

**UNIVERSITY OF ECONOMICS - VARNA**  
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**HAPPINESS AS SEGMENTATION CRITERIA IN B2B  
MARKETS**

**ABSTRACT**

of a dissertation paper for the award of the educational and scientific  
degree Doctor of Philosophy in Marketing

**Academic Supervisor:**

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The dissertation paper consists of 279 pages which include the following: Title page – 1 page, Introduction – 8 pages, Main text in three chapters – 187 pages, a conclusion 2 pages, Bibliography list -20 pages and appendices (55 pages). The dissertation contains 39 tables, 25 figures, and 15 appendices. The bibliography includes 431 sources in Bulgarian, English, and Turkish.

The dissertation paper has been discussed at the department of Marketing in the University of Economics – Varna and it has received a positive evaluation. The author is a fulltime doctoral student at the department of Marketing in the University of Economics – Varna. The research and the writing of the paper are carried out at the same university.

The dissertation defense will take place on **02.07.2024** at **14.00 h.**, in **Hall 205** of the University of Economics - Varna at a meeting of the Scientific Jury appointed Order No. № ПД 06-62 from 30.04.2024 of the Rector of the University of Economics - Varna.

The defense materials are available to those interested on the Internet the website of the University of Economics - Varna, [www.ue-varna.bg](http://www.ue-varna.bg)

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**Title:** Happiness as segmentation criteria in B2B markets

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## **I. A COMMON CHARACTERISTIC OF THE DISSERTATION PAPER**

### **1. The topicality of the research**

Market segmentation has been a hot topic in the marketing literature over the past decades. Since its introduction by Smith (1956) to the present day, over 3700 research articles on segmentation have been published in peer-reviewed journals. Despite the impressive size of the segmentation literature, very few publications focus on segmentation in B2B markets compared to consumer markets. Citing the small number of empirical studies in the area of segmentation in business markets and their narrow scope, the author of this paper attempts to exploit these shortcomings by empirically validating a new previously unobserved segmentation criterion for business market segmentation.

In the context of B2B markets, psychographic segmentation offers a new way to view the market according to the cognitive characteristics of organizational consumers (Weinstein, 2015; Brotspies and Weinstein, 2017). In B2C markets, psychographic segmentation has gained widespread acceptance among academics and practitioners as psychographics has been shown to build responsive and vivid profiles indicative of consumer lifestyles (Ziff, 1971; Demby, 1974; Funk and Hudon, 1988; Wedel and Kamakura, 2000; Wells et al., 2010; Jadczačková, 2013b; Modi and Patel, 2013).

Such clearly distinguishable profiles provide marketers with a good starting point for adapting their communication style and sales tactics. Encouraged by the discriminative power and applicability of consumer psychographics, B2B marketers embrace this concept to trace organizational behavior (Robertson and Wind, 1980; Jadczačková, 2015). However, the use of psychographics is limited to characterizing individuals – decision-makers in purchases (Barry et al., 2010) or CEOs of small family businesses (Jadczačková, 2013a). In other words, the complexity of the purchasing decision process in business organizations and the involvement of individuals in "buying centers" within the organizations are not considered (Barry et al., 2010; Kotler, 2011).

Referring to these gaps, the dissertation author believes that it is necessary for businesses and researchers to focus not on the individual but on the organization and to investigate those socio-sentimental factors (Barry et al., 2010) that contribute to establishing the psychographics of the entire organization<sup>1</sup> (Robertson and Wind, 1980; Weinstein, 2004, 2015; Williams and Ben Oumlil, 2015). In this direction are the studies of Jadczačková (2013, 2015), in which she empirically proves and validates business culture as a psychographic variable for segmentation in business markets. Other authors investigate the relationship between happiness and business culture, demonstrating that there is a statistically significant correlation between them (Whitehall and Gabriel, 2018; Ficarra, Rubino and Morote, 2020).

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<sup>1</sup> The author of this dissertation is aware that psychographics refers to the individual, but referring to previous research by authors who have studied psychographic segmentation criteria in the context of organizational markets, believes that he could use the term as relevant in an organizational aspect, given that business organizations are composed of people. Robertson and Wind (1980) developed a conceptual model of organizational psychographics.

One of the main assumptions for the increasing relevance of happiness as a topic on a global scale are two resolutions of the UN related to subjective well-being and happiness: resolution 65/309-19.07.2011 on happiness as a holistic approach to development, requiring member states to make efforts and include happiness assessment in their systems and programs, and resolution 66/281-28.06.2012 declaring March 20<sup>th</sup> as the International Day of Happiness (United Nations, 2012). Several world leaders such as the UN general secretary Ban Ki-Moon, José Barroso, make important statements in support of considering happiness as a key goal, result, and indicator for assessing the progress of countries worldwide. The Kingdom of Bhutan in 1972 first considered happiness as a measure of national prosperity, replacing GDP with the Gross National Happiness (GNH) index. The National Academy of Sciences in the USA forms a group to examine how measuring happiness can be used for the development of public policies. In 2005, Diner and Kahneman initiate a petition for the introduction of national subjective well-being indicators, and in 2009, at the initiative of Sarkozy, the Commission on Measuring Economic Performance and Social Progress is formed (Shtiglitz, Sen, Fitusi, 2009). According to them, GDP is insufficient, and in some respects inadequate, to assess the progress and problems of a society, and they believe that it should be supplemented with other, more social indicators, including those for quality of life and subjective well-being. In 2010, David Cameron assigns the UK's National Statistical Office to develop and implement a system of indicators for measuring subjective well-being to be used in planning and accounting for the country's state policies (Allin and Hand, 2017). In connection with the implementation of this task, a National Well-being Measurement Program is developed (Copley, 2011). Similar initiatives, national round tables, projects, and programs are being implemented in several other countries - Germany, the USA, Canada, Australia, and others. The OECD launches a series of initiatives to include indicators of subjective well-being in the national statistics of countries, such as: Adoption of the Istanbul Declaration goals of leading global economic organizations, one of which is the inclusion of indicators of social well-being in national statistics (OECD, 2009); Launch of the "Better Life Index" (Mizobuchi, 2014); publication of the Compendium of well-being indicators (OECD, 2011) and publication of Guidelines for measuring subjective well-being (OECD, 2013). Countries such as the Netherlands, UAE, Germany, and Japan have taken similar steps and strive to use happiness as a parameter for progress.

In 2012, the first World Happiness Report was published, and since then, 11 more reports have been published (the latest on 20.03.2024), with significant evidence that the indicators used in the reports are statistically significant and therefore can be used to shape public policies. Thus, happiness becomes an increasingly relevant topic in the view of experts, businesses, and politicians.

The intertwining of happiness with the Sustainable Development Goals (SDGs) also reflects on the business world, and with the widespread acceptance of the concept of sustainable development and its associated goals, the introduction of various restrictions and changes in laws and regulations begins, which in turn affects businesses and leads to changes in the consumer behavior of business organizations.

The dissertation presents an interdisciplinary study of the term "happiness." As a starting point for assembling the construct of organizational happiness, both cognitive factors affecting happiness from within (such as shared values and beliefs, culture, etc.) and external factors (factors influenced by sustainable development) that modify the organization and affect its happiness are taken into consideration. Several instruments based on the GNH index have been used to measure organizational happiness in this study, with necessary adjustments made to adapt them for business purposes. The so-called "happiness index" measures people's sense of happiness, reflecting key indicators of subjective quality of life and serving as a reflection of the main index of quality of life. It is considered a scientific concept for "people-oriented" development, tracking economic and social trends on one hand while potentially indicating people's satisfaction with life on the other. However, scholars note that there are still some technical and social dimensions that pose challenges and need to be addressed in the system of statistical indicators of the happiness index (White, 2015; Veenhoven, 2017b). Hence, it is crucial to analyze the connotation and creation of an index system and find an effective and reasonable method for measuring the happiness of business organizations. For this purpose, a rational and efficient method for evaluating the happiness index is used, as it reflects the harmonious level of societal development.

In the scientific literature within an organizational context, happiness has been predominantly studied from the perspective of employee happiness (De, Ward and De Neve, no date; Youssef and Luthans, 2007; Whitehall and Gabriel, 2018; Roy and Konwar, 2020; Sender, Carvalho and Guedes, 2021). In studies related to consumer behavior (Marcel and Dragan, 2014; Sørensen and Thomsen, 2016; Barbosa, 2017), it is considered as an emotion within the psychological determinants of consumer behavior (Bagozzi, Gopinath and Nyer, 1999; Laros and Steenkamp, 2005; Karu-salo, 2013; Gregory and Rutledge, 2016). In relationship marketing, it is regarded as a factor predisposing customer loyalty (Belanche, Casalo and Guinaliu, 2013; Paliwal and Professor, 2013) and higher profitability for companies. Many studies have described the benefits of using happiness in an organizational context, such as employee satisfaction (Frey and Stutzer, 2010; Wesarat, Sharif and Majid, 2015; Osman, Saputra and Saha, 2017; Salas-Vallina and Alegre, 2018), company competitive advantage (Zak, 2017; Mendoza-Ocasal, D. et al., 2021), more satisfied customers and better financial results (Demircoglu, 2014; Pepey et al., 2016; Moçoşoğlu et al., 2018; Othman et al., 2018; Duarte et al., 2021), and others. However, in marketing literature related to business market segmentation, happiness has not been deeply explored. A review of scientific publications related to segmentation of organizational markets revealed that there is currently no study examining happiness as a segmentation criterion in business markets. This, in turn, provides the dissertation author with grounds to propose and test an instrument for measuring the happiness of business organizations.

## **2. Object and Subject of the Study**

**The object** of study in this thesis is organizational happiness in maritime business companies performing ancillary activities in maritime transportation, and **the subject** of the dissertation research

is determining the role of organizational happiness as a criterion producing differences in purchasing behavior of business organizations in the target sector.

### **3. Main Research Thesis**

The main thesis advocated is that happiness, considered as a psychographic variable, can be used as a segmentation criterion in business markets, considering differences in organizational behavior when purchasing from "very happy" business organizations. According to the author, "very happy organizations" with high scores on the business organizations' happiness index exhibit different (differentiable) behavior, allowing them to be grouped into segments with external heterogeneity and internal homogeneity. According to the author, in the maritime transport sector, there is a segment of so-called "happy companies," and these companies are characterized by satisfied employees, harmonious relationships with partners, clearly expressed positive attitudes towards eco-products/services, and distinctive responsible consumer behavior in the context of sustainable development. The characteristics attributed to happy organizations are derived from the analysis of various studies measuring happiness in an organizational aspect, establishing that it leads to satisfied employees (Frey, 2018; Lambert et al., 2020; Tiwari et al., 2021) and harmonious relationships with partners (Osman, Saputra and Saha, 2017; Rashed and Polas, 2019; Duarte et al., 2021). Companies with a high happiness index have positive attitudes towards eco-products/services and are more informed about them (O'Brien, 2008; Chaiprasit and Santidhiraku, 2011; Epstein and Buhovac, 2014; Mendoza-Ocasal, D. et al., 2021) and have better financial results (Wesarat, Sharif and Majid, 2015; Zak, 2017; Ficarra, Rubino and Morote, 2020; Mendoza-Ocasal, D. et al., 2021).

### **4. Purpose and Objectives of the Dissertation Work**

In the area of segmentation in business markets, a small number of empirical studies have been identified that have a very narrow scope. Referring to this, the aim of this dissertation is to validate happiness as a segmentation criterion on the basis of a scientifically argued analysis of theoretical propositions and on the basis of an empirical study in the shipping industry in Bulgaria.

In relation to the achievement of the so defined aim the following more important objectives can be highlighted: 1) To systematize, analyze and further develop the theoretical and methodological aspects of segmentation criteria and the decision-making process in business markets; 2) To review the specialized literature on the variety of practices in happiness measurement. As a result, to review the metrics, methods and indicators of happiness measurement and to analyse the different happiness indices; 3) Based on a summary and analysis of key theoretical propositions in the areas of business market segmentation, organizational behavior of companies as consumers, and ways to measure happiness, to adapt Bhutan's Gross National Happiness (GNH) index for the purpose of the study and to test a happiness measurement toolkit for companies engaged in ancillary activities in the shipping industry in Bulgaria.

## 5. Research Methods

The development of the work is based on: 1) Studying numerous publications by Bulgarian and foreign authors; 2) Consultations with happiness specialists<sup>2</sup>; 3) Discussions with managers of maritime companies; and 4) Consultations with experts from the Maritime Administration and the Bulgarian Port Infrastructure Company.

In developing the instrument for collecting primary data, a focus group consisting of 6 industry experts was used. The derived indicators were confirmed by happiness experts. The study involved a total of 128 participants, including 105 respondents - employees in business organizations<sup>3</sup> and 17 managers<sup>4</sup> and 6 experts in the industry. The obtained results are valid for this sample and can be considered relevant to the Bulgarian market, given that the companies operating in the industry are 68 ship agencies and brokers and 16 suppliers. The study sample was formed based on the respondents' responses.

For the analysis and synthesis of the collected information, a systematic approach was applied. The collection of primary data was carried out through an online survey for employees of companies (105), personal interviews with company managers (17), and in-depth interviews with industry experts (6). The data from the empirical study were processed using a combination of statistical methods, including comparative, descriptive, correlation, regression, dispersion analyses, and  $\chi^2$  tests. The statistical processing of the collected information was carried out using the MS Excel 2007 and SPSS 19.0 software products. The formulated conclusions and summaries were visualized using tables and graphical tools.

## 6. Limitations of the Study

The development of this research is subject to the following constraining conditions:

- The first limitation imposed in this work pertains to the industry and the scope of firms included in the study. Companies engaged in auxiliary activities in maritime transport, specifically in agency, brokerage, and supply operations of ships within the Bulgarian ports of Varna, Burgas, and Balchik, were investigated.
- The second limitation is associated with the selection of companies to be included in the study. These companies were chosen based on an analysis of data on the number of processed ships in these ports for the period 2018-2022, with information provided through the collaboration of the Executive Agency Maritime Administration (EAMA) Varna and the Bulgarian port infrastructure company (BPIC).

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2 We have used Dr. Tatyana Ertuğrul - Anadolu University, Eskişehir, Turkey and current HR Director of ETI company for Poland and Romania, Prof. Howard Harris as an expert here as well as experts from Bhutan National Happiness Institute- <https://www.gnhcentrebhutan.org/gnhcb-team/>

3 Fullfilled the questionnaire

4 Managers completed the questionnaire related to organizational conditions for happiness in the organization.

- The third limitation is related to seeking differences in consumer behavior among highly happy, happy, and less happy business organizations concerning their role as consumers of eco-products and services in the maritime business.
- The fourth limitation is connected to examining the consumer behavior of business organizations in their role as socially responsible consumers of eco/green products and services from the perspective of companies, employees, and society as a whole. The perceptions of other stakeholders remain outside the scope of the empirical investigation as they are deemed irrelevant to the focus of the dissertation.
- The fifth limitation is associated with the definition of a happy organization - it is clarified that a happy company can be defined as such under the condition that it creates and facilitates conditions and work processes and positively influences the organizational climate, and organizational happiness is what the company does to achieve well-being for its employees.

### **7. Sources of information**

The information needed to accomplish the aims and objectives of the study was provided by:

- Desk study of various publications by national and international authors from different scientific fields as well as reputed organizations such as United Nations, Gross National Happiness Commission of Bhutan, analysis of experts and reports of international experts in the field of sustainable development and happiness (UNTACD), world happiness indices etc.
- Primary data was provided through a combination of qualitative and quantitative methods incorporated in the study design - in-depth interviews, focus groups, survey.

### **8. Validation**

The dissertation was discussed at meetings of the Marketing Department. Parts of it were presented and discussed at international scientific conferences and published as articles and reports in specialized scientific publications.

## **II. STRUCTURE AND CONTENT OF THE DISSERTATION**

The dissertation is structured into an introduction, three chapters, conclusion, and appendices, with a total volume of 279 pages, including 1 title page, 4 table of contents pages, 8 introduction pages, 187 pages main text, 2 conclusion pages, 20 pages of literature used, and 55 pages of appendices. The structure of the thesis is as follows:



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### III. MAIN CONTENT OF THE DISSERTATION

#### Introduction

The introduction briefly presents the relevance and significance of the problem, the main practical-applied problems related to the use of happiness, the subject and object of the study, the research thesis, the main goals and objectives of the dissertation work, as well as the adopted limitations.

#### First Chapter

The first chapter consists of three paragraphs, which discuss the theoretical aspects of segmentation in business markets, happiness in a business context, and the consumer behavior of business organizations. It also provides guidance on using happiness as a newly unobserved psychographic segmentation criterion in business markets.

In **paragraph 1** of the first chapter, a historical overview of the concept of segmentation in business markets is provided to derive the essence, specifics, methods, and criteria for segmenting B2B markets. To select suitable articles related to the focus of the dissertation study, the author applies several filtering criteria. The first criterion applied is keywords: "industrial market segmentation" (594), "organizational market segmentation" (207), "B2B market segmentation" (42), and "business market segmentation" (1248). With these parameters set, a total of 2091 articles are retrieved. The second applied criterion is language: English; the third is the type of publication: only full-text articles with open access are selected, and the fourth is the type of publication - review article or research. After applying the selected criteria, 251 articles are selected, which are thoroughly reviewed, resulting in the selection of 44 relevant articles. Based on the literature review conducted, it is found that there is a lack of scientific publications related to segmentation in business markets, and their focus is mainly theoretical. Few studies have been conducted during the analyzed period, especially those dealing with the changes that have occurred in these markets under the influence of various factors, which require a deeper understanding and reconsideration of the knowledge base for segmenting the business market both conceptually and empirically.

In this context, **paragraph 1.1** provides a comparative analysis of the most popular models for segmenting business markets to extract the most important characteristics used in segmentation within them. The following conclusions are drawn from the analysis: Segmentation through macro-micro segmentation variables is well theoretically described in the literature (Wind and Cardozo, 1974; Robertson and Wind, 1980; Shapiro and Bonoma, 1984; Mitchell and Wilson, 1998; Simkin, 2008; Hutt and Speh, 2013; Gökçay Balci, Balci, and Cetin, 2017). According to Wind & Cardozo (1974), the most important criteria for segmenting business markets that should be used are: organizational characteristics, product characteristics, and decision-making unit (DMU) characteristics. Their conclusion is that organizational characteristics are often used and somewhat suitable, product characteristics are sometimes used and least suitable, and DMU characteristics are not used but are very

suitable. Referring to this, the author of the dissertation systematizes the characteristics of the decision-making unit for purchasing that can be used as criteria in micro-segmenting the market.

