based on the analyzed data. The data can serve many purposes. Such as a basis to decision making in the company, to redefine the key performance parameters or improve the marketing communication channels, which is closely related to rising the company efficiency. Kotler et al. (2007) recommend continuous monitoring of the implemented actions and further evaluation of its effectiveness. This can be achieved also by external methods, such as the A/B testing, which is also a method used in this paper. (Brunec, 2017)

1.8.1.2 Specification of data measuring

Several principles and methods of data measuring exist. Google Analytics, which is the most used analytic tool worldwide implements the page tagging technology. Page tagging works through a javascript code, which is embedded into the website. The

javascript technology can be also considered as a weakness, due to the fact that visitors using web browsers with disabled javascript are not measured. Google Analytics is interconnected with cookies, through which the unique visitor profile is created, developed and monitored. The service works with three pre-defined data categories – user, session and hit. By combining these values, a complete visitor profile is created. (Brunec, 2017)

- User (visitor) presents any webpage visitor, accessing the page from a desktop or mobile device. Mobile application users can be also measured.
- Session (visit) presents the period for which the user remained on the website.
- Hit (interaction) present any activity performed by the user during the session. The most generall interactions are purchases, number and length of visit and page interactions.

Cookies

As elaborated above, the data gathering technology of Google Analytics is based on cookies. Cookies, in its base form are text files, which usually after the user permission are recording and storing data about the user. During a repeated visit to the same webpage, the cookies are uploaded to the server and updated. The initial use of cookies was to make the visits more time efficient for the user. It could be transcribed as a webpage memory, saving the previous settings, information about user and activities, such as adding items to the shopping cart. Nowadays, cookies are often associated with privacy intrusion and ethics questionability. This is mostly due to the third party cookies, which are part of the basic type division as follows:

- The session cookies are active only during the visit of the webpage and disappear upon closing it. The usual function is to store the user actions during browsing multi-leveled webpages, such as e-shops.
- The second type of cookies is the permanent cookies, also referred to as first-party cookies. These cookies are elaborated in this chapter, is the basic form of data storage, generally saved on the user's computer and initiated by the server during the session.
- The last type is the third-party cookies. These are the data collected by third-party websites, often without user knowledge. This type of cookies is subject to data mining, personal information selling and general invasion to user privacy. The

most common occurrence is in advertisements, social networks and foreign elements displayed on these sites. (Gao, 2005)

Basic data measure categories

- Traffic displays the number of users who entered the webpage and can distinguish unique visitors based on cookies.
- Traffic source analyzes the initial sources and services, from which the users have accessed the webpage, also referred to as acquisition. Data gathered are for example the organic search, which indicates that user has found the webpage through a search engine, such as a Google, Yahoo, Bing. Paid search illustrates users who entered the webpage upon clicking on a paid advertisement, such as banners, PPC, pop-up. Direct access indicates that the user has entered the page by typing the URL address. Referral marks users who entered the page by clicking on a hypertext link, posted on other pages. Social traffic source indicates visitors from social media. The company can also create its own traffic source category, for specific purposes, such as for measuring the success of a certain marketing campaign.
- Audience location detects the geographical location of users visiting the webpage, often used for marketing targeting.
- Demographic data are accessed through cookies, online user profiles or data input. Most relevant information are age, gender, interests, behavior patterns, browsing history.
- Exit rate is measured by visitors, which are users who deliberately entered the webpage and their relation exceeded a certain specified time or action criteria.
- Immediate exit rate is measured by visits, which are counted as users entering the page and immediately leaving it, as opposed to visitors. (Gao, 2005)

1.8.2 A/B testing

A/B testing is a multipurpose tool, based on comparing two versions of the same object. In the case of website analytics it refers to deciding between two webpage variants, based on the perception of the tested audience. The main goal of such A/B testing is to improve website efficiency, which is directly related to improving the key performance factors. The basic level of testing is presented in the graphic user interface, simplified as website design and functions. An example could be a comparison of layout, design, color scheme

or general user perception and feeling. Although not specifically measurable, the feeling is often the deciding parameter for the website visitor. The more in-depth testing refers to analyzing data such as user paths, programming errors or website adaptiveness to connected devices. The process of testing is based on providing two different testing version to the user, identifying the requested task and measuring desired data. (Siroker and Koomen, 2015)

1.8.3 Website perception

Beaird and George (2014) describe the visual perception of the website as one of the keys to a successful conversion of a visitor to a customer. Gao (2005) agrees, highlighting the focus on the overall design, color scheme, layout and functionality, followed by minor details, such as text stylization. Beaird and George (2014) also stress the importance of the first impression, upon which the visitor often decides to stay or leave the page within seconds. This impression is generally based on a feeling, as opposed to measurable attributes. The basic design, which aims to maximize the positive perception could be divided into three main interconnected categories:

- Layout, which defines the whole webpage, location of each particle, their interconnection and overall impression.
- Colour, which evokes a certain mood in the visitor, as the colors are directly connected to human emotions. For example the green color evokes a feeling of easiness and relaxedness, the red color radiates emotion, white color gives a perception of fairness and modern style, purple represents wealth. Colors of grey scale can be both modern looking and monotone, even invoking negative feelings, depending on the design.
- Text stylization, which describes the correct way of writing and formatting text on the website, with relation to other elements. Beaird and George (2014)

1.8.4 Social media in marketing

Social media marketing has experienced significant growth during the world wide web evolution into so-called Web 2.0. This new perception of the web is based on the user-generated content and interactions, as opposed to the initial Web 1.0, which was focused on one-way communication. Social media platforms have fully absorbed the principle and built on it even further. Gao (2005)

Schoja (2016) discusses that today's digital world is interconnected on this basis, which created a massive opportunity for the business sphere to shift and adapt its marketing to these channels. The social media most used for marketing are Facebook and Instagram, as by creating a company's page, they help to create social groups around the firm, build its story and promote its portfolio. The sites offer paid advertisement, with a precise estimation of reach to price ratio and countless targeting options.

2 Analysis of the current situation

2.1 Company presentation

Barko s.r.o. is a company based in the Czech Republic, established in 1997 and operating since 1998 by opening its first business unit in the city of Syrovice. Since then, the company has grown both in size and market share, as well as broadening its portfolio of products and services. At present, the company focuses on both B2B and B2C business with clients from all over Europe.

The vision of the company is to accept all customers, regardless of size and to help nature by recycling a secondary material waste.

The main area of business of the company is in the waste and recycling industry, which is connected to the metallurgical and other industries processing secondary materials. The main focus of the company is buyout, processing and selling the secondary material, as the company serves as an intermediary, connecting waste producers and processors. This activity is often referred to as the general broker company model of the industry. (Folea, Cahill and Stalios, 2014)

The company deals with metal scrap, including ferrous, non-ferrous and precious metals, paper, electric components and devices, car batteries, cars and miscellanies. The focus on this work will be aimed towards the metal scrap, as it is the largest portion of the company's processes, and at the new platinum extraction technology.

The company is composed of a headquarters located in Zastávka u Brna and several business units, located mainly in the Moravia. These business units serve two main purposes. Primarily as a storage and processing units for a material acquired from a business deal. Secondly, as a contact place for non-business customers, who wish to sell the waste.

As of the year 2019, the company has finished building its first factory for platinum extraction from catalytic converters. This new, unique technology will be aimed towards foreign markets, as well as the domestic market. (Barko, 2019)

According to Porter's generic strategies, the company is operating the cost leadership model, focusing on minimizing costs and prices, retaining a certain amount of margin. The company has lately started focusing on differentiation strategy by offering a unique

service of direct LME booking and lately, the new product of platinum extraction. Based on Ansoff's matrix, the company is currently implementing the market development strategy, as it offers a new, unique product to the foreign markets.

The market targeting is composed of two main segments, the type of customer and geographical location. The company focuses both on business and non-business clients. The first category is communicated to mainly through direct channels, with an emphasis on personal approach, as they create the major part of the company's revenue. The non-business clients are communicated to through more areal channels, with local focus and intention of promoting the buyout centers. The company segments the market also geographically, as to the domestic market, which includes Slovakia, and foreign markets, which include countries of the European Union. Foreign marketing communication is currently underdeveloped, which is the focus of this paper. (Barko, 2019)

2.2 Macro environment analysis

2.2.1 PESTEL analysis

2.2.1.1 Political factors

Ministry of industry and trade, through its institution Czech Invest (2019) states that the Czech Republic has a long-running stable politic and economic environment. This promotes trade, competitiveness and overall rating of the country. The credibility is also supported by rating agencies, namely the Standard & Poor's (rank AA-), Moody's Analytics (A1) and Fitch Ratings (AA-). Combination of the factors is placing the Czech Republic into global top 30 competitive countries.

One of the main concern of the European Union as a united market is the competitiveness of its industries. This trend is present in the industries related to the company, as the support for innovation of technologies related to the fourth industrial revolution, such as big data, internet of things, swarm robotics and blockchain, is high. A company with such technological capabilities can enter numerous funding and research and development programs, as well as focus its marketing on these activities, which promotes an image of a modern, efficient and innovative company. (Rademaekers, et al, 2011)

According to the World Bank's (2019) ease of doing business with rankings, the Czech Republic ranks at 35th place out of 190 and most of the European Union's countries are ranked in the top 40 positions.

2.2.1.2 Economic factors

As per data published by World Bank (2019), the GDP of the Czech Republic for the year 2017 was 215,9 billion US dollars, displaying a stable annual economic growth of 4,4%. The economic growth forecast for the next three years, calculated by the European Commission is slightly decreasing per annum. The annual inflation in 2017 was 2,4%, with a forecast of stagnation around the 2% mark. World Bank (2019)

The traders depend on the price mechanism of multinational exchanges, which derives the value of each material. The stock exchanges, such as the London Metal Exchange are an inevitable variable of the trade. These exchanges are interconnected to various external factors, including economic, as well as political, legal, technological and environmental. This often unseen influence can shift the price of the material drastically in a short time period. Companies are therefore more likely to employ methods of price-fixing, such as hedging. (Rademaekers, et al, 2011)

The European Union's production of waste is periodically exceeding its capabilities to process it. This information is a basis for two basic determinations. Firstly, the demand for buying and processing the material is secured and consistent in a long time period. Secondly, even small, domestic companies can exploit the demand and enter foreign markets. (Wang, 2013)

The stable demand is also secured by countries such as China, which is the world's leading importer of secondary materials, with an example of the metallurgy industry, which is not self-sufficient and is fully reliant on import. Other attractive markets for the sale of the material beside the European Union are India, Pakistan, Turkey and Vietnam. (Barko, 2019)

As elaborated above, the markets of the European Union are currently operating at their full processing capacity. Even though the labor, energy and technology costs are higher than in the mentioned Asian markets. The main reasons for the full capacities are technological advancement, quality of human resources, fully developed legal frameworks and logistics. These factors are applicable for both brokers who process the material and buyers of the processed material, which will be further transformed into a product. The final buyers generally seek processing companies with the mentioned factors, as it guarantees the quality of the material and the related services. This results in a competition in the local markets. (Yucel and Thomas, 2018)

At the same time, the high labor, technology and energy cost in the European Union is one of the main reasons for companies to avoid production there. Most of the companies are therefore buying, processing and selling the secondary material to the buyers from different locations. This separation of markets lead to a trend of developing Asian industries, focused on production and manufacture from secondary materials. (Dessart and Bontoux, 2017)

2.2.1.3 Social factors

The trading on the stock exchanges is also related to the social factors, which are gaining influence and coverage by technological advancement. Speculations, being one of the major trading factors, are directly influencing the price setting mechanism, as the prices are lately affected by two nonquantifiable variables. The first and main price shifting factor is political statements, which can change the price overnight. Second is the overall political and economic environment and mood of the country or industry, such as the trend of willingness to invest. (Rademaekers, et al, 2011)

Based on research by Hofstede (2019), the Czech Republic is a society with a high uncertainty avoidance, which is reflected in businesses avoiding uncertain outcomes and trying to reduce the risk. This factor might be connected to the broker companies using the mentioned methods of hedging and doing business based on framework agreements, due to the turbulent industry environment. The Czech Republic is also a society which is generally open and willing to negotiate and adapt to a sudden change, which is an ideal environment for brokers operating based on stock prices, as they are used to negotiating. (Rademaekers, et al, 2011)

2.2.1.4 Technological factors

The investment into research and development of new technologies is globally very high, as each country and organization directly or indirectly supports the innovation in its industries as a tool of competitive advantage. Although the technology investment in the European Union is generally high, the most notable progress is visible in the private sector, namely by the largest multinational companies, with sufficient resources. This represents the initial, first wave of implementing a new technology, which means that small businesses will be able to reach the said technology, but at a cost of time delay and possible other limitations. (Calis, 2006)

