

## SURVEY OF SOCIETY EXPECTATIONS TOWARDS SUSTAINABLE 4P IN THE NEW PUBLIC MANAGEMENT PERSPECTIVE

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**Purpose:** The purpose of the article is to draw attention to the important problem of taking into account the expectations of buyers of products to the activities of manufacturing companies in the area of marketing mix to a more sustainable, as a way of modern social management.

**Design/methodology/approach:** The article has a theoretical and empirical character. The theoretical part of the study was prepared on the basis of a review of the literature concerning the subject, while the research part of the work is the result of own survey conducted among the inhabitants of the Silesian province. The research was based on the survey method with the use of distributed questionnaires, also commonly known as street surveys. The tool used to obtain data was a survey questionnaire containing a structured set of open and closed questions.

**Findings:** In the course of the research study it was determined that there should be a modification of the marketing mix elements in terms of environmental and social, by means of which production, trade and service enterprises directly affect consumers. Customers' decision to purchase a product is increasingly dependent on the company's active involvement in pro-environmental and pro-social activities.

**Research limitations/implications:** The research results obtained are not representative in the statistical sense, although they are an interesting approach to the problem and undoubtedly have a cognitive character in the area in question.

**Practical implications:** Business activities of enterprises should focus not only on achieving financial goals or expanding market shares, but should also take into account environmental and social objectives. Middle and high-level managers are expected to change the way of managing the organization into a more pro-environmental and pro-social one, which in turn will contribute to changing the perception of the enterprise itself among consumers, as a sustainable organization.

**Social implications:** Considerations contained in the article indicate the need to change the behavior and attitudes of buyers to a more responsible in terms of environmental protection and other market participants. The article draws attention to the need to make conscious purchase choices, which in turn should contribute to improving the condition of the environment and the life's quality of societies.

**Originality/value:** As a result of the conducted research study, a theoretical-cognitive gap was identified. It was also found that there is a scarcity of qualitative and quantitative research in

the area of the undertaken topic. Therefore, there is a need for further examinations, which should be characterized by intensity and depth in both theoretical and empirical layers. The article is addressed to managers of manufacturing companies, as well as service companies who want to conduct business in accordance with the concept of sustainable development.

**Keywords:** sustainable development, new public management, pro-social management.

**Category of the paper:** Research paper.

## 1. Introduction

New Public Management (NPM), which is a sub-discipline of management sciences, (Sudol, 2014; Cyfert et al., 2014) can be characterized as a set of management techniques used in public management, from which the rationale for implementing solutions based on efficiency of operations and rationality of expenditures is derived (Pierścieniak, 2011).

According to the standards set by the NPM, in order to improve the efficiency of public sector operations, a number of organizational solutions characteristic of the private sector should be used first. In management sciences, the local government organizational unit is seen, as an organization, because it has all the elements of this complex and ordered system built of people, tasks, technology and structure (Peszko, 2002). The organization realizes its goals through action, the main features of effectiveness and efficiency. Managing such an organization in the light of the NPM concept justifies the use of methods used in the private sector.

NPM is a doctrine postulating the use of mechanisms used in the private sector of the economy for efficient management of the public sector. In literature NPM is sometimes defined as: a managerial form of approach to public administration (Supernat, <http://www.supernat.pl>), which manifests itself in the application of solutions commonly used and proven in the market economy. These activities are aimed at increasing the effectiveness of particular units of the public sector.

Further considerations in this paper will focus on the managerial approach, i.e. from the NPM perspective. The managerial approach, including NPM, points out organizational similarities between the features of public administration and the private sector, emphasizes the importance of professional management and effectiveness. Each of the above presented approaches emphasizes different values, procedural or structural solutions in its functioning, which leads to a complementary view of public administration in today's world (Supernat, <http://www.supernat.pl>).

New public management was popularized in 1980s and 1990s in highly developed countries such as Great Britain, United States, New Zealand. The search for a new concept led to the formulation of its basic assumptions, which were designed to respond more realistically to the needs of highly developed societies. In the literature, the basic assumptions of NPM consist of, among others:

Efficient performance – which is one of the most salient characteristics of NPM (Hausner, 2002). They emphasize the rationality of resource management according to the principles of: maximization of effects at the assumed level of outlays or minimization of the outlays incurred while achieving the assumed effect (Kotowska, 2015). In order to achieve these objectives, NPM indicates the need to change the type of management employment from employment contracts to contracts covering the implementation of a specific project. Remuneration, in turn, should be appropriately linked to the results obtained, as it is the case, for example: in the UK (Kettl, 1997). The results achieved are not only the quality of services provided, but also a real impact on the change in the lives of residents.