In **paragraph 1.2**, the commonly accepted criteria for segmenting the organizational market published in specialized literature were discussed in order to outline the advantages and disadvantages, strengths and weaknesses of each. In marketing literature, two interpretations of the term "criteria for market segmentation" are encountered. The first considers the criteria as characteristics indicating the extent to which the market is suitable for segmentation, while the second boils down to the selection of indicators on which to group consumers. The term "segmentation variable" refers to a measured value, such as an element in the study or an observed category (e.g., expenses), while the term "segmentation criterion" refers to the nature of the information used for market segmentation, and it may also refer to a specific construct (e.g., desired benefits). Some authors consider segmentation variables as bases<sup>5</sup> for segmenting the B2B market (Wedel and Kamakura, 2000; Diamantopoulos et al., 2014), and according to them, these are a set of characteristics attributed to a given market segment that make it unique, while Dibb and Simkin (2009) call these bases segmentation variables or basic variables. In this dissertation, the term "segmentation criterion" is used in a broader sense than the term "segmentation variable".

In **paragraph 1.2.1**, various viewpoints of authors working in the field of B2B segmentation related to geographic segmentation criteria are analyzed, with some highlighting their advantages while others comment on their weaknesses and drawbacks. An important premise for their use is the regional differences between target markets in different countries. Segmenting by this criterion is a traditional and cost-effective method, but it is not used to the same extent as before, as many services, especially in the business market, become electronic and the internet diminishes the importance of localization in many companies (Weinstein, 2008). When using these segmentation criteria, some important characteristics may be overlooked, such as differences between customers of the same size being ignored (Malcolm and Dunbar, 2012; McDonald, 2016). Despite the noted inefficiency of geographic variables as segmentation criteria, a study by Abratt (1993) finds that they are the most commonly used variables (87.5%) by companies.

In **paragraph 1.2.2**, firmographic segmentation criteria are discussed, with various viewpoints on the use or non-use of these criteria in the context of segmenting organizational markets being examined. Their distinctive characteristic is outlined as their measurable values, and it is noted that their quantitative values can be used to profile customers in segments to tailor marketing communication offers or messages (Malcolm and Dunbar, 2012). The analysis reveals that many authors subject these criteria to criticism, stating that they do not directly reflect the primary needs of customers. However, their use as a first step towards a more integrated segmentation method may be justified given their ease of application and low cost of acquisition. This makes these segmentation

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<sup>5</sup> Segment bases- these are characteristics that show why segments are different (e.g.: needs, wants, desires, perceptions, preferences)

criteria among the most used by experts in segmenting the business market (Wind and Bell, 2009; Barry et al., 2010; Weinstein, 2014; Weinstein, 2016). A downside is that they are likely also used by competitors and would not provide a competitive advantage to the company. Pointing out their drawbacks, experts highlight behavioral segmentation criteria discussed in **paragraph 1.2.3** as providing more valuable and useful information to marketers, which justifies considering them a more suitable method for segmenting business markets. These criteria allow segmentation to be aligned with the needs of the organizational buyer, which are often clearly expressed. According to experts, these variables represent the best starting point for defining market segments (Simkin, 2008, 2018; Wind and Bell, 2009; SIMIĆ, 2015). As a result of the literature review, it is concluded that research in this area is fragmented among various potential criteria, and many of them overlap. With this type of segmentation, the focus is often on usage patterns and the benefits sought by the consumer. Today, this segmentation criterion is becoming increasingly popular in academic and business environments, with the main advantage of benefits-based segmentation being the cause-and-effect relationship between desired benefits and purchasing behavior (Weinstein, 2004, 2015). Despite the advantages and characteristics mentioned for this type of segmentation, it is not always sufficient. To complement the capabilities of the above-analyzed segmentation methods, researchers propose including indicators and criteria related to the psychographic segmentation method, which are discussed in **paragraph 1.2.4**. This segmentation method emerges as an alternative research methodology aimed at filling the gaps left by other types of segmentation and offering a new way to examine the market based on the cognitive characteristics of business customers. Psychographics is defined as "a way to describe (graph) the psychological (psycho) way of life of the consumer or consumer segment" (Hawkins, D.I., Best, R.J. and Coney, 1989). This method is more widely used in consumer markets, but as known in the business market, individuals make decisions, not the company. For this reason, businesses are also beginning to apply this method in the industrial market space (Barry et al., 2010). Attention to these segmentation variables is increasing as it is important to understand how decision-makers evaluate the firm's offering, which is crucial for predicting buyer behavior (Verhallen, Frambach and Prabhu, 1998; Barry et al., 2010). In this context, Barry and Weinstein (2010) develop a model of organizational psychographics that explains how marketers can use it in segmenting organizational markets and allows clustering of business buyers into homogeneous clusters based on their attitudes and behaviors, which differ in motivations, risk perception, and styles of social interaction. However, developing marketing strategies based on psychographic dimensions is limited, as the frameworks for classifying buyers through psychographic data are subjective and difficult to measure (Williams and Ben Oumlil, 2015).

In 2013, organizational culture<sup>6</sup> was introduced and established as a new psychographic criterion for segmenting the business market by Jadcakova (2013). According to her (2013) and Barry

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<sup>6</sup> Organizational culture defines appropriate behavior, binds and motivates people, and provides solutions where clarity is lacking. Corporate culture has been found to influence the purchase decision process. Shared values

et al. (2010), organizational psychographics enables the "personality" of the firm to be captured through its business culture and forms segments that differ from each other in terms of preferences and response to the marketing mix (Barry et al., 2010). In this sense, Jadcakova (2013) theoretically and empirically proves in her work that business culture provides the necessary insight into the unique individuality of the firm and thus enables the creation of meaningful segments that are both recognizable and responsive. Different authors believe that in the initial market research, specialists should try to cover as many "softer" psychological characteristics as possible to avoid missing important perspectives (Jadcaková, 2013a, 2015; Raku et al., 2016). In this context, psychographics is a very valuable segmentation criterion for strategic marketing, for understanding buyer behavior and minimizing risk (Weinstein, 2004, 2014, 2015; Kenney and Weinstein, 2010; Jadcaková, 2015). This segmentation method involves an analysis of the behavioral factors influencing purchase decisions in industrial markets and is a partial analysis of the emotions that could be associated with B2B transactions (Jadcaková, 2013a; Weinstein, 2015). In this context, another group of authors (Bigné and Andreu, 2004; Laros and Steenkamp, 2005; Spies, 2016; Fisher, 2019) believes that in every purchase in the business market, there is both a rational and an emotional component. In this regard, in recent years, there has been increasing interest in emotions in an organizational context, with greater importance being attached to them.

The reviewed segmentation methods and criteria identified in the scientific literature are summarized and systematized into groups, along with their indicators and variables (Table 1) as follows:

*Table 1*

<b>Main criteria used in business market segmentation</b>	
<b>Criterion</b>	<b>Indicators and Variables</b>
Firmographic criteria	<ul style="list-style-type: none"> <li>- Location,</li> <li>- Geography,</li> <li>geographic location (Locations)</li> <li>- Company size,</li> <li>- Sector in which it operates,</li> <li>- Industry,</li> <li>- Purchase frequency</li> </ul>
Demographic criteria	<ul style="list-style-type: none"> <li>- Industry,</li> <li>- Shareholders composition,</li> <li>- Sales volume,</li> <li>- Annual revenue,</li> <li>- Employees</li> <li>- Years in business,</li> <li>- Serviced markets,</li> <li>- Products/services,</li> <li>- Position</li> <li>- Level of experience/tenure,</li> <li>- Production capacity</li> </ul>
Criteria related to buyer type	<ul style="list-style-type: none"> <li>- Manufacturers,</li> <li>- Companies in the service sector,</li> <li>- Wholesalers,</li> </ul>

help to reduce the anxiety experienced by members of the purchase decision center and minimize conflicts that could arise (Jadcak,2013)

Main criteria used in business market segmentation	
Criterion	Indicators and Variables
	<ul style="list-style-type: none"> <li>- Retailers,</li> <li>- Agencies</li> </ul>
Criteria related to product usage	<ul style="list-style-type: none"> <li>- Tools,</li> <li>- Raw materials,</li> <li>- Components and accessories</li> </ul>
Behavioral criteria (Behavior segmentation criteria)	<ul style="list-style-type: none"> <li>- What the company buys,</li> <li>- What it produces,</li> <li>- How it produces its product</li> <li>- What methods or processes are used,</li> <li>- Membership in associations,</li> <li>- Purchasing methods (supplier analysis, sample purchase, tenders, contracts)</li> <li>- Presence on social media, - Sales data, - Market share, sector in which the company operates</li> <li>- How they serve their customers, - Why customers buy from the organization</li> <li>- What their needs are, - Product usage rate, - How and why customers make purchases (routine buyers, careful buyers, loyalists, bargain hunters)</li> </ul>
Criteria for needs-based segmentation	<ul style="list-style-type: none"> <li>- What drives them to buy,</li> <li>- What they want,</li> <li>- What they seek from their suppliers</li> </ul>
Criteria for benefit-based segmentation	<ul style="list-style-type: none"> <li>- Application of the product,</li> <li>- Product availability,</li> <li>- Geographical location</li> <li>- Presence of entry barriers,</li> <li>- Sensitivity of potential buyers to the brand</li> <li>- Possibility to build long-term relationships (ease of creation)</li> <li>- Competitive advantages of the product for potential users</li> </ul>
Psychographic criteria	<ul style="list-style-type: none"> <li>- Corporate ethics,</li> <li>- Customer organization management system</li> <li>- Corporate culture / organizational culture</li> <li>Differentiation of customers based on their: <ul style="list-style-type: none"> <li>- Activities,</li> <li>- Interests,</li> <li>- Opinions</li> <li>- Intentions,</li> <li>- Values,</li> <li>- Lifestyle,</li> <li>- Resistance to change</li> <li>- Diversification orientation,</li> <li>- Open-mindedness/solid decision-making process</li> <li>- Early adoption/follow-up,</li> <li>- Growth/static orientation</li> <li>- Technological sophistication,</li> <li>- Professionalism,</li> <li>- Requirement for recommendations</li> <li>- Awareness of competitors,</li> <li>- Reluctance to take risks,</li> <li>- Loyalty</li> <li>- Market/product focus,</li> <li>- Emotions</li> </ul> </li> </ul>
Operational criteria	<ul style="list-style-type: none"> <li>- What technologies are used in the organization, - How firms use the firm's product or service</li> </ul>
Criteria for segmentation based on buying style	<ul style="list-style-type: none"> <li>- Centralized or decentralized,</li> <li>- Power structure in the organization</li> <li>- Who are the best customers,</li> <li>- What are the relationships with customers/suppliers</li> <li>- Decision-making leading criteria: Price, - Quality, - Purchase, - Hiring, - Leasing</li> </ul>
Criteria for segmentation related to situational considerations	<ul style="list-style-type: none"> <li>- Urgency/emergency of the purchase,</li> <li>- Special offer from the seller</li> <li>- Order size depending on the situation</li> </ul>

Main criteria used in business market segmentation	
Criterion	Indicators and Variables
Criteria for segmentation related to personal characteristics of decision makers at the buying center (buyer motives)	<ul style="list-style-type: none"> <li>- Stage of the company's life cycle,</li> <li>- Staff style and decision-making style</li> <li>- Attitude toward risk,</li> <li>- Buyer-seller relationship style,</li> <li>- Business culture and loyalty</li> </ul>

*Source: Developed by the author*

From the systematized criteria in *Table 1*, it can be seen that specialists have created a very detailed list of criteria, dimensions, and variables used in segmenting the business market. However, Mayers (1996) already noted in 1996 that the number of market segmentation criteria is limited only by the marketer's and/or researcher's imagination. Tonks (2009) also supports Mayer's position, stating that there could be millions of ways to segment the market in any given situation. In this context, the author of this dissertation supports their views and believes that such a list of criteria used in segmenting the business market could not be absolutely exhaustive.

In the literature, the above-mentioned segmentation criteria are classified in various ways. In this context, in *Table 2*, the author summarizes the bases derived from the literature on which the criteria for segmenting the business market can be classified:

*Table 2*

**Bases for classifying criteria for segmenting B2B markets:**

Bases for classification of segmentation criteria	Descriptive characteristics of segmentation criteria
According to the type of data used	<ul style="list-style-type: none"> <li>-Static data: Includes demographic and firmographic criteria.</li> <li>-Dynamic data: Includes criteria related to consumer behavior and psychographic criteria.</li> </ul>
Depending on the type:	<ul style="list-style-type: none"> <li>-Observable: Directly measurable, such as demographic indicators, purchase frequency, etc.</li> <li>-Derived: Includes psychographic criteria and perceived benefits.</li> </ul>
Based on the level of segmentation:	<ul style="list-style-type: none"> <li>- Macro-segmentation: Economic factors (e.g., economic level, technology), geographical, demographic, cultural factors.</li> <li>-Micro-segmentation: Individual characteristics, specific customer needs, and characteristics.</li> </ul>
According to dependence on the product:	<ul style="list-style-type: none"> <li>-Independent of product conditions.</li> <li>-Product-specific variables (related to customer and product conditions).</li> </ul>
Based on the specificity of the product:	<ul style="list-style-type: none"> <li>- Product-specific variables.</li> <li>-Non-specific product variables/benefits, attributes, perceptions, preferences, intentions.</li> </ul>
Depending on what they are based on:	<ul style="list-style-type: none"> <li>- Customer nature/similarities in lifestyle, purchasing behavior.</li> <li>- Product usage level.</li> </ul>
According to the basis of division:	<ul style="list-style-type: none"> <li>-Environment-related: Factors associated with the surrounding environment.</li> <li>-Internally-related: Factors related to the internal organization of the business entity.</li> <li>-Purchase decision-making process-related: Factors associated with the purchase decision-making process.</li> </ul>

*Source: Developed by the author*

According to the dissertation author, the bases used in the literature to classify segmentation criteria are somewhat confusing. Therefore, in addition to Krastevich's proposed classification, the author adds criteria derived from the work over this dissertation paper. This way, dissertation author

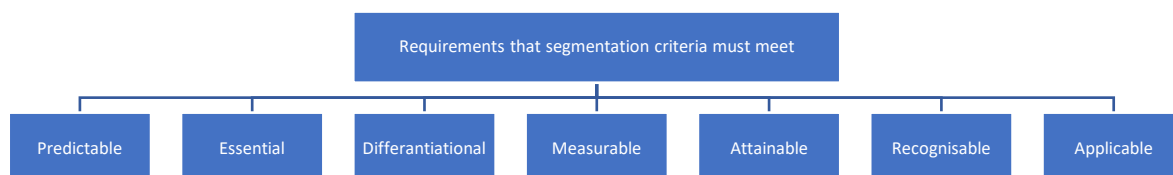


proposes a modified and easier classification and systematization of segmentation criteria for organizational markets.

Organization related criterion	Surrounding environment criterion	Decision making criterion
Form of registration	Economics development of the industry	Number of people in the DMU
Size of the company	Legal barriers in the industry	personal characteristics of the people engaged in the decision making center
Applied technology	Industry type	Formalization of the DMU
Way of using bought product	Geographic location	Frequencies of purchases
Market share	Belonging to a particular industry	Buyer-seller relations/ accepted value of the relations/
Financial indicators		Average size of the orders
Situational factors/urgency, seasonality/		Variety of the goods
Buying approach		Preferred channels for distribution
Functional policies		Paying forms
Switching expenses		Loyalty of the intermediates/distributors
Capacity		Risk ability
		Organizational attitude to risk
		Personal attitudes to risk
		Buying methods
		Organization of the buying

*Fig. 1. Classification and systematization of segmentation criteria in B2B markets*  
*Source: Developed by the author*

The literature analysis showed that for segmentation variables to be successful and support the formation of meaningful segments, they must meet certain conditions. Therefore, researchers have identified a number of requirements for segmentation criteria (Elliott and Ang, no date; Plummer, 1974; Kotler and Armstrong, 2010; Martin and Schouten, 2012) (Fig. 2). These requirements are summarized as follows: measurability (how easily the size, location, and content of a segment can be measured), accessibility (how to reach and serve the segment effectively), substantiality (i.e., the segment should be large enough and profitable enough to justify investment), actionability (the ability to apply effective marketing strategies to attract and serve the chosen segment), determinacy (the ability to clearly identify the decision-making factors of buyers), feasibility (i.e., the basis of segmentation is perceived as rational by management), and predictiveness (i.e., the basis for segmentation is able to link market behavior with segment membership).



*Fig. 2. Conditions that Criteria for Segmentation Must Meet*  
*Source: Developed by the author*

The discussed requirements that segmentation criteria must meet are grouped and arranged in Table 3, from which the advantages and disadvantages of the different groups of segmentation criteria are clearly visible.

Table 3

*Evaluation of Segmentation Criteria Groups*

Groups of Segmentation Criteria	Discriminative	Essential	Stable	Actionable	Accessible	Responsive
Geo-demographic	<b>High</b>	<b>High</b>	<b>High</b>	Low	<b>High</b>	Low
Usage-based Segmentation	<b>High</b>	<b>High</b>	<i>Moderate</i>	Low	<i>Moderate</i>	<i>Moderate</i>
Benefit-based Segmentation	<i>Moderate</i>	<i>Moderate</i>	<i>Moderate</i>	<b>High</b>	Low	<b>High</b>
Psychographic Segmentation	<i>Moderate</i>	<i>Moderate</i>	<i>Moderate</i>	<b>High</b>	Low	<b>High</b>

Source: Adapted from Wedel et al. (2003)

From Table 3, it is visible that there is no single group of segmentation criteria that excels over others in all categories. According to the researcher, the drawbacks of one group can be overcome by combining it with another. In this way, a more comprehensive picture can be obtained. Ultimately, it should be emphasized that even the most effective combinations of criteria do not guarantee a successful segmentation strategy if they are not suitable for the target audience. As noted by Dibb and Simkin (2010), measuring the effectiveness of segmentation is challenging because it involves both "*hard*" (statistical) and "*soft*" (segmental) measures. Foedermayr and Diamatopoulos (2008) add that the effectiveness of segmentation is difficult to capture and is often confused with market performance and success indicators.

In summary, it can be said that in the literature, firmographic<sup>7</sup>, operational, personality characteristics, buying behavior, and situational factors are widely accepted in segmenting the business market (Abratt, 1993; Krastevich, 1994; O'Brien et al., 2020). At the same time, in recent years, there has been an increase in publications examining psychographic criteria in an organizational context, with some significant and useful criteria for segmenting the organizational market (Fine, 1991; Powers and Sterling, 2008; Barry et al., 2010; Jadczačková, 2015; Weinstein, 2016).

