Model of Company's Social Sustainability

Danguolė Oželienė

Department of Management, Faculty of Business Management, Vilnius Gediminas Technical University, Vilnius, Lithuania; Department of Tourism, Faculty of Business Management, Vilniaus kolegija / University of Applied Sciences, Vilnius, Lithuania; E-mail address: danguole.ozeliene@vgtu.lt

The article has been reviewed.

Received on 12 November 2018, accepted on 31 December 2018

Abstract

Due to an excessive focus towards economic and environmental dimensions, sustainable development loses the essence of holisticity. Establishing long-term business success requires effective social activities which are of equal importance as economic ones. In the past the tendency of businesses that were avoiding participation in active search of solutions of social problems was justified by the lack of resources and competences in the social field. However, the idea of creating a shared value has proved that solving social problems is financially beneficial for businesses. Yet the social dimension has not been defined distincly, and its content has not been clearly expressed. As a consequence, companies struggle to identify the content and tools of the social dimension themselves. The aim of this article is to create a model for the social dimension of enterprise sustainable development and to develop an indicators system available for quantitative assessment of the social dimension. The result of the research carried out was the critical evaluation of scientific publications, the content of the social dimension of sustainable development was analyzed. A hierarchical system of indicators has been developed for quantitative evaluation using Pareto's rule and a model for the social dimension of sustainable development of the company was created.

Keywords: social dimension of sustainable development, model of the social dimension, set of indicators, Pareto's rule, holistic approach.

Introduction

Sustainable development is a holistic concept that involves three-dimensional interaction. The social dimension of sustainable development is analyzed in a rather laconic manner in research, identifying it alongside economic and environmental

dimensions. Seventeen goals have been raised in Sustainable Development Agenda up to 2030, six of them directly relate to the solution of social problems in the world. This is a significant justification of the relevance of the social dimension. The list of objectives begins with the commitment to eliminate all forms of poverty, hunger, to ensure healthy lifestyle, quality lifelong education of equal quality, gender equality, and reducing inequalities between countries (Transforming Our World, 2015). Putting these goals on top of the list demonstrates their relevance for sustainable development worldwide. However, set goals can only be achieved by joint efforts of all members of society. Businesses avoiding to participate in solving social problems have been justified for a long time. A well-known American economist, Friedman (1970), states that the only responsibility for business is to maximise their profit, and business has no resources and competences to solve social problems. The situation has essentially changed when Porter and Kramer (2011) announced the idea of creating a shared value, proving that solving social problems can be financially beneficial for businesses. Therefore, the objectives set on the agenda are important for the purpose of sustainable development at the micro (enterprise) level. Dyllick and Muff (2015) notice a "big disconnect" between micro-level progress and macro-level deterioration. More and more business executives agree that sustainability-related strategies are necessary to maintain competitiveness today and even more so in the future. The increasing number of executives reports that their organizations' commitment to sustainability has increased in the past and will

develop further in the future. Unfortunately, these actions are not reflected in the state of our Planet. Poverty has not been eradicated, inequity is growing, hunger and malnutrition still kill a child every 6 seconds, 1.8 billion people do not have access to clean drinking water and sanitation, 2.3 billion people do not have access to electricity (Dyllick and Muff, 2015). The problem is why, despite the efforts of researchers and numerous scientific publications, the implementation of sustainable development in practice is still a challenge for business. Sustainable business contributes to sustainability by delivering economic, social and environmental benefits (Dyllick and Hockerts, 2002). If only focusing on economic and environmental dimensions of enterprises, sustainable development loses the essence of holisticity. It should be noted that it is difficult for enterprises to identify the content of the social dimension themselves, to determine the measurement indicators, or to develop a model. Only comprehensive research can fill this gap, and thus help businesses to achieve sustainable development.

The aim of this article is to develop a conceptual model of company's social sustainability and a set of indicators relevant for quantitative assessment of the social sustainability. The following tasks were set to achieve the aim of the research:

- to examine the content of the social dimension based on various approaches;
- to determine the most frequent sustainability indicators based on analysis of academic literature;
- to identify a set of indicators for assessing the social dimension at enterprise level using Pareto rule.

Research methods are as follows: a systematic analysis of scientific literature and the synthesis of various approaches based on logical abstraction, modelling, Pareto rule.

The article is arranged in two sections, the first one provides a description of the origins of proposed model, explaining the identification of four key components of social sustainability. The second part of the article presents the identification of the set of social sustainability indicators for quantitative evaluation.

Research methodology

In the article, the analysis of scientific literature was carried out with the help of a descriptive method. The methods of cognitive analysis and synthesis were applied to analyse various approaches and research results. The relevant articles about social sustainability were collected according to the following criteria. First of all, science databases (Clarivate Analytics, Scopus, ScienceDirect, Taylor & Francis, Emerald) were used to conduct a systematic review of the academic literature. The search was carried out using the following keywords: "social dimension", "social dimension of sustainable development", "indicators of social dimension", "assessment of social dimension". The selection of articles was limited to journals or proceedings that have been published between 2010 and 2018, and focused on company's social sustainability. Only original studies were selected for this analysis. Secondly, all selected articles were carefully reviewed and analyzed in order to identify the components of conceptual model of company's social sustainability and indicators. Lastly, Pareto charts were developed to determine the indicators that have been frequently discussed in the academic literature. The most frequent social sustainability indicators were determined using Pareto rule. Indicators that failed to comply with this rule from the far-reaching investigation were eliminated as too subjective. The research methodology is presented in Figure 1.