The use of market competition mechanisms to achieve the above mentioned results. The use of market competition mechanisms is possible e.g. through outsourcing of services and purchased goods, which have a higher quality and lower price than those produced by the administration itself. Another example is such reorganization of public administration bodies that leads to their obtaining revenue from the sale of goods or services. The proposed reorganization forces, what is worth emphasizing, the organizational units of public administration separated in this way to compete with each other and with non-governmental and private organizations. It should be mentioned that such a reorganization carried out at all levels would lead to disaggregation of the whole public sector. The resulting smaller organizational units should be characterized by much more clearly defined tasks and thus clearly outlined responsibilities. Greater accountability to the public is one of the main goals of the NPM.

The control of services and goods by the public administration instead of their provision by the administration itself. In situations where it is possible to increase the efficiency of the services and goods provided by using other organizations for this purpose, such as for example: NGOs, non-profit organizations or finally the private sector in its broadest sense. The transition from a hierarchical system of service provision to a networked and interdependent one is also a feature particularly valued and repeatedly emphasized by co-management, which is another paradigm of public administration functioning. The precursor of this concept was H. Cleveland, who predicted that public administration will evolve towards intertwined networks, which will be characterized by less control, more dispersed authority spread over many decision-making centers. This will entail a more complex decision-making process involving organizations both inside and outside the public sector. They will be characterized by shared responsibility for action. This will entail a flattening of structures in the public administration, a dispersion of the real to the entities whose participation in the decision-making process is desirable.

Increasing results while decreasing costs. Each action undertaken by the administration should be characterized by the best possible use of available financial, material and human resources. The result of these actions is to reduce the costs of provided services while increasing their quality. This assumption manifests itself in all the above mentioned assumptions of NPM, which seeks to achieve more with less (Hood, 1995).

According to the postulates formulated by NPM, public management should focus on zones where the market cannot perform as effectively. The postulated model assumes a far developed social consciousness, and responsibility for the environment in which the social group operates. This should be kept in mind, since the creation of such a culture is the result of the evolution of societies. One cannot unreflexively try to instill this type of model in societies with underdeveloped and well-established democracy and readiness for self-determination by taking an active part in social processes.

Starting from the achievements of management sciences, the sources of public management are the well-known systemic view of organizations and organizational change management. Organizations are treated as a certain class of systems described using the conceptual apparatus of general systems theory and cybernetics – autonomous wholes separated from the environment, characterized by internal connections and couplings (Kozuch, 2004).

So, in summary, the pursuit of evolving doctrines, in this case public management, is a continuous process. Thus, the discussed doctrine of NPM should be considered only as a stop in the continuous process of reforming or searching for new ideas allowing to better adopt the resources available at a given time, the knowledge already possessed and the technology used.

One of the instruments used to improve the functioning of public management in line with the NPM concept is process management (Krukowski, 2011; Wiatrak, 2006). It is based on the assumption that public activities should be optimized in terms of processes rather than functions. Thinking in terms of functions leads to actions that optimize the effectiveness of parts of the organization at the expense of its whole. It leads to the necessity of coordinating separate parts of the organization: intertwined processes within the organization are artificially separated by cells, which means that individual processes are pragmatized and their realization takes place in distant areas, in the sense of hierarchical subordination and feedback. Moreover, the vertical division of work leads to the separation of managers from executors, which results in the separation of thinking from performing, and thus performing from improving processes. Since process is a natural determinant of achieving efficiency growth in organizations, the process approach is a consequence of searching for new sources of efficiency growth in organizations (Grajewski, 2016). Describing the organization in terms of process, it is necessary to remember about its complex system of dependencies occurring in the studied system. This leads to the necessity of capturing, in all complex reconstruction processes, the full set of cause-effect relationships. Thanks to such an approach it is possible to make a comprehensive assessment of the system under study. Otherwise, i.e. creation of process reconstruction based

on incomplete data model, it will result in implementation of actions that will disturb the logic of functioning of the whole system rather than improve it. Process management is about striving to maximize those components of the organization's process that are responsible for creating added value on the one hand, and on the other hand it is about minimizing the share of inefficient operations of the entire organizational system (Grajewski, 2016, p. 56).