The processing of secondary material is defined by high energy costs and technology requirements. The countries of the European Union are global leaders in recycling technology, alongside Asian markets and the United States of America. The main issue connected to the high focus on technology and limits of European Markets is the energy and labor costs, which are notably higher than those in China and similar Asian markets. According to Wang (2019), the Chinese industry has already shifted to high-ampere aluminum reduction cells, which are characteristic for its energy consumption level under the world average, creating a further competitive advantage with relation to the quantity of material China is able to process. This is the main reason why European Union is unable to process the secondary materials as efficiently as China, which creates a tendency of local markets processing the purest, highest quality scrap, and exporting the rest. (Rademaekers, et al, 2011)

The Czech, European and Global technological advance is exponentially progressing, introducing a large number of innovative technologies in secondary material recycling, extraction, processing and the information systems connected. The factor with growing importance is automatization and self-sufficiency, which are able to replace a human factor to a certain degree or to assist it. The most innovative technologies are based on x-ray, magnetic fields or scanners capable of recognizing the chemical composition and attributes of the material before processing it. One of the most notable technologies related to Barko is the ability to precisely identify the amount of platinum in used catalytic converters and extract it with computer precision. This technology is in a process of early implementation to the markets, which creates a competitive edge to the companies who currently own and operate it. (Brooks et al., 2019)

The process of recycling requires on average sixty percent less energy consumed than a production based on raw material input. (Wang, 2013)

2.2.1.5 Environmental factors

The European Union and the member countries have declared a progressive environmental policy with goals of years 2020 and a vision for 2050. The policy aims to systematically reduce the negative environmental impact of certain industries, support renewable resources, such as clean energy and a low-carbon policy. The vision is to protect, conserve and enhance Europe's nature. The secondary material processing and manufacturing industries, as one of the largest energy consumers across the sector, are

already implementing necessary precautions towards the environmental policies, with modern technology as an advantage over competitive markets. (European Commission, 2019)

China, as the largest importer of secondary material has recently declared a new green country policy. The official government source of General Administration of Customs of the People's Republic of China transcribed the decision of The Central Committee of the Communist Party of China and the state council on Comprehensively Strengthening Ecological Environment Protection towards the new policy. The main point is a complete ban and a major restriction towards import of material marked as a scrap, officially taking force by 2020. (Yucel and Thomas, 2018)

Due to this policy, companies such as Barko will have to seek new export markets or adapt the material to a point of not being classified as scrap indefinitely. China has also lowered the import tariff on pure materials, such as ferrous, non-ferrous and precious metals from 11,5% to 8,4% in an effort to compensate the scrap import ban by the input of pure material. (Yao, 2018)

Due to China's new import policy, the United Nations expects rising global demand for pure material, rising supply and an increase in the effectiveness of secondary material sorting and processing. (Yao, 2018)

Based on the European Unions environmental policy, Yucel and Thomas (2018) expect rising popularity of recycling production as compared to primary production from raw ore. Recycling itself has manifested a significantly lower environmental impact, as it reduces pollution of soil and air as well as energy consumption. Primary production adds a factor of mining and finite resources to the equation. The secondary production is also significantly more effective in comparison to the quantity of material required for a produced unit and in the difference of waste generated by the process. (Wübbeke and Heroth, 2014)

2.2.1.6 Legal factors

The legal influences are mostly discussed in the environmental factors, such as import and export restrictions, bans and related logistics and business costs, such as taxes, quotas and limits.

2.2.2 Macro environment analysis summary

Table 1: Macro environment analysis summary

(Source: author: according to discussed research)

Political
<ul style="list-style-type: none">• EU and government support for research and innovation• Stable politic and economic environment• World bank ranks the Czech Republic as of 35th of 190 in ease of doing business with• Most countries of the EU are ranked within the top 40
Economic
<ul style="list-style-type: none">• Stable economic growth with expected annual continuation• Inflation within the norm, forecast of stagnation• Industry interconnected to LME, which is influenced by external macroenvironmental factors• Insufficient EU capacities to process secondary material, need for export• Capacities balanced by Asian markets, mainly China's dependency on import• High costs and limits of energy, labor and land
Social
<ul style="list-style-type: none">• The Czech Republic is a society with high uncertainty avoidance, promoting risk prevention• Highly volatile market, as political statements influencing society and commodity prices• The general mood on the markets influences willingness to invest
Technological
<ul style="list-style-type: none">• High level of investment into technology, mainly in the private sector• EU is one of the global leaders in technology regarding the processing of secondary material• China is slowly developing into a supreme technological market• Industry 4.0 implementation as a key factor for country competitiveness• The processing industry is 60% more cost efficient than primary production
Environmental
<ul style="list-style-type: none">• EU declared a progressive environmental policy to reduce negative impact and support renewable resources• China's new green country policy is limiting and banning the import of material marked as scrap by 2020• China has lowered import tariff on pure materials from 11,5% to 8,4%• EU expects a rise in secondary material, promoting environmental policies• Lower environmental impact of recycling as compared to primary production.
Legal
<ul style="list-style-type: none">• Interconnected to environmental factors (import, export, taxes, tariffs, ...)

2.3 Industry analysis

2.3.1 Specifics of the industry

The recycling industries, such as metallurgical, plastic, paper and others are generally globally interdependent, as the supply and demand are being created through the globe. Bako, such as many other competitors, is therefore forced to operate internationally in order to generate a profit and sustain market growth. (Dessart and Bontoux, 2017)

Knowledge of the current industry specifics is one of the key factors for a successful marketing strategy, which displays the importance of information sharing between the marketing department and the company. (Folea, Cahill and Stalios, 2014)

Political, technological and legal factors lead to a high global concentration of the industry, as the secondary material is easily transportable, therefore creating a worldwide supply and demand market, with several specialized processing facilities and industries. Such industrial specialization is for example China's quantitative and qualitative lead in ferrous and non-ferrous metal scrap processing. (Dessart and Bontoux, 2017)

The metallurgy industry is controlled mainly by several major companies, which create an output of 65% of the industry's turnover. (Dessart and Bontoux, 2017)

European Unions is globally the dominating market in the export of scrap, both metal and paper. The world's leading secondary material importer is China, due to its demand, which often surpasses a point of self-sustainability. (Rademaekers, et al, 2011)

Factors which define the industry are recycling technology, high energy consumption and a major environmental impact. (Folea, Cahill and Stalios, 2014)

The global concentration is also presented by the fact that the majority of the scrap production and processing is done by several large companies. The most traded commodities are ferrous, non-ferrous and precious metals. (Dessart and Bontoux, 2017)

The globalization is also visible in the price setting mechanism, as all of the commodities are traded based on a price set by public exchanges, mainly the London Metal Exchange, Chicago Exchange and Shanghai Metals Exchange. (Rademaekers, et al., 2011)

The principle of economies of scale is relevant in the industry, as the processing part of the business model is heavily reliant on the technology. Trading companies therefore do

business regardless of the physical proximity, as the more distant markets and business partners might have a beneficial economical position. (Dessart and Bontoux, 2017)

Rademaekers, et al. (2011) forecast the industry to progressively shift to the secondary production and material refining, as the primary production is inevitably predetermined to decrease due to the limited raw resources. Companies should therefore invest in technology able to increase the effectiveness of secondary material sorting and processing, in order to increase the output of pure material per unit of scrap.

2.3.2 Porter's five forces model

Rivalry amongst the existing competitors

The rivalry amongst existing competitors is intense, as none of the competitors has a major competitive advantage. This is mainly due to the public price-setting mechanism, which is generated on stock exchanges, being the main competitive factor. As all the companies have a set commodity price, the margin has to be gained through other means. (Rademaekers, et al., 2011)

The most traded commodities are metal, plastic and paper, which are essentially homogenous products. This fact, with a combination of mentioned price mechanism leaves companies in a similar starting supply and demand position. Companies, in order to achieve a profit margin, therefore focus on other means such as gaining advantage through human resources, services or technological lead. (Calis, 2006)

Bargaining power of buyers

The buyers are companies, such as metallurgical and plastic processors, which focus on purchasing the secondary material in a specific, required form, quality and quantity as an input and transform it into a new product. The bargaining power of buyers is high, as the quantity of secondary material is in surplus in the European Union's market, which increases the negotiating power of the buyers. Depending on the current availability of the material, the buyers can change the buyout prices of the scrap alongside with other demands. (Global Recycling, 2019)

The industry is specific by its high elasticity between supply and demand. As the general price of material changes regularly, yet periodically, the buyers are in a position to demand not only the price, but also other attributes. The most common demands are those of delivery terms, payment terms and specific quality of the material. The larger the

amount of material in a transaction, the fewer companies are able to process it, strengthening their position even further. (Global Recycling, 2019)

The basic business model is of a broker attempting to purchase the material as cheap as possible, processing it, by which the market price rises significantly, and selling the material with a maximal margin. As the potential buyer can choose from several brokers, it is expected that the offer with the lowest price will be successful. As discussed, this is the point of companies promoting it's value-added, which can outweigh a better price offer. (Barko, 2019)

Bargaining power of suppliers

The suppliers, same as buyers, have a significant position over the broker companies. The firms, such as Barko, enter the market in a position of the buyer, seeking the material based mostly on price, followed by quality and logistics solutions. This puts the company to an uncommon position, as the general business model of other industries puts the supplier into a weaker position. (Barko, 2019)

It is necessary to distinguish business suppliers and supply from physical customers, who in comparison contribute to a negligible quantity. The latter category forms a minor quantity supply and has minimal negotiating power. (Barko, 2019)

The business suppliers are therefore able to choose from multiple potential buyers, as the material is homogenous by its nature. Suppliers are able to create a competition between the potential buyers and raise the price or other requirements. (Barko, 2019)

Threat of substitutes

The level of threat of substitutes varies, as each specific commodity faces its own substitute threats. The first type of substitute is the substitute for material, which could lead to a change in supply and demand. For example, modern materials such as carbon might replace the aluminum to a certain degree. This occurrence is currently only in small and specialized scales, due to the costs. The threat of substitutes from the position of the shift of material demand is therefore low. (Dessart and Bontoux, 2017, p. 34)

Another substitute is in relation to the final buyers, as they can choose between buying a secondary material or primary, raw material. As discussed, the raw materials are less cost efficient and have a higher negative impact on the environment, which leads to the trend

of demand decrease. The threat of substitute from the position of final buyers is therefore low. (Rademaekers, et al, 2011)

The broker companies, such as Barko, have an option to adapt to the market demand and supply, therefore considering all the above potential substitutes, none is a direct threat to the company.

The threat of new entrants

The threat of new entrant is significant, as there are no barriers to entry for trading companies. Factors such as a capital structure, network, experience and technology are an advantage, but not a necessity for entering the market. These factors are relevant to the companies which aim to only buy and sell the material. As Rademaekers, et al., (2011) discuss, if the factor of processing was added to the equation, the minimal entry barriers would be set to a capital structure, human resources and technology. Brooks et al.,(2019) also highlight the importance of well-established connections, know-how and optimal conditions on the market.

Dobrovnik, et al., (2018) describe a new type of threat is emerging due to technological innovations and globalization. One of the most notable ones is an emergence of online business platforms, securely operating through the blockchain. This technology allows the so-called peer-to-peer trading, meaning businesses are able to trade without an intermediary company, such as brokers. The technology is also promoted for its capability of precise monitoring of the attributes of the shipment, such as country of origin, environmental impact, quality and other specifics. (Daly, 2018)

2.3.3 Analysis of competition

2.3.3.1 Global competition

EMR Group

Description: *“European Metal Recycling is a global leader in metal recycling, welcoming both business and public to trade scrap metal at our friendly professional yards.”* (EMR, 2019)

Competitive advantage: The EMR Group is one of the major global players, with size and capital structure exceeding most of the competition. This allows the company to lessen its margin compared to the competition, as they make up for it by the number of sales. The other competitive advantage is that the company doesn't necessarily process

the purchased material. Instead it focuses on buying the material and transporting it directly to the end customer, operating as a broker and supplier. This approach might however prove to be disadvantageous at the certain circumstance, as the company has almost no control over the quality of the shipment. (Barko, 2019)

Marketing communication channels: The websites are static, without adaptive scaling. The general design is notably aged. The social media presence is mainly on facebook. The company is managing it rather well, the post is consistent and relevant to the brand building, as they are focused mainly on good news, contributions and achievements, creating an image of successful, friendly company. The company allows direct communication through both chat and commentaries. The company also uses Twitter and LinkedIn as a mirror to the facebook group, creating a strong social media presence. The Instagram page is still in development. Considering the size of the company, its online market communication is well managed towards personal feeling and community involvement. The communication channel of the website is underwhelming.