Fig. 1. Research methodology (composed by the author)

Development of Model of the Social Sustainability

The content of the social dimension both macro and micro is differently interpreted in scientific publications. The studies focus too much on the economic and environmental dimensions and studies of the social dimension are not sufficiently comprehensive. The social dimension is not clearly

defined, and its content is not distinctly expressed. Garbie (2014) analyzed 130 scientific publications and identified five aspects of social dimension: Work Management, Human Rights, Societal Commitment, Customers Issues, Business Practices. According to Garza (2013), the content of the social dimension includes job satisfaction, the maintenance of skilled labour, cooperation with the government,

communication with stakeholders and the local community in which the company operates. The critical evaluation of academic literature (Callado and Fensterseifer, 2011; Kocmanova and Simberova, 2012; Veleva et al., 2012; Durdevič et al., 2013; Singh et al., 2013; Kinderytė, 2013; Taylor, 2013; Butnariua and Avasilcai, 2015; Yeo, Tjandra and Song, 2015; Oertwing, Wintrich and Jochem, 2015; Edgeman et al., 2016; Hasan et al., 2017; Huanga and Badurdeena, 2017; Drucker, 2017; Husgafvel et al., 2017; Shaaban and Scheffran, 2017; Longman, 2018) allows to determine the key components of the model of social dimension. The most relevant components of the model related to the social sustainability are presented and discussed in the following sections.

Employees and labour practices

Drucker (2017) states that a company is really its people their knowledge, capabilities, and relationships. According to Potelienė and Tamašauskienė (2015), knowledge, experience, acquiredskills, inherited abilities, attitudes, behaviour, creativity, entrepreneurship, and health refer to the concept of human capital. The authors state that the quality of society's life is determined by investment in people and their knowledge. Investments in education and training determine skills and abilities, that lead to an increase of individual's income and productivity of the company. A higher level of education in society reduces social fragmentation, crime rate and extends life expectancy. Survey carried out in 2017 within 250 global companies has shown that investing in human resources is financially beneficial for businesses and employees. Companies that invest in employees increase its profit 4.2 times, profit per employee 4, earnings per employee - 2.8, and average revenue - 2.1 times (Harvard Business Review, 2017). In the context of the Fourth Industrial Revolution, investment in employees is essential for the development of advanced technologies and the efficient use. Drucker (2007) states that in the 20th century the wealth of business company was equipment of manufacturing, and in the 21st century it is intelectual workers and their productivity. Company's employees become an intellectual property of the company and the engine of economic progress. But reseach carried out in the United States shows that the proportion of people who received employer-funded training decreased from 21% in 2001 to 15% in 2009 (the most recent data available). It is obvious that companies want their employees to learn and grow, but in practice they are skimping on. That means a lot of people who want to become better at their

jobs are fending for themselves. Organizations could change that and offset the drop in formal training by encouraging and supporting enrollment in massive open online courses (MOOCs) which are readily available and relatively inexpensive on platforms such as Coursera or EdX (Hamori, 2018). Gunlu et al. (2009), Edgeman et al. (2016) note that job satisfaction is a key factor in maintaining high productivity and efficient customer service, which directly increases the productivity of the company. Unsatisfied employee is a non-productive one, so it is important to know what determines employee's satisfaction in the organization. Berings et al. (2004) notes that employees are more motivated and satisfied when their values and organization's values matches. There is a strong correlation between commitment to organization and job satisfaction. The more employees are dissatisfied with their work, they are less committed to the organization, and they are more likely to look for opportunities to change jobs. Companies are faced with the issue of personnel change. On the one hand, new employees become involved in the organization's activities, bringing new ideas and experiences. On the other hand, it is an additional cost to the company to train new employess. Numerous studies in recent years have related to the status of women. A review of the status of women leaders within politics and the business sectors around the world shows that only 22.7% of parliament positions and 9% of CEO positions were held by women (Longman, 2018). Author has emphasized the importance of having greater diversity in leadership, and specifically for greater representation by women in business leadership. Women's participation in business leadership is critical for wise decision-making and for other numerous financial and organizational culture reasons. According to literature review, a component of employees and labour practices needs to be included in the company's social sustainability model.

Employees' health and working condition

According to Callado and Fensterseifer (2011), Taylor (2013), Butnariua and Avasilcai (2015), Shaaban and Scheffran (2017), a work-friendly environment today is understood as ergonomic workplaces, advanced technologies, safe and healthy environments, flexible work schedules, work-friendly microclimate, gender equality, respect for human rights, etc. The standardized management system OHSAS 18000, the social responsibility standard SA 8000, the ISO 26000 guidelines help companies to achieve sustainable development, but are often criticized for being overly complex

and requiring additional resources for their implementation (Durdevič et al., 2013, Kinderytė, 2013). SA 8000 (Social Accountability 8000), based on the International Labor Organization (ILO) conventions, the Universal Declaration of Human Rights, United Nations conventions and international agreements, set out the requirements for ethical employment practices. The standard OHSAS 18000 regulates work safety. The ISO 26000 guidelines highlight seven spheres that contribute to sustainable development. Summing up, the component employee health and working condition is significant and needs to be included in the social sustainability model being developed.

Communication with customers

Pursuing and maintaining a good stakeholder orientation and social performance reputation is becoming a necessary part of business. According to stakeholder theory, customers are one of the company's stakeholders (Freeman, 2010). On the one hand, companies are responsible for meeting the expectations of their stakeholder groups. On the other hand, customers and consumers obligate the organization to act responsibly. An organization guarantees to provide consumers with high quality services and this determines not only a better financial performance of the organization but also employee's quality of work and business sustainable development of the organization. An enterprise's purpose begins with the customer who determines what a business is, what it produces, and whether it will prosper. The customer is no longer a passive receiver of products but is engaged in designing and refining them (Drucker, 2017). Drucker (2017) suggests that management can make the relationship that force the organization to understand what the customer values. Managers must determine which needs of a customer in target market are unsatisfied and then further determine whether they can step up to provide value. Value is based on ability to connect with the customers and know more about their needs and desires than they can articulate.