Economic development of the modern world resulting from the increase of international trade and the free movement of capital, people and goods leads to the increase of social and environmental problems (Wagner, 2015). Business entities operating under pressure of increasing income and market share draw little attention to the condition of environment and to the existing social problems (Kemper et al., 2019). Manufacturing companies focused on maximizing profits, strive to meet the needs of the modern consumer, regardless of the costs in environmental and social terms (Jianu et al., 2015). Dimension of economic satisfaction of companies is one of the main objectives posed in front of modern manufacturing, services, or commercial companies (Khan et al., 2019). Manufacturing activities of the organization is clearly related to the impact on the natural environment. Reaping the Earth's natural resources needed for production is an undeniable interference with the ecosystem of our planet. The business activities of enterprises, including marketing conducted without thinking of the environmental and social aspects in the longer term is doomed to failure (Masiello et al., 2018). For this reason, there is a need to change the current way of managing businesses, including marketing activities for more sustainable economic ventures in environmental and social terms (Selby et al., 2009). It is not risky to say that the market success of future companies will depend precisely on the ability to balance economic goals of the organization while respecting the environment and corporate social sensitivity (de Koeijer et al., 2017). Achieving economic, environmental and social balance of enterprises is not an easy task. In overcoming the arising problems it may be useful to adopt and implement the principles of sustainable development (Jianu et al., 2015).

The purpose of the research work described in this paper is to generalize the concept of sustainable 4P i.e. (Product, Price, Place, Promotion) operating in the private sector and its relation to the concept of new management in the public sector by finding out the social expectations of sustainable 4P of manufacturing companies.

## **2. Theoretical background**

The deteriorating state of our planet being a result of the increasing demand for various goods and services, technical and technological development and transformation of the attitudes of societies into consumer societies have significantly deteriorated the condition of environment. The negative impact of industry and selfish attitude of consumers have also

become the cause of many social problems. The changing factors of macro-environment including primarily the technical and technological ones, socio-cultural and environmental ones, have initiated the global discussion about deteriorating state of the environment and increasing social problems (Rudawska, 2019). The decision of the UN General Assembly in 1968, where it was decided to organize a United Nations conference in Stockholm, entitled *Human Environment* can be regarded the beginning of the creation of the sustainable development concept. In 1969, the UN Secretary General Sithu Thant presented the report titled *Man and his environment*. The secretary drew attention to the global crisis in man's relation to the environment.

Sustainable development is an interdisciplinary area which also reflects in the management sciences (Pomering and Johnson, 2018; Ertz and Sarigöllü, 2019). Because of the importance of the issue, sustainable development evokes more and more interest among scientists and the enterprise and social organizations itself. International discussions on the protection of the environment contributed to the formulation of the definition of sustainable development. According to the Brundtland Commission, *sustainable development is development that meets the needs of the present without the risk that future generations will not be able to satisfy their needs* (Hauff, 1987). Similar view on the essence of sustainable development express Dam and Apeldoorn (2008). The authors define it as a development that takes into account the needs of the present without limiting the possibility of meeting them for future generations. A different definition of sustainable development was also formulated, recommended primarily for the economics of sustainable development i.e. *sustainable development aims to ensure all people living today and the future generations sufficiently high environmental, economic and socio-cultural standards to the Earth's natural limits, applying the principle of intra-generational and intergenerational justice* (Rogall, 2000). Pearce, Barbier and Markandya (1997) cite the concept of sustainable development defined by Repetto as a strategy enabling the management of human, natural, financial and property resources contributing to the long-term growth of prosperity and wealth. Belz and Peattie (2010) say that there are many different approaches to the essence of sustainable development. The authors present a concept of hard sustainability – which is focused on maintaining the quality of the environment through protection of the environment as a result of rational economic activity – and soft sustainability, which is focused on ensuring that economic growth can be maintained by reducing the impact on the environment and society. It behooves to mention that the concept of sustainable development was originally derived from the forestry. In the nineteenth century, Hans Carl von Carlowitz introduced this concept to define a way of forest management where as much trees are cut as you can grow in the same place.

Implementing the principles of sustainable development among societies and manufacturing and trading companies is a serious challenge that modern humanity is facing. The progressive degradation of the Earth's ecosystem, along with emerging social problems can lead to catastrophic consequences (Trojanowski, 2020). People should remember that nature can exist without the presence of a man, but a man without nature is doomed to annihilation. International community is making efforts to balance the environmental, social and economic objectives. The concept of sustainable development was discussed e.g. at the Earth Summit in Rio de Janeiro 1992, at the summit in Kyoto 1997 and The Hague 2000 (Lee and Carter, 2009). However, despite the efforts and procedures to protect the Earth the question whether the future of the world will be sustainable, remains open.

Taking into consideration the research's objective, a term of marketing mix with respect to sustainability should be explained. Marketing as a major driving force of the global economy is responsible for the quality of the environment (Poczta and Malchrowicz-Moško, 2018). It is through marketing systems that most human and psychological needs are satisfied. Marketing drives the world economy and leaves a big footprint in both the environment and society (García-Arca et al., 2017; Ertz and Sarigöllü, 2019). Thus, sustainable enterprise entails sustainable marketing activities (Khan et al., 2019; Solér, 2012; Diez-Martin et al., 2019). Discussion about adapting marketing of companies to the principles of sustainable development raises contradiction. Marketing is seen as a force focused on increasing production and sales, which is contrary to the concept of sustainable development calling for a reduction in consumption (Jones et al., 2008). Marketing companies is also blamed for the creation of consumer societies. Its actions have significant impact on the development of mass consumption. It is often accused of harming customers through misleading practices, aggressive sales techniques, intrusive and persuasive advertising, offering trashy and potentially harmful products, or intentional aging of the product (Armstrong and Kotler, 2012).