The analyzed empirical studies indicate that companies primarily use simple segmentation criteria when segmenting organizational markets, such as geographical location and industry, which are convenient and available. Criteria like psychographic and behavioral ones are less frequently used (Dibb and Simkin, 2009; Barry et al., 2010; Weinstein, 2016). The criteria chosen for segmentation depend on the industry (Goller, Hogg, and Kalafatis, 2002), the company's strategic goals, the level of competition (Mitchell and Wilson, 1998), the purpose of segmentation, and, last but not least, the convenience for marketers (Abratt, 1993).

Although the number of studies analyzing emotions in an organizational context is increasing (Hawkins, Del I; Mothersbaugh, 2010; Kesting and Rennhak, 2011; Spies, 2016), the literature review conducted by the researcher did not identify scientific papers that consider happiness as a segmentation

<sup>7</sup> A study by Abratt (1993) found that the most commonly used variables were: geographic (87.5%), firmographic (62.5%), degree of use (62.5%) and buying situation (62.5%)

criterion in the business market. Today, the world is facing economic and social change due to increasing concern for sustainable development, where society demands socially responsible behavior from business organizations (Tiwari et al., 2021). Under the influence of these factors, a new mindset is emerging in business, and companies are beginning to incorporate happiness into their business model in line with the concept of CSR. This new business model includes a happy organization, happy employees, and customers (Kamel et al., 2017; Frey, 2018; Whitehall and Gabriel, 2018). Happiness thus becomes an increasingly relevant topic in the organizational context, which can be viewed as a prerequisite for changes in consumer behavior of companies and as a segmentation criterion.

In the **second paragraph** of the first chapter, the theoretical aspects of happiness in an organizational context are discussed. **Paragraph 2.1** analyzes the links between happiness and sustainable development. The concept of sustainable development is presented, and the connections between the three main pillars, the goals of sustainable development, and the place of happiness in this concept are illustrated (Figure 3).

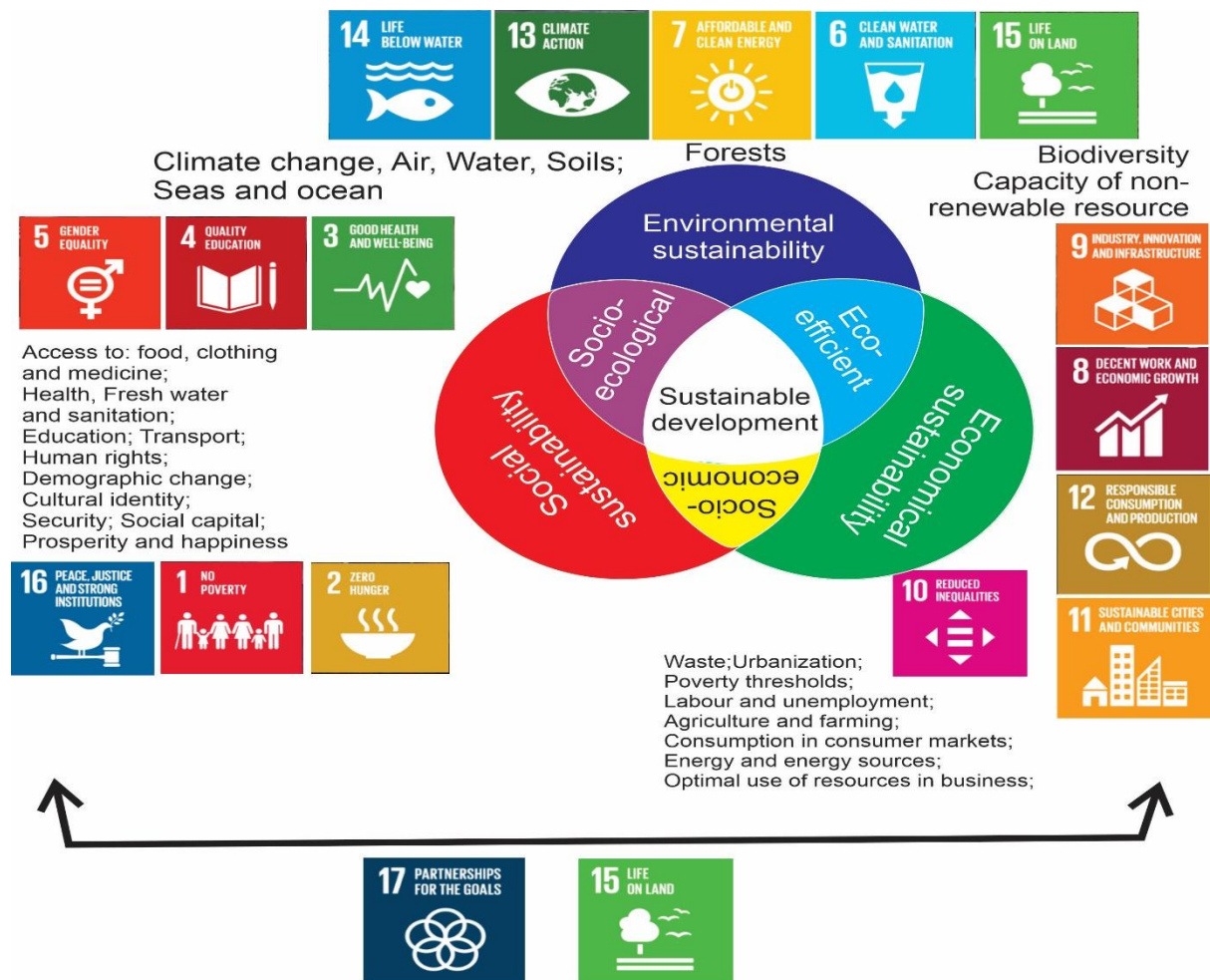


Figure 3 Graphical representation of the three pillars of sustainability, sustainable development, and the place of happiness within them

Referring to Figure 3, "sustainable development" can be considered as a comprehensive concept that consolidates traditional understandings of the relationship between humanity and nature, giving them a new meaning in line with contemporary social theory and practice. In this context, happiness relates to the pillar of social sustainability. According to the dissertation author, social sustainability can be defined as the long-term ability of societies (business organizations) to provide well-being to their members (employees), particularly their happiness and prosperity. This concept is gaining popularity, and happiness is becoming an increasingly relevant topic and catching the attention of experts. Consequently, scholars note the need for a new transformative approach to defining and measuring well-being and success. This is the moment when researchers need to include other holistic aspects such as happiness in measuring social progress, societal well-being, and organizational success. In this context, in recent years, the recognition of prosperity and happiness as global goals has increased, initiated by Bhutan, which began using Gross National Happiness (GNH) as an indicator to measure its national well-being instead of GDP. Thus, GNH is beginning to be accepted globally as a new alternative measure of success.

Today, publications related to happiness are increasingly common, and it has become one of the fastest-growing areas in academic research. Its study has become one of the most stimulating topics in economics, providing tools and metrics to test "old hypotheses" in new ways. Scholars are finding ways to combine subjective surveys with objective data (e.g., life expectancy, income, and education). Additionally, many political leaders and governments are becoming interested in how happiness research can contribute to their public policies and are beginning to consider it as an important variable that can be used to improve public welfare. In the business context, happiness is a topic discussed in publications by scholars from the United States, the United Kingdom, and elsewhere, examining various aspects of how it influences business organizations.

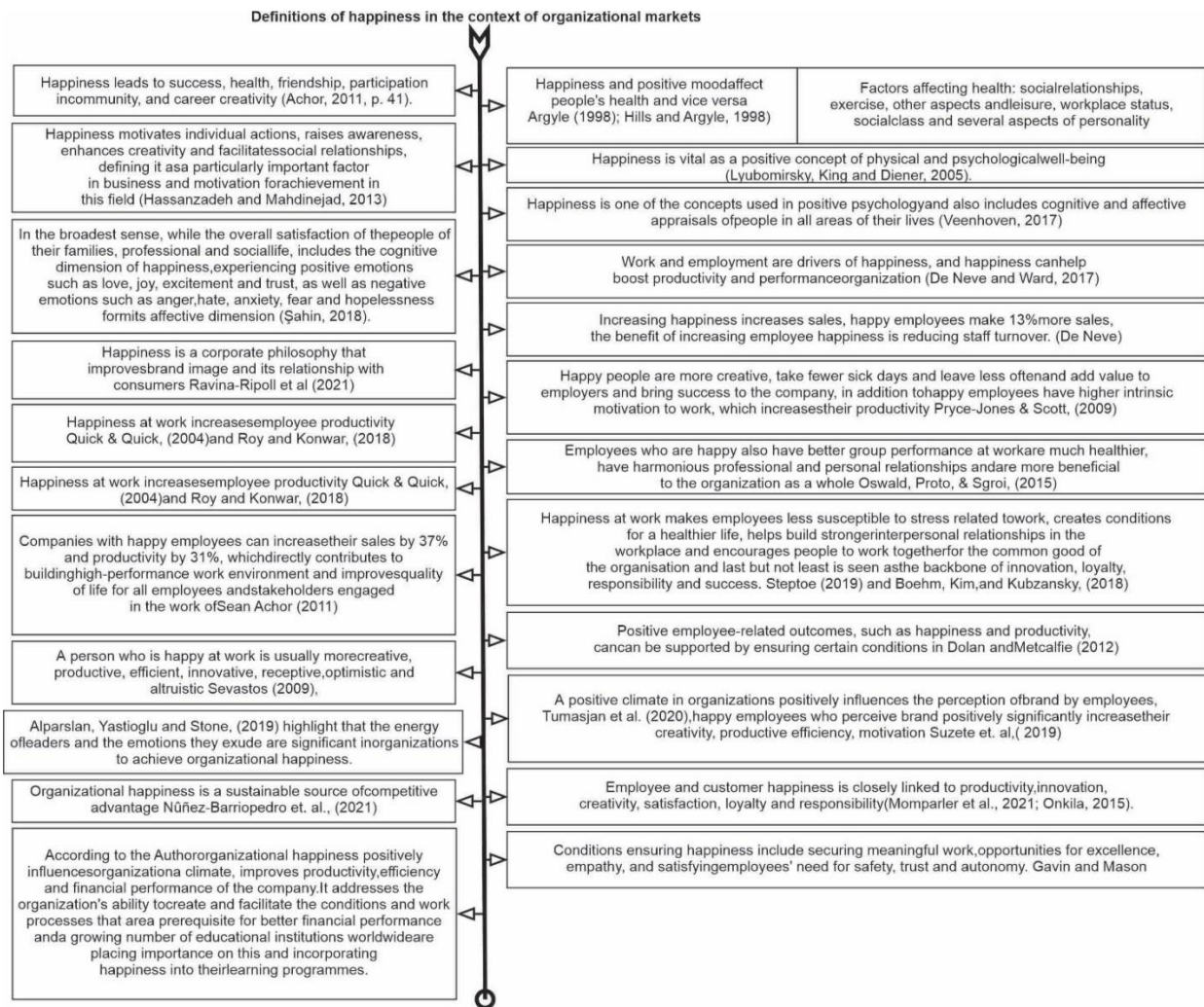
In **paragraph 2.2**, the substantive aspects and characteristics of happiness in the organizational context were discussed, with an interdisciplinary review of the concept of organizational happiness. Scientific publications and research in the field of social and organizational sciences were examined to extract the substantive aspects, scope, and characteristics of organizational happiness. In this regard, an analysis of the content of scientific articles on the topic, published in scientific databases, selected by keywords such as "organizational happiness," "corporate happiness," "happiness in B2B," "happiness and business organizations," "workplace happiness," "employee happiness," and their Turkish and English equivalents, was conducted. The literature review revealed that for almost a century, scientific works in the field of "organizational happiness" have focused on terms other than "happiness" (Maslow, 1954; Herzberg, 1959). This suggests that this concept either has been taken for granted or has not been fully accepted as a fundamental part of organizational theory. This gap in research suggests that previous studies have actually examined the same concept of happiness, although their approaches and concepts may appear different (Okulicz-Kozaryn, 2016). According to Benuyenah and Pandya (2020), scholars in the field of management, unlike psychology, have not yet focused enough on the topic of

happiness in the organizational aspect. As a concept in these sciences, happiness itself has not been studied or popularized independently as a precursor to productivity, although on a national level, the concept has garnered broad interest, particularly in the works of Veenhoven (2009, 2018; Veenhoven et al., 2021), and internationally, in reports prepared by the UN (2012). Despite the increasing number of academic publications on happiness in an organizational context, in today's digital society, there is still not a sufficiently large volume of studies on the topic (Bataineh, 2019), and scholars point out that one reason is that this line of research is still in its early stages. In many of the analyzed articles published in the 21st century, happiness is viewed as a synonym for subjective well-being<sup>8</sup>, job satisfaction, quality of life, and welfare<sup>9</sup> (Easterlin, 2003; Mackerron, 2012; Mogilner, Aaker, and Kamvar, 2012; Bhattacharjee and Mogilner, 2014; Lázaro García, 2014; Diener, Oishi, and Tay, 2018; Medvedev and Landhuis, 2018), and in its broadest sense, it is used as a collective term for everything that is good. In the studies, there is a great focus on defining the concept, and although there is consensus in the literature regarding its significance for both individuals and organizations, this agreement, however, is not valid for defining the concept (Waterman, Schwartz, and Conti, 2008; Harris, 2018a). Definitions given for happiness in the organizational context are summarized in Figure 4.

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<sup>8</sup> Subjective well-being is "an assessment of the quality of life" (Andrews and McKennell, 1980, p. 131).

<sup>9</sup> Subjective well-being is "an umbrella term for various evaluations that people make of their lives, the events that happen to them, and the circumstances in which they live" (Diener, 2006, p. 400).



*Figure 4 summarized definitions of happiness in an organizational context.*

The study showed that currently, there is no complete consensus among researchers in defining happiness and related constructs, and the term continues to be ambiguously defined and often conflated with other concepts, both globally and at the organizational level, and there still exist limited knowledge about happiness in an organizational context. Therefore, it can be said that the word "happiness" is used in various ways, and each person invests different meaning into it, implying that interpretations of the term may depend on the context, and the main components attributed to these constructs in the scientific literature suggest conceptual overlap between these dimensions.

In **paragraph 2.3**, various methods and metrics for measuring happiness were analyzed through a desk research. The following criteria were applied in the selection of publications: source type - academic journals, full-text articles, in English and Turkish, published between 2010-2023. As a result, 517 scientific articles were filtered, with the exclusion of articles published in the World Database of Happiness, as the database itself contains selected scientific publications on the topic of happiness. As of January 31, 2024, this database contains over 16,200 publications, organized into different sections. In the "Measure of Happiness" section, there is a detailed description of all acceptable measures for

assessing happiness (1515 measures), with a detailed classification by focus, time, observation, and rating scale. Given the complexity of the term happiness, according to scientists, the obvious way to measure it is to ask individuals to provide their opinion on their own happiness. Its measurement for scientific purposes is usually carried out as part of a "survey," in which many people respond to the same questions, face-to-face interviews are conducted, or online surveys are filled out. The way questions are presented adapts to these techniques, which means that questions are answered by choosing from a limited number of options for answers (so-called "multiple choice" questions). These methods are called standard. The increasing attention to the study of happiness and subjective well-being encourages the proliferation of various psychometric measures. In this context, in **paragraph 2.3.1**, various happiness measuring scales have been subjected to detailed analysis. From the examined measures, it can be summarized that happiness, subjective well-being, and quality of life are concepts that share common components for which there are no standardized operationalized definitions or criteria. This lack is evident in their interchangeable use in the scientific literature.

In **paragraph 2.3.2**, another type of measure gaining popularity in recent years, known as happiness indices<sup>10</sup>, is discussed. They provide an innovative way to assess what allows people to have measurable and sustainable results. The indices "create" knowledge and "translate" it into practical tools for auditing, assessment, and analysis. As a result of the review, it can be argued that the most suitable way to measure happiness is through so-called "happiness indices," which measure people's sense of happiness and reflect key indicators of subjective quality of life and sustainable development. However, currently, there is still no unified index system, and each researcher builds their own index system depending on their research perspective and object. Therefore, great importance is placed on the analysis and its connotation, the creation of an index system, and an effective and reasonable method for measuring happiness in society, and in the context of this dissertation, in business organizations.

In **paragraph 2.3.3**, empirical studies using various happiness measures in an organizational context are analyzed. The aim of this analysis is to identify the specifics and constructs of these measures, as well as to identify the factors influencing organizational happiness. As a result, the author of the dissertation aims to take these into account when developing an instrument to measure happiness of the business organizations. The analysis of the studies and the instruments used in them showed that the topic related to measuring happiness in an organizational context is relevant. Despite the diverse set of tools for measuring happiness, the author believes that indices are most suitable for measuring it in an organizational context. In **paragraph 3**, theoretical aspects of the consumer behavior of organizational clients are discussed.

Given the topic of this work, the dissertation author deems it necessary to address the specifics and characteristics of the business market and the consumer behavior of organizational clients in

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<sup>10</sup> The so-called "happiness index" measures people's sense of happiness and reflects key indicators of subjective quality of life.