Scholz recycling

Description: “Recycling. Resources. Responsibility.” This is not just the motto of Scholz Recycling GmbH, but also its ambition. (Scholz, 2019)

Competitive advantage: One of the most reputable and longest operating companies in the global market. The company operates multiple processing facilities located directly in the target markets, such as China. This gives the company a local advantage, as it can buy and process material locally, eliminating the need for transportation completely. This strategy has proven problematic in relation to China’s new environment policy, as the company can no longer import material classified as scrap to its Chinese processing facilities. Admittedly, Scholz is a veteran of Asian markets, which might result in an effective solution. (Barko, 2019)

Marketing communication channels: Scholz operates a website matching the modern standards, it is responsive, modern looking and optimized to run swift on all devices. The design is simple and highlights the most important elements, such as contacts and locations of facilities. The company has no social media presence whatsoever, which in combination with the website creates an image of the business to a business-oriented company with minimal non-business personal touch and community engagement.

Gemini Corp.

Description: “The whole world is a small village”. (Geminicorp, 2019)

Competitive advantage: Gemini Corp. Promotes the same business model as its competitor EMR Group. The company prioritizes cost leadership strategy, lowering its margin, allowing the company to sell at the lowest prices possible. The company is known for its flexibility, as it focuses on adapting to dynamic demand. The threat of China's import ban is present for Gemini as well. The flexibility is expected to be a key factor, as the company might redirect its supplier channels to companies offering a purer material, which can be imported to restricted markets. (Barko, 2019)

Marketing communication channels: Gemini bases its webpage design on a clean and simple look. It offers a graphical signpost, which redirects the visitor to a specific material division of the company, such as wood, plastic or metal. The webpage is fully responsive, adaptive and lag-free. Gemini has an almost non-existent social media presence, as it only posts on its Facebook group. The group activity is on average once per month or less, with negligible reach.

2.3.3.2 Local competition

TSR Czech Republic

Description: The motto of the company is reliability. The vision is an effective recycling solution to waste producers and offer of high-quality material to customers. (TSR, 2019)

Competitive advantage: The TSR Czech Republic has a strong capital and reputation backing from the Global Remondis group and connections to its other subsidiaries. This allows the company for acquisition opportunities, solidity and reputational bonus. The company focuses on the whole buy, process, sell model, making it a direct competitor. The main advantage of TSR is its own research and development facility as well as the ability to invest in the most modern technologies, making it one of the biggest companies in the domestic market. The company has also a wider coverage of the facilities through the Czech Republic. As per the newest competition research, none of the domestic companies, including TSR does own the newest platinum extraction technology, which is one of the keys to Barko's competitive edge. TSR's weakness might be its insufficient online promotion and inflexibility, which is caused due to the company structure and decision making, which during strategic planning might be in cooperation with the parent company. (Barko, 2019)

Marketing communication channels: TSR has a simple yet effective webpage design. The company uses an adaptive, modern looking design, focused on highlighting its products and showcasing its dominant market coverage of domestic facilities. As the company is a purely Czech division, the webpage offers no multilingual customization. The weak side of TSR's communication channels is social media, as the company has only a LinkedIn account, which is more business focused. There is a complete absence of other social media platforms. This might come as a surprise, due to the TSR's promotion of its over 30 buyout facilities through the Czech Republic, which is mostly aimed to non-business customers, as the social media are one of the most effective mass communication and awareness tools.

Remet

Description: *“Your future business partner“* the company promotes its flexibility towards customers and willingness for a personal approach. (Remet, 2019)

Competitive advantage: The company's basic operations are similar to Barko and TSR, with the exception of its aluminum division. Remet is not only a trader company of the classical buy, process, sell model. The company also operates in metallurgy, offering a production of aluminum alloys. This gives the company an advantage in the domestic market, as it offers to reduce customer costs for time and transportation. (Barko, 2019)

Marketing communication channels: Remet displays a modern, clean looking website with dynamic elements, focused on its areas of operations. The design is stylized in the company's specific color scheme, which promotes subconical memorization. The choice of prevailing black and white scheme with next to no color pallet might be a subject to discussion or A/B testing. The website is fully translated into the languages relevant to the company. Remet focuses its social media presence on Facebook. The page is active, posting news frequently. As for the scope, it falls to a category of small pages, with room for growth.

Gebeshuber

Description: A sound example of traditional buy, process, sell model, which the company utilizes to its full potential. A daughter company of Eisenhandel Gebeshuber GmbH (Gebeshuber, 2019)

Competitive advantage: The company has established stable cooperation with companies such as Schulz and Chico-Environmental Group, which allows for a prosperous global trade. (Barko, 2019)

Marketing communication channels: It is clearly visible that the webpage has outlived its time, as per judging the limited aspect ratio, blog-like design and general visual perception. This is confirmed by the watermark, as the webpage was created in 2009. The webpage is reliant on adobe flash player, that in most cases must be manually activated or in case of some visitors, installed. The sound strategy would be a complete redesign of the webpage. The company has no social media presence.

2.3.4 Key Success factors

The company, in order to operate efficiently, requires a strong capital structure which can be provided internally or by a parent company. A strong capital structure enables the company to reduce risks, trade in large quantities and generally creates a strong background, on which the company can build a reputation of a stable, reliable business partner. (Dessart and Bontoux, 2017)

A guaranteed and secure long-term access to the material is one of the key factors of doing business in the industry. The access is ensured by the company itself as well as by the market conditions and properties. The company can strengthen access by an effective communication network, long-term framework agreements and an effective marketing promotion, which supports the visibility of the company and potential supply. (Rademaekers, et al, 2011)

As the industry is heavily globalized, the factor of low trade barriers is necessary. This factor enables firms to export and import material with minimal to none restrictions and supports a healthy competition. Companies which can operate globally have access to larger markets and more strategic options. (Rademaekers, et al, 2011)

Considering the current setting of the market, each company needs secure access to the stock exchanges, such as the London Metal Exchange in case of Barko. In the case of

non-business customers, the stock exchanges must be public, as to avoid any speculations. (Rademaekers, et al, 2011)

Dessart and Bontoux (2017) also highlight the importance of protection from market turbulence in the form of price fixings, such as hedging and fixed contracts. This factor also promotes planning in the company.

Smaller companies are advised by Dessart and Bontoux (2017) to operate on a first-out first-in basis, as to buy and sell material in a position of an intermediary, based on contracts, not to make an unnecessary stock.

2.3.5 Industry analysis summary

Table 2: Specifics of the industry

(Source: author: according to discussed research)

-
- High level of global interconnection, requiring companies to operate internationally
 - Majority of the industry controlled by large companies, new entrants must focus on value-added, know-how and networks
 - High energy consumption
 - High technology involvement, the progressive shift toward automatization
 - Dependence on LME
 - Economies of scale are relevant in the industry
 - Forecast of a progressive shift to a secondary production

Table 3: Key success factors

(Source: author: according to discussed research)

-
- Strong capital structure
 - Access to material
 - Low trade barriers
 - Access to the stock exchange
 - Protection from market turbulence

Table 4: Porter’s five forces

(Source: author: according to discussed research)

Rivalry amongst the existing competitors
<ul style="list-style-type: none"> • No competitor has a major advantage, rivalry level is high • Dependence on LME leaves a little space for price manipulation. • Focus on value added
Bargaining power of buyers
<ul style="list-style-type: none"> • High power of buyers, a surplus of the material increases the negotiating position • A large number of suppliers enables buyers to create a competition • Buyers can demand additional specifics of product/ service
Bargaining power of suppliers
<ul style="list-style-type: none"> • High power of business suppliers, as they can choose from multiple offers • Low power of non-business suppliers
Threat of substitutes
<ul style="list-style-type: none"> • Each commodity faces its own substitute threat • The threat of new materials substituting the traditional ones, such as carbon and aluminum • The threat of new business models substituting the company in general • The shift in demand for primary and secondary material
The threat of new entrants
<ul style="list-style-type: none"> • The threat is significant. No barriers to entry for trading. Higher requirements for processing.

Table 5: A marketing communication analysis of competition

(Source: author: according to discussed research)

	Responsive webpage	Modern design	Social media	Social media activity
EMR	No	No	Yes	Weekly
Scholz	Yes	Yes	No	-
Gemini	Yes	Yes	Yes	Monthly
TSR	Yes	Yes	No	-
Remet	Yes	Yes	Yes	Weekly
Gebeshuber	No	No	No	-
Barko	No	No	No	-

2.4 Microenvironment analysis

2.4.1 Competitive edge

As advised by Rademaekers, et al., (2011) the company invests into processing technologies such as scanning, sorting and extraction, in order to gain a competitive advantage. These processes compile the value added to the material by reducing the company's costs and increasing the output efficiency and quality.

Barko, as one of the traders with a focus on processing, has multiple storage and processing units which enables the company to take on businesses with large quantities of material. The processing technology also allows the company to buy a low-quality secondary material, which is more complicated to sort and process. This gives the company a competitive advantage over smaller competitors and companies with insufficient space, technology and capital structure. (Barko, 2019)

The company has a good reputation, long history and is backed by a strong capital structure, which makes Barko a trustworthy business partner. Barko has established a variety of long-term business contracts and frameworks, allowing the company to operate with reduced risk and increased efficiency. Trading based on long-term contracts with dependable suppliers and customers with a combination of the strong capital structure allows the company to control its liquidity and solvency. The company network and reputation also allow being in contact with multiple trading channels, which could substitute a loss of supplier or customer. (Barko, 2019)

Barko is engaged in the trade of a variety of material, from the standard scrap such as metal, paper and plastic, through car wreckages, wirings and electronics to a latest added commodity, platinum. This allows the company to cover a large scale of the market, reduce the risk and specialize its divisions to a specific commodity. (Barko, 2019)

The company, as one of the few on the European market and the only on the domestic, allows the customers to book prices directly through the London Metal Exchange. This function is highly attractive to the clients, as they can book the material price instantly, without negotiating. (Barko, 2019)

The company finished building a new factory with the cutting-edge technology of platinum extraction from catalytic converters. The technology is unique in the Czech Republic and very rare even in the markets of the European Union. The main advantage

of the technology is the ability to scan the catalytic converter prior to the extraction, giving precise information about the quantity of plasma inside. (Barko, 2019)

2.4.2 Value Chain

2.4.2.1 Primary activities

- Inbound logistics
 - a. Business demand intake management

Department: Business

Activity: The department of business handles the management of information networks regarding the acquisition of material. The department is responsible for processing demand, bids and purchase contracts.

One of the main functions of the business department is securing a stable demand for the material. The business department is therefore responsible for matching the demand to supply. Material acquisition based on an exact demand is preferred to a predictive stocking of material, which is therefore followed by seeking a buyer, as mentioned in the first-in-first-out method. The following activities of the business department are creating an offer to the supplier and maintaining open communication channels. As discussed, this activity, in ideal conditions, is directly related to the negotiations with the potential buyer.

b. Acquisition of the purchased material

Department: Logistics, Quality

Activity: Transportation of acquired material to assigned facilities, quality control, evaluation and material assortment

In a case when the material has to be transported by own means, the logistics department receives information about the order from the business department and proceeds to the logistics operations. The purchased material is transported to the assigned Barko facility, based on the quantity and specifics for processing and storage. Barko is able to conduct the logistics on its own, as it owns several trucks. In case of a larger or technically more challenging order, the business department, after consultation with logistics, proceeds to contact an outsourcing company. The role of the quality department rests in inspecting the material prior to processing, and if possible prior to purchasing. The quality of material matching the price is the responsibility of the quality department. This responsibility is realized through authority to change the buyout price or conditions based

on deviations from agreed material quality. After transporting the material, the quality department is responsible for the correct allocation. The department also plays a role after the processing, as to evaluate the output quality.

c. Non-business demand intake management

Department: Logistics, Quality

Activity: Acquisition of material from non-business customers, quality control, evaluation and material assortment

The quality department is also responsible for dealing with non-business customers. Barko is currently operating several buyout facilities across the Moravia, which are designated for an intake of smaller quantities of material. The department is responsible to classify and evaluate the material. The logistics department will thereafter allocate the material to a specified place.

- **Production**

Department: Processing

Activity: Processing the material into the required form

The processing department is responsible for processing the material into the form which is required by the customer and corresponds to the industry standards and norms. The basic processing activities deal with cutting, formatting and packeting of material. More advanced processes require skilled human labor or specific machinery for extraction of material. The general product parameters are quantity, quality and purity. The department must also work according to the time schedule defined by the business contract.