Customer satisfaction depends not only on quality of goods but also on creative problem solving and how quickly and effectively options and solutions are presented.

Communication with community

Companies are not limited to job creation and tax payments, but more often engage in social activities and addressing social challenges. Businesses exist to deliver value to society. In this context companies should be interested in the health

of the population, appropriate education and good relations with the local community, since most of the employees in the company are from a local labour market. Veleva et al. (2012) argue that the companies have resources and are capable of taking responsibility. Internal and external communication helps to effectively manage and involve employees in social activities. More and more of the executives of the company recognize the benefits of such involvement and the ability to attract and retain talented employees. In particular, there is some pressure on the part of employees. Employees of current generation want to work in a company that fosters solid values and is not afraid of obligations to the public. Veleva et al. (2012) explored the benefits of employee volunteering to business. The study revealed that employees involved in volunteering are more satisfied with their work, are more proud of their organization, believe in the mission of the organization, and have a higher morale. In addition, the study showed the positive impact of volunteering on the company's performance. Porter and Kramer (2011) highlighted the business dependence on society, which means that both business decisions and social policies must be in line with the principles of shared value and must be mutually beneficial. According to Michelini (2012), this kind of business model can offer a company new opportunities for responsible business conduct while at the same time it creates economic and social value. It shows that business can play an important role in eradicating poverty in society. According to Schmitt (2013), the creation of a shared value is closely linked to sustainable development. At company level, shared value increases employee's productivity in the value chain. At the community level, companies take into account the needs of society in order to better adapt products and services to customer needs. Yunus et al. (2015) also recommend companies to participate in solving social problems. This activity should not be financially harmful, but profit must be reinvested in the business rather than returned to the shareholders of the company.

Social issues can also be addressed by social innovation. Contemporary successful businesses exist to deliver value to society. Social innovation is the development and implementation of new business models to meet social needs, social goals and create new social relationships in society. The concept of social innovation is relatively new, although this sphere employs about 40% of start ups in different parts of the world. While societal development in the nineteenth and twentieth centuries was driven by technological progress and economic dogmas, the twenty-first century must give rise to social

innovation to encourage societal and systemic changes (Grimm et al., 2013). Social innovation may refer as a resource for creativity, learning and skilling, knowledge exchange and capacity-building to make organizations resilient to rapidly changing external environments. Social innovation is the development and implementation of new products. services and business models to meet social needs, social goals and create new social relationships in society. Michelini (2012) founds that modern companies combining three concepts - Shared Value, Tripple Bottom Line, and Corporate Social Responsibility can successfully develop activities in low-income markets and at the same time help to address social problems such as poverty reduction. Kramer and Pfitzer (2016) argue that if business could support social progress in every region of the world, poverty, pollution and disease would be

reduced, while corporate profits would increase. In recent years, the application of the concept of shared value has become imperative for companies as they seek new economic opportunities to gain confidence of the public. Society and Business are Interconnected Systems (Schmitt, 2013). Companies operate in the community, not outside it. Kramer and Pfitzer (2016) propose a new concept called Collective Impact. The essence of collective impact is that social problems come from uncoordinated actions by "players" in all sectors. Therefore, they can only be solved by joint efforts of business, government, charity organizations and society.

After analyzing and critically evaluating the methodological potential of the social dimension, a model of the social sustainability was developed (see Figure 2).

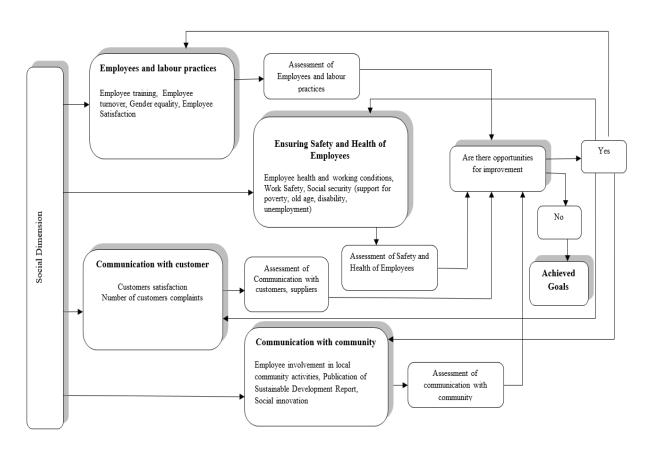


Fig. 2. Model of social sustainability of the company (composed by the author)

The model consists of four components of the social dimension including employees and labour practices, work safety and employee health, communication with customers and local community. According to the authors, the under-utilization of the opportunities offered by the social dimension reduces business development opportunities. Social dimension of sustainable development reflects the company's attitude towards the stakeholder: employees, service providers, contractors, clients, as well as the impact on the whole society. Effective social activity is important for long-term business success. Objective and measurable indicators are needed to assess the company's activities in terms of socially sustainable development. In a further study, it is necessary to identify and elaborate indicators

that are suitable for quantitative assessment of the results and for management decisions.