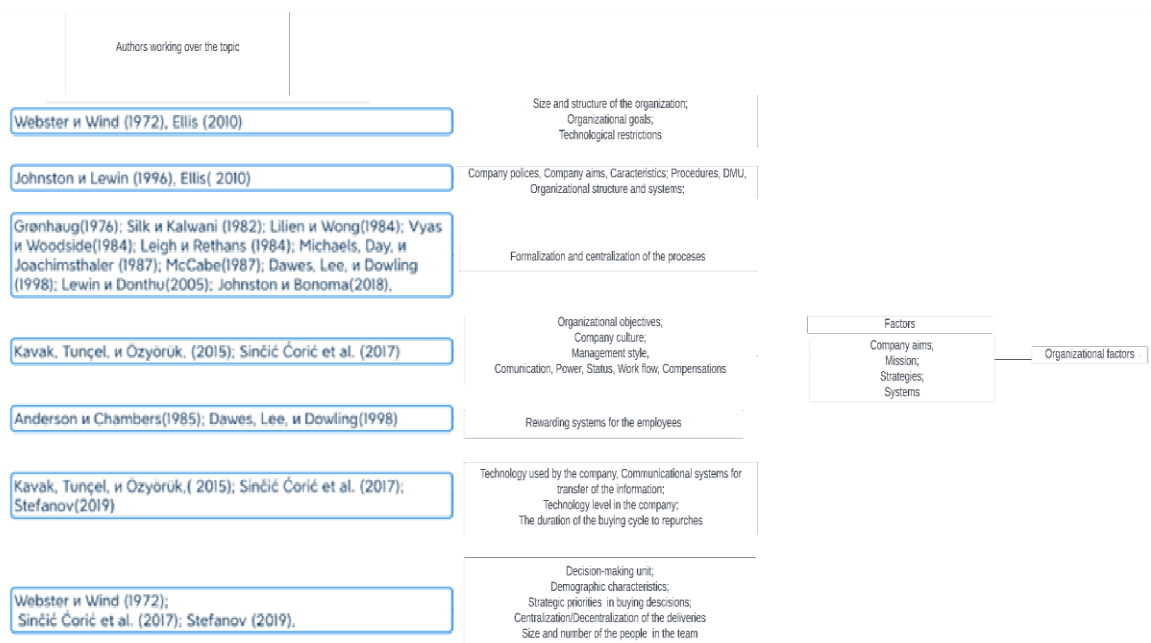
**Paragraph 3**, in order to identify the factors influencing this behavior, subsequently to be taken into account in identifying the needs of organizational clients, which form the basis of segmentation. The identified factors influencing the behavior of organizational clients are considered in the development of an instrument (index) for measuring the happiness of business organizations. **Paragraph 3.1** describes the substantive aspects, peculiarities, and distinctive characteristics of organizational markets, analyzing full-text scientific publications covering the period 1960-2021, freely accessible in indexed and referenced databases. Keywords such as "organizational buying behavior," "industrial buying behavior," "consumer behavior of an organizational user," and "business buying behavior" were used in the selection process. Definitions from selected articles were analyzed to clarify the essence of the term "consumer behavior of an organizational consumers." It was found that different authors' perspectives are very similar and generally include the main distinguishing characteristics of the behavior of organizational consumers related to collectivism in decision-making (Powers and Sterling, 2008), the complexity and formalization of the process (Lilien, 2016; Purcărea, 2016), and the multitude of factors influencing this process (Webster and Wind, 1972; Lilien, 1980). The literature analysis highlights the presence of the so-called "Buying Center," which includes all members of the organization who actively participate in the process of purchasing a specific product/service (Shapiro and Bonoma, 1984), and the process of purchasing by organizational consumers itself. This process is defined as complex and lengthy due to its multifaceted nature, collectivism, and perceived risk (Johnston and Lewin, 1996). In this context, the organizational buying behavior is considered as a system of processes, with the buying center being the group of individuals representing the client firm at the center of these processes (Grewal et al., 2015).

Referring to the characteristics of organizational markets and their dynamics, businesses are required to understand the peculiarities of organizational buying behavior, which could provide competitive advantages in dynamic and turbulent environments (Johnston and Lewin, 1996; Pawłowski and Pastuszek, 2017). In this regard, basic models of consumer behavior during purchase by organizational clients have been analyzed in **Paragraph 3.2** to extract their characteristics, phases, and specificities of this behavior. A comparative analysis of 7 different models of organizational buying behavior has been conducted, allowing the following generalizations: all analyzed models are very general, aiming to define only the behavior of large companies in purchasing, excluding the behavior of small companies. This raises questions about the applicability of existing models in the literature, as small businesses differ in many aspects from large ones. Studies on consumer behavior of small and medium-sized enterprises (SMEs) as of November 2022 are scarce, with only 4 such publications found by Morrissey and Pittaway (2004), Kavak, Tunçel, and Özyörük (2015), Özmen, Öner, and Khosrowshahi (2012), and Özmen, Öner, Khosrowshahi, and Underwood (2013). The topic of consumer behavior of SMEs is important to the author because the study aims to identify differences in the consumer behavior of organizational users in a specific industry, and in Bulgaria, the chosen industry consists mainly of micro and small enterprises, with medium-sized enterprises being relatively



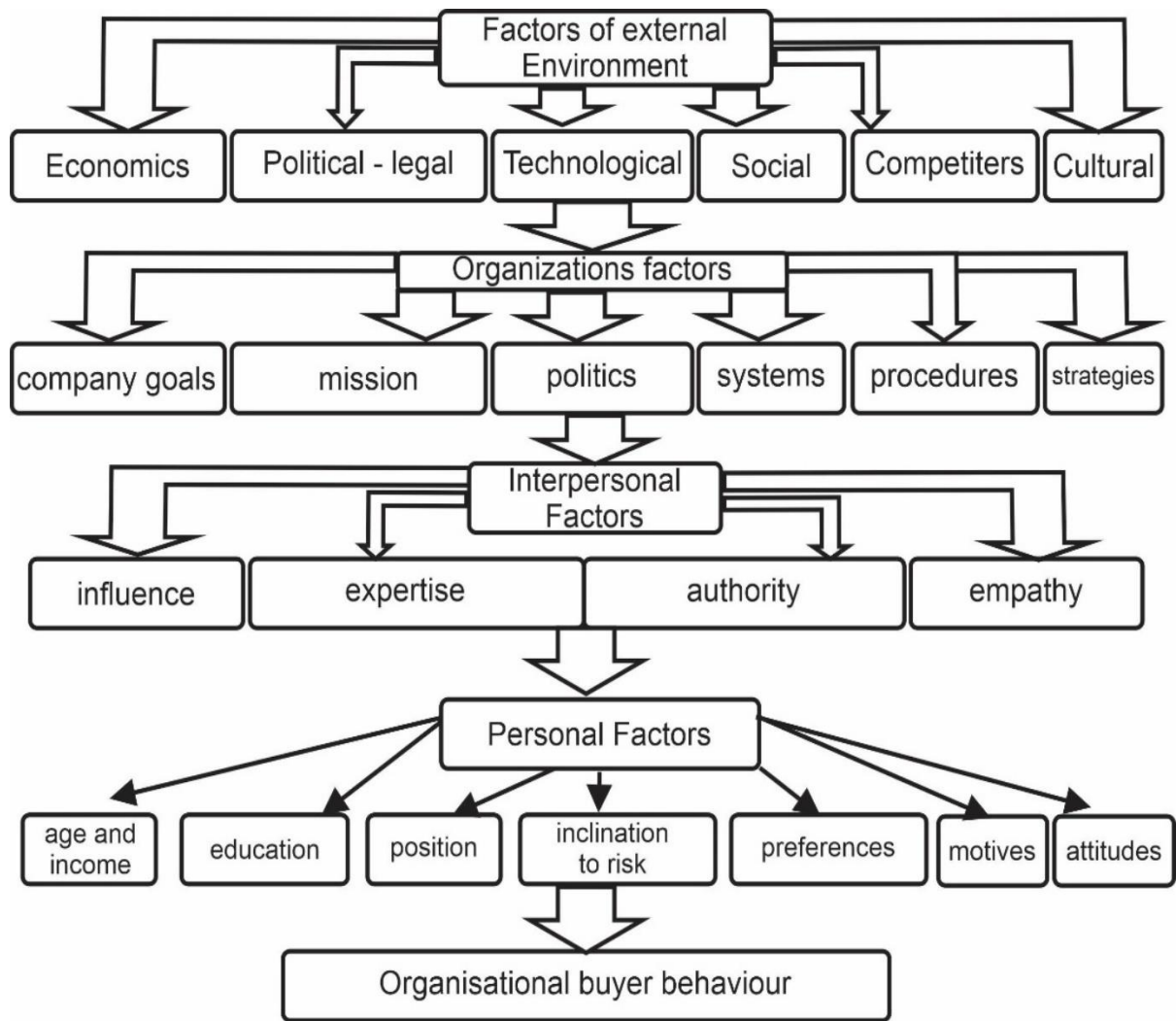
rare. Therefore, it is important to extract and systematize the various factors influencing the behavior of organizational consumers to be taken into account in the planned study. In **Paragraph 3.3**, the factors influencing organizational buying behavior are summarized and analyzed, considering that this behavior represents a decision-making process carried out by individuals who interact within the context of the organization in which they work. The factors influencing organizational buying behavior are classified into two groups - external and internal. As a result of the literature review on the topic, the following influential external environmental factors have been identified and summarized: the number of suppliers (Choffray and Lilien, 1978; Vyas and Woodside, 1984; Kauffman and Leszczyc, 2005; Homburg and Kuester, 2008), environmental uncertainty (Spekman and Stern, 1979; McCabe, 1987), relationships (Heide and John, 1992; Palmatier, Dant and Grewal, 2007), technology (Weiss and Heide, 1993; Stremersch et al., 2003; Weiss, 2005), economic factors (interest rates and investments), ecological factors, market situation (competitors) (Stefanov, 2019), as well as social, political, legal, and cultural factors (Webster and Wind, 1972). In summary of the examined external environmental factors, it can be said that they represent a primary source of information for marketers, but at the same time, they also impose certain limitations on them. Analyzed studies describe how external environmental factors influence the purchasing process in the industrial market, but few scholars have investigated how organizational purchases and sales change under the influence of these factors in different industries and contexts. As a result, there are still areas that remain unexplored, and the maritime business is one of them.

Depending on the dissertation author's adopted classification of factors influencing organizational buying behavior, Figure 5 summarizes the characteristics of internal factors, including organizational, group, and individual factors.



*Fig. 5 Organizational Factors and Sub-factors Influencing the Purchasing Decision-Making Process*

In summary, when analyzing organizational behavior, firmographic characteristics of the organization, strategic purchasing priorities, centralization/decentralization of supplies (Stefanov, 2019), and organizational structure, which consists of several subsystems: communication, power (Ćorić, 2021), status, compensation, and workflow (Kavak, Tunçel, and Özyörük, 2015) should be considered. The next group belonging to internal factors are the so-called inter-personal (group) factors, which include the decision-making team for purchasing. Evaluation of purchase situations and actions of individuals depend on psychological processes such as perception and information processing, motives, emotions, and learning, which relate to personal (individual) factors, the third subgroup of internal factors. This work specifically focuses on motives and emotions because in some situations, purchasing decisions may be influenced by subjective factors such as the supplier's image, personal preferences, or informal contacts established between the seller and the buyer (Hawkins, D., Best, R., and Coney, 1989). Strong personal relationships also play a significant role in organizational buying, and each decision-making participant brings their personal motivation, perceptions, and preferences into the process, which depend on age, income, experience, education, job position, personal characteristics, and attitude toward risk (Stefanov, 2019). Each participant is motivated to achieve a balance between personal and organizational goals, taking into account certain constraints such as information, personal relationships among team members, personal characteristics, role-related behavior, company policy and culture, external environmental influences, etc. (Kavak, Tunçel, and Özyörük, 2015). In summary of the above, it can be stated that organizational behavior is influenced by various factors and is conditioned by the interaction between humans and the formal structure. Based on this, the well-established concept in specialized literature, "organizational behavior," which describes human behavior in the work process in different organizations, is derived. As a result of the analysis of the factors influencing organizational consumer behavior, a generalized model of the factors influencing the organizational consumer in the purchasing decision-making process is presented in Figure 6.



*Figure 6. Generalized Model of Factors Influencing Organizational Consumer Behavior.*

It was found that there are numerous different factors that influence an organization's behavior in the purchasing process. Analyzing and recognizing these factors is beneficial for market segmentation and building "customer personas," which would allow for a deeper understanding of the business organization's target market and utilization as segmentation criteria. Considering that business organizations are primary environments where people have the most intense interactions with others, the feelings, attitudes, and perceptions of employees are of great importance in achieving organizational goals and tasks. These feelings and perceptions determine their satisfaction with the organization and influence their behavior, serving as a prerequisite for the productivity and success of companies. According to analyzed studies, employees seek emotionally pleasant and happy environments in the organizations they work for, which in turn affects the behavior of the organization itself in the purchasing process.

## Summary of the First Chapter

As a result of a critical analysis of the theoretical aspects of segmentation, happiness, and consumer behavior in the context of business markets, the following key points were established:

1) There is a significant gap in publications related to the segmentation of business markets, which is a problem in today's rapidly changing world. The emergence of new markets and changes in existing ones lead to changes in buying processes and consumer behavior. This presents an opportunity for future research to deepen and reconsider the knowledge base of segmentation in business markets.

2) A comparative analysis of models for segmenting the business market revealed that the characteristics of decision-making units (DMU) are not widely used as segmentation criteria, although they are highly suitable. Descriptive characteristics of the buying center were systematized as segmentation criteria that marketers could use in developing markets.

3) Psychography is recognized as a valuable segmentation method for strategic marketing in business organizations, aiding in understanding buyer behavior and risk minimization. Emotions play a significant role in B2B purchases, making psychographic segmentation a useful tool. Despite increasing interest in emotions in the B2B context, there is a lack of scientific research on happiness as a segmentation criterion in B2B markets.

4) Scholars advocate for a new transformative approach to measuring well-being and success, as Gross Domestic Product (GDP) fails to provide sufficient information about social progress associated with improving the well-being of people and organizations. This has led to the development of alternative measures for achieving sustainable growth, with happiness becoming a subject of rapidly growing interest in academic research.

5) There is currently no complete consensus among researchers regarding the definition of happiness and its related constructs, despite significant focus on defining the term.

6) Research demonstrates connections between happiness and organizational culture, validating happiness as a psychographic variable and segmentation criterion in business markets. This suggests that happiness can influence the decision-making style of business organizations.

7) Results of analyzed scientific studies in the first chapter indicate that happiness is perceived as an important factor for the success of business organizations. Considering that each business organization has its own decision-making style, influenced by various factors, happiness can be viewed as a factor influencing the decision-making style of business organizations.

8) Analysis of the theoretical aspects of happiness, metrics for its measurement, and segmentation in business markets provide the necessary theoretical foundation for developing tools to measure happiness in business organizations. Among various tools for measuring happiness, indices are considered the most suitable for measuring happiness in an organizational context. The ability to measure happiness through appropriate tools may play a key role in validating it as a segmentation criterion in business markets.

## Chapter Two

Second Chapter consists of three paragraphs. In **Paragraph 1**, a situational analysis of the maritime business in Bulgaria is conducted, with **Paragraph 1.1** focusing on the state of the maritime business in Bulgaria. The maritime industry<sup>11</sup> is defined as encompassing all enterprises with over 50% turnover from maritime activities, including those involved in owning, operating, designing, constructing, supplying equipment, or providing specialized services to all types of ships and other floating objects (Melbye, Theie, and Jakobsen, 2015). For Bulgaria, the maritime industry is a specific sector that brings together companies from various sectors related to maritime activities (the maritime sector<sup>12</sup>). According to Haugland (2021), these companies have four main types of activities, typically categorized as ship companies, shipbuilders, equipment suppliers, or service providers. These four categories are interdependent and intertwined, either by creating demand for other business areas or by supplying goods to other companies. Shipping companies are the engine of this industry, particularly in terms of their constant search for better and more efficient solutions to meet the requirements and pressure from other industry participants. The International Maritime Organization (IMO) defines maritime transport as vital to the global economy, as 90% of world trade is carried out by sea, with according to UNCTAD (2021) being the most profitable way to transport goods and raw materials worldwide. Statistical data indicates that water transport is a major driver of the economy in Bulgaria, with 70% of imports and exports being carried out by this mode of transport through nationally significant ports (Kraychev, Bogdanov, and Vasileva, 2021). In this context, the country has a developed maritime port infrastructure serving all types of cargo handling activities in maritime ports.

In the present dissertation, the author focuses not on the entire maritime business in Bulgaria but specifically on companies performing auxiliary activities in maritime transport - agency companies, ship brokers, and suppliers. To determine the number of broker, agency, and supply companies, mainly secondary data from industry organizations, Executive agency Maritime administration, Bulgarian ports infrastructure company, the National Center for Electronic Document Management in Maritime Transport, as well as experts were used. According to data from the Bulgarian Association of Ship Brokers and Agents (BASBA) as of January 1, 2023, the number of registered association agents and brokers is 40, noting that some of the companies, in addition to agency and brokerage, are also engaged in freight forwarding and supply. A reference was also made to the Single Window unified information system for document circulation in maritime transport. As a result, it was found that in addition to the companies registered in BASBA, there are another 28 companies in the platform involved in agency

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<sup>11</sup> The maritime industry is a complex industrial sector encompassing various companies involved in transportation, logistics, regulatory, engineering, financial and insurance activities and other services supporting the entire maritime transportation system, which are vertically and horizontally intertwined. Includes ports and terminals, shipping services, maritime trade and ancillary services, navigation, direct and indirect industries supporting the maritime transport system.

<sup>12</sup> The maritime sector is a part of the economy that is driven by individual industries for shipping, ports, marine and maritime business services, each of which includes a diverse set of activities.

and brokerage activities, which provides grounds to claim that the total registered companies in the industry are 68. A large part of these companies are micro-enterprises, with some of them operating regularly and others having very sporadic activities.

According to the Bulgarian Association of Ship Suppliers (BASS), the number of registered suppliers is 12. It should also be noted that several companies supplying ship fuel have been identified but are not members of this association. These companies are Lukoil, Petromar, Ins Petrol, Saksa Fuels, Eurodon Trading. Together with them, the number of licensed suppliers in Bulgaria is 16. Data provided by the Directorate "Vessel Traffic Management - Black Sea", which is part of the "Bulgarian Port Infrastructure company", with the assistance of the Maritime Administration Directorate - Varna, was used to identify the most actively operating companies in the industry. The information provided is for the number of maneuvers requested by ship agents and brokers for a period of 5 years - 2018 and 2022. As a result of the analysis, it was found that there are 29 companies that work most actively and have regular activities in the maritime transport sector, excluding companies with sporadic agency services. According to experts in the industry, the competitive environment in the maritime business in Bulgaria has been quite dynamic and unstable in recent years. They believe that this instability creates unfavorable conditions for the development of companies currently operating in this market and also becomes an unattractive precondition for new companies to enter, despite relatively low barriers to entry into the industry. Another reason for the unattractiveness of the industry is that it places great importance on long-standing good relationships between companies, which is a crucial criterion for success. Competition among existing competitors is high, and there is currently no real threat from substitute services. Experts agree that buyers in the industry have high power, while suppliers have moderate power. The trend of maintaining these unfavorable conditions in the future is unfortunately not favorable for the industry's development. In this context, experts hope that certain circumstances will arise soon to bring about changes in market conditions in the future.

In **paragraph 1.2**, the factors influencing the industry are analyzed, grouped into two categories - external and internal factors, with often having a bidirectional effect. In summarizing the analysis of the factors influencing the industry, it can be noted that the maritime industry as a whole is one of the most affected due to regulatory and normative changes related to sustainable development sectors, which in turn affects the consumer behavior of companies. Therefore, regulatory provisions related to sustainable development, along with market mechanisms, can be considered as a precondition for the emergence of sustainable practices, which predispose the types of decisions made by companies and lead to changes in their consumer behavior. Factors related to sustainable development, influencing business organizations, can be divided into two categories: regulations issued by the International Maritime Organization (IMO), other international organizations, national authorities, and market forces, primarily affecting customer preferences and leading to changes in their consumer behavior. As a result, the industry in Bulgaria is heavily influenced by these external factors.