Reviewing the literature from the scope of sustainable marketing, one can find several definitions of the concept, e.g. it is understood as a *socially responsible marketing, carried out with respect for the environment that meets the current needs of consumers and businesses, while maintaining or even improving the ability of next generations to meet their needs in the future* (Armstrong and Kotler, 2012). The others, involved in the area of sustainable marketing argue that sustainable marketing is designed to meet the needs and expectations of customers with respect to social and environmental criteria and objectives of the organization (Belz, 2006). This means building and maintaining a balanced relationship with customers, social environment and environmental surroundings. The creation of customer value chain followed by taking into account environmental and social aspects is another approach presented by Leitner (2010). The author claims that maintaining a balance between economic, environmental and social results of operations throughout the product life cycle is the essence of sustainable marketing. Much space to issues of sustainable marketing devote also Martin and Schouten (2012). According to the authors, is the process of creating, communicating and delivering

value to clients in compliance with environmental and social aspects. There is also an opinion that as part of the concept of sustainable marketing, companies seek to achieve the objectives focused on three aspects: environmental, social and economic (Palić and Bedek, 2010). The expanded definition of sustainable marketing can be found as well. In accordance with it (Fuller, 1999) sustainable marketing is defined as the process of planning, implementing, and controlling the development, pricing, promotion, and distribution of products in a manner that satisfies the following three criteria: organizational goals are attained, customer needs are met, the process is compatible with ecosystems. Reviewing the literature in the field of sustainable marketing the standpoint of Kadirov (2010) regarding the nature and its importance cannot be ignored. The author argues that from the viewpoint of the original thinking systems, the existing concepts of marketing systems seem to be insufficient. Kadirov points out that many marketing concepts develop alternative trading systems frameworks. Examples of such systems may be selling hybrid cars. Such actions constitute an alternative basis for the redefinition of the basic problems of macro marketing, which should be particularly useful to decision-makers and system designers.

Research and analysis of the marketing environment and the choice of target markets are the basis for the creation of programs for sustainable marketing mix. The well-known concept of the “4P” constitutes the basis for the formulation of a company’s strategy for customer interaction (Kazibudzki and Trojanowski, 2020). The examples of marketing objectives focus primarily on the matters important for the company, except for the most important market participant that is a client. Thus, some authors propose to replace the “4P” formula, aimed at ensuring the interests of the company, for “4C” composition – convenient for the customer i.e. customer solution, customer cost, convenience and communication (Belz and Peattie, 2010). In order to achieve a balance between the interests of the company and the consumer needs while respecting the principles of sustainable development the concept of “3E” must be also taken into account i.e. environment, equity, economy (Hunt, 2011).

### **3. Research methodology and results**

The research method used in the study is the survey. Survey made it possible to obtain information from the respondents on how a person assesses and perceives the studied phenomenon. The overall aim of the used method was to learn the facts and capture possibly all details of the written statements, in connection with the questions from the field of shaping elements of 4P for companies in terms of sustainability.



A questionnaire including an ordered list of questions and consisting of four thematic parts was a tool with which the survey was conducted. It included questions about creating sustainable products by manufacturing companies, about decisions concerning the establishment of sustainable product prices, product distribution methods taking into account the principles of sustainable development and the use of instruments of sustainable promotion mix. The questionnaire contained 22 open questions that give the freedom to formulate answers and closed questions that restrict the answer to one of the given options in the poll. Sample group used in the research had a random character, although it cannot be considered as statistically representative for the surveyed population. The study, in which 400 people participated, was carried out in retail outlets in Silesia region. In order to bring closer the structure of the respondents, the characteristics of the sample group was made in terms of gender, age, education and place of residence – Table 1.