- **Outbound Logistics**

Department: Logistics, Processing, Quality

Activity: Transport of the processed material to the end customer

Transportation of material to the end customer is generally handled by Barko's vehicles, customer or an external company, depending on the specifics of material and contract. The material must undergo a final examination by the quality department after the processing. The most used ways of transportation are truck transport, railroad and sea transport. In case of a material with higher rarity and value, such as precious metals and platinum, the transportation parameters might differ.

- **Marketing and sales**

Department: Marketing, Business

Activity: Managing the company's marketing strategy

The marketing department is responsible for the creation and management of Barko's marketing strategy. That includes the general marketing approaches, marketing communication mix, channels, public relations and the general brand image. The marketing department works in a close connection to the business department, as the marketing must follow the company goals, vision and current trends. The department deals with the general, universal marketing, as well as focuses on both businesses to business and business to customer marketing. The business department is also partially responsible for the marketing promotion in the business to business are, as the company traders are required to promote the company and maintain a good business relations, which improves the company reputation.

- **Service**

Department: Business

Activity: Managing customer feedback

The service department is responsible for managing mostly the objections and questions from customers. As the produced material is not a final product, the company does not offer a warranty and post-warranty services. The main task of the department is to deal with any issues in products and services.

2.4.2.2 Support activities

- **Firm infrastructure**

Department: Company management, Finance, Controlling

Activity: Strategic planning, bookkeeping, enforcement of legislation

Company management oversees the other departments, the company and its environment in general. The main responsibility is strategic planning and reaching set goals. The finance department is responsible for bookkeeping compliance with accounting standards and norms and supports company management in financial planning. The controlling department consists of specialists, who focus on keeping the legal factors, such as norms and regulations up to date and standards.

- **Human Resource Management**

Department: Human Resources

Activity: Managing the human resources of the company

The human resources department is responsible for acquiring, managing and improving the company's employees. The process is a cycle, which begins with constant monitoring of current work positions and their respective employees in relation to the ever-evolving requirements. In case of a vacant or a new position, the department is responsible to employ a competent employee. The current level of employees is regularly improved by further education in relevant fields. Department is eligible to create and manage employee reward programs, with cooperation with company management department. The department is also responsible for handling disputes and problems amongst the employees.

- **Technology development**

Department: Information Technology, Technology, Processing

Activity: Management of facilities, technology acquisition, hardware and software management

The technology department is responsible for acquiring, installation and management of machinery as well as periodical management of the facilities. The facilities and its respective units must be up to date, efficient and safe, which is managed in cooperation with Processing and Controlling department. The Information Technologies department is responsible for managing the internal software and hardware. Both departments ensure that the technology is up to date and the employees are educated and fit to operate it. The Information Technology department is also in close cooperation with the marketing department, mainly in relevance to digital communication channels.

- **Procurement**

Department: Business

Activity: Ensuring the optimal trading contracts

The procurement is a starting part of the inbound logistics activities, operated by the business and logistics departments. The departments ensure the business conditions to be as beneficial to the company as possible.

2.4.3 Microenvironment analysis summary

Table 6: Competitive edge

(Source: author: according to discussed research)

- Investment in processing technologies
- Multiple storages and processing units
- Strong capital structure, history and renown
- The established network of business contacts
- Large portfolio of material and specialisations
- LME system embedded to the website, allowing for a direct price booking
- Platinum extraction technology

Table 7: Porter's value chain

(Source: author: according to discussed research)

Primary activities	Activity	Department
Inbound logistics	Business demand intake management	Business
	Non-Business demand intake management	Logistics, Quality
	Acquisition of the purchased material	Logistics, Quality
Production	Processing the material into required parameters	Processing
Outbound logistics	Transport of processed material to end customer	Logistics, Processing, Quality
Marketing and sales	Managing the company's marketing strategy	Marketing, Business
Service	Managing customer feedback	Business
Support activities	Activity	Department
Firm infrastructure	Strategic planning, bookkeeping, enforcement of legislation	Company management, Finance, Controlling
Human resource management	Managing human resources of the company	Human Resources
Technology development	Managing facilities, technology acquisition, hardware and software management	IT, Technology, Processing
Procurement	Ensuring optimal trading contracts	Business

2.5 Marketing analysis

2.5.1 Analysis of the marketing mix

2.5.1.1 Product

Barko has a wide variety of offered products and services, as it trades with many types of secondary materials. The company offers to buy and process scrap and proceeds to sell the processed material to a customer. (Barko, 2019)

Product from a perspective of the customer, willing to sell material

The company offers to buyout a scrap from the business or non-business customer. The portfolio consists of multiple materials. First being metals, which are divided based on composition into ferrous metals, non-ferrous metals and precious metals. Ferrous metals, such as iron are the most common metal commodity, followed by non-ferrous metals, such as aluminum, copper or zinc. The rarest form of metal are the precious metals, such as gold, silver, bronze and platinum. The other offered products are a buyout of catalysts, paper, wiring, electronic waste and car batteries.

The new product in the company's portfolio is platinum, which is being extracted from catalytic converters. The customer can offer any scrap, which is identified in one of these categories, regardless of the quality, quantity or form.

Product from a perspective of the customer, willing to buy the material

The end customers are companies looking to buy the processed scrap, now referred to as a secondary material for production input. Depending on a prior contract, the material might be processed specifically according to the demands of the customer. The basic processes are sorting, dismantling, cutting and packaging.

Customer value

The customer willing to sell the scrap is generally aiming to generate as much profit as possible, while exerting a minimal amount of costs included. The customer therefore tends to monitor the price development, based mostly on the quantity of material, as the larger the quantity, the more beneficial the buyout price. As the supply of scrap is always present, the end customer can choose from multiple competing companies. The product selection specifics are therefore mainly price, quality, terms of payment, logistics and company reliability.

2.5.1.2 Price

The price of products and services is established based on several factors. The price of metal commodities is set based on market stock derivation, mostly from the London Metal Exchange. The stock market is constantly changing and each material has its own price, which is influenced by global factors and factors unique to the material. The price of non-stock commodities is based on costs, competition and general price level.

Price from a perspective of the customer, willing to sell material

Customers willing to sell the scrap are focused mostly on two price factors. The buyout price, which is to be as high as possible and the transportation costs. Depending on the nature and quantity of scrap, the customer has to choose between own means of transportation and the transportation service offered by Barko. As elaborated, customers tend to monitor the fluctuation of commodity price, in order to maximize the profit. While selling a commodity which price is derived from the stock exchange, the customer can directly book the current price on Barko's website to up to 5 days. The price increases based on quantity.

Price from a perspective of the customer, willing to buy material

The same principle is applied for final customers, to whom Barko sells the processed material. These customers have to take into account the price of material and transportation as well as additional and optional costs incurred by custom processing, sorting, cutting and packaging. The long term business clients are eligible to negotiate better price conditions in general or by framework agreements, as a bonus for reliability.

2.5.1.3 Place

Barko operates four buyout and processing facilities, which are opened for any customer, willing to sell the material. The material is to be transported either by the customer, or can be picked up by Barko's logistics department. Barko also offers car towing. The customer looking to buy the processed material has the option of transportation at own costs or delivery by Barko at the agreed price. The most common transport solution for businesses is a full package offered by Barko, which usually outsources a logistics company.

2.5.1.4 Promotion

Barko focuses a large deal of investment into the promotion through multiple communication channels and constantly seeks new promotion opportunities. The marketing department monitors, analyses and adjusts its communication based on current market trends, inner company requirements and also runs a long-term strategy. For wide-scale marketing, Barko currently uses the following channels: Website, advertising, sales promotion and online banners.

The advertising is performed through radio commercials (aired on local radios), advertising billboards, advertisement on the company's vehicles. The company's current promotion weakness is lack of modern digital communication, such as social media and search marketing. The company also doesn't attend any industry venues. The author will focus on this aspect of the promotion.

As for business customers and partners, the company also uses a more direct and personal approach to online and offline communication.

2.5.2 Communication channels analysis

2.5.2.1 Traditional channels

The company invests into multiple forms of **advertising**, based on the targeted audience, trends and seasons. The advertisement channels are as follows:

- Advertisement on company vehicles (trucks, personal cars, containers).
- Radio advertisement. Ads played periodically throughout the year on Radio Krokodýl, as it has the biggest audience reach in the region, which results in the best price to performance ratio. Other radios might be used depending on a more localized focus.
- Billboards and advertising areas near the main roads leading to Brno. This type of advertisement is slowly decreasing in use.

The **personal selling** channels are used mainly amongst the business to business relations, as by using this channel, the company can acquire new clients or maintain the relationship with the current ones.

Direct marketing is used mostly business to business in the form of phone calls and emails.

Sales promotion is offered towards both customers willing to sell the scrap and final buyers. The first category is offered a weekly action on one selected materials, which will have an increased buyout price for a week. By this, the company hopes to increase the input of the selected material.

An increase in buyout price with the increasing quantity of material. The latter category is offered advantageous terms based on the contract negotiated. In this case, the sales promotion might be in the form of price reduction, shipping and credit terms.

The company is not regularly engaged in any **venues**. The participation in venues is generally scarce, as the company focuses mostly on educational expositions organized by universities.

2.5.2.2 Digital channels

Website is the main digital marketing channel of the company, as it serves both for promotion and business. The main domain is www.druhotnesuroviny.cz, and www.barko.cz, which will redirect the visitor to the first page. Company has also launched www.drahekovy.cz, as an effort to promote the precious metals, including the new product of platinum extraction. The next standalone website is the www.evykup-barko.cz, which enables the visitors to instantly book the price of material through real-time market prices. The website is always in the process of evolution, as the company tries to improve the design, efficiency and customer experience, which is connected to the business itself. The main website is relatively new, as the redesign was launched in 2016, which is however a temporary solution, as the template is gradually becoming obsolete.

The main issues are in design layout, the complexity of the web and responsiveness to a resolution and screen ratio change. The strong part of the website is the functionality, as it interconnects the visitors to LME in real time and offers a tuned booking system. The precious metals website has already implemented a brand new design, which should be applied to the whole website.

Another issue, as specified by Beaird and George (2014) is the potential customer design perception, which is formed within seconds by the first impression, upon entering the website. The issue is the color scheme, which creates the overall user feeling from the website. The current color pattern is generally monotone and bland. Modern sites are often distinguished by simple, light-colored design, with a contrasting of warm color,

which creates a welcoming feeling. Other arguable elements are the form of translation and minor text and layout parameters. For the visualization of the current color scheme, please visit chapter 3.4.

Barko uses multiple forms of **search marketing**. The company uses **SEO**, attained by efficient website coding and keywords. The focus is primarily on the Czech market and the Google search engine.

The company currently uses Google Ads **PPC** for promotion. The advertisement is done through Czech keywords and is based on pay per click, meaning the more competitive the competition, the more the company has to pay for each click. The company uses three versions of the Google Ads, namely the search engine promotion, website promotion and promotion in videos.

The search promotion displays the company's pre-defined design amongst the search results as one of the top ones. The design has to fit the Google requirements, generally consisting of title, brief text field and an URL. The website PPC is displayed on any page, offering an advertisement space. The promotion in videos is done through the YouTube platform, which is owned by Google. The static advertisement is displayed at the bottom of the video, not to be mistaken with video ads running prior to the video. For additional samples of current running ads for each platform, please discuss Appendix I.



Figure 7: Sample of PPC advertisement, displayed at websites

(Source: Barko, 2019)

2.5.3 Marketing analysis summary

Table 8: Marketing Mix

(Source: author: according to discussed research)

Product	Price
Buyout of scrap	Buyout price of metals based on LME
Selling of secondary material	The selling price of metals based on negotiation
Related services	Non-stock commodities price based on competition, costs, value added
Commodities: <ul style="list-style-type: none"> • Metal • Paper • Wiring • Electronics • Car batteries, catalysts 	The additional price charged per custom services
Services: <ul style="list-style-type: none"> • Car towing • Cutting, packaging, formatting • Extraction of precious metals • LME price booking 	
Place	Promotion
Buyout facilities for both B2B and B2C customers	Advertisements
Product pickup from the client	Digital marketing
Product delivery to the client	Personal selling
	Direct marketing
	Sales promotion

Table 9: Marketing channels analysis

(Source: author: according to discussed research)

Traditional channels	Form
Advertising	Billboards, radio, vehicles, containers
Personal selling	B2B communication
Sales promotion	Limited price offers
Venues	Expositions, educational venues
Direct marketing	Phone, email
Digital channels	Form
Website	Company's websites
Social media	None
Search marketing	PPC, SEO

2.6 SWOT

Strengths

Capital structure, which secures a stable market position, reduces the risk of trading and promotes reliability.

A wide portfolio of offered material, with many specializations. This offers the company to adjust to the current market environment, fluctuation and short to long-time industry trend changes.