In addition to the external factors discussed, numerous internal factors also influence the industry, largely dependent on the behavior of various participants, including governmental and municipal institutions as well as private companies. Investments in the sector are of utmost importance, as Bulgarian ports are crucial logistical points for the entire transportation process. In recent years, the EU has paid exceptional attention to ports, turning them into a key factor from strategic, economic, trade, ecological, and social perspectives. This is entirely logical, as ports are important not only for maritime transport and intermodal transport in Europe but also as economic axes, sources of employment, and integration of the population. In this context, the development of maritime transport depends on the state of port infrastructure. Unfortunately, however, many public transportation ports in Bulgaria face a variety of factors limiting their functionality. These constraining internal factors are generally summarized as follows: 1) Incompatibility of a large part of the existing port infrastructure such as quays and container yards and warehouse facilities, with the characteristics of individual transport vehicles, types of goods, and requirements for their processing and storage technology. 2) Insufficient depth in front of the quays at many ports/terminals (it is inadequate and limits the draught/size of vessels visiting the port). 3) Parameters of navigable channels and the throughput capacity of Bulgarian ports.

The analysis of the factors shows that most of them negatively impact the industry in Bulgaria but at the same time, they also serve as prerequisites for changes in the consumer behavior of companies. As already mentioned, the focus is not on the entire maritime transport industry but specifically on firms performing auxiliary activities such as agency companies, ship brokers, and suppliers. These types of companies are typical representatives of business markets and, from the perspective of studying the consumer behavior of SMEs, are very suitable as objects because they are intermediaries in maritime transport and provide services to third parties, being considered as key actors in the logistics chain in maritime transport. In this context, the characteristics of these companies are examined in **paragraph 1.3** and the differences between the activities carried out by them are described. Presenting the characteristics of each type of company is important because very often the services offered by brokers and agents are considered identical and the terms broker and agent are used interchangeably, which, given the nature of their activities and the services offered by them, is incorrect.

In summary of this paragraph, Table 4 describes the characteristic activities performed by the companies and compares the main services provided by them.

Table 4

**Typical activities characteristic of agency and brokerage companies include:**

Agency services	Brokerage services
<b>Provision of supplies to ships:</b> - Fuel - Provisions (food and technical means) - Supplies - Ship repair assistance / spare parts /	<b>Fixing of ships/vessels/gargoes</b> - Chartering - Insurance - Consultation in developing a cargo plan - Customs clearance - Clearance of cargo documents - Real-time reporting - Nomination of agents - Monitoring charter performance - IMDG code dangerous goods consultancy - Handling insurance claims and disputes - Monitoring the preparation of bills of lading - Preparation of letters of guarantee - Bank guarantees, - payment of commission and freight
<b>Activities related to the stay of a ship in port:</b> - Provision of a suitable berth for the cargo - Providing a convenient dock and storage facilities or vehicles - Provision of pilotage services - Providing tug, tow, mooring - Provide rigging services, - Surrey (providing supervision during loading and unloading activities) - Draft survey - Fuel Survey - Loading/unloading- docking services - Ancillary activities- load securing - Cleaning of holds - General logistics services - Fumigation - marine insurance contract - ship repair - Provisioning and fuel supply - Stale time calculation - Determination of demurrage	<b>Offering assistance in finding the most efficient logistical solution involves:</b>
<b>Administrative services:</b> - Ports infrastructure - Maritime administration - Payment of all ship bills- disbursement account", - Issue of necessary permits - Crew change (Meet and dispatch, visa assistance, hotel accommodation ) - Digital ship disbursement - Crew list entry/de-listing	

*Source: Developed by the author*

The systematization allows us to see where the differences lie between the various types of companies and to understand what products they require in their roles as clients. Referring to the fact that this industry is strongly influenced by the concept of sustainable development, the author believes that it is necessary to examine the products and services required by companies in the context of eco-friendly and sustainable products and services. In this regard, Table 5 systematizes the products and services purchased by ship, agency, and supplier companies, classifying them into two groups: products and services with conventional characteristics and products and services with eco-friendly characteristics.



Table 5

**The main products and services purchased by ship, agency, and supplier companies include**

Traditional products and services in the maritime industry typically include:	Eco-friendly products and services in the context of the maritime industry, as defined by BGHI, may include:
<b><u>Services/products purchased in the role of intermediary include:</u></b>	<b><u>Services/products purchased in the role of intermediary include:</u></b>
<ul style="list-style-type: none"> <li>- Bunkering with traditional fuels (IFO 180, 360)</li> <li>- Provisions, materials, and technical equipment</li> <li>- Oils and spare parts</li> </ul>	<ul style="list-style-type: none"> <li>- Collection and disposal of oil mixtures, sanitary waters</li> <li>- Waste/bio waste collection</li> <li>- Bunkering with LNG</li> <li>- Alternative fuels with low sulfur and nitrogen oxide content</li> <li>- Shore power supply during the ship's stay at the dock for the ship's generator</li> <li>- Supply of provisions such as eco paints, eco products</li> </ul>
<b><u>Services/products purchased in the role of consumers include:</u></b>	<b><u>Services/products purchased in the role of consumers include:</u></b>
<ul style="list-style-type: none"> <li>- Office consumables</li> <li>- Transportation vehicles (company cars)</li> <li>- Training sessions</li> <li>- Electrical appliances</li> <li>- Lighting</li> <li>- Purchase of equipment</li> </ul>	<ul style="list-style-type: none"> <li>- Training for enhancing the qualifications of employees regarding ecological regulations from MARPOL, IMO, etc. by MARAD</li> <li>- Providing safe working conditions</li> <li>- Training and career development</li> <li>- Informational tools in the form of training to foster attitudes towards sustainable consumption</li> <li>- Effective information exchange system with clients/suppliers and external stakeholders.</li> <li>- Purchase of innovative equipment to reduce the company's carbon footprint</li> <li>- Services of the single window electronic document system</li> <li>- Electronic services from VTMS</li> <li>- Solar panels for office buildings (e.g., on the roof of the Odessos port)</li> <li>- Hybrid or electric company vehicles</li> <li>- Removal of company-generated waste to special depots</li> <li>- Eco-friendly fuels</li> <li>- Eco-products according to ISO 9001:2008 standards</li> <li>- Water purification systems in offices</li> <li>- Recycled paper</li> <li>- Reusable consumables</li> <li>- Energy-saving lighting in offices</li> <li>- Energy-saving electrical appliances</li> <li>- Eco-materials for repair activities to improve the working environment</li> </ul>

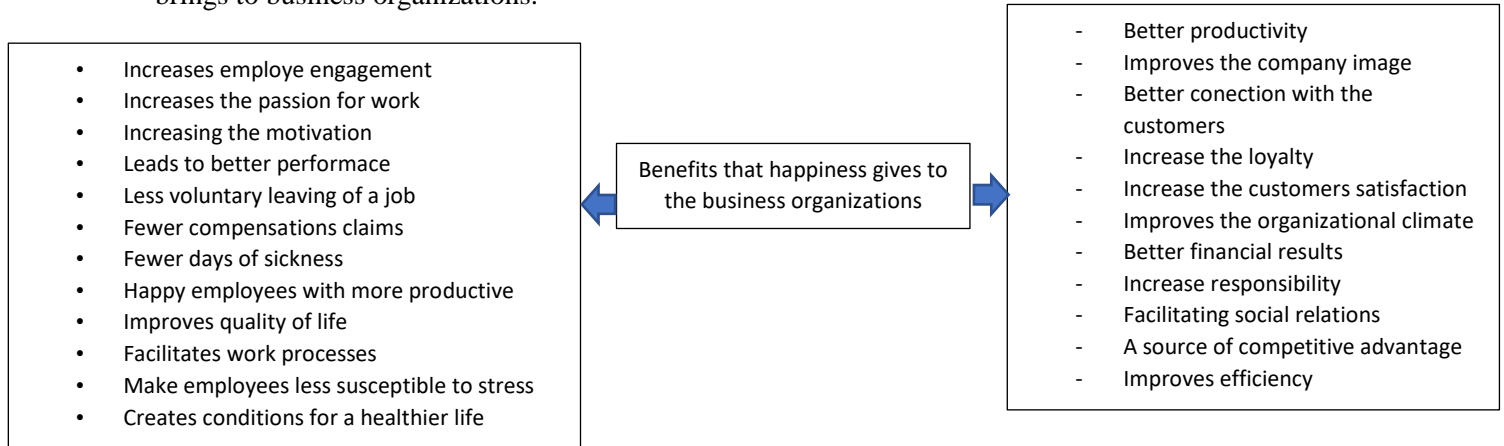
*Source: Developed by the author as a result of in-depth interviews with experts in the industry.*

The classification and description of the main products and services bought by shipping, agency, and supplier companies have been made in order to identify what are the differences in their consumer behavior. Additionally, the eco-products/services identified in terms of BGHI purchased by companies in the industry in their role as consumers and intermediaries are intended to be used in developing the happiness measurement tool for the purposes of the study. In this context, the benefits of happiness to business organizations are outlined in the next section, along with an analysis of happiness indices in an organizational context. The idea is for their analysis to serve as a framework to assist the author in developing the instrument for the study, which will be validated in the industry.

In **paragraph 2** of the second chapter, the specifics and characteristics of happiness indices measuring the happiness of business organizations are discussed. **Paragraph 2.1** analyze the benefits of happiness for business organizations. It should be noted that the maritime industry was the first that use the Seafarers Happiness Index to measure the happiness of seafarers back in 2015. Since its introduction, an annual survey has been conducted aimed at identifying the conditions and factors

influencing the happiness of seafarers. Based on the index results, companies seek to improve conditions for their employees, ultimately aiming to achieve their organizational goals and objectives, such as improving financial results and stakeholder satisfaction.

As a result of the analysis conducted, Figure 7 summarizes the general benefits that happiness brings to business organizations.



*Fig. 7 Benefits of Happiness for Business Organizations*

The analysis demonstrates that, overall, studies prove that employees' subjective well-being has a positive impact on both themselves and the organizations. For employees, well-being is associated with their levels of engagement (Othman et al., 2018), organizational citizenship behavior (Rego, Ribeiro, and Cunha, 2010; Vasconcelos, 2011), workplace relationships (Williams, Kern, and Waters, 2017), job satisfaction, and overall career success (Boehm and Lyubomirsky, 1992), among others. For organizations, it is associated with greater customer satisfaction, higher productivity, fewer voluntary turnover, compensation claims, and fewer sick days (Pepcy et al., 2016), among others.

As a result of the aforementioned facts and studies, the author summarizes the following:

1) There is a consensus that organizational happiness positively influences the organizational climate, improving companies' productivity and effectiveness. It is related to the organization's ability to create and facilitate conditions and work processes that are prerequisites for better financial results.

2) Workplace happiness is associated with greater professional success, higher incomes, better job performance, and a willingness to help others in their work, which can lead to efficiency and achievement of organizational goals.

3) Maximizing employee happiness is a sustainable source of competitive advantage (Ravina-Ripoll et al., 2021) in the context of CSR and can be considered a holistic measure of companies' success.

4) Referring to the established links between happiness and corporate culture, the open system theory, and the study by Ficarra, Rubino, and Morote (2020), it can be argued that happiness can be seen as an element of corporate culture.

5) Analyzed studies demonstrate a causal relationship between happiness and business organization performance. This suggests that companies with higher happiness index scores would have different consumer behavior.

In **paragraph 2.2**, the specifics of happiness indices in an organizational context are described and analyzed. This section analyzes various studies using indices to measure happiness in an organizational context covering the period 2012-2022, which are summarized and chronologically arranged in Table 6.

**Table 6**

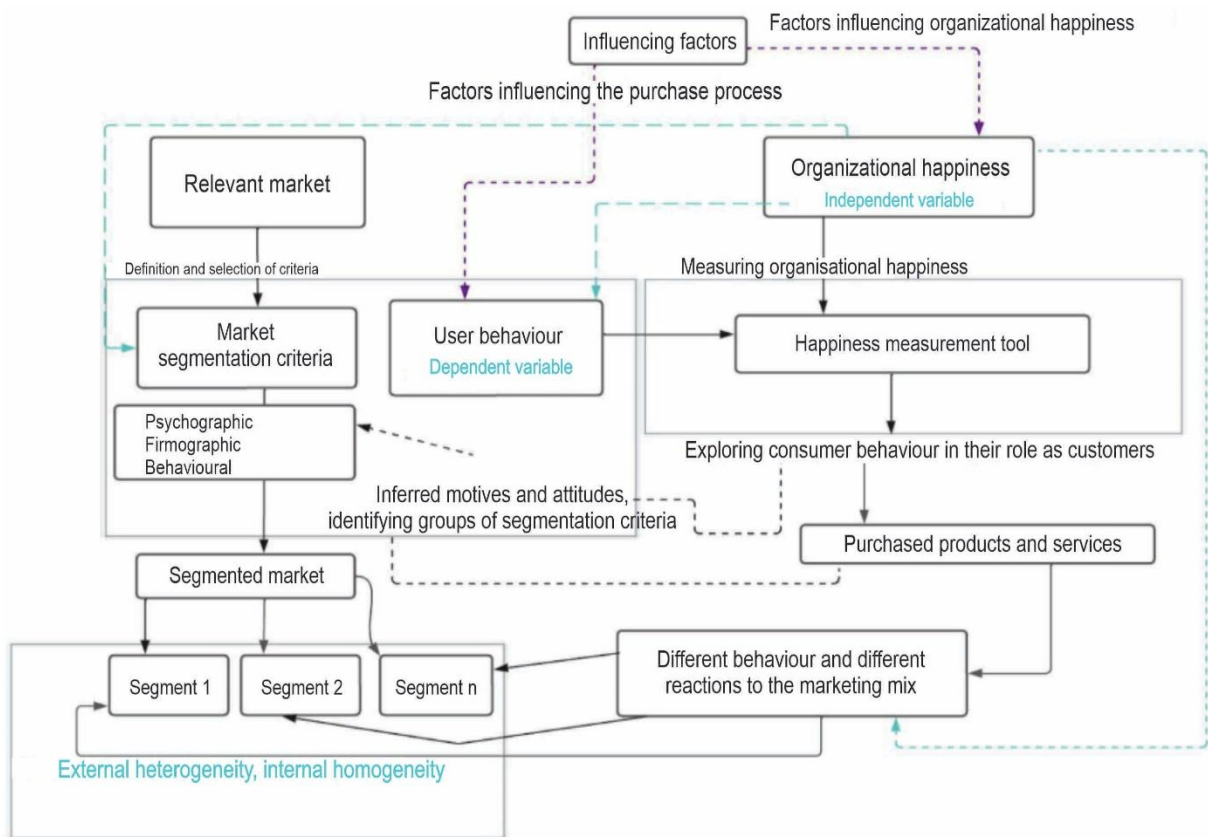
**Indices, main areas, and components measuring happiness in an organizational aspect**

<b>Index/ soutry</b>	<b>Main areas</b>	<b>Used scales</b>	<b>Instruments</b>	<b>Content validation</b>	<b>Data analysis</b>
Happy work index (HWI) Thummakul et al.,(2012) Thailand	1. Working atmosphere 2. Human resource management 3. Physical and mental health 4. Growth or quality of organisational products	Standard scales	- self-assessment guide (Happy- Workplace Index: Self-Assessment Questionnaire), staff and management interview questionnaires	- experts - pilot survey - 101 business organizations	Qualitative data - content analysis, quantitative data - using frequency, percentages and exploratory factor analysis (EFA) Cronbach's alpha
Gross Institutional Happiness Index (GIHI) (Applasamy et al., 2014) Taylor's University (Malaysia)	1. Psychological wellbeing 2. Health 3. Time use 4. Education 5. Cultural diversity 6. Good governance 7. Community vitality 8. Ecological diversity 9. Living standart	Liker scales  Semantic differential	Questioniers	- 29 teachers	Sufficiency thresholds for each of the indicators.  Methodology for calculating the index
Happiness Index (Demircoglu, 2014) Turkiye	1. Relationships at work 2. Work 3. The work environment.	- Likert scale	Online questionnaire	- 87 participants	Mean, standard deviation, regression analysis, correlation coefficients, p-values
Happiness index of University Mindanao students (Abecia et al., 2014) University Mindanao	1. Competition 2. Mode- fashion 3. Intellectual 4. Technological computer games 5. Altruism 6. Nightlife 7. Care for others 8. Celebrations	- Liker scales 5 point	A questionnaire with 39 predefined sources of happiness.	- 381 students	Factor analysis Chi square, p- value, Kaiser-Mayer Olkin test
Employee Happiness Index - IT Company India Thiruvankadam and Jayasingh (2018)	1. attitude to oneself, 2. attitude to work, 3. career growth and development, 4. organisational culture and coherence, 5. physical and mental well-being, 6. work-life balance, 7. relationships with the team, 8. relationships with managers	Liker scales	questionary	400 employees	correlation, Chi-square, ANOVA and regression analysis
Organizational Happiness Index	1. Job satisfaction 2. Satisfaction with work-life balance	- Likert scale 5 point	- online survey based on a questionnaire	- 312 people	SPSS, Cronbach's alpha, Descriptive statistics, mean , standard deviation,

(Omar, Ramdani, Mohd&Hussein) 2018 State University, Klang, Malaysia	3. Employee well-being					Correlation
UTHM staff happiness index Malaysia Isa et. al. (2019)	1. Individual, 2. Social 3. Organizational	4 point Liker scale	- Questionnaire based on the World-Happiness Index	- 535 people		- Frequency, %, median
PERMA-SAC index (Shetty et al., 2019) India	1. Positive emotions 2. Engagement 3. Relationship 4. Meaning 5. Accomplishment	5 point liker scale	- Used a customized PERAMA-profile and combine it with the Satisfaction-Agreement-Consistency(SAC) Index - Questionnaire	- Pilot study		- Factor anlyls, Cronbach's alpha, T-test
Abbreviated Gross National Happiness Survey for Singapore's Hospitality Industry Abbreviated GAS-SHI (Utanes,2020) Singapore	1. Demography and household, 2. Happiness and well-being, 3. Health, 4. Family and community, 5. Use of time, 6. Balance, 7. Education, 8. Core Values, 9. Cultural vitality, 10. Governance,, 11. Environment and standard of living.	- 4 and 5 point Likert scale	makes amendments that result in an adapted and modified version of the original abbreviated form of the GNH index. Questionnaire	- Pilot study		- descriptive statistics
Organizational Happiness index (Gupta, Agrawal, Chavan) 2020 B-school in Pune	1. Sense of value 2. Work-life balance 3. Pay and benefits 4. Career development opportunities 5. Fair distribution of work 6. Management support 7. Connection/trust between colleagues 8. Commitment to the organisation	- the indicators chosen by the authors are measured on a scale from 1 to 10	Using the scale developed by Happinessindex.com and the Happiness Alliance - conducting short interviews and questionnaires	40 teachers and staff		- descriptive statistics
Happiness Index Chauhan, Shah, Agrawal, Rajput(2021) India	1. Prosperity 2. Work 3. Employees 4. Organization	5 point Likert scale	- structured questionnaire;- personal interviews in the organisation	100 respondents		statistical techniques, Cronbach alpha, descriptive statistics, regression analysis

Source: Developed by th eauthor

From the chronologically ordered indices in Table 6, the main areas used in each tool are listed, along with descriptions of the scales and the methods used to analyze the collected data. Likert scales are most commonly used in the analyzed indices. Data were collected through questionnaires or personal interviews, and mixed methods were used in their development. Data analysis was mainly conducted using descriptive statistics, correlation and regression analyses, factor analysis, Chi-square tests, etc. It was also noted that different studies used different types of questions, and before moving on to developing a tool to measure happiness in business organizations, the author believes it is appropriate to thoroughly examine the types of questions used in happiness measurement studies and clarify their specifics, which should be considered when developing the happiness measurement index for business organizations. **Paragraph 2.3** describes the characteristics and types of questions used in happiness measurement. Referring to the discussed methods and metrics for measuring happiness (in Chapter I), and the indices in the previous section, the most frequently used types of questions and scales used in happiness measurement are summarized. After clarifying the characteristics of the types of questions for measuring happiness, the methodology for developing an index for measuring happiness in business organizations is described in **paragraph 3**. Methodological guidelines for conducting the study are described, with **paragraph 3.1** examining and explaining the conceptual and operational model of the study. The theoretical foundation presented in **Chapter I** is used as the basis for developing the conceptual model, incorporating ideas, components, and associative characteristics of authors focused on researching various aspects of happiness. The model acknowledges that the business market is not a homogeneous set of business clients, and its goal is to identify segmentation criteria used in market segmentation, as a result of which firms can be grouped based on their different reactions to elements of the marketing mix in segments with external heterogeneity and internal homogeneity. The connections between segmentation criteria, happiness metrics, and their benefits for business organizations, as well as their consumer behavior in the role of customers in the B2B market, are outlined. A necessary condition for determining the influence of happiness on business organizations is to measure it based on the result, to look for differences in the behavior of organizations performing auxiliary activities in maritime transport in Bulgaria. To establish such a difference in behavior, it is necessary to conduct a study on the consumer behavior of companies operating in the maritime transport industry because the formation of significant segments is based on market research. The conceptual model shows the relationship between segmentation criteria, happiness, and consumer behavior, which is not consistently linear and can be influenced by various factors commonly identified as "influencing factors." Based on the above, it can be emphasized that the following elements are at the core of the conceptual model: happiness - as an independent variable; consumer behavior - as a dependent variable; influencing factors - as mediating the relationship between the independent and dependent variables and segmenting the B2B market, particularly psychographic segmentation criteria to which happiness relates.