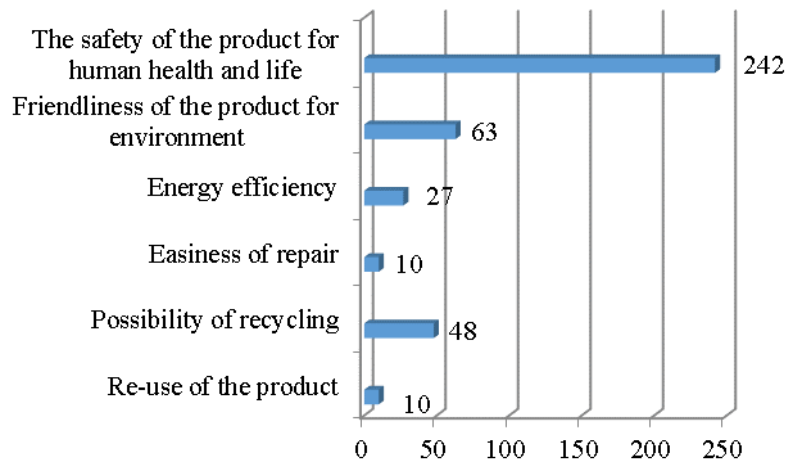
**Table 1.**  
*Characteristics of the sample group*

Gender					
Women			Men		
246			154		
Age in years					
18-30	30-40	40-50	50-60	60-70	70 <
60	95	87	73	48	37
Level of education					
Basic	Vocational		Secondary		Higher
8	55		178		159
Place of residence					
Village ~ 5 000	Small town up to 50 000		Average city 50 000-250 000		Large city ~ 500 000
81	126		188		5

Source: own elaboration.

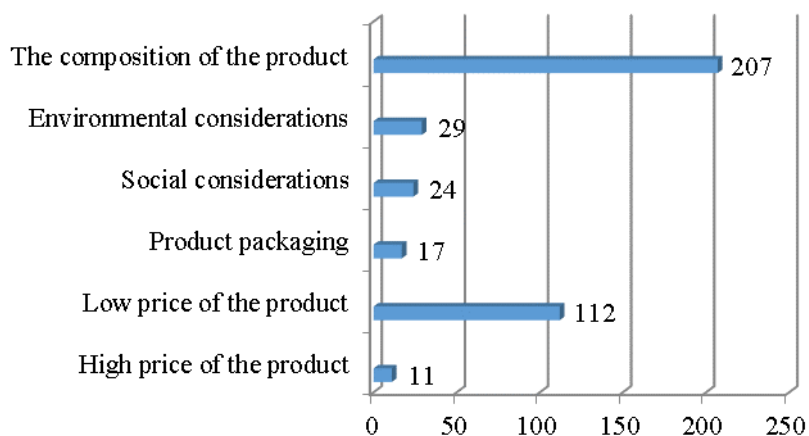
Evaluating the 4P tools aimed at sustainable development it should be emphasized that the most important instrument is the product. Thus, the questionnaire starts with the question: *what qualities should meet sustainable product?* Result of this study presents Figure 1.

Analysis of the product in terms of sustainable development included the issue of incentives that induce consumers to buy a particular good. Consumers have certain criteria, that determine the purchase of the product. Figure 2 presents the factors affecting consumers' purchasing decisions.



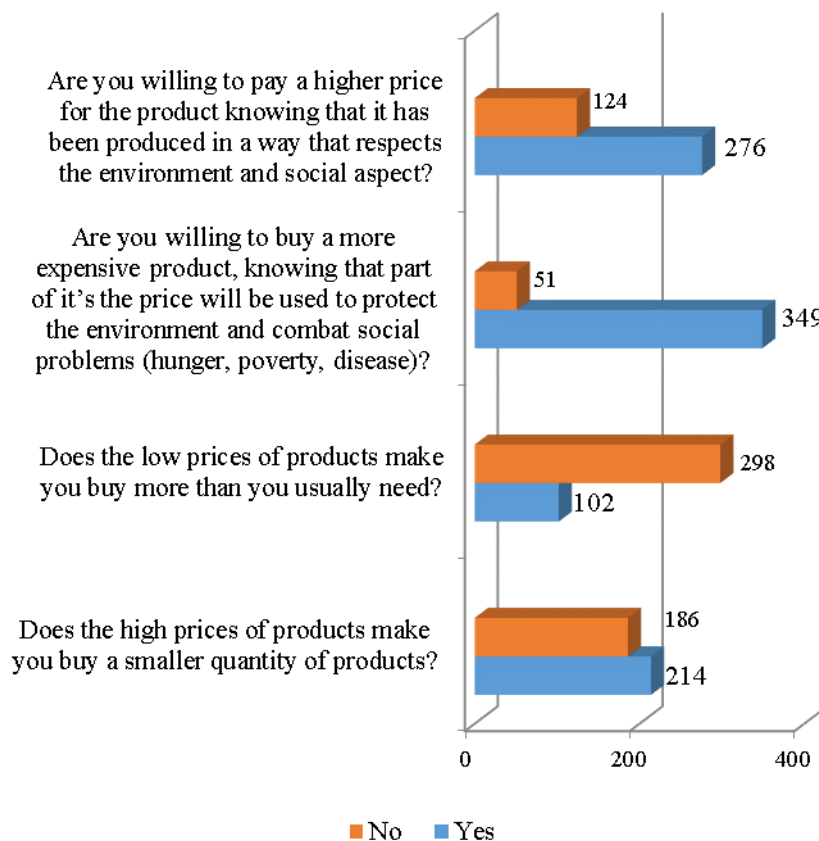
**Figure 1.** Features of sustainable product according to the opinion of respondents. Source: own elaboration.