Development of the indicators system

It is not enough to know the content of the social dimension in order to achieve sustainable development. It is necessary to have tools to measure the result achieved and to anticipate further changes. For evaluation purposes, it is necessary to distinguish indicators that are appropriate and reflect the purpose of the assessment. Ginevičius (2009) argues that it is not quantity that is important in the selection of indicators, but indicators should cover all the most important aspects of the phenomenon under consideration. Often companies are tracking too many indicators that "require a lot of resources but are unproductive" (Stainer 2006). Too many indicators need to be reduced and structured. The number of indicators in the groups must be such that they can be evaluated and analyzed. Hasan et al. (2017) advise on what should be avoided by developing a system of indicators. Firstly, the indicators may not be correctly selected, and therefore there is a risk of a mistake in management decisions. Secondly, the selected indicators can only be applied to a specific business sector, as in other sectors they may not be effective. Different methods are used for the selection of variables. Garbie (2014) suggests, for each dimension of sustainable development, a comprehensive analysis of scientific literature to form indicator groups: to select a certain number of measurable indicators for each group and to compile a list of the most frequently occurring indicators and to compile a mathematical model in this list and calculate the index for sustainable development of each dimension. Hasan et al.

(2017) suggest the use of scientific literature and Pareto's rule for the selection of indicators. The authors recommend to carry out analysis of selected scientific articles according to the relevant keywords from the scientific publications of the databases and to create a list of indicators. In the next stage, the most commonly recurring indicators are selected according to Pareto's rule. Shaaban and Scheffran (2017) also recommend to eliminate indicators with a recurrence rate of less than 20 percent in selected scientific publications, as these indicators are usually subjective.

Hasan et al. (2017) recommend the use of standardized indicator systems such as the Global Report Initiative (GRI), the Dow Jones (DJSI), the Organization for Economic Cooperation and Development (OECD), the United Nations Commission on Sustainable Development (UNCSD). Standardized systems include a huge number of indicators and can not always be applied in practice. Husgafvel et al. (2017) also recommend to review the quantitative characteristics of key global initiatives (such as the UN Global Compact and the Global Reporting Initiative GRI, ISO 26000, the Dow Jones Index, RobecoSAM) and relying on existing corporate governance practices in Sustainable Development, as outlined in the Corporate Performance Report. In this way, the core indicators would include all internationally recognized systems for assessing sustainable development. Sustainable development is a process of continuous improvement, and the formed indicator system helps to monitor this process and assess compliance with the goals set. Table 1 provides the lists of indicators, frequency of their recurrence and confirmatory sources based on the analysis of scientific literature.

Table 1

Indicators List of the Social Dimension (composed by the author)

Indicator	Source	Frequency of recurrence
Employee turnover	Garbie (2014), Yeo, Tjandra and Song (2015), Oertwing, Wintrich and Jochem (2015), Hasan et al. (2017), Vevelka and Ellenbecker (2001), Kinderytė (2013), Singh et al. (2013), Huanga and Badurdeena (2017)	8
Working conditions	Garbie (2014), Husgafvel et al. (2017), Vevelka and Ellenbecker (2001), Taylor (2013), Hasan et al. (2017)	
Gender equality Garbie (2014), Oertwing, Wintrich and Jochem (2015), Kocmanova and Simberova, (2012), Hasan et al. (2017)		4
Social security (support for poverty, old age, disability, unemployment)	Garbie (2014), Vevelka and Ellenbecker (2001)	2
Employee training	Garbie (2014), Yeo, Tjandra and Song (2015), Oertwing, Wintrich and Jochem (2015), Husgafvel et al. (2017), Singh et al. (2013), Huanga and Badurdeena (2017) Butnariua and Avasilcai (2015)	7

Employee education	Garbie (2014), Vevelka and Ellenbecker (2001)	2		
Employee involvement in local	Garbie (2014), Garza (2013), Veleva (2012), Singh et al. (2013),			
community activities	Butnariua and Avasilcai (2015), Huanga and Badurdeena (2017)	6		
Number of jobs created	Garbie (2014), Callado and Fensterseifer (2011), Huanga and			
Number of jobs created	Badurdeena (2017)	3		
The funds for society and culture	Garbie (2014)	1		
Customer personal data protection	Garbie (2014)	1		
Availability of services	Garbie (2014)	1		
Fight against corruption	Garbie (2014)	1		
Fair trade	Garbie (2014)	1		
The cultural differences	Garbie (2014), Huanga and Badurdeena (2017)	2		
Employee satisfaction	Garza (2013), Husgafvel et al. (2017)	2		
Cooperation with the government	Garza (2013)	1		
	Garza (2013), Kinderytė (2013), Singh et al. (2013), Huanga and	2		
Customer satisfaction	Badurdeena (2017)	3		
	Taylor (2013), Yeo, Tjandra and Song (2015), Callado and			
	Fensterseifer (2011), Oertwing, Wintrich and Jochem (2015), Hasan et al. (2017), Husgafvel et al. (2017), Vevelka and			
Worker health				
	Ellenbecker (2001), Kinderytė (2013), Butnariua and Avasilcai			
	(2015), Huanga and Badurdeena (2017)			
Number of customer complaints	Yeo, Tjandra and Song (2015), Huanga and Badurdeena (2017)	2		
Publication of sustainable	Yeo, Tjandra and Song (2015), Husgafvel et al.(2017)	2		
development report		2		
Organizational ethics	Callado and Fensterseifer (2011)	1		
Employability and career	Callado and Fensterseifer (2011), Hasan et al. (2017)	2		
management				
Allocation of profits to employees	Callado and Fensterseifer (2011)	1		
Legitimate employment contracts	Callado and Fensterseifer (2011)	1		
Employee involvement in decision-	Oertwing, Wintrich and Jochem (2015), Kinderytė (2013)	2		
making				
Social innovation	Husgafvel et al.(2017), Michelini (2012)	2		
Labour security	Butnariua and Avasilcai (2015), Shaaban and Scheffran (2017),	4		
Labour Security	Taylor (2013), Callado and Fensterseifer (2011)			
Communication with suppliers	Huanga and Badurdeena (2017)	1		

Table 1 shows 27 indicators identified as a result of research. As the number of indicators is high, structuring needs to be deepened. The Pareto rule is applied in the next step to select the appropriate indicators. The code is assigned to each indicator and the further data is processed according to the Pareto-charting principles (Hasan et al., 2017), i.e. this is

arranged according to the frequency of recurrences and their percentage is calculated. Table 2 shows the selected indicators with their designated codes, their frequency and the confirmatory of sources. These codes were used to represent the indicators and to show which component of social dimension they represented.