*Fig. 8. Conceptual model illustrating the relationships between Business Organizations' Consumer Behavior, Organizational Happiness, and B2B Market Segmentation.*

The operational model (Fig. 9) follows the logic of the conceptual model, aiming to present its components in a detailed manner and visualize the possible influences (direct and indirect) on happiness and its affirmation as a segmentation criterion in business markets. The model is focused on diagnosing this relationship in depth. For this purpose, the independent, dependent, and influencing variables are operationalized through a complex set of relevant components.





The operational model of this study takes into account the impact of several different types of factors: factors influencing consumer behavior, factors influencing business organizational happiness, and happiness itself as a factor influencing both consumer behavior and business organizations. Based on the results of similar studies conducted by various authors on other objects, it can be generalized that these factors can significantly influence consumer behavior in business organizations and thus, at first glance, alter the linear relationship between happiness, considered as an independent variable, and consumer behavior, considered as a dependent one. The influence of happiness and its benefits for business organizations are described in Chapter II, Paragraph 2.1.

From the visual representation of the operational model, the steps to be followed in the current study are visible. In this regard, the author makes the following clarification: the focus of this research is only on whether there is similarity or difference in the consumer behavior of happy companies in their role as clients and whether happiness can be a segmentation criterion in B2B markets, without detailing the entire segmentation, targeting, positioning process (STP). To determine this, it is necessary to conduct a market study to analyze the motives, attitudes, and needs of consumers. The study involves collecting and processing information using various methods. This information enables the degree of similarity and difference between individual buyers to be revealed and allows their grouping into segments, with each segment being profiled depending on the characteristics revealed by the observed signs using cross-tabulations, cluster analysis, etc. Through this study, the author wants to test whether happiness can be considered as a segmentation criterion in B2B markets. Proving or rejecting this assumption is possible through empirical research. Testing the principal ideas laid out in the conceptual model involves applying a related series of research activities, conditioning the algorithm for conducting empirical research (Fig. 10).

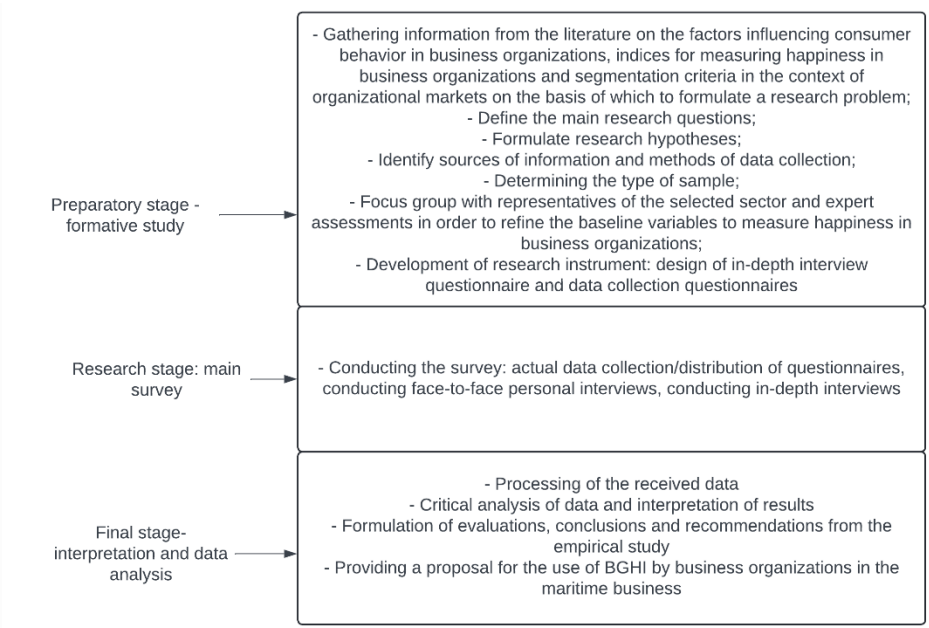


Fig. 10 Process Framework for Conducting Empirical Research

Source: Developed by the author

In **Paragraph 3**, the design and algorithm for conducting empirical research, visualized in Fig. 10, are detailed. The research design consists of various activities structured into three stages. At each of the three separate stages of the research, either a formulative, descriptive strategy, or a combination of both, is applied. The algorithm involves the implementation of a connected series of research activities, which are elaborately described in **paragraphs: 3.2.1, 3.2.2, and 3.2.3**. In **Paragraph 3.2.1**, the steps of the preparatory stage are described. The first task of this stage is related to acquiring and analyzing secondary information about segmentation criteria, business organizations' consumer behavior (Chapter I), and happiness indices for business organizations, detailed in Chapter II, **Paragraph 2.2**. Content analysis was used as the method. As a result, it was found that there are currently no scientific studies using happiness as a segmentation criterion in B2B markets. The analysis of publications related to happiness indices leads to the identification of input variables, indicators, and their constituent variables influencing organizational happiness. As a result, the two main areas used for measuring organizational happiness are delineated and supplemented in the next stage after conducting a focus group with industry experts. In this paragraph, the main research questions are defined based on theoretical frameworks, with the research problem broadly summarized as follows: currently, (1) studies related to market segmentation in the B2B context are generally scarce, particularly in the industry. As a result of the literature analysis, it was found that (2) happiness has not been considered as a segmentation criterion in business markets. Furthermore, although beyond the scope of this dissertation, the author notes that (3) there is currently no established unified model for the decision-making process of SMEs in the industry, and the proposed models in the literature mainly focus on large business organizations. Referring to the logic and theoretical frameworks in Chapter I, it should be noted that for happiness to be used as a segmentation variable, it must be able to measure the value of an element or observed category, in this case, happiness, hence the need for a suitable measuring tool. In this context, a decision was made to design a tool for measuring happiness in business organizations. The resolution of the formulated problems raises the following research questions:

- *Do companies in the maritime business exhibit different consumer behavior in their consumption of eco/bio/sustainable products based on their happiness index results?*
- *What are the factors and motives influencing the purchasing decision process of business organizations in the industry with high happiness index results?*
- *Is it possible for happiness to be a segmentation criterion in business markets using the example of maritime transport?*
- *Do companies with high happiness indexes have happier employees?*
- *Are companies with high happiness index results more oriented towards purchasing eco/bio/sustainable products?*

In connection with the above questions and the identified scientific-research problem, four scientific problems need to be addressed: (1) Currently, there is no theoretically and methodologically substantiated and tested tool for measuring the happiness of business organizations in maritime transport

in the Republic of Bulgaria. (2) Currently, there is no study that identifies, describes, and analyzes the factors influencing SMEs in the maritime transport industry in their decision-making process to purchase eco-products. (3) There is a lack of research in the literature that analyzes the motives, needs, and attitudes of companies in the industry towards their consumption of eco-products. (4) Currently, there is no research that conducts a situational analysis of the industry to analyze its current state.

The general research hypotheses are formulated using logical and content analysis methods in Chapter I and Paragraph 2 of Chapter II. For this purpose, secondary information was used, upon which the conceptual model of the development and its constituent elements were derived. The interrelationships between the elements are presented by formulating general research hypotheses tailored to the industry's specificity. At this stage, the following eight research hypotheses have been formulated:

- - H1: In the maritime transport industry in Bulgaria, there exists a segment of so-called "happy business organizations."
- - H2: Companies with high happiness indices in the industry exhibit more sustainable consumer behavior.
- - H3: Firms with high happiness indices, in their role as consumers, correspond to certain firmographic characteristics.
- - H4: Companies with high happiness indices, in their role as consumers, correspond to certain psychographic characteristics.
- - H5: Firms with high happiness indices, in their role as consumers, demonstrate higher profitability compared to other companies in the industry.
- - H6: Companies with high happiness indices have positive attitudes towards the consumption of eco-products and services.
- - H7: Happy business organizations develop and maintain relationships with their partners in the long term.
- - H8: Business organizations with high happiness indices are more informed about eco-products.

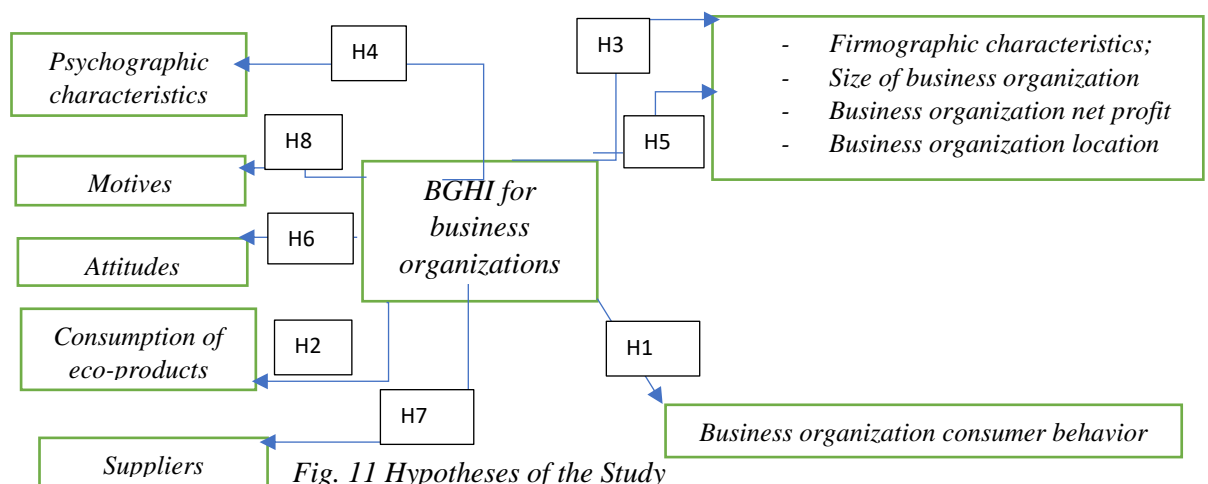


Fig. 11 Hypotheses of the Study

The sources of information, methods, and tools for data collection have been determined. Both qualitative and quantitative research methods and tools have been utilized, with these methods requiring the use of both primary and secondary data. Gathering sufficient volume and quality of primary information is required to prove or reject the listed hypotheses. The sources of this information are, on one hand, the employees in business organizations performing auxiliary activities in maritime transport, and on the other hand, the management of these companies.

The first method for data collection aimed at identifying the factors influencing consumer behavior of SMEs and identifying their attitudes towards the consumption of eco-products is in-depth interviews with managers of companies in the industry, using a semi-structured questionnaire. The next methods used are focus groups and expert evaluations. Another method for gathering primary information is reaching out to a pre-selected group of participants, conducted through personal interviews and/or online surveys. Standardized questionnaires were used for both online surveys and personal interviews. Considering the fact that the instrument designed to measure the happiness of business organizations consists of two parts, two separate surveys were conducted, one for the employees and one for the management of the companies. The questionnaires for measuring happiness were composed using nominal and ordinal scales, and their validity and reliability were established through previous studies and the information obtained from the literature review presented in Chapter I, paragraph 2, and Chapter II, paragraph 2 was additionally used to validate the questionnaire.

The choice of the industry, which is dictated by its significant importance for the country's economy and the fact that it is one of the industries most strongly influenced by the concept of sustainable development (Chapter II, paragraph 1), has been explained. The chosen object of the present study is the maritime business in Bulgaria. Defined as such, it requires further operationalization. For the purposes of the dissertation, the scope of the object includes companies registered in Bulgaria performing auxiliary activities in maritime transport, specifically: ship brokers, agents, and suppliers holding a license to serve ships, which will hereinafter be referred to as "brokers", "agents" and "suppliers". As a result of the analysis of the industry, it has been found that their current number as of June 2022 is 68 brokerage and agency companies and 16 supplier companies holding licenses and conducting activities in Bulgaria, operating in ports in Varna, Balchik, and Burgas. It is important to clarify that the other market participants such as ship companies, freight forwarders, port operators, etc., are not covered in the studied object.

The type of sample has been determined, applying a model of non-random sampling, which includes 17 respondents, managers of companies performing auxiliary activities in maritime transport, and 105 employees in these companies. The sample is small, but it should be noted that the companies in the industry are few in number and mainly represent micro and small enterprises.

Focus groups and expert evaluations have been conducted. The focus group was conducted with 6 representatives from the industry to complement the list of initial variables forming the nine indicators used to construct the happiness measurement tool. The respondents included experts in maritime

transport. The initially generated list of variables as a result of the focus group was discussed with experts regarding the usefulness and appropriateness of the initial indicators and variables within the scope of each indicator necessary for the construction of the tool. A research toolkit was developed, comprising a questionnaire for in-depth interviews and survey cards to collect data, as a result of which to develop a tool for measuring the happiness of business organizations. The main task of this stage is to design measurement scales and refine the design of the main study. In formulating the measurement scales of the tool, the happiness measures were used, which were discussed and analyzed in detail in Chapter I, paragraph 2, such as: Bradburn's Affect Balance Scale (1965), Satisfaction with Life Scale (SWLS), Subjective Happiness Scale (SHS) by Lyubomirsky and Lepper (1999), Oxford Happiness Questionnaire (OHQ) (Hills and Argyle, 2002), WHO quality of life measurement tools, etc. It has been established in several studies that these scales have internal consistency, good to excellent reliability upon testing and retesting, and good convergent and discriminant validity (Karakasidou et al., 2016). The scales have been validated in various countries and languages (see Chapter I, paragraphs 2.2, 3.3), which provides a basis for their use in the present study. For the sake of objectivity, it should be noted that there are certain criticisms from various authors related to both the definition of the term happiness and its measurement. In this regard, a detailed critical review of the measures has been conducted, and criticisms of the instruments have been outlined and described. The methodology of the main study is described in **Paragraph 3.2.2**, and the methodology of the final stage of the study is discussed in **Paragraph 3.2.3**.

In **paragraph 3.3**, the methodology and design of the integrated indicator BGHI are described. Based on the review of important publications and studies related to happiness, the researcher proposes an adapted tool as a means of developing an index to measure the happiness of business organizations called the Business Gross Happiness Index (BGHI). The index is developed as a quantitative measure derived from a system of individual indicators characterizing various aspects of happiness in an organizational context. The methodology of the integrated indicator BGHI is built based on the adaptation of the GNH index, GAS-SHI (Utanes, 2020), GIHI index, and recommendations in the Handbook on Building Composite Indicators (OECD, 2008). When constructing each composite indicator, several steps similar to three of the main steps discussed above in the text are followed, which according to the researcher could be categorized into three groups, considered as stages of the algorithm—preliminary analysis, constructive procedures, and sensitivity analysis.

The preliminary analysis requires a deep understanding of the problem for which the composite index is being created. As a result of this stage, the aspects of the phenomenon under study are identified. The preliminary analysis includes the development of the theoretical framework of the indicator (Chapter I, Paragraph 2, Chapter II, Paragraph 2), because understanding the essence of the phenomenon under study is of paramount importance, but clarifying it alone is not sufficient. For this reason, experts

in the field<sup>13</sup> are involved in specifying the criteria by which the zones of the instrument are delineated, and the corresponding indicators for their measurement are included. Consequently, individual indicators are selected, which are then used in forming the index. To minimize the risk of subjectivity in construction, various views and concepts related to happiness and its measurement are subjected to critical analysis as a result of scientific discussions and practical experience.

The framework proposed by the researcher is constructed by adapting the core areas of the analyzed happiness measures in the context of business organizations after aligning them with the experts. For the purposes of the measuring instrument, the main 9 areas of the GNH index are used, grouped into 2 main assessment zones for this work. The first zone is called Employee Happiness Index (EHI), which contains 28 indicators with different variables, and the second is Organizational Conditions for Happiness (OCH), containing 20 measurement indicators.

The construction of "Employee Happiness" is determined by collecting primary data through structured online surveys. The second construct, "Organizational Conditions for Happiness," is determined by processing both primary and secondary data. Primary data are collected through structured personal interviews, while secondary data are obtained from officially published documents and reports of business organizations. The design of constructing the research instrument is presented in Table 6.