Several unique trade channels and partners, which reduces risk of unprofitable business transactions and serves as an insurance against a loss of a supplier or a customer.

The new platinum extraction technology, which is unique to the Czech market and one of the few in the European Union's market. This allows the company to attract clients through Europe and gain a reputation of an innovative company.

A website interfaces with a direct connection to the London metal exchange, as the only company on the Czech market, allowing the customers to book the material prices online.

The high flexibility of the company towards innovation and investment, as the company management believes that one of the keys to competitive advantage is in technology.

Weaknesses

An unsatisfactory number of human resources, as the company is in active search to fill multiple vacant positions. The industry gradually increases its demand for employees with specific skills.

As a broker type company, the main limitations of the buy, process, sell model is the processing capacity, speed and storage space. This limits the seemingly limitless potential of trading external commodities, as opposed to own production.

Insufficient marketing strategy towards foreign markets. The company focuses most of its marketing on a domestic market, which is a weakness towards the newly implemented products aimed towards international markets.

Non-existing social media presence. The social media have quickly become one of the most efficient tools of marketing communication and brand promotion. Social media are a fitting tool to promote the company, create a strong brand and keep in touch with customers.

Opportunities

Investment in innovative technologies. The top end machinery allows the company to process the material more efficiently, increasing the ratio of input material to the final product and reducing the waste generated. New technology also promotes energy, cost and time efficiency.

Research into the implementation of new potential products, such as unique materials and more precious metals. The increase of product portfolio would allow the company to enter new markets or to be able to offer more products to the existing clients, generating a stronger business partner position. The company could use this approach as a pre-emptive strategy against potential substitutes.

Company has a unique opportunity to expand to the European market, as its currently implementing the new platinum extraction technology. The company should focus on its international marketing strategy. The clients obtained through the new technology might be potential business partners in other commodities.

The company could consider the fourth industrial revolution, mainly the blockchain technology, as many industry businesses are expected to implement this technology. Creating a digital mark on the material should increase its attractiveness, as the stakeholders can monitor its attributes, such as origin. The technology might be an industry standard in the future, promoting security and transparency of trade. Another benefit of the blockchain is the peer-to-peer transactions. (Dobrovnik, et al., 2018)

The rising pollution of soil, oceans and air is a major global problem, with one of the solutions to be found in the recycling industries. The issue leads to new environmental policies, which may force governments and organizations to support the industry.

Threats

The increasing political and legal pressure on environmental protection is directly influencing the industry. Recycling is one of the most energy demanding industries, which has a major environmental impact. The industry itself, as well as other related industries, is also specific for its air and soil pollution. Current most drastic precaution is in the form of the discussed Chinese import restrictions and ban, which forces companies to either seek new export markets or to process an adjusted material. The most common threats are taxes, import and export restrictions and bans, and emission limits. (Wübbecke and Heroth, 2014)

The threat of substitutes leading to a decrease in demand for current materials the company is trading with. This is mainly due to advancement in technology and rising demand for a specific material such as carbon, which is a suitable replacement for aluminum. The same can be applied for gold, which might be replaced from the position of conductors by new, wireless technology. Political and legal pressure might also lead to changes in the generation of waste, resulting in shifting material trends. (Dessart and Bontoux, 2017)

A new type of competition, mainly the online trading servers and platforms, which connect the scrap producers and final buyers without the need of a trader, such as Barko. The platforms work on advanced algorithms, able to match supply and demand and offering a secure trade and payment conditions.

The threat in a form of new technology becoming a standard for the industry, such as discussed blockchain. The company might fall behind the competition by not implementing the necessary innovative technologies in time. The currently emerging new

businesses, which are based on online platform business models are gradually implementing the technology. (Daly, 2018)

The threat of scrap producers becoming self-sustainable. This is represented by an example of Toyota, which has established several scrap processing facilities as its daughter companies. Toyota is therefore aiming to process all of its generated waste, eliminating the companies such as Barko from the business model.

2.6.1 SWOT chart summary

Table 10: SWOT chart

(Source: author: according to discussed research)

Strengths
<ul style="list-style-type: none">• Strong capital structure, liquidity• Wide portfolio of products and services• Reliable trade network• Platinum extraction technology• Website LME price booking interface• Focus on innovation and technology investment
Weaknesses
<ul style="list-style-type: none">• Unsatisfactory human resources, vacant positions• Business model limited by processing capabilities• Insufficient foreign marketing communication• Non-existing social media presence• No research facility due to the size of the company
Oppoturnities
<ul style="list-style-type: none">• Investment into innovative technologies• Secondary research of innovative technologies• Opportunity to expand to foreign markets with new platinum extraction technology• Focus on Industry 4.0 technology, such as blockchain• Public support of environment and recycling
Threats
<ul style="list-style-type: none">• Legal norms, restrictions and bans• Substitute commodities and business models• Progressive technological innovation• Self-sustainable scrap producers

3 Proposals and contribution

The main aim of this chapter is to combine the researched theory, conducted analyzes, analytical data, tests and communication with company representatives, upon which the author will propose improvements to the company's selected marketing communication channels. The selected channels are mostly digital, with the exception of venues, which are however also to be implemented in a mean to be digitally measurable. The selected channels are namely:

- Website, as the company currently operates multiple websites, domains and online services, which the author deems to be in need of improvement.
- Social media, as the company doesn't promote itself on any social media at the moment.
- Search marketing, as the company acquires clients mostly by organic search, which is insufficient regarding the aim to attract a foreign clientele.
- Venues, as the company needs to acquire business partners.

The offered improvements in marketing communication are aimed to increase the efficiency of the company's marketing promotion, marketing reach and to improve the brand image in general. The aims will serve two main reasons:

- Implementation of new platinum extraction technology, which is a product primarily targeted at business customers through the European Union. The marketing promotion must be in accordance with the market entry strategy.
- General improvement of the company's digital marketing communication with a focus on a foreign clientele.

The solutions provided are devised by author of the paper, based on own experience and knowledge, as well as on conducted literature review, analyzes, professional references and communication with the company.

3.1 Targeting

The basic market segmentation will be established on two properties. First, whether the target is a business or non-business customer. Secondly, based on the geographical location. As the author focuses mostly on digital channels, which in default cover a wide area without the need for targeting, the specific targeting will be done mainly through

social media and venues. The website, social media and search promotion will be in general a wide reach tool, with the possibility of custom targeting.

As the majority of non-business customers is located in the South Moravian region, which corresponds to gathered data, as well as the location of buyout facilities, the company can use a Facebook advertisement campaign. Facebook ads can be precisely directed towards this region or even more focused areas, such as districts and towns. The company could also define the preferred age of potential customers. Another form of targeting will be in the venues itself, as the company should participate in specialized exhibitions and fairs abroad, presenting the new technology. The combination of the location and technology itself is targeting mostly to foreign business customers. The company does not expect a high supply of catalytic converters from non-business customers. The website, social media and search promotion will be in general a wide reach tool, with no default targeting.

3.2 Improvement methodology

As discussed in the introduction, the author has composed the paper into three main parts, theoretical, analytical and practical. This chapter will further elaborate on the chosen methodology and the step-by-step process of creating an improvement proposal. The complete methodology, including solution and post-implementation phase is as follows:

1. Setting the aims and expected results

The author has set the aims in the introduction chapter, further enhanced by elaboration, including expected results in chapter 3, the main goal chapter.

2. Researching the relevant literature, models and frameworks

All relevant theory, starting from the marketing basics, further focused into the scope of the work, has been described and discussed in the first chapter, the theoretical foundations.

3. Conducting relevant analyzes

The author has selected the analytical models and frameworks based on expert recommendation and general renown of the models. The conducted analyzes were approached in the same manner as the theory, starting from a broad perspective and further focusing on the factors relevant to the aim of the paper. The author has conducted

external macro-environmental analysis, industry analysis, internal micro-environment analysis and marketing analysis, which is a standalone level for the purpose of this work.

a. External environment analysis

The author has used the PESTEL framework in order to analyze the external environment of the company. The full version of the framework was selected, as the environmental and legal factors are of utmost importance in the analyzed industry.

b. Industry analysis

The industry analysis was performed through Industry specifics, Porter's five forces model and analysis of key competitive factors of the industry. The analysis of competitors is further elaborated in a standalone subchapter.

c. Internal environment analysis

The analysis of the internal environment was conducted by Porter's value chain framework, supported by competitive edge analysis.

d. Marketing analysis

The author has selected the Marketing Mix and Marketing Communication channels as the main focus of the marketing analysis.

4. Selecting the relevant marketing communication channels for improvement

The author, based on the theory, analyses, and communication with the company, selected the communication channels deemed to require improvements. The key attribute of selection was the connection to the aims set in the first step, focus on modern, digital approach and targeting foreign markets. The selected marketing communication channels are digital, such as website, social media, search marketing (PPC, SEO) and physical, such as venues.

5. Google analytics data evaluation

The author has conducted an evaluation of the data gathered by Google Analytics. The chosen marketing communication channels were each subjected and compared to research regarding the application in the company's marketing strategy, on which basis the author has evaluated their current state and established a hypothesis for improvements. As per the request of the company, the numerical data acquired from Google Analytics will be displayed in percentage ratios.

6. Website improvement hypothesis

The established hypothesis for website optimization was evaluated based on A/B testing, data analysis, questionnaires and application of theoretical background.

7. Proposal for improvements based on the previous steps

The data gathered were used as an input for either improving the current state of communication channels or approving its functionality. The solution is also supported by economic suggestion estimates. The author has also highlighted the importance of monitoring and discussed relevant tools and approaches.

3.3 Google Analytics data evaluation

General analysis of sessions

The Google Analytics were implemented to the website and the program has been operating since June 2009 until the present day without interruption. This gives the author enough data to analyze and make assumptions, as the amount of data gathered is sufficient and the length of the measured time period is enough to trace relevant patterns, processes and trends.

Visits by geography

Based on the geographic factors, one of the data gathered is the location, from which the visitors entered the page. The location is set to display the state and if possible, city. Most visitors came from the Czech Republic, followed by Slovakia. Germany, Austria and Poland. The rest of the visitors came either from other European states, with a highlight on the Netherlands and also from the USA. Other countries, which might be considered anomalies, are Brazil and China. As for the Czech Republic, the majority of visits came from Brno and region Brno-venkov, followed by Praha, Ostrava and Třebíč. These searches are categorized as relevant, as the system was able to store the location of 98% of all visits.

Table 11: Visits by geography

(Source: author: according to discussed research)

Location	The portion (%)
Czech Republic	82,22%
Slovakia	9,98%
Germany	2,62%
Austria	2%
Poland	1,5%
Others -	1,68%

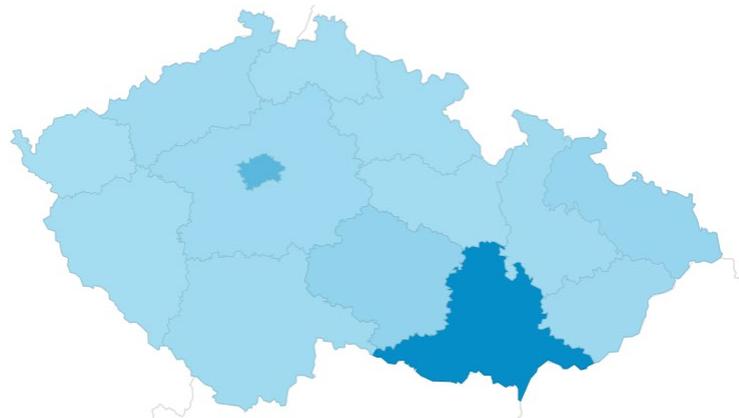


Figure 8: Visits by geography

(Source: Author)

The latter countries are under an assumption of anomalies, as the company does not have any English keywords, PPC or SEO which might be displayed to the foreign visitors at the moment. This leads to the assumption that the visitors might have been people using VPN, tourists or robots. As expected, the majority of visitors came from the domestic market, followed by the Slovakian market and other neighbor countries. This statistics is mainly due to the company's current marketing focus on the Czech market and the focused clientele. The first point is supported by the minimal marketing communication adaptation towards foreign markets, such as the absence of English social media, SEO, PPC or attendance on venues. The second point is purely numerical, as the company focuses its business on both business and non-business customers, which clearly lead to a majority of visits being from non-business domestic customers, looking for local

services. The business customers, including the foreign, are a significantly smaller portion of visitors. The newly targeted segment of business customers for platinum extraction will have a minimal impact on demographic data gathered, which is why this tool is suitable mostly for local non-business customers or with relation to other statistics.

Repeated visits

Company monitor how many of the total visitors entered the page only once (monitored by an initiated session, which automatically creates and manages a user ID) and how many have re-entered the page for two or more times. The latter category is marked as a visitor, which is a person with an intent to re-enter the page, therefore a customer or a potential customer.