Analysis of the data according to Pareto rule (composed by the author)

Indicator codes	Indicator	Frequency	Accumulated recurrence rate	Percentage	Accumulated percentage
S_1	Worker health	10	10	13	13
S,	Employee turnover	8	18	10	23
S_3	Employee training	7	25	9	32
S ₄	Employee involvement in local community activity	6	31	8	40
S_5	Working conditions	5	36	6	46

Table 2

$\overline{S_{\epsilon}}$	Gender equality	4	40	5	51
$\overline{S_7}$	Labour security	4	40	5	56
$\overline{S_8}$	Number of jobs created	3	43	4	60
S_{q}	Customer satisfaction	3	43	4	64
S ₁₀	Social security (support for poverty, old age, disability, unemployment)	2	45	3	67
$\overline{S_{11}}$	Employee education	2	47	3	70
S_{12}	The cultural differences	2	49	3	73
S ₁₃	Employee satisfaction	2	51	3	76
S ₁₄	Number of customer complaints	2	53	3	79
S ₁₅	Publication of sustainable development report	2	55	3	82
S ₁₆	Employability and career management	2	57	3	85
S ₁₇	Employee involvement in decision- making	2	59	3	88
S ₁₈	Social innovation	2	61	3	91
S ₁₉	The funds for society and culture	1	62	1	92
S ₂₀	Customer personal data protection	1	63	1	93
S ₂₁	Availability of services	1	64	1	94
S ₂₂	Fight against corruption	1	65	1	95
S ₂₃	Fair trade	1	66	1	96
S ₂₄	Cooperation with the government	1	67	1	97
S ₂₅	Organizational ethics	1	68	1	98
S ₂₆	Communication with suppliers	1	69	1	99
S ₂₇	Allocation of profits to employees	1	70	1	100

Based on the Pareto charts, mathematical calculations and visualization of the final results are presented in Figure 3. The most frequent sustainability indicators that have been frequently discussed in the academic literature were determined using Pareto rule. Indicators with a frequency rate

of less than 20 percentage are eliminated from the compiled list as not meeting the criteria for the selection of indicators. Based on information gathered in Table 2, Pareto charts were developed (see Fig. 3)

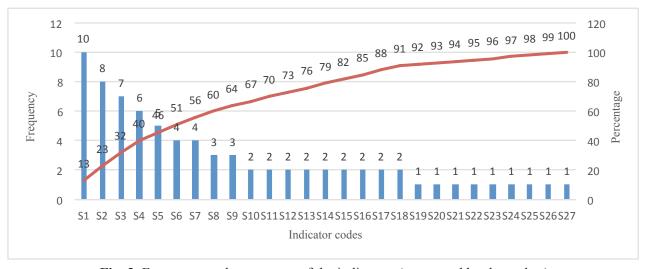


Fig. 3. Frequency and percentage of the indicators (composed by the author)

Social dimension indicator system provided in Figure 3 is composed of 18 selected indicators, which, due to a depth of structure are divided into four groups. The names of the groups correspond to the names of the components of the content of the social dimension identified during the analysis of the methodological potential of academic literature (Fig. 2).

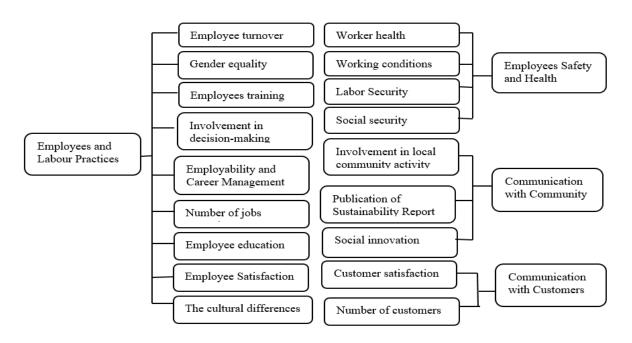


Fig. 4. Indicators System of the Social Sustainability of the company (composed by the author)

The set of selected indicators of social sustainability is provided in Figure 4. Based on Table 2, the first most frequently mentioned indicator among the initial 18 social dimension indicators was S₁ (Employee health). This indicator was mentioned in 10 different articles. The second most frequently mentioned indicator was S₂ (Employee turnover) which was mentioned in 8 articles. The third most frequently mentioned indicator was S₃ (Employee training). Other indicators are employee involvement in local community activities, working conditions, etc.. For future study, these indicators will be verified by experts from industries and then can be used for quantitative assessment of the social sustainability of the enterprise.

This article contributes to clearer understanding of what the social dimension of sustainable development means in general and how it relates to company activities as well. The developed model can be used to make managerial decisions in the social field and to assess the social performance of the company in the context of sustainable development and to calculate the index of company's social sustainability.