Another tool of 4P that supports sustainable development is the price. This tool does not generate costs for the company, as in the case of other instruments of the marketing mix, but provides profit for organization.



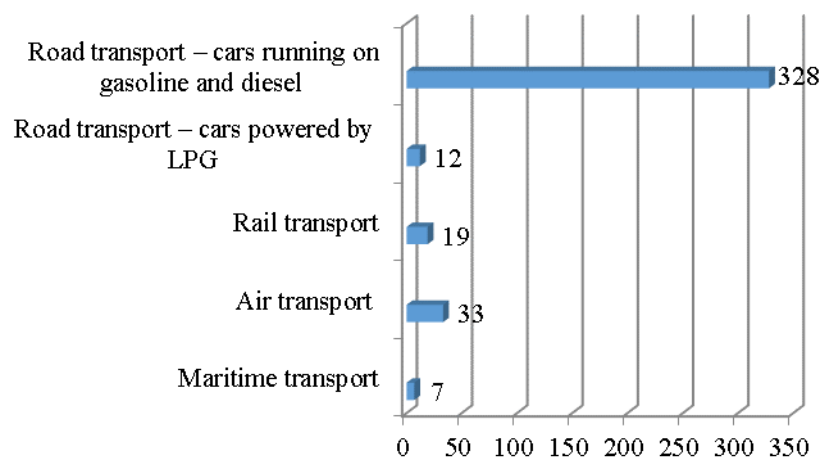
**Figure 2.** Preferences of a product purchase according to the respondents. Source: own elaboration.

Changing marketing environment of the company requires formulation of new pricing strategies, targeted at the idea of sustainable development. Creating pricing policy considering the principles of sustainable development, should take into account the opinions of consumers on the prices of sustainable products. When determining the price of the product, in addition to the cost of production, prices of competitors and the size of demand, the consumer preferences regarding payment for a sustainable product should also be taken into consideration. The results of the research in this regard are presented in Figure 3.



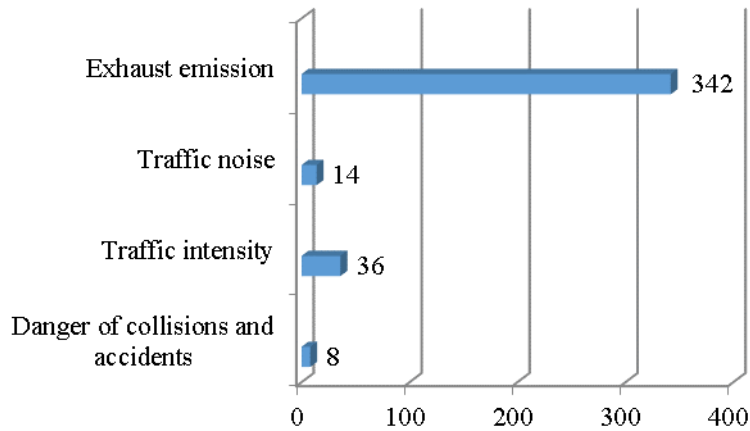
**Figure 3.** Pricing preferences of consumers. Source: own elaboration.

Distribution of products is the third component of 4P oriented towards sustainable development. In the case of the distribution there are broad opportunities to implement the concept of sustainable distribution including the selection of such means of transport that have minimal impact on the environment. Figure 4 presents the results of research on the type of transport used by the company, which has the most negative impact on the natural environment and society.



**Figure 4.** Means of transport and its negative impact on environment and society according to the opinion of respondents. Source: own elaboration.