The main assumption for repeated visits is that people periodically monitor the prices of material, provided either by Barko or London Metal Exchange, which is implemented to the site, as well as the weekly material special price offer. The current rate of repeated visits since January 2018 to present is 29%. The assumption is that the number is composed mostly of people monitoring the weekly actions and LME price development. The rest of the visits are expected to be one-time visitors, looking for an opportunity to sell the material.

Visits by demographic

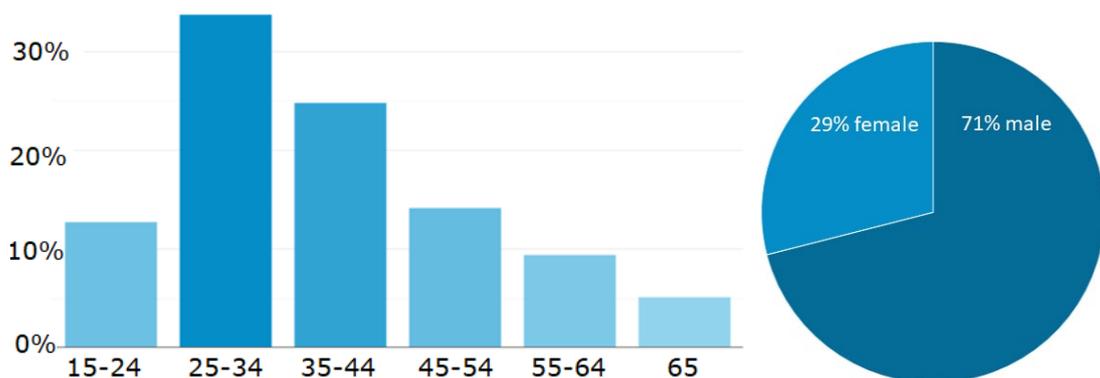


Figure 9: Visits by demographic

(Source: Author)

The company gathers the demographic data by creating a User ID of each visitor. The male to female ratio is determined by the Google Dots Name Validation API, which automatically analyses the name and evaluates the gender. The names are available through the online form in the LME booking section, which the client is obliged to fill.

The age is determined by the user's profile data, which most of the regular clients create. Out of all the visitors, the company has gathered gender data from 15% users and age from 30%. The gap is mainly due to API not recognizing company names and generally more accounts created than bookings done.

The author would highlight that the majority of visitors are aged between 25 to 44, which corresponds to the statistics of social media users by age, as displayed by Statista (2019). This leaves a major gap in the company's communication channels.

Visits by device

The majority of visits (78,9%) came from desktop computers and laptops, using an internet browser. The second most used device were smartphones, which consists of 17,6%, followed by the minority of tablets and other devices (3,5%). Based on these statistics, the recommendation would be to focus on the optimization of the desktop website, as it is currently not responsive to a resolution and aspect ratio changes. The website offers a mobile version, which is simplified and works on all devices.

Acquisitions

Visits based on acquisitions have shown that the organic search was the most proficient way of people finding the webpage, with a visit count of 77%. The second most numerous number of sessions has happened through the paid search with 12%. Direct links and directly typing URL into the web browser is the least used mean of entering the page with a count of 11%. The following tables will display the acquisition by keywords.

Table 12: The most searched keywords on Seznam search engine

(Source: author: according to discussed research)

Keywords	Translation	The portion (%)
Výkup kovů	Metal buyout	7,21 %
Hliník výkup	Aluminum buyout	7,20 %
Ekologická likvidace	Ecological disposal	7,07%
Výkup elektroniky	Electronics buyout	5,84%
Výkup autobaterií	Car batteries buyout	5.08%
Výkup železa cena	Metal buyout price	4,97%

Table 13: The most searched keywords on Google search engine

(Source: author: according to discussed research)

Keyword	Translation	The portion (%)
Barko	Barko	16,94%
Výkup železa	Metal buyout	9,95%
Výkup papíru	Paper buyout	8,84%
Drahé kovy výkup	Precious metals buyout	8,20%
Výkup autobaterií	Car batteries buyout	8,08%
Sběr papíru	Paper collecting	4,47%

Table 14: Main website competitors based on the similarity of organic search

(Source: author: according to discussed research)

Website	Keyword similarity (%)
Sroty.cz	64%
Kovosrot-alba.cz	59%
E-sberny.cz	48%
Kovosrot-suda.cz	45%
Cajdasrot.cz	44%

The assumption is clear, as the majority of visitors came from organic search, this corresponds to non-business potential customers seeking local services. The company should therefore implement tools that enhance the visits from paid search, with distinction to the foreign customers and the new technology. The keywords from both search engines are rather similar, with a focus on the company's services, prices and ecological dismantling. The main difference is in Google's top search – Barko, which might indicate a sample of visitors, who regularly enter the page in order to monitor prices and weekly sales promotion in the form of actions.

Landing pages

One of the key statistics that company gathers is the number of visits to each website category. The author will work with a limited dataset, which will include all the data, but will not divide them between paid and organic search, as per the request of the company. By landing pages, Barko measures which parts of the web are most visited and focuses its efforts based on it. The measuring is done through sessions, rather than visits. The most visited URL is the www.druhotnesuroviny.cz, alongside www.barko.cz, which will redirect the visitor to the same webpage. This page, being the main part of the web is the default landing page. The following table displays the most popular landing pages.

Table 15: Landing pages

(Source: author: according to discussed research)

Landing page URL	Landing page characteristics
http://www.druhotnesuroviny.cz	The main page
http://www.barko.cz	The main page
http://www.druhotnesuroviny.cz/cenik.htm	The price list
http://www.druhotnesuroviny.cz/co-vykupujeme	The commodity list
http://www.druhotnesuroviny.cz/Kontakt	The contact page
http://www.drahekovy.cz	The buyout of colored metals
http://www.evykup-barko.cz	The LME price booking

Keyword gaps

The Google Analytics, with support of the Alexa database and Google web statistics has analyzed a total number of 782 keywords used by the companies similar to Barko. From the sample of most searched keywords, the company uses 88%, which leaves a blank space of 12%, which are the keyword gaps. Keyword gaps, ranked by the usage of competitors are:

- Autovrakoviště
- Metal buyout
- Precious metal price
- Ankauf von Metallen
- Likvidace

Two assumptions can be made. First, the obvious gap in foreign language keywords, which indicates that the company lacks in implementing multilingual communication channels. Second, the nature of the search, which is directed mostly on ferrous and non-ferrous metal, including precious metals, which indicates a foreign demand for the company's services in specified areas of expertise.

Bounce rate

The bounce rate of the webpage is 40%, which indicates that 40% of visitors close the website immediately on the first landing page. The bounce rate standard for similar websites, according to Google Analytics, AdWords and Alexa is 53%. The general bounce rate in business-oriented websites in the Czech Republic is 43%. This bounce rate is assumed to be related mainly to the random visits and visitors, looking for the weekly prices. The author would point out that bounce rate in this case doesn't mean the visit was unintentional, as visitors might enter the page looking for a weekly price action or a contact number, which is located on the entry page.

The average length of visit

The average length of the visit is 2 minutes and 35 seconds. The average number of pages visited is 2,1 per visitor. This would correspond to the assumption that most visitors enter the main page and proceed to click on the section of the website they look for, which is usually the exit page as well. One of ten visitors on average also proceeds to click on another part of the webpage, which might indicate a misclick or a complicated website structure.

3.4 Website improvement hypothesis

The author has devised a hypothesis of a website redesign, based on conducted website analysis, compared to modern website standards and the author's experience. The main issue is the monotony of color palette and minor graphics and layout inconsistencies. The author has slightly redesigned the current main webpage to fit the criteria as analyzed in chapter 1.8.3 and performed qualitative and quantitative research. Quantitative research was done in the form of A/B tests, performed anonymously through Google Questionnaires. The qualitative research was based on the questionnaires, which had an optional choice to answer multiple related questions. As expected, the majority of respondents chose to select the preferred variant without filling the optional questions.

The proposed redesign, if successful, should serve as a temporary solution, until the completion of new webpages. For results, please discuss Appendix II.

Version A: The original

Based on anonymous feedback, the current website design gives off a monotone feel, with color scheme being dominated by shades of grey. This corresponds to Beard and George (2014), who discusses the negative feeling invoked by certain applications of such color. The majority of respondents focused primarily on the background picture of and the general color scheme of the two proposed variants, paying little attention to formatting and text stylization.



Figure 10: Current website design

Source: (Barko, 2019)



Figure 11: Colour scheme of the current website

(Source: Author)

Version B: Author's alteration proposal

The author has modified the website in two main attributes. First, the overall design, including attention to the color scheme. Second, the text stylization. The most notable change is the replacement of the background picture, for which the author has used a photo copyrighted by the company. The photo was chosen based on the color scheme, with prevalent green, evoking relaxed and good mood, and also corresponding to the company's main color. In addition, a car with a dominant red color, depicting emotions, but at a limited scale to avoid being the center of focus. The overall background color was also shifted more forwards to white color, as to promote the modern, clean design and reduce the monotone grey color. The current shade of grey is also more prone to inaccurate display on various monitors.

As for the text stylization, the author has aligned the text into a block, which is perceived as more professional and widened the space between rows for an increase of readability, as corresponding to Beaird and George (2014).

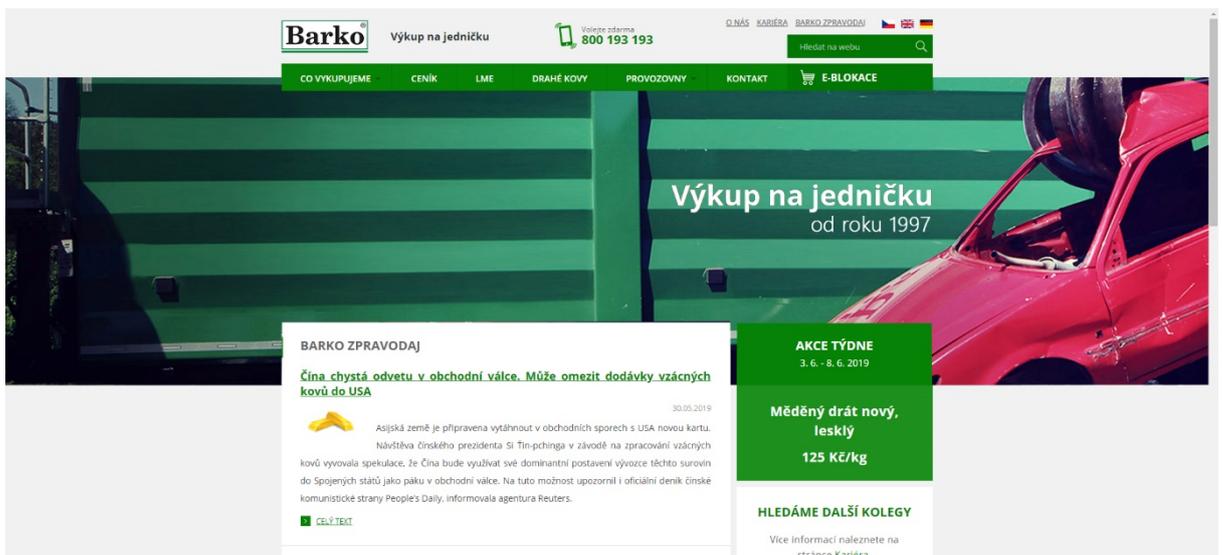


Figure 12: Modified website design

(Source: Author)

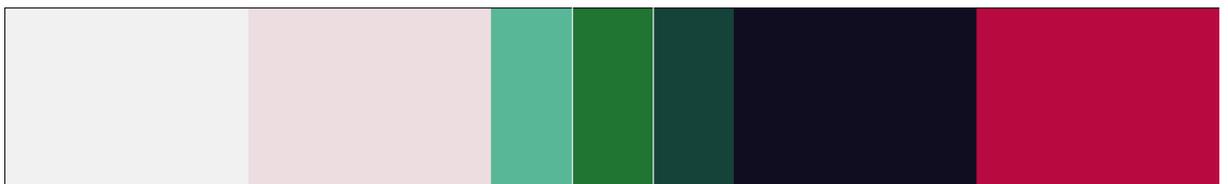


Figure 13: Colour scheme of the modified website

(Source: Author)

The hypothesis was deemed true, based on the conducted A/B testing, supported by the comments of respondents. This means an opportunity to improve web design to increase the visitor's overall positive perception. This solution is executable at minimal costs within a short time, leaving the company more time to implement the complete redesign.