Conclusions

The social dimension of sustainable development is analyzed in a rather laconic manner in research, identifying it alongside economic and environmental dimensions. Academic literature review affirms that social dimension of sustainable development reflects the company's attitude towards

employees and labour practices, employees'safety and health, communication with customers, communication with community and relations with the local community. This article focuses on company's social sustainability. Its conceptual model as well as a set of indicators relevant for quantitative assessment are developed while contents of the social dimension are examined with regard to various approaches. The model consists of four components of the social dimension. It should be noted that the model helps to make managerial decisions in practice for enterprises seeking social sustainability.

To carry out a quantitative assessment, the system of indicators has been developed. Choosing suitable indicators for evaluation purpose is a challenge for researchers. There are risks of choosing incorrect, misused, or misinterpreted indicators which may lead to misleading decisions. On the other hand, all these selected indicators cannot simply be applied to every sector of industry because some indicators might be effective and some indicators might not. Through academic literature, 27 indicators of social dimension are listed. Each of them is clustered into four groups: Employees and Labour Practices, Employees Safety and Health, Communication with Customers, and Communication with Community. Based on Pareto rule, 18 indicators are shortlisted as highly influential indicators of social dimension and can be used for quantitative assessment of the social sustainability.

References

- 1. Berings, D., De Fruyt, F., Bouwen, R. (2004). Work values and personality traits as predictors of enterprising and social vocational interests. *Personality and Individual Differences*, 36, 349-64.
- Butnariua, A., Avasilcaia, S. (2015). The Assessment of The Companies' Sustainable Development Performance. *Procedia Economics and Finance*, 23, 1233-1238. Available at www.sciencedirect.com.
- 3. Callado, A. L., Fensterseifer, J. E. (2011). Corporate Sustainability Measurement from an Integrated Perspective: The Corporate Sustainability Grid (CSG). *IJBIT*, 3 (3), 44-53.
- 4. Dyllick, T., Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11, 130-141.
- Dyllick T., Muff, K. (2015). Clarifying the Meaning of Sustainable Business: Introducing a Typology from Business-as-Usual to True Business Sustainability. Organization and Environment; forthcoming. Available at https://doi.org/10.1177/1086026615575176.
- 6. Drucker, P. F. (2007). *Management Challenges for the 21st Century*. Oxford OX2 8DP, UK.
- Durdevic, T., Searcy, C., Karapetrovic, S. (2013). The role of ISO 14001 in sustainable enterprise excellence. In *The 5th European Conference on Intellectual Capital ECIC 2013*, 11–12 April 2013, Bilbao, Spain, 2, 99-107.
- 8. Edersheim, E.H. (2017). *The Definitive Drucker*. McGraw-Hill Education, USA.
- 9. Edgeman, R., Neely, N., Eskildsen, J. (2016). Paths to sustainable enterprise excellence. *Journal of Modelling in Management*, 11 (4), 858-868. Available at https://doi.org/10.1108/ JM2-12-2014-0097.
- 10. Freeman, R., Harrison, J., Wicks, A., Parmar, B., De Colle, S. (2010). *Stakeholder theory: The state of the art*. Cambridge University Press.
- 11. Friedman, M. (1970). A Friedman doctrine. *The New York Times*, Sept. 13. Available at http://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html.
- Garbie, I. H. (2014). An Analytical Technique to Model and Assess Sustainable Development Index in Manufacturing Enterprises. *International Journal* of Production Research, 16, 4876-4915. Available at http://www.tandfonline.com/doi/abs/10.1080/00207 543.2014.893066.
- Garza, F. A. (2013). A Framework for Strategic Sustainability in Organizations: A Three Pronged Approach. *Journal of Comparative International Management*, 16 (1), 23-36.
- 14. Ginevičius, R. (2009). Socioekonominių sistemų būklės kiekybinio įvertinimo problematika. *Verslas: teorija ir praktika*, 10 (2), 69-83. Available at: doi: 10.3846/jbem.2010.14.
- 15. Grim, R., Fox, Ch., Baines, S., Albertson, K. (2013). Social innovation, an answer to contemporary societal challenges? Locating the concept in theory and practice. *Innovation: The European Journal of Social Science Research*, 26 (4), 436-455. Available at http://dx.doi.org/10.1080/13511610.2013.848163.