Table 6

**Framework of business organization happiness measurement tool**

Employee happiness	
Domains	Indicators
Psychological well-being (well-being)	1 Job satisfaction; 2 Confidence; 3 Satisfaction with organizational conditions 4 Commitment to the organization; 5 Discrimination in the organization; 6 Bullying in the work environment; 7 Positive emotions; 8 Negative emotions.
Health	1 Self-rated health: days in good health, disability, mental health; 2 Psychological state; 3 Physical condition; 4 Stress; 5 Nature of work; 6 Prolonged disability; 7 Security.
Time use and work-life balance (Time balance)	1 Satisfaction with work-life balance; 2 The impact of work life on social life; 3 Sleep and rest hours (time balance); 4 Work schedule 5 Working hours
Education	1 Professional development; 2 Skills development; 3 Scholarships(sponsorships).
Living standard	1 Remuneration and allowances 2 Pay satisfaction; 3 Satisfaction with retirement benefits 4 Satisfaction with vacation and holiday time; 5 Satisfaction with fringe benefits.

<sup>13</sup> We have used Dr. Tatyana Eтуğrul, Prof. Howard Haris, and experts from National Happiness Institute of Bhutan- <https://www.gnhcentrebhutan.org/gnhcb-team/> as experts here.

<b>Organizational conditions for happiness</b>	
Good governance	<ol style="list-style-type: none"> <li>1 Local employment</li> <li>2 Company problems;</li> <li>3 Legal compliance;</li> <li>4 Audit;</li> <li>5 Staff attrition.</li> <li>6 Pay differentials</li> </ol>
Community links/ community vitality/	<ol style="list-style-type: none"> <li>1 Volunteering in the community;</li> <li>2 Donation to the community;</li> <li>3 Damage to infrastructure;</li> <li>4 Impact on community well-being;</li> <li>5 Supply of raw materials;</li> <li>6 Feedback from the community;</li> </ol>
Environmental responsibility	<ol style="list-style-type: none"> <li>1 Emissions assessment;</li> <li>2 Solid waste assessment</li> <li>3 Environmental volunteering;</li> <li>4 Green activities/donations</li> <li>5 Environmental products and services.</li> </ol>
Cultural activities	<ol style="list-style-type: none"> <li>1 Cultural volunteering,</li> <li>2 Cultural donations;</li> <li>3 Promotion of culture.</li> </ol>

*Source: Developed by the author from (Ura, Alkire and Zangmo, 2012).*

The main characteristics are grouped similarly to the GNH index into nine domains. The first is related to psychological well-being. It is a characteristic, significant, and desirable state for employees. It includes cognitive and affective assessments of various areas of their work life. Its inclusion in the research instrument would allow identification of which areas employees are least happy in and why.

The second domain is associated with measuring the perception of physical and mental health. Happiness is considered one of the important variables that determines perceived health and satisfactory performance of employees. The third domain is called "Time Balance" because the balance between work and personal life and leisure time is important for employee well-being. Similarly, proper time management by employees is important for the well-being of the organization they work for. If employees can effectively manage their time through proper planning, they could be happier, and conversely, if they misuse their time, it may lead to dissatisfaction.

The fourth domain is "Education," which is related to the application of a holistic educational approach that allows employees to acquire knowledge and skills to aid in their professional development and career advancement. The fifth domain is related to determining the standard of living. It pertains to the material well-being of employees, providing for basic material needs for a comfortable life.

The sixth domain is "Good Governance," associated with the effectiveness, transparency, and accountability of management and is an important component of governance initiatives within the organization. Through the seventh domain, data on existing connections with local communities are provided. It relates to the level of engagement and strength of communities in which people share common activities and experiences.

The vibrancy of the community in a corporate environment can be identified with social capital and various community parameters such as volunteering, donations, infrastructure damages, impact on community health, community feedback.

The eighth domain is associated with the environment and environmental responsibility. It relates to the activities undertaken by the company in this regard. The ninth domain is focused on the impact of factors from the cultural environment of employees. It is considered not only as a resource for establishing identity but also for mitigating the negative consequences of its influence on companies, the surrounding environment, and local communities.

Thus, the proposed design of the research instrument for gathering the data necessary for calculating the happiness index of companies was tested with a focus group. As a result, the scope of the variables proposed by the author of this dissertation included in the instrument for measuring the happiness of business organizations was specified. The main zones, the indicators included in them, and all derived variables for each indicator were discussed and commented on with experts investigating and measuring happiness.

As a result of the discussions and clarifications by the experts, the researcher adapts the indicators of the happiness measurement instrument (GNH) and adjusts the thresholds for sufficiency for each of them, after which the final version of the instrument is discussed again with the experts. The opinion of the experts is that the variables added by the author of this dissertation and the adaptation of the indicators made by the author are suitable and can be included in the data collection instrument. As a result of the focus group and in-depth interviews, an adapted design of the research instrument for gathering data for forming an index measuring the happiness of business organizations is proposed.

In **paragraph 3.4**, the variables used in the organizational happiness measurement tool are operationalized. The selected variables included in the instruments are operationalized as follows: Employee Happiness assesses the satisfaction and level of happiness of employees in a wide range of areas, while Organizational Conditions for Happiness examine the behavior, procedures, and contributions of the business to improving the well-being and happiness of employees and society as a whole.

Employee Happiness (EHI) is conceptualized and measured through a set of material and non-material factors in five areas: psychological well-being, health, time use, education, and standard of living. Organizational Conditions for Happiness (OCH) are an assessment tool of the internal measures and commitments undertaken by the company to promote the well-being of employees, the environment, and society as a whole. The concept is based on the view that business is in symbiosis with communities and the environment and assumes that the principle of shared value should be followed in both business decisions and social policies. The Organizational Conditions for Happiness tool includes areas that provide information on the responsibilities and actions taken by the company to emphasize their potential to influence the quality of life, transform organizational values, and create a values-based culture in companies. Information on organizational conditions for happiness is collected through areas of cultural diversity and sustainability, community vitality, environmental responsibility and sustainability, and good governance.



In addition to these, indicators and measures used to study the consumer behavior of companies in their role as consumers of eco-products and services are also discussed. For the study of consumer behavior of firms in their role as consumers of eco-products and services, part of the questions included in the questionnaires for data collection to calculate BGHI are intended to be used. In addition to these, additional questions have been designed and developed, including relevant indicators, measures, and variables that help identify the attitudes and motives of companies towards eco-products/services, as well as the importance of various factors influencing their behavior when purchasing eco-products/services. The selected indicators allow the identification of whether a given business buys, produces, and delivers eco-products/services and what actions it takes to reduce harmful effects on the environment, among others.

The variables selected by the researcher and used to analyze the consumer behavior of business organizations in their role as customers include: sustainable behavior, consumption of sustainable/products in the sense of BGHI, motives for purchasing eco-products, green attitudes of business organizations, and responsible consumer behavior.

Sustainable consumption in this work is understood as follows: sustainable consumption is when a business organization uses various products and services in ways that minimize negative impacts on the environment and society (Bocken, 2018), or in other words, companies with sustainable consumption consume only as many products as necessary, with the products consumed being eco-products in the sense of BGHI and locally sourced. Through these variables and indicators, the aim is to identify the main factors influencing consumer behavior when purchasing eco-products in the maritime sector, explore the motives of business organizations for consuming eco-products, and examine their attitudes towards sustainable consumption. Based on the conducted formative research and analyzed studies, the variables for the needs of the main study and the corresponding scales for their measurement have been specified. Based on this, a design of a research tool for measuring happiness has been developed, including the questions developed by the researcher related to the consumer behavior of business organizations.

### **Chapter Three**

It is entitled Approbation of the research instrumentarium in business markets. In Paragraph 1, the methodology for measuring the happiness of companies engaged in ancillary activities in maritime transport in Bulgaria is approbated. The proposed methodology is approbated by performing the following sequence of steps. **Paragraph 1.1** describes the research instrument which includes structured questionnaires and a semi-structured in-depth interview questionnaire. Two separate questionnaires were constructed to collect the primary data required to calculate the Business Gross Happiness Index (BGHI). One is aimed at measuring the organizational conditions for happiness in the business organization and the other is for measuring the happiness of its employees. Respondents were reached through an on-line research platform where an electronic version of the survey was generated. Both the employee-focused survey and the management-focused survey were designed in a way that allowed for

a structured survey as a descriptive method of primary data collection. The thematic approach is fully tailored to the formulated research problem, taking into account the specific aspects for each of the two groups of respondents. The majority of the questions are of closed ended questions. To metrify the responses, mostly 5-degree ordinal scales were used, and it was explained to the respondents in advance that the distances between the different degrees within the scale were equal. **Paragraph 1.2** describes the methodology for the analysis of the data collected. The general analysis methodology adopted for this assessment tool is similar to that used for the GNH index (Ura et al., 2012). It involves three stages: determining the sufficiency threshold, determining weights, and summarizing and scoring. In summary, it can be said that the instrument design thus proposed by the dissertation author provides data to construct an index that can measure the happiness of business organizations. In **paragraph 1.3**, the Business gross happiness index of business organizations (BGHI) participating in the study is calculated (Table 7).

Table7

*Happiness indices of business organizations*

Company code	Organizational condition for happiness <b>OCH</b>	Employee happiness <b>EHI</b>	Business gross happiness index <b>BGHI</b>
<b>KS1</b>	60,03	66,5389	63,28445
<b>KSO2</b>	71,7	66,3185	69,00925
<b>KBA3</b>	63,36	76,717	70,0385
<b>KBA4</b>	100	71,8255	85,91275
<b>KA5</b>	64,2	61,1206	62,6603
<b>KBAS6</b>	67,53	72,7341	70,13205
<b>KS7</b>	85,03	61,1587	73,09435
<b>KB8</b>	87,53	78,2681	82,89905
<b>KA9</b>	85,03	70,647	77,8385
<b>KS10</b>	76,7	86,6395	81,66975
<b>KBA11</b>	71,7	59,6178	65,6589
<b>KA12</b>	67,53	79,2968	73,4134
<b>KBA13</b>	72,53	80,9598	76,7449
<b>KBA14</b>	76,36	77,055	76,7075
<b>KBA15</b>	72,53	83,836	78,183
<b>KBAO16</b>	95,86	52,0997	73,97985
<b>KBAS17</b>	83,37	71,0196	77,1948

*Source: developed by the author on the basis of own calculations according to the described methodology*

Referring to the results in Tab. 7, several points make an impression. In the case of the employee happiness index, no company achieved the maximum score of 100 points. For KS1, KSO2, KBA4, KA5, KS7, KB8, KA9, KBA11, KBAO16 and KBAS17 companies have lower scores in the Business Happiness Index compared to the organizational happiness conditions. While for KBAS6, KS10, KA12, KBA13, KBA15, the opposite is observed- the companies score lower in the index calculating organizational conditions for happiness and score higher in the index calculating employee happiness.

According to the scale of evaluation of the companies' score on the index, it was found that the surveyed companies can be grouped into two segments: the segment "happy organizations" with a score on the index between 51-76 points, and 11 companies fall into it, and 6 of the surveyed organizations fall into the segment "very happy organizations" with a score above 77 points. The calculations made by the author of the dissertation allow to state that there are segments of the so-called happy and very happy business organizations in the industry.

The term "Very Happy Organisation" refers to a company where all the necessary conditions for happiness are present and the company has a sustainable behaviour in its role as a consumer of services and products. This company provides its employees with great autonomy and flexibility in the workplace, conditions for employees to feel respected, safe and opportunities for excellence. They allow for strong interpersonal relationships in the workplace and have an emotionally pleasurable environment that leads to very satisfied employees who have a very good work-life balance, and are highly emotionally engaged in their jobs. As a result, organizations significantly increase their productivity, which positively impacts company performance. These companies have a happiness index score above 77 points.

A "happy" company refers to a company where conditions for happiness are present and there is partial sustainability in its role as a consumer of services and products. This company provides partial autonomy and flexibility in the workplace and has conditions and opportunities for employee achievement. These companies allow for the development of relatively good interpersonal relationships in the workplace and have a relatively emotionally pleasant environment that leads to satisfied employees who have a good work-life balance and are somewhat emotionally engaged in their workplace. As a result, organizations improve their productivity, which positively affects company performance. These organizations score in the range of 51-76 on the Business Organizations Happiness Index and score at least 60 on one of the two index items and score above 50 on the other item.

**In paragraph 1.4**, the reliability and validity of the research instrument is assessed, and the reliability of the research instrument is presented in **paragraph 1.4.1**. For the aims and objectives of this study, the author of the dissertation has selected validated measurement scales that have been shown to be reliable and valid (Chapter I and Chapter II), however, it is necessary to examine whether these scales are reliable and valid for the specific study. To do this, the internal consistency of the scales used is assessed. The degree of reliability of the scales applied to the operationalising variables embedded in the conceptual model were assessed using the Cronbach's Alpha criterion. The Chi square test was used for the analysis of relationships in the formulated hypotheses, as a prerequisite for its application was the establishment of the reliability of the scales (Table 8) that were used to assess the main summarizing variables of the constructs in the happiness measurement instrument. The internal consistency of the scales was tested with Cronbach's Alpha, and the results are summarized in Table 8

Table 8

**Internal consistency of scales used in happiness measurement instruments**

<b>Index measuring employee happiness in the company</b>		
<b>Blocks in the tool</b>	<b>Assessed constructs and summarizing variables</b>	<b>Cronbach's Alpha coefficient</b>
Block 2	<b>Psychological well-being - 8 summarizing variables</b>	<b>0,709-0,767</b>
Block 3	<b>Health - 7 summarizing variables</b>	<b>0,700-0,798</b>
Block 4	<b>Time Use and Work-Life Balance (Time Balances) - 5 summarizing variables</b>	<b>0,699- 0,724</b>
Block 5	<b>Training- 3 summarizing variables</b>	<b>0,657-0,732</b>
Block 6	<b>Living standard – 5 summarizing variables</b>	<b>0,765-0,788</b>
<b>Index measuring organizational conditions for happiness in the company</b>		
<b>Blocks in the tool</b>	<b>Assessed constructs and summarizing variables</b>	<b>Cronbach's Alpha coefficient</b>
Block 2	<b>Good governance – 5 summarizing variables</b>	<b>0,697-0,738</b>
Block 3	<b>Relations with the local community/community vitality – 6 summarizing variables</b>	<b>0,728- 0,774</b>
Block 4	<b>Ecological diversity and resilience – 5 summarizing variables</b>	<b>0,699- 0,763</b>
Block 5	<b>Cultural diversity and sustainability – 3 summarizing variables</b>	<b>0,732-0,771</b>

The data presented in Table 8 show that all the constructs assessed in the two questionnaires have an acceptable and high level of reliability.

In **Paragraph 1.4.2** the validity of the scales used in the study are tested. The results of the criterion validity tests conducted show that the summarizing variables in each of their items adequately describe the latter at a level of statistical error- below the acceptable level. Convergent and discriminant validity tests of the rating scales were conducted by calculating correlation coefficients between the summarizing variables of each construct. Discriminant validity testing is accomplished by comparing the correlation coefficients between the variables on each construct on the one hand and comparing them between any two causally related constructs on the other. When comparing the correlations between the variables under the different constructs of the index and the Business Gross Happiness Index, it was found that there were strong correlations between the majority of the summarizing variables within the two constructs compared to when comparing them between the individual constructs.

Given the evidence of, respectively, (1) summarizing variables that are statistically significant and describe the constructs under study, (2) high correlation coefficients between summarizing variables within each construct, (3) correlation coefficients for summarizing variables that have higher scores within each construct under study compared to those between causally related constructs, there is reason to state that the conditions for criterion, convergent, and discriminant validity are met.

**Paragraph 2** describes the firm demographic profile of the companies that participated in the study, and **paragraph 3** analyses the consumer behaviour of the business organisations as customers in the industry, with data obtained from the in-depth interviews with experts analysed in **Paragraph 3.1**. The results of the analysis show that approximately 6 and 8 factors were mentioned by all respondents. In Tab. 9 the extracted factors are classified according to the factors conceptually extracted by the dissertation in Chapter I.

Table:9

**Factors influencing the consumer behaviour of companies in the industry as a result of the in-depth interviews conducted**

Specific product-related factors	Price, Quality, Functional characteristics, Country of origin, Durability, Reliability, Product standards, Brand, Seasonality, Quality certificates, Product type (equipment, raw material, etc.), Product to be new or used, Customer product requirements.
Specific supplier-related factors	After sales services (e.g. spare parts supply, maintenance), Payment terms (e.g.: payment terms, leasing), Delivery terms (on time or on additional need), Ability to solve problems, Price advantages (promotion, discount, commission), Image, Experience, Production process, Warranty, Honesty, Personal attitude.
Specific factors related to the buyer company	Return on investment, Current financial position (e.g. budget, credit), Compatibility of the product with the firm's physical facilities, Market share of the buying firm, Effect of the purchase on production costs (whether it increases or decreases these costs is important), Company culture, Management style, Company policy.
Economic factors	Exchange rates, Economic conditions in the buyer's country, Economic conditions in the supplier's country, Economic conditions worldwide, Fuel prices on world markets, Prices of basic commodities, Inflation, Interest rates on loans to companies, Intercompany indebtedness.
Market-based factors	Market dynamics, Market trends, Specific industry characteristics.
Customer-based factors	Demand, Preferences, Client's financial capacity, Personal preferences, Personal attitude, Long-standing relationship.
Relationship-based factors	Trust, Personal relationships, Ethical trade, Satisfaction, Loyalty, Quality of communication (e.g.: availability of contact person), Duration of relationship, Partnerships.
Decision makers	Owners (managers), Shareholders, Purchasing employees, Knowledge and experience of the person making the purchase.
Sources of information	References (e.g. actual users of the product, other companies in the same sector), Visits (e.g. distributors and manufacturers), Employees, Internet, Specialised exhibitions, Social networks, etc.
Intermediaries	Financial institutions, insurance companies, etc.