3.5 Solutions

The author has devised a set of proposed solutions for improving the company's market communication channels. The solutions are based on primary and secondary research, including literature review, environmental analyzes, data analysis, A/B testing and author's knowledge and experience. The recommendations are targeted both on business and non-business customers, with a focus on a foreign clientele.

The author **estimates** the solutions to improve the company's online presence and improve the cost efficiency of digital marketing communication. The search optimization is aimed to improve the website's KPI, which is expected to be done so by increasing the general traffic, thus the visitor conversion ratio. The social media are expected to build a strong social base around the company and improve the targeting of campaigns, using Facebook Ads. The venues and English e-channels optimization are aimed to acquire foreign clients for the new facility.

Website design and efficiency improvement

The author has divided the website solution into two phases. The first phase will consist of slight design alternations to the website, which will provide a temporary solution and give the company time for implementation of more time-consuming improvements. The website currently has two different styles, one older, as seen on the most pages, for example the main page and a modern, up-to-date style, as seen on the Precious Metals category. The second phase will therefore aim to update the website to the modern design and functionality standard of the site of the precious metal.

In **first phase**, the main page is to be graphically enhanced to make the design more appealing to the eye. This consists of changing the background picture to a more colorful one, as supported by the A/B testing and the discussed alterations of the author's proposed website adjustments. Human mind generally perceives colors as more appealing and personal than the current state of the website, which is represented by a monotone color palette, as seen in chapter 3.4.

The website is to be adjusted to the standards of responsiveness on both desktop and mobile devices, as currently it is not responsive to change of displayed size.

The author recommends to fully translate the websites to the English language, possibly other languages, based on specific targeted markets. The current translation is insufficient and for a potential customer time-consuming as the required information are not present and have to be requested from the company. The translation will include the news and articles, which will be connected and mirrored to social media.

The websites should also be adjusted esthetically, to be more pleasant for the eye and to improve the readability. The author recommends excluding the transparent panel, which displays the current path, as it is hardly readable and has no practical use for the visitor. The text on the website, mainly the news, should be aligned to a block, instead of the current left alignment. This will improve the visitor's perception and make the text seem more professional. The general text should also correspond to standard researched by literature, as to have the spaces between letters widened as well as the line spacing. The focus should be also on color, which is preferred to be in contrast to the respective background in order to be clearly readable.

The **second phase** will consist of a complete redesign, according to the modern standards, as presented by the site of the Precious Metals. The proposed URL www.barko.cz, as well as druhotnesuroviny.cz, will serve as an entry page to the company's multiple subpages, divided by respective products and services. The entry page will consist of a panel display, as presented by graphical tiles in the precious metal page. The main purpose is to increase the efficiency and user experience while looking for a specific service, as the current main page is starting to be overwhelmed by the company's increase in products and services. In general, the whole webpage and its subpages will be redesigned to the same modern style as the Precious Metals page, uniting the design. The change is not only graphical, as the whole style requires united programming, which will simplify and improve the efficiency of further website management and changes.

As per data analysis of most visited pages, the author recommends adding a watchdog function to the London Metal Exchange pricing system, embedded on the webpage. The value added from the customer perspective will be an increase in time efficiency and comfort of price monitoring, which is expected to increase the number of long-term clients. The downside might be a decrease in daily traffic, which is acceptable, as the

website does not generate any revenue per visitor. If the website was to implement tools to generate revenue per visitor, the solution could be altered by offering a the watchdog function as a paid website feature or a mobile application.

Social media implementation

The author advises the company to implement social media as one of the market communication channels, namely Facebook and Instagram. Use of LinkedIn could be also considered. The social media will serve as a tool of positive promotion, informational news and community creation. The basic concept of modern social media marketing is to tell a story. The company should mirror both sites, with addition to the website news, which is easily done as the structure of the media is very similar. The main focus should not be on selling, but on promoting, highlighting the successes of the company, advertising the newly acquired technologies and such. The social media are unparalleled in range to price ratio. The company can launch precise campaigns and ads, targeted on specific market segments, locations and customers. Facebook also offers a precise estimation of reach based on advertisement specifics. An important part of posting is the focus on foreign clientele, which can be successfully done by creating a multilingual page and posts. Social media offer to display two or more different versions of each page and post, as created by the company. The current trend is creating a graphical photo and short video posts, as people are initially focusing on the visual aspect, and content afterward.

Search marketing

The author advises the company to further improve its search marketing, with a focus on an international clientele. According to statistics, up to 72% of new business relations happen on Google search. The suggestion is to strengthen the current SEO and PPC. The company currently uses SEO aimed towards Google, with Czech keywords, the author recommends implementing keywords in English language and other European languages, depending on the targeted market. The most logical choice would be Germany and Poland. The author would also recommend using SEO aimed at seznam.cz, as Seznam still holds its ground against Google, with a one-third share of the organic search in the Czech Republic in the year 2018. This SEO would be targeted towards Czech clientele. One of the sources for new SEO might be the conducted analysis of keyword gaps and keywords used by the competition.

As for PPC, the author recommends continuing in the company's efforts by using Google Ads, with the addition of multilingual advertisements for the foreign market. A graphic redesign would also be advised. The modern trend is also in the form of interactive adds.

Venues

The author recommends enhancing the marketing communication channels by company's attendance of specific venues, specifically the ones focused on engineering and technology. The goal of the business will be to promote new technology and acquire business clients.

3.5.1 Economic suggestion estimate

The costs are based on the author's experience and IT background, combined with consultations with IT specialist and research of market prices. The main variables are website and social media, which costs might prove more complicated to estimate. The cost of a website redesign depends mostly on the time frame given to the web design company, as shorter means pricier. The cost is also related to the technology, which is behind the website, as keeping or changing it will affect the difficulty of the redesign, therefore costs too. The cost of social media depends on whether the company decides to use an internal or external solution. The author recommends outsourcing both the establishment and management of social media, at least at the start of the project. After a trial experience, the company could either train, possibly hire a new employee, or maintain the outsourcing company. The employee should be a part of the marketing department with a requirement to manage the full spectrum of discussed online marketing tools.

The author will discuss the related costs and estimations, all prices are displayed in Czech Crowns, further referred to as CZK. The company's annually published net turnover in 2017 was 347 million CZK, with EBIT of over 30 million CZK. Company's monthly marketing budget is in range of tens of thousands of CZK. The cost of solutions proposed by the author is well within the planned budget, with the exception of phase two of the complete website redesign, which would require a certain investment.

Table 16: Economic costs estimate

(Source: author: according to discussed research)

Channel	Activity	Cost in CZK
Website	Phase 1 redesign	1 000
	Phase 2 redesign	60 000
	Watchdog function	10 000 + server costs
Social Media	Facebook page creation	5 000
	Facebook page management	2 500 / month
	Facebook Ads	Depending on various factors
Search marketing	PPC	5 000 /month
	SEO	5 000 / month
Venues	Exhibitions	Depending on various factors

3.5.1.1 Costs commentary

The website includes an alternation of already existing sites, which reduces the costs by hosting and managing. The implementation of the watchdog function depends on whether the tool will be implemented internally or through an external application, such as Amazon SQS.

PPC includes analysis of keywords, adjustment of advertising channels, design of advertisements and online implementation. Due to the already existing Czech PPC, the total cost will be low. Further professional redesign and adjustments are priced at an average of 1 000 CZK per hour.

SEO includes editing of the web structure and content for foreign language search. The future management is expected to be in a range of few thousands CZK per year, possibly less, depending on company changes and trends.

Social media include the creation of the page for 5 000 CZK and management of the page for 2 500 CZK monthly. This includes periodical posts, consultation and community engagement. The company can decide to invest in Facebook Ads, which will induce additional costs in the range from hundreds to thousands of CZK.

The cost of **exhibitions** depends on the venues itself, location, size of the stand, length of action and many other factors. The company should expect a cost in the range of tens of thousands of CZK, which makes the attendance on venues very questionable. The author would recommend focusing on smaller, more specific venues.

3.5.2 Measuring and monitoring

As the proposed factors have mostly an indirect contribution to the company's sales, it is difficult to precisely estimate the expected profit increase. The author will therefore discuss recommended measuring solutions, which will enable the company to gather the data from each communication channel and improve the current ones. The company will be able to calculate and monitor the impact of the solutions upon executing discussed solutions and modify the strategy based on lessons learned.

Website data gathering is performed by Google Analytics, which is an all-around sufficient tool for measuring the relative indicators, such as conversion ratio and increase of traffic in specific segments. The tool offers a wide range of customization towards company's requirements. The website measuring is interconnected to the PPC and SEO marketing. The author would highlight:

- The possibility of monitoring the changes in organic and paid search, which is connected to SEO and PPC.
- The ability to measure the popularity of landing pages, which is connected to website optimization, mostly foreign keywords.
- Monitoring the average bounce rate, length of visit and rate of immediate exit, which is expected to improve by better website design and responsiveness.
- Measure a marketing strategy focused on a certain geographic location, as per comparison of pre and post visits.

Social media itself offer measuring tools, such as Facebook's Ads Manager, which provides a wide variety of interactive reporting tools. The company will be able to fully analyze both its page and advertisements. Social media are easily connected to the website, and implemented into the Google Analytics database. The page and ads are simply measurable by factors such as:

- Organic reach, such as fan reach, which represents people liking the page and viewing the contents intentionally and directly on the page. Organic reach grows

exponentially with the size of the site, as it's a connection to the community growth and brand image.

- Paid reach, which represents people interacting with the paid advertisement.
- Engagement, which displays people interacting with page or advertisement.
- Click-through rate, which displays the number of people who clicked on the link, photo or other attached content. The company can focus its content to fit the most popular user experience trends.
- Negative feedback, which measures how many people have hidden the ad or page, left the page or reported it. The company can draw conclusions on the reasons behind such actions and possible reparations.

Venues can be measured by two main methods, real-time attendance, and clients gained through past venues. The first category represents people interested or converted to customers by the company's presentation on the spot. The second option dwells in creating a special URL for exhibition visitors, or offering a unique form of sales promotion, connected to the venue, such as QR coder or discount codes. Company is therefore able to distinguish the visitors who came based on previous venue attendance.

Conclusions

The author has commenced the theoretical part by setting the aims and expected results of the paper. Performed thorough research of the relevant literature, frameworks and models, narrowed down from the general marketing theory and environment analyzes, through marketing communication and its factors, to precise tools used for evaluation and improvement of digital marketing communication channels.

Proceeded by analytical part, the author has performed the relevant analyzes in the scope of the macro environment, industry, microenvironment and marketing. The first segment consisted of the PESTEL analysis. The industry research is composed of Porter's five forces model, industry key success factors and analysis of competitors, focused on their competitive advantage and digital marketing communication channels. The microenvironment analysis consisted of market specifics, Porter's value chain analysis, competitive edge analysis. The marketing analyzes were conducted by researching a company's marketing mix and communication channels. The analytical part was summarised into a SWOT chart.

The author has afterward proceeded to the third, practical part of the paper. The author has selected the marketing channels for improvement, focusing mostly on the digital ones. Author thereafter conducted in-depth research, analysis and evaluation of each channel. The author has based most of the improvements on theory, secondary research and experience, as the solutions were aimed either at establishing a new marketing communication channel or improving non-public data segments. The only exception was in the form of the website, for which the author has constructed a hypothesis of design and efficiency improvement, by creating a redesigned model. The hypothesis was tested by conducting qualitative and quantitative primary research, which was aimed to support the theory and secondary research. Based on the research, the author has offered improvement solutions for selected channels, including estimation of costs and methods of efficiency measurement, which will enable to calculate the overtime performance.

In conclusion, the author recommends the company improvement solutions, targeting both business and non-business customers on the foreign and domestic market. The recommendations are an establishment of new multilingual marketing communication channels in the form of social media and venues, and improvement of the current channels, namely the website and search marketing, with an international focus.