- Gunlu, E., Aksarayli, M., Sahin Percin, N. (2009).
 Job satisfaction and organizational commitment of hotel managers in Turkey. *International Journal of Contemporary Hospitality Management*, 22 (5), 693-717. Available at doi:10.1108/09596111011053819).
- 17. Hamor, M. (2018). Can MOOCs solve your training problem? *Harvard Business Review*, 1-2, 70-77.
- Hasan, M. S., Ebrahim, Z., Wan Mahmood, W. H., Ab Rahman, M. (2017). Sustainable - ERP System: a preliminary study on sustainability indicators. *Journal of Advanced Manufacturing Technology*, Special Issue (TMAC) Symposium 2017, 61-73.
- Huanga, A., Badurdeena, F. (2017). Sustainable Manufacturing Performance Evaluation: Integrating Product and Process Metrics for Systems Level Assessment. *Procedia Manufacturing*, 8, 563-570. Available at www.sciencedirect.com.
- Husgafvel, R., Poikela, K., Honkatukia, J., Dahl, O. (2017). Development and Piloting of Sustainability Assessment Metrics for Arctic Process Industry in Finland The Biorefinery Investment and Slag Processing Service Cases. Sustainability, 9 (1693), 2-16. Available at doi: 10.3390/su9101693.
- 21. Kavadias, S., Ladas, K., Loch, C. (2016). The Transformative Business Model. *Harvard Business Review*, 91-98.
- 22. Kinderytė, L. (2013). Įmonės darnios plėtros vertinimo sistemos modelis. Daktaro disertacija (Doctoral Thesis). Kaunas.
- 23. Kocmanova, A, Simberova, I. (2012). Modelling of Corporate Governance Performance Indicators, *Inzinerine Ekonomika (Engineering Economic)s*, 23 (5), 485-495. Available at http://inzeko.ktu.lt/index.php/EE/article/view/2865/2220.
- 24. Kramer, M., Pfitzer, W. (2016). The Ecosystem of Shared Value. *Harvard Business Review*, 81-89.
- Longman, A. K. (2018). Perspectives on Women's Higher Education Leadership from Around the World. *Administrative Science*, 8, 35. Available at doi:10.3390/admsci8030035.
- 26. Michelini, L. (2012). Social Innovation and New Business Models Creating Shared Value in Low-Income Markets.
- 27. Oertwig, N., Wintrich, N., Jochem, R. (2015). Model-based Evaluation Environment for Sustainability. *Procedia CIRP*, (26), 641-645. Available at www.sciencedirect.com.
- 28. Porter, M., Kramer, M. (2011). Creating shared value. *Harvard Business Review*, 89 (1), 62-77.
- 29. Singh, S., Olugu, E., U., Fallahpour, A. (2013). Fuzzy-based sustainable manufacturing assessment model for SMEs. *Clean Techn Environ Policy*, 1-14. Available at doi:10.1007/s10098-013-0676-5.
- 30. Schmitt, J. (2013). Social Innovation for Business Success Shared Value in the Apparel Industry. Springer Gabler.
- 31. Stainer, L. (2006). Performance management and corporate social responsibility: The strategic connection. *Strategic Change*, 15, 253-264.
- 32. Shaaban, M., Scheffran, J. (2017). Selection of sustainable development indicator for the assessment of

- electricity production in Egypt. *Sustainable Energy Technologies and Assessment*, 22, 65-73. Available at www.sciencedirect.com.
- Tan, H. X., Yeoa, Z., Nga, R., Tjandraa, T. B., Songa, B. (2015). A sustainability indicator framework for Singapore small and medium-sized manufacturing enterprises. *Procedia CIRP*, 29, 132-137. Available at www.sciencedirect.com.
- 34. Tamasauskiene, Z., Poteliene, S. (2015). Evaluation of return to investment in human capital in Lithuania in the context of other countries. *Engineering Economics*, 3, 198-206.
- 35. Talent investing in employees pays off. (2017). Harvard Business Review, 26.
- 36. Taylor, B. M. (2013). Sustainability and Performance Measurement: Corporate Real Estate Perspectives. *Performance Improvement*, (6): 36-45.
- 37. Transforming Our World: The 2030 Agenda For Sus-

- tainable Development. (2015). United Nations. Available at https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20 Sustainable%20Development%20web.pdf.
- 38. Veleva, V., Ellenbecker, M. (2001). Indicators of Sustainable Production: Framework and Methodology. *Journal of Cleaner Production*, 9 (6), 519-549.
- Veleva, V., Parkers, S., Lee, A., Pinney, Ch. (2012).
 Measuring the Business Impacts of Community Involvement: The Case of Employee Volunteering at UL. Business and Society Review, 117 (1), 123-142.
- Veleva, V. (2009). Managing Corporate Citizenship: A New Tool for Companies. *Corporate Social Responsibility and Environmental Management*, 16. Available at doi:10.1002/csr.206.
- 41. Yunus, M., Dalsace, F., Menasce, D., Tavignot, B. F. (2015). Reaching the rich world's poorest consumers. *Harvard Business Review*, 3, 46-53.

Oželienė, D.

Įmonės darnios plėtros socialinės dimensijos modelis

Santrauka

Imonėms koncentruojantis tik i ekonomine ir aplinkosauginę dimensijas darni plėtra praranda holistiškumo esmę. Efektyvi socialinė veikla yra taip pat svarbi ilgalaikei verslo sėkmei kaip ir ekonominė. Verslo vengimas įsitraukti į socialinių problemų sprendimą ilga laiką buvo pateisinamas išteklių stoka ir kompetencijos socialinėje srityje trūkumu. Bendros vertės kūrimo idėja jrodė, kad socialinių problemų sprendimas įmonėms yra finansiškai naudingas. Socialinė dimensija nėra vienareikšmiškai apibrėžta, o jos turinys nėra aiškiai išreikštas. Todėl įmonėms sudėtinga pačioms identifikuoti socialinės dimensijos turinį ir parinkti vertinimo priemones. Šio straipsnio tikslas – sukurti įmonės darnios plėtros socialinės dimensijos modelį, padedantį įmonėms siekti darnios plėtros, identifikuoti rodiklius, parodančius socialinės darnos pasiekimo lygį. Sisteminei literatūros apžvalgai atlikti buvo naudojamos šios mokslinių straipsnių duomenų bazės: Clarivate Analytics, Scopus, ScienceDirect, Taylor & Francis, Emerald. Straipsnių atrankai buvo nustatyti tam tikri kriterijai ir ribos. Analizuoti atrinkti 2010–2018 metais publikuoti originalūs tyrimai.