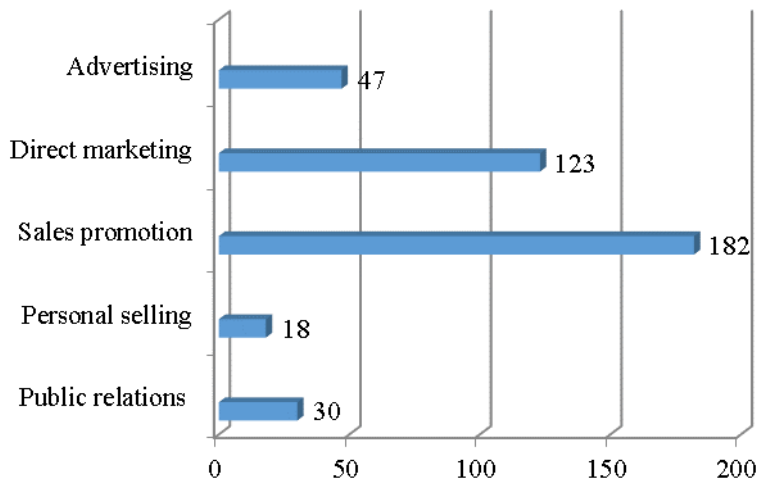
In the carried out research on the means of products transport, factors that harm our nature and people are determined. Respondents indicated the main negative factors affecting the surrounding environment. Results of the studies in this regard are provided in Figure 5.



**Figure 5.** Negative factors related to the use of means of transport. Source: own elaboration.

A supplement of the analysis of the 4P instruments supporting sustainable development is the mix promotion focused on the concepts of sustainability. The research questionnaire included the following question: *which of the instruments of promotion mix encourages you to buy the product?* Results of this inquiry are presented in Figure 6.

Another question concerned the negative impact of the promotion mix instruments on the environment. Figure 7 shows the results of the research.



**Figure 6.** Promotion mix instruments encouraging to product purchase. Source: own elaboration.

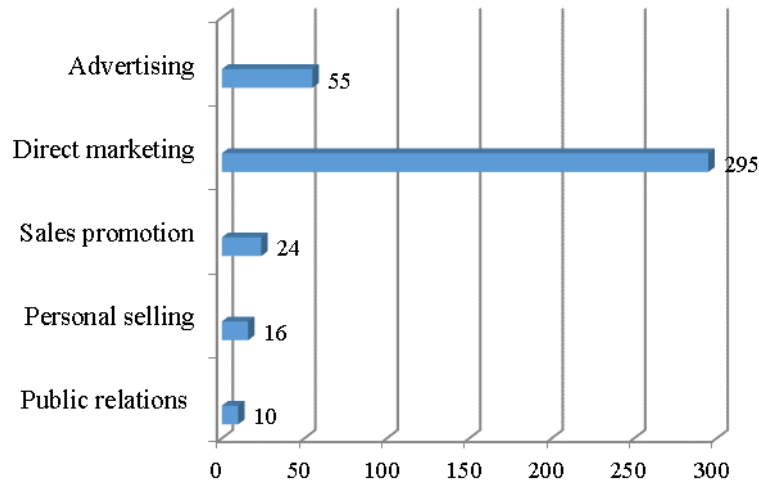


Figure 7. Negative impact of promotion mix instruments on the environment. Source: own elaboration.

Advertising messages used by businesses also contribute significantly to the state of society. Using the forms and means of promoting the organization can create positive or negative role models. The authors also conducted research on the negative impact of promotional activities on society – Figure 8.

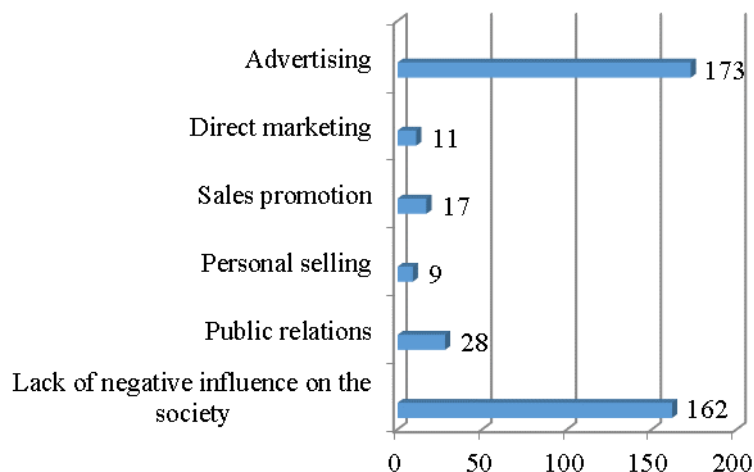


Figure 8. Negative influence of promotion mix instruments on the society. Source: own elaboration.

Advertising is the most harmful mix promotion tool for society. Yes answer was showed by 173 researched respondents. In the second place was the actions in the field of public relations. Other promotional tools, and so direct marketing, sales promotion and personal selling are indicated respectively by 11, 17, and 9 people participating in the survey as a tool with negative impact on society. It should be emphasised that as many as 162 people cannot see the negative impact of the promotion mix activities on society, which is a state different in the case of the negative impact of measures to promote the environment, where all respondents confirmed the negative impact of the different mix promotion tools on the state of nature.