References

- (1) **AMERICAN MARKETING ASSOCIATION.** (2004). The Definitions of Marketing. [online] Available at: <https://www.ama.org/the-definition-of-marketing/> [Accessed 2 Jun. 2019].
- (2) **ANSOFF, H. AND J. MCDONNELL, E.** (1988). The new corporate strategy. New York: J. Wiley.
- (3) **ANSOFF, H.L.** (1965) Corporate Strategy. McGraw-Hill, New York.
- (4) **BARKO,** Internal information related to the company [oral statement]. Nádražní 598/598, Zastávka u Brna, 16. 3. 2019
- (5) **BALOGUN, J. AND HOPE HAILEY, V.** (2008). Exploring strategic change. 3rd ed. Harlow, United Kingdom: Pearson Education.
- (6) **BEAIRD, J. AND GEORGE, J.** (2014). The principles of beautiful Web design. 3rd ed. SitePoint. (Beaird and George, 2014)
- (7) **BROOKS, L., GAUSTAD, G., GESING, A., MORTVEDT, T. AND FREIRE, F.** (2019). Ferrous and non-ferrous recycling: Challenges and potential technology solutions. Waste Management, [online] 85, pp.519-528. Available at: https://www.sciencedirect.com/science/article/pii/S0956053X18307852?fbclid=IwAR10jleUbaTy5OvnVveVHcWySPj9j4-XRaTECK9_sZq-5VyMoFt5xlK_2A4 [Accessed 7 May. 2019].
- (8) **BRUNEC, J.** (2017). Google analytics. Praha: Grada.
- (9) **CALIS, G.** (2006). New competitive realities in steel. [ebook] Amsterdam, Netherlands: SteelConsult International, Millenium Steel, pp.18-22. Available at: http://www.steelconsult.com/ArticleSteelConsultinMillenniumSteel_English.pdf [Accessed 2 Jun. 2019].
- (10) **CANNON, J., PERREAULT, W. AND MCCARTHY, E.** (2008). Basic marketing. Boston: McGraw-Hill/Irwin. (Cannon, Perreault and McCarthy, 2008)

- (11) **CAPON, C.** (2009). Understanding the business environment. 3rd ed. Harlow, England: FT Prentice Hall Financial Times, pp.5-13.
- (12) **CLIFTON, B.** (2012). Advanced Web Metrics with Google Analytics. Indianapolis, Ind.: Wiley. (Clifton, 2012)
- (13) **COLE, G.** (1997). Strategic Management. 2nd ed. London: Thomson Learning, pp.64-79.
- (14) **CZECHINVEST.** (2019). Stable Political and Economic Environment. [online] Available at: <https://www.czechinvest.org/en/Reasons-to-invest/Stable-Political-and-Economic-Environment> [Accessed 4 Jun. 2019].
- (15) **DALY, T.** (2018). As China restricts scrap, metal companies look to process copper abroad. [online] Reuters. Available at: <https://www.reuters.com/article/us-china-copper-scrap-idUSKBN1EX0OA> [Accessed 18 May. 2019].
- (16) **DESSART, J. F. AND BONTOUX, L.** (2017). Non-ferrous Metals Manufacturing: Vision for 2050 and Actions Needed. JRC Science for policy report, Foresight series. [online] European Commission. Available at: http://publications.jrc.ec.europa.eu/repository/bitstream/JRC106071/jrc106071_non-ferrous_metals_sector_-_vision_for_2050_and_actions_needed_online.pdf [Accessed 24 May. 2019].
- (17) **DOBROVNIK, M. ET AL.,** 2018. Blockchain for and in Logistics: What to Adopt and Where to Start. Logistics, 2(3), p.18. Available at: <http://dx.doi.org/10.3390/logistics2030018>.
- (18) **EMR.** (2019). EMR - Recycling to create the resource. [online] Available at: <http://www.emrgroup.com/> [Accessed 2 Jun. 2019].
- (19) **EUROPEAN COMMISSION.** (2019). Environment. [online] Available at: https://europa.eu/european-union/topics/environment_en [Accessed 1 Jun. 2019].
- (20) **FOLEA, V., CAHILL, E. AND STALIOS, A.** (2014). Metallurgy made in and for Europe. [ebook] Luxembourg: Publications Office of the European Union. Available at:

https://ec.europa.eu/research/industrial_technologies/pdf/metallurgy-made-in-and-for-europe_en.pdf [Accessed 4 May. 2019].

- (21) **FREY, P.** (2011). Marketingová komunikace. Praha: Management Press. (Frey, 2011)
- (22) **GAO, Y.** (2005). Web systems design and online consumer behavior. Hershey PA: Idea Group Pub. (Gao, 2005)
- (23) **GEBESHUBER.** (2019). Šrot Gebeshuber. [online] Available at: <http://www.gebeshuber.cz/cs> [Accessed 4 Jun. 2019].
- (24) **GEMINICORP.** (2019). Gemini Corporation- we give materials a new life. [online] Available at: <https://www.gemincorp.be/> [Accessed 7 Jun. 2019].
- (25) **GLOBAL RECYCLING.** (2019). Will China's National Sword Initiative Have an Adverse Effect?. [online] Available at: <https://global-recycling.info/archives/1461> [Accessed 1 May. 2019].
- (26) **HANZELKOVÁ, A.** (2013). Business strategies. Praha: C.H. Beck.
- (27) **HOFSTEDE INSIGHTS.** (2019). Compare countries - Hofstede Insights. [online] Available at: <https://www.hofstede-insights.com/product/compare-countries/> [Accessed 3 Jun. 2019].
- (28) **CHAFFEY, D. AND SMITH, P.** (2011). eMarketing eXcellence. Amsterdam: Elsevier. (Chaffey and Smith, 2011)
- (29) **JAKUBÍKOVÁ, D.** (2013). Strategický marketing. Praha: Grada.
- (30) **KENNERLEY, M. AND NEELY, A.** (2003). Measuring performance in a changing business environment. Emerald Insight, 23(2), pp.213-227.
- (31) **KOTLER, P. AND KELLER, K.** (2013). Marketing management. 14th ed. New Jersey: Pearson Education, Prentice Hall. (Kotler and Keller, 2013)
- (32) **KOTLER, P., ARMSTRONG, G. AND OPRESNIK, M.** (2017). Principles of marketing. 17th ed. Harlow: Pearson.

- (33) **KOTLER, P., WONG, V., SAUNDERS, J. AND ARMSTRONG, G.** (2007). *Moderní marketing*. Praha: Grada. (Kotler et al., 2007)
- (34) **LEVITT, T. (1983)**. The globalization of markets. *Harvard Business Review*, 25(3), pp.17-19.
- (35) **MANKTELOW, J.** (2005). *Mind Tools*. 4th ed. [ebook] Swindon: MInd Tools, pp.53-68. Available at: <https://books.google.cz/books?id=sLCJF9VdFDcC&pg=PT60&dq=why+use+p+estle&hl=cs&sa=X&ved=0ahUKEwimxtu-kefgAhUpsqQKHZOpALkQ6AEIKTAA#v=onepage&q&f=false> [Accessed 5 Jun. 2019].
- (36) **MARMOL, T., FEYS, B. AND PROBERT, C.** (2015). *PESTLE analysis. 50Minutes*. (Marmol, Feys and Probert, 2015)
- (37) **MASLOW, A. H.** (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396.
- (38) **MICHAUX, S., CADIAT, A. AND PROBERT, C.** (2015). *Porter's five forces. 50Minutes*. (Michaux, Cadiat and Probert, 2015)
- (39) **MITCHELL, M.** (2012). *SEO & PPC*. FT Press. (Mitchell, 2012)
- (40) **PORTER, M.** (2008). *Competitive advantage: Creating and Sustaining Superior Performance* New York: The Free Press.
- (41) **PORTER, M.E.** (1985) *Competitive Advantage. Creating and Sustaining Superior Performance*. Free Press, New York
- (42) **QUINN, J.** (1980). *Managing Strategic Change*. MIT Sloan Management Review, [online] 21(4). Available at: <https://sloanreview.mit.edu/article/managing-strategic-change/> [Accessed 6 Mar. 2019].
- (43) **RADEMAEKERS, K.** (2011). *Competitiveness of the EU Non-ferrous Metals Industries. FWC Sector Competitiveness Studies*. [online] Rotterdam: ECORYS Nederland BV. Available at: <https://ec.europa.eu/growth/tools-databases/eip->

raw-

materials/en/system/files/ged/82%20fn97624_nfm_final_report_5_april_en.pdf

[Accessed 22 Mar. 2019].

- (44) **RAY, R.** (2013). *The Facebook Guide to Small Business Marketing*. Indianapolis: John Wiley & Sons. (Ray, 2013)
- (45) **REMET.** (2019). Remet. [online] Available at: <http://www.remet.net/> [Accessed 9 Jun. 2019].
- (46) **RYAN, D.** (2012). *Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation*. 2nd ed. London: Kogan Page.
- (47) **RYAN, D. AND JONES, C.** (2008). *Understanding digital marketing*. Michigan: Kogan Page. (Ryan and Jones, 2008)
- (48) **SCHOJA, V.** (2016). *Why Should Companies Invest in Social Media Marketing?*. Hamburg: Anchor Academic Publishing. (Schoja, 2016)
- (49) **SCHOLZ.** (2019). Scholz Recycling – Recycling. Resources. Responsibility.. [online] Available at: <http://www.scholz-recycling.com/> [Accessed 1 Jun. 2019].
- (50) **SIROKER, D. AND KOOMEN, P.** (2015). *A/B Testing: The most powerful way to turn clicks into customers*. Hoboken: John Wiley & Sons, Incorporated. (Siroker and Koomen, 2015)
- (51) **STATISTA.** (2019). Global Facebook user age & gender distribution 2019 | Statistic. [online] Available at: <https://www.statista.com/statistics/376128/facebook-global-user-age-distribution/> [Accessed 13 Jun. 2019].
- (52) **THE WORLD BANK;** *Measuring Business Regulations*. (2019). Rankings & Ease of Doing Business Score. [online] Available at: <http://www.doingbusiness.org/en/rankings> [Accessed 10 May. 2019].
- (53) **TSR.** (2019). *TSR The Metal Company*. [online] Available at: <http://www.tsr.cz/> [Accessed 4 Jun. 2019].

- (54) **WANG, Z.** (2013). Multi-year expert meetings on commodities and development. [online] United Nations Conference on Trade and Development. Available at: <https://unctad.org/en/Pages/SUC/Commodities/SUC-MYEM.aspx> [Accessed 19 May. 2019].
- (55) **WRIGHT, R. AND ETEMAD, H.** (2001). SMEs and the global economy. *Journal of International Management*, 7(3), pp.151-154.
- (56) **WÜBBEKE, J. AND HEROTH, T.** (2014). Challenges and political solutions for steel recycling in China. *Resources, Conservation and Recycling*, [online] 87, pp.1-7. Available at: <https://www.sciencedirect.com/science/article/pii/S0921344914000627?fbclid=IwAR0DRXXJdRdenofTUgVMZKad51bOtd5CmafdtncLtO5O1veIfkARi1pRJqs> [Accessed 1 May. 2019].
- (57) **YUCEL, I. AND THOMAS, W.** (2018). How Chinese scrap bans are transforming global metal flows. [online] CRU. Available at: <https://www.crugroup.com/knowledge-and-insights/spotlights/2018/how-chinese-scrap-bans-are-transforming-global-metal-flows/> [Accessed 21 May. 2019].

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Appendix I - Samples of Barko's PPC promotion

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Barko

- Výkup za nejaktuálnější ceny dle LME
- Výkup širokého sortimentu kovů
- 20 let tradice

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Barko

- Výkup za nejaktuálnější ceny dle LME
- Výkup širokého sortimentu kovů
- Jistota platby za výkup

CENÍK MĚDI

AKCE TÝDNE VÝKUPU
23.4. - 28.4.2018

Litina kusová
6 Kč/kg

PŘEJÍT DO CENÍKU

Barko

Barko
NEJLEPŠÍ VÝKUPNÍ CENA

AKCE TÝDNE
Hliník kusový
33 Kč/kg

10.7. - 15.7.2017

PŘEJÍT DO CENÍKU

Barko
NEJLEPŠÍ VÝKUPNÍ CENA

AKCE TÝDNE
Železný šrot nad 6 mm,
max. 40x40 cm
5 Kč/kg

24.7. - 29.7.2017

PŘEJÍT DO CENÍKU

Appendix II – A/B Testing results

A total number of anonymous respondents was 56, of which 5 answered the optional question 2, regarding the reasoning behind their decision.

Transcription of questionnaires. The original version was presented as version A, the altered as version B.

“Question 1 – Which version of the webpage do you prefer, as a potential customer entering the webpage for the first time? Answer by choosing option A or B.

Question 2 – Please elaborate on your decision. “

Questionnaire 1 – Prefers version B

The greyscale radiates a more professional feeling towards me, but I agree on the second, more colorful version, as the execution of grey color is way too negative in this case.

Questionnaire 2 – Prefers version B

The first version is quite depressing. Was a filter used? As for the second option, I prefer light colors with a bit of added red.

Questionnaire 3 – Prefers version B

The second option seems more professional and gives a perception of simplicity.

Questionnaire 4 – Prefers version A

I like the first version, as it gives a real feeling of the size and seriousness of the company. Although I would prefer the background picture with real colors. The second version might be a followup in the slideshow

Questionnaire 5 – Prefers version B

I like the version with the car, but something is missing on the left side of the page, at least in my opinion. It seems quite blank. The general color scheme is working, I like the aspect of a red color, which radiates emotion.