Socialinės dimensijos aktualumas atsispindi Darnios plėtros darbotvarkėje iki 2030 m., kurioje iš septyniolikos iškeltų tikslų šeši tiesiogiai susiję su socialinių problemų sprendimu pasaulyje. Tikslų sąrašas pradedamas įsipareigojimu panaikinti visų formų skurdą, badą, užtikrinti sveiką gyvenseną, lygiavertį kokybišką švietimą, trunkantį visą gyvenimą, pasiekti lyčių lygybę, mažinti nelygybę tarp šalių ir šalių viduje (Transforming Our World 2015). Iškeltus tikslus galima pasiekti tik bendromis visų visuomenės narių pastangomis, o įmonių indė-

lis šiuo metu yra nepakankamai svarus (Dyllick, Muff, 2015).

Socialinės dimensijos turinys gana skirtingai interpretuojamas mokslinėse publikacijose. Įmonė yra ne tik ekonominė, bet ir socialinė sistema, kurią sudaro bendro tikslo susieti žmonės – darbuotojai ar jų grupės. Darbuotojai vykdo įmonės veiklą ir kuria įmonės produktus, procesų naujoves, valdo verslo procesus. Gunlu *et al.* (2009), Garbie (2014), Edgeman *et al.* (2016), Drucker (2017), Longman (2018) darbuotojus išskiria kaip vieną iš socialinės dimensijos dedamųjų.

Callado, Fensterseifer (2011), Taylor (2013), Butnariua, Avasilcai (2015), Shaaban, Scheffran (2017) teigia, kad darbui palanki aplinka pirmiausiai yra saugi ir sveika aplinka, ergonomiškos darbo vietos, pažangios technologijos, lankstus darbo grafikas, palankus darbui mikroklimatas, žmogaus teisių gerbimas ir kt.

Garbie (2014), Yeo, Tjandra, Song (2015), Huanga, Badurdeena (2017) nagrinėdami įmonių darnią plėtrą, bendradarbiavimą su klientais įvardija kaip būtiną dedamąją. Socialiniai aspektai padeda pagerinti paslaugų kokybę ir suteikia konkurencinį pranašumą, tai lemia didesnį klientų pasitenkinimą ir lojalumą.

Pažangios įmonės, kurdamos darbo vietas ir mokėdamos mokesčius, vis dažniau įsitraukia į visuomenės veiklas sprendžiant socialinius iššūkius. Veleva *et al.* (2012) tvirtina, kad tam įmonės turi išteklių ir yra pajėgios prisiimti atsakomybę, o vidaus ir išorės komunikacija padeda veiksmingai valdyti ir įtraukti darbuotojus į socialinės srities veiklas. Michelini (2012), Garza (2013), Singh *et al.* (2013), Garbie (2014), Yeo, Tjandra, Song

(2015) tvirtina, kad vis dažniau įmonių vadovai pripažįsta tokio dalyvavimo naudą įmonės ir prekės ženklo reputacijai ir gebėjimui pritraukti talentingus darbuotojus, juos išlaikyti. Yunus *et. al* (2015), Kramer, Pfitzer (2016) teigimu, jei verslas galėtų skatinti socialinę pažangą kiekviename pasaulio regione, skurdas, tarša ir ligos sumažėtų, o įmonių pelnas padidėtų. Taip įmonė ne tik pagerintų savo finansinius rodiklius, bet ir realiais darbais prisidėtų prie socialinių problemų sprendimo.

Apibendrinant mokslininkų įžvalgas, galima išskirti derinį darbuotojas – klientas – visuomenė kaip dominuojančius socialinės dimensijos elementus, sudarančius kuriamo modelio pagrindą. Detalizuotas kiekvieno elemento turinys pateikiami modelyje (2 pav.). Įmonėms, siekiančioms darnios plėtros, nepakanka žinoti socialinės dimensijos turinį, būtina turėti priemonių ir įrankių, kaip pamatuoti pasiektą rezultatą ir numatyti tolimesnius pokyčius. Vertinimui atlikti reikia išskirti rodiklius, kurie būtų tinkami ir atspindėtų vertinimo tikslą. Ginevičius (2009) teigia, kad parenkant rodiklius svarbu ne jų kiekybė, bet rodikliai, kurie turi aprėpti pagal galimybę visus svarbiausius nagrinėjamo reiškinio aspektus. Per didelį rodikliųskaičių būtina mažinti, rodiklius labiau struktūri-

zuojant. Rodiklių skaičius grupėse turi būti toks, kad juos būtų galima įvertinti ir analizuoti. Hasan et al. (2017) pataria, kad blogai atrinkus rodiklius kyla pavojus priimti klaidingus vadybinius sprendimus, o atrinkti rodikliai gali būti taikomi tik tam tikram verslo sektoriui, nes kituose sektoriuose jie gali būti neveiksmingi. 1 lentelėje pateikti atrinkti rodikliai, jų pasikartojimo dažnumas ir patvirtinantys šaltiniai. 2 lentelėje duomenys analizuojami pagal Pareto diagramų sudarymo principus, t. y. išdėstomi pagal pasikartojimų dažnumą, skaičiuojama jų procentinė išraiška (Hasan et al. 2017). 4 paveiksle pateiktos rodiklių grupės, sudarytos atlikus rodiklių struktūrizavimą. Socialinės dimensijos rodiklių sistema suformuota iš 18 rodiklių, kurie yra suskirstyti į keturias grupes. Suformuotas rodiklių rinkinys yra tinkamas socialinei dimensijai kiekybiškai vertinti įmonės lygmeniu.

Sukurtas įmonės darnios plėtros socialinės dimensijos modelis gali būti praktiškai taikomas vadybiniams sprendimams priimti, siekiant socialinės darnos įmonės veikloje.

Pagrindiniai žodžiai: darnaus vystymosi socialinė dimensija, socialinės dimensijos modelis, indikatorių rinkinys, Pareto taisyklė, holistinė prieiga.