*Source: Developed by author*

The results of the interviews show that the most determinant product-specific factors influencing the buying behaviour of companies in the industry are: price, quality and functional characteristics of the product. All interviewees considered these to be mandatory factors to consider in the purchase decision process. In addition to these most frequently mentioned factors, nine more were cited as influencing purchase behavior: country of origin, product durability and reliability, product standards, brand, seasonality, product type, quality certification, and product being new or used. To summarize this paragraph, it can be said this study investigated the components of organizational buying behavior of companies performing ancillary activities in maritime transport in Bulgaria and showed that due to some specific characteristics of these companies, the components of their organizational buying behavior differed in some aspects from the components of existing models of organizational buying behavior described in the literature. The differences between the organisational behaviour of the companies in the industry and the organisational behaviour of the large companies derived from the literature analysed in Chapter 1 are summarised in Table 10

Table 10

**Differences in the components of organizational buying behavior between companies in the industry and the described literature**

	<b>Companies in the industry /micro and small companies/ SME</b>	<b>Big companies</b>
Components of organisational behaviour	Relatively few components of consumer buying behaviour	Large number of components of consumer buying behaviour
External environment factors	Mainly economic factors, partly legal and regulatory	Physical, technological, political, legal and cultural factors (Webster and Wind, 1973)
Decision makers	Characteristics of individual participants (mostly company managers)	Characteristics of individual participants in the purchase decision center (Webster and Wind, 1972; Sheth, 1973; Choffray and Lilien, 1980; Johnston and Lewin, 1996)

Reward systems	None identified	Reward/measurement system (Anderson and Chambers, 1985)
Factors of internal environment	Factors based on the relationship between the supplier and the company (e.g. trust, loyalty, quality of communication)	

*Source: Developed by author*

Referring to Table 10, it can be said that companies in the industry have a specific buying behaviour. These specificities have to be taken into account during the segmentation process when companies target companies operating in this industry. Factors based on the relationship between the supplier and the company, such as trust, loyalty, quality of communication, are important in the buying process by companies in the industry. This can help marketers to adapt their strategies and activities and to shape their marketing mix differently from that of large companies, taking into account the differences mentioned in Table 10, (e.g. they can give more importance to promotional tools such as personal selling, etc.).

The third block of the in-depth interview questionnaire included questions related to sustainable consumption and eco-products. After a detailed analysis of the collected data, it was found that managers of different companies understood different things by the term sustainable product. Their opinions on what they understand by a sustainable product are summarized in Table 11

*Table:11*

**Interviewees' opinions related to the term sustainable product**

<b>Respondent</b>	<b>Respondents' definitions of a sustainable product</b>
1	Sustainable products are those that are of good quality, do not need to be repaired and can be used for a long time. A sustainable product is one of good quality!
2	Sustainable products are those that are eco-friendly and organic. These products have special labels and are available at higher prices.
3	Sustainable products are manufactured to eco-friendly standards and are sold in specialist shops or by specialist companies.
4	Sustainable products are green and eco products
5	Sustainable products are those that are low carbon and locally produced. These products do not have to be transported long distances, which contributes to environmental protection.
6	Sustainable products are offered by socially responsible companies and manufactured to specific standards.

*Source: Developed by the author based on data from in-depth interviews with experts*

As a result of the analysis of the data collected, through the third block of the in-depth interview questionnaire, it can be summarized: 1) Consumers in the industry consume eco-friendly products in one form or another, and not all call them that; 2) Basically all are clear on what sustainability is and point out quite a few of the commonly accepted characteristics of sustainable consumption; 3) Only 50% of the respondents have conscious and purposeful sustainable behavior, while the rest consume such products in order to contribute to environmental protection, to reduce costs or under customer and regulatory pressure. 4) For only 3 of the companies all their purchases of products or services are eco-friendly and are intended for consumption in their office, while for the remaining 3 such type of purchases are made much less frequently, only a few times a year. 5) The managers surveyed are familiar with the concept of sustainability and the benefits of responsible behaviour and consumption, but unfortunately it cannot yet be said that they all have such behaviour. 6) In 5 of the 6 companies the decisions to purchase eco-friendly products (services) are made mainly by the company managers.

**Paragraph 3.3** analyses the consumer behaviour of companies engaged in ancillary activities in maritime transport using data collected through a survey. In order to analyse the consumer behaviour of the companies and to derive their motives and attitudes towards the consumption of eco-friendly products and services, as well as to identify the factors influencing their consumer behaviour, an analysis of the quantitative data collected was carried out. Referring to the collected data related to the goods and services consumed by the companies in the industry and with the help of expert evaluations obtained from the managers involved in the in-depth interviews, the companies were grouped into 4 segments depending on their consumption behaviour and the goods and services purchased.

Table 12

Classification of companies as a result of expert assessments	Consumer behaviour and products bought by companies
<p><b>Not sustainable</b> (This segment includes companies that have unsustainable consumer behaviour 0-9)</p>	<p>Companies in this group buy mainly products and services of a conventional nature, both for their own consumption and for their customers:</p> <ul style="list-style-type: none"> <li>- Conventional fuel bunkering (IFO 180, 360)</li> <li>- Provisions, materials and technical equipment</li> <li>- Oils and spare parts,</li> <li>- Office supplies</li> <li>- Vehicles /service vehicles/</li> <li>- Training</li> <li>- Electrical appliances</li> <li>- Lighting</li> <li>- Purchase of equipment</li> </ul>
<p><b>Rather unsustainable</b> (In this segment, companies have rather unsustainable consumer behaviour) 10-15</p>	<p>Companies in this group buy mostly conventional products and services for their own consumption, but in their role as agents and/or supplier they occasionally buy eco-friendly products and services at the request of their customers, such as:</p> <ul style="list-style-type: none"> <li>- Collection and disposal of oily mixtures, scum</li> <li>- Collection of waste/bio-waste/</li> <li>- LNG bunkering</li> <li>- Low sulphur and low nitrogen oxide alternative fuels</li> <li>- Electricity from shore-side facilities during the ship's stay on the quay for the ship's generator</li> <li>- Supply of provisions which are eco paints, eco products(supply)</li> </ul>
<p><b>Rather sustainable companies</b> In this segment, companies have rather sustainable consumer behaviour. Buyers between 16 and 23 sustainable products/services</p>	<p>Companies in this group occasionally buy products of a conventional nature, mainly on request of their customers, and for their own consumption they mostly buy eco-friendly products and services:</p> <ul style="list-style-type: none"> <li>- collection and disposal of oily mixtures, sewage</li> <li>- Waste collection/bio-waste/</li> <li>- LNG bunkering</li> <li>- Alternative fuels with low sulphur and nitrogen oxide content</li> <li>- Electricity from shore-side facilities during the ship's stay at the quay for the ship's generator</li> <li>- Supply of provisions which are eco paints, eco products(supply)</li> <li>- Training to upgrade the skills of employees in relation to the environmental regulations of MARPOL, IMO, etc. by MARAD</li> <li>- Single window electronic document turnover system services</li> <li>- Electronic services from VTMISS</li> <li>- Eco fuels</li> <li>- Recycled paper</li> <li>- Reusable consumables</li> <li>- Energy saving lighting in offices</li> <li>- Energy saving appliances</li> <li>- Eco materials for renovation work to improve the working environment</li> </ul>
<p><b>A sustainable company</b> In this segment, business organizations have a categorically sustainable consumer behavior both in their role as a customer and in their role as an intermediary.</p>	<p>The companies in this group mainly buy eco-friendly products as defined by BGHI for their own consumption and for their customers.</p> <ul style="list-style-type: none"> <li>- collection and disposal of oily mixtures, sewage</li> <li>- Waste collection/bio-waste/</li> <li>- LNG bunkering</li> <li>- Alternative fuels with low sulphur and nitrogen oxide content</li> </ul>

<b>24-33 sustainable products and services</b>	<ul style="list-style-type: none"> <li>- Electricity from shore-side facilities during the ship's stay at the quay for the ship's generator</li> <li>- Supply of provisions which are eco paints, eco products(supply)</li> <li>- Training to upgrade the skills of employees in relation to the environmental regulations of MARPOL, IMO, etc. by MARAD</li> <li>- Ensuring safe working conditions</li> <li>- Training and career development</li> <li>- Information tools in the form of training to shape sustainable consumption attitudes</li> <li>- Effective information sharing system with customer/supplier and external stakeholders.</li> <li>- Purchase of innovative equipment to reduce the company's carbon footprint</li> <li>- Single window electronic document turnaround system services</li> <li>- Electronic services from VTMS</li> <li>- Solar panels for the office buildings / e.g. on the roof of the port of Odessos/</li> <li>- Hybrid or electric service vehicles</li> <li>- Removal of waste generated by the company to special landfills</li> <li>- Eco fuels and Eco products according to Iso 9001:2008 standard</li> <li>- Water purification systems in offices</li> <li>- Recycled paper</li> <li>- Reusable consumables</li> <li>- Energy saving lighting and appliances in offices</li> <li>- Eco materials for renovation work to improve the working environment</li> </ul>
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*Source: Developed by author*

Referring to Table 12 and the research carried out, it can be summarized that each of the four segments can be profiled depending on the observed attributes, resulting in segments that are externally heterogeneous and internally homogeneous and firms falling into one of the four different segments are expected to have similar reactions and behaviors to different marketing stimuli or put another way, to have clearly distinguishable consumer behavior. For the purpose of this paper, companies in the industry are grouped according to their purchases of sustainable products, their attitudes towards eco-products, the motives they give for choosing such products and last but not least their happiness index. To see if companies with different scores on the happiness index have different behaviours in the next paragraph the author analyses the relationships between the variables describing the sustainable consumption behaviour of business organisations and the happiness index.

In **paragraph 3.4**, an analysis of the strength, direction and relationships in the model describing the sustainable consumer behaviour of companies and the happiness index is performed. For this purpose, the coefficients of R and R<sup>2</sup>,  $\beta$ -coefficients and the coefficients of Cramer's  $\chi^2$ , are used in Tab13 the data from the correlation and regression analyses are summarized.

*Table 13*

**Aggregated data from correlation and regression analyses**

Dependent variable/influencing variable	Komogorov-Smirnov Asymp. Sig. (2-tailed)	R	R2	Sig.	$\beta$ коэф.	Sig.	$\chi^2$	
							Cramer's V	Sig.
BGHI* Eco-friendly products/services bought by companies	0,946, 0,814 - normal distribution	0,469	0,220	0,057	0,469	0,057	0,753	0,210
BGHI* Eco motivation of the business organization	0,635, 1,624 - normal distribution	0,242	0,059	-0,004	-0,242	0,349	1,000	0,371
BGHI* Motives for buying green roducts	0,946 - normal distribution	0,196	0,038	0,452	0,196	0,452	0,721	0,032
BGHI* Company's interest in eco-friendly products	0,946;0,570 - normal distribution	0,232	0,054	0,371	0,232	0,371	1,000	0,371



BGHI* Eco orientation of the company	0,946; 0,705 - normal distribution	0,227	0,052	0,371	-,227	0,381	1,000	0,371
BGHI* sustainable (green) behaviour	0,946;0,230-normal distribution	0,468	0,219	0,058	-0,468	0,58	1,000	0,357

\* Statistically significant at  $\alpha=0.10$ .

The analyses performed confirmed the existence of relationships between the variables studied with BGHI. The correlation coefficient (R) shows that there is a weak correlation (0.196) between BGHI and motives to purchase green products, a moderate correlation exists between: BGHI and eco-motivation of business organization (0.242), BGHI and company's interest in green products (0.232), BGHI and company's eco-orientation (0.227) and significant correlation was found between BGHI and green company (0.468) and BGHI and eco-products/services purchased (0.469).

According to the coefficient of determination ( $R^2$ ), 22% of the changes in the outcome variable (BGHI) are due to changes in the factor variable "eco-products/services purchased", 21.9% to "sustainable (green) behavior", 5.9% to "eco-motivation of the business organization", 3.8% are due to the purchase of green products, and 5.4% to "company interest in eco-products".

In the process of calculating the regression analysis, standardized  $\beta$ - coefficients were formed to indicate the relative importance of each variable in conditioning the dependent variable. Cramer's coefficient indicates that the relationships between the variables are strong but are statistically not significant because their significance levels are greater than  $\alpha=0.10$ . In this situation, it is necessary to be skeptical about these results because one of the conditions for  $\chi^2$  tests is not met. In this situation, in order to comply with the application requirements of the  $\chi^2$  -test, it is possible to increase the sample size.

A correlation analysis with Spearman's rank correlation coefficient was also performed. This coefficient was used instead of Pearson's coefficient because there are ordinal (rank) data and the sample is too small and this coefficient is preferable when measuring the relationship between two variables in a small sample.

**Table 14**

***Correlation analysis with Spearman's rank correlation coefficient***

Spearman's rho		BGHI	The company is interested in eco products (services)	The company is environmentally motivated	The company is eco-oriented	The company has a "green" behaviour
BGHI	Correlation Coefficient	1,000	-,143	,015	-,110	-,490*
	Sig. (2-tailed)	.	,584	,954	,674	,046
The company is interested in eco products (services)	Correlation Coefficient		1,000	,664**	,570*	,496*
	Sig. (2-tailed)		.	,004	,017	,043
The company is environmentally motivated	Correlation Coefficient			1,000	,609**	,371
	Sig. (2-tailed)			.	,010	,143
The company is eco-oriented	Correlation Coefficient				1,000	,526*
	Sig. (2-tailed)				.	,030
The company has a "green" behaviour	Correlation Coefficient					1,000
	Sig. (2-tailed)					.

\*\* The correlation was significant at 0.01 (2-tailed). Correlation is significant at \*0.05 (2-tailed)

From the results of the correlation analysis presented in Tab. 14 it is visible that according to its values and significance levels, statistically significant relationships exist between 6 of the variables studied. As the strength of relationship between 5 of them is moderate to strong, and there is one relationship with inverse dependence (BGHI\*green company). From the data presented in Tab. 14 results, it can be concluded that there is a statistically significant positive relationship between the company's interest in eco-products and eco-motivation, eco-orientation and green behavior, while there is a negative relationship between green behavior and happiness index. These relationships are significantly high, with Spearman's coefficients ranging between 0.490- 0.664. Those that are not statistically significant will not be interpreted.

A correlation analysis was conducted to check whether there is any relationship between the happiness index and various benefits provided to the employees such as supplementary health insurance, food subsidy, both short term and long term training, personal development seminars, health and safety etc., the results are summarized in Table 15 and show that there is a relationship between the dependent variables and the happiness index.

**Table 15**

**Results of correlation analysis with the coefficient of Cramer's V**

Happiness index/ Dependent variable	□2	
	Cramer's V	Sig.
BGHI* personal development courses	0,765	0,000
BGHI* scholarships for long-term training	0,828	0,000
BGHI*short-term study grants	0,756	0,000
BGHI* health and safety seminars	0,621	0,000
BGHI* personal protective equipment	0,595	0,000
BGHI* health insurance	0,564	0,000
BGHI* additional health insurance	0,518	0,000
BGHI* office conditions	0,492	0,009
BGHI* transport to work	0,627	0,000
BGHI* subsidies for food	0,456	0,024
BGHI* fitness membership/other clubs /	0,579	0,000

As a result of the analyses, relationships were found between the variables studied. The results of these analyses provide a basis to state that using the results of the happiness index companies can be grouped into segments with clearly identifiable sustainable behaviour in their role as consumers of eco-products.

In **paragraph 3. 5** the formulated hypotheses are tested and analysed. The relationship between the variables under study within the formulated hypotheses is tested using Cramer's V and Spearman's rank correlation coefficients. In determining the strength of the relationship, it was adopted to consider it weak at values between 0 and 0.3, moderate between 0.3 and 0.5, significant between 0.5 and 0.7 and high between 0.7 and 0.9.

**Table 16**

**Testing the formulated hypotheses with Cramer's V and Spearman's rank correlation coefficient**

Statistical hypothesis №	Cramer's coefficient value	Approx. Sig. p-value	Spearman's coefficient	Approx. Sig. p-value	Testing the research hypotheses
<b>Hypothesis 2:</b> There is a relationship between consumer behavior of business organizations and BGHL.	0,753	0,032	0,522*	0,030	Confirmed
<b>Hypothesis 3:</b> There is a relationship between the happiness index of business organizations and firm characteristics.	0,544	0,081	0,515	0,034	Confirmed
<b>Hypothesis 4:</b> There is a relationship between happiness index and psychographic characteristics of business organizations.	0,496	0,043	0,721	0,032	Confirmed
<b>Hypothesis 5:</b> Business organizations with a high happiness index have high profitability					Not Confirmed
<b>Hypothesis 6:</b> Business organisations with a high happiness index have positive attitudes towards the consumption of eco-products	0,521	0,000	0,551	0,007	Confirmed
<b>Hypothesis 8 :</b> Business organizations with a high happiness index are more knowledgeable about eco-friendly products	0,469	0,001	0,493	0,001	Confirmed

As a result of all the tests and analyses carried out, we can say that all the scientific hypotheses are confirmed except the 5th hypothesis.

**Paragraph 4** of chapter three discusses the applied aspects, implications and recommendations resulting from the measurement of happiness and its validation as a segmentation criterion in business markets.

**Conclusion**

The conclusion reports the fulfilment of the aim and objectives of the dissertation. It is pointed out that the topic can have continuation and further development in future research. It is commented that the maximum deployment of the tool can be achieved by adapting it to the needs of the specific industry or business organisation.

Future directions are outlined for the use of the happiness index by both management and companies to use it as a segmentation criterion.

**IV. STATEMENT OF CONTRIBUTIONS TO THE DISSERTATION**

The main contributions of the dissertation research can be summarized as follows:

- **Theoretical contribution:** Further development and enrichment of research in the field of segmentation criteria in business markets by deriving and empirically validating happiness as a new, not observed so far differentiating factor.

- - **Practical-methodological contribution:** adaptation and testing of the GNH methodology for measuring happiness to specifics - Practical contribution. Through the proposed index, companies can regularly measure the happiness of their business organization and identify areas and areas where they are not doing well and work towards improving them,

- **Practical contribution:** a business happiness index (BGHI) is proposed that can be used as a tool to measure the success of companies in a new holistic way in line with the principles of the concept of sustainable development. Through the proposed index, companies can regularly measure the happiness of their business organization and identify areas and areas where they are not doing well and work towards improving them.

## **VI. DISSERTATION PUBLICATIONS**

### **Scientific articles:**

Niyazieva, S. “*Methods and metrics for measuring happiness.*” Proceedings of the Union of Scientists - Varna, Ser. Economic Sciences, 7(3), 2018, 1, 59 - 70.

### **Scientific reports:**

Niyazieva, S. “*Sustainable development: a prerequisite for the emergence of sustainable shipping and its impact on B2B segmentation in maritime transport.*” Management and sustainable development. Ser. Society. Man. Nature, Governance and Sustainable Development: XXI International Scientific Conference, 22 - 24 March 2019], Sofia: LTU, 77, 2019, 4, 82 - 87.

Niyazieva, S. “*Sustainable development, happiness and sustainable business-is there a connection between them?*” Economic science, education and real economy: development and interactions in the digital age: Proceedings of the Jubilee International Scientific Conference in Honour of the 100th Anniversary of the Founding of IU - Varna: T. 2, Varna: Science and Economics, 2, 2020, 823 - 839.

## **VI. DECLARATION OF ORIGINALITY**

I hereby declare that this dissertation: 'Happiness as a segmentation criterion in business markets' is a wholly original product and that no foreign publications and developments have been used in its development in violation of their copyright.