The conducted research in the sphere of using promotion mix instruments by companies were also designed to obtain information on the use of environmentally and social-friendly promotional projects. According to the respondents promotional messages addressed to consumers are not inviting to respect the environment and to counteract social problems. Such view present 265 people, while the remainder of the respondents – 135 people think that promotional messages are subject to the principles of sustainable development.

#### **4. Discussion**

The changing business environment, the emergence of new trends and developments especially in the context of environmental and social issues requires enterprises to change their current activity in the market of goods and services (Kemper et al., 2019; de Koeijer et al., 2017). The pressure exerted on the market participants – mainly consumers, on manufacturing and trading companies, forces the economic entities to modify the business objectives and marketing tools to be oriented to sustainable programs supporting sustainable consumption (Jianu et al., 2015; Solér 2012; García-Arca et al., 2017). Modification should focus on the 4P instruments through which the company directly affects the consumer. Making the decision to purchase the product increasingly depends on the active involvement of companies in the environment and pro-social actions (Diez-Martin et al., 2019; Masiello et al., 2018; Selby et al., 2009).

The results of the study presented in Table 2 indicate that the most important feature that a sustainable product should have is being harmless for human health and life. This feature is indicated by 242 respondents out of 400 surveyed. Another important characteristics is the product friendliness to the environment – 63 answers. Third place in the hierarchy of sustainable features of the product takes place the product recycling possibility – 48 answers. Other features of sustainable product indicated by respondents include energy efficiency, easy repair and possibility of the product reusing. The most important factor inducing customers to purchase goods is the composition of the product i.e. its raw material – Table 3. The vast majority of respondents indicated this criterion as the most important. An important incentive to buy a product is its low price. In the third place of shopping preferences are environmental reasons, just behind this factor, respondents indicated social aspects connected with a product. The packaging of the product and its high price were considered less important.

Analyzing consumer price preferences it can be agreed that buyers value more the environment and social problems than the low prices of products. Customers are willing to pay a higher price for a product that has been manufactured in a way that respects the environment and social aspects. Such desire was expressed by 276 individuals. Overwhelming majority of respondents also indicated that they are prepared to pay a higher price for the product where

part of the price will be used to improve the condition of the environment and social problems – 349 individuals. Low price of the product is not the main reason why consumers buy more. Results of this study indicate that only 25% of respondents – 102 individuals, are willing to buy more products than they usually need at a lower price. The other respondents – 298 individuals make shopping at a stable level and low prices do not influence them to increase their purchases. The increase of price does not reduce the amount of purchased products. Almost half of the respondents – 186 individuals indicated that high prices are not the reason for limiting the purchased goods.

Distribution of products is the third component of marketing mix oriented towards sustainable development. In the case of the distribution there are broad opportunities to implement the concept of sustainable distribution including the selection of such means of transport that have minimal impact on the environment (Ertz and Sarigöllü, 2019). Vehicles with hybrid or electric engine are not a serious threat to the environment, and their negative impact on the ecosystem is negligible. The use of other means of transport, not only by road, should also be considered (Jacyna et al., 2018). For larger quantities of distributed goods, a rail transport can be used, which apart from the noise, has a very limited impact on the environment (García-Arca et al., 2017; de Koeijer et al., 2017). With regard to the social aspects, sustainable distribution can be demonstrated, among others, in the choice of routes, which will shorten the delivery time, reduce the amount of consumed fuel, and thus will reduce the cost of delivery of products and purchase prices of the product in store. Another example would be the selecting brokers that are socially and environmentally sensitive, limiting the number of participants in the distribution channel, which will translate favorably on the final price of the product at the point of sale, and support charity actions. These examples and methods constitute the essence of sustainable distribution and demonstrate the commitment of distribution, logistics companies in creating equal opportunities for the development of future generations (Kemper et al., 2019).

The most onerous means of transport for the environment and society is road transport powered by combustion. This mode of transport was indicated by 328 respondents of the survey. Other means of transport have little impact on nature and people. Indications of respondents were at the level of 33 responses in the case of air transport and 19 and 12 responses in the case of rail and road transport powered by LPG. The least onerous transport is the maritime transport. This answer was indicated only by 7 people participating in the study. Exhaust emission is the most troublesome and harmful factor for humans and the environment. This response showed 342 respondents. Another negative factor associated with the use of transport is the traffic intensity – 36 answers. Traffic noise ranks third among the respondents – 14 people. Least noticeable negative factor is the risk of transport collisions and accidents. This answer indicated only 8 individuals.

Mix promotion instruments by means of which the organization communicates with potential buyers of goods and services include advertising, direct marketing, sales promotion, personal selling and public relations (Khan et al., 2019; Solér, 2012; Selby et al., 2009). The conducted research in this area of marketing raise the problem of the negative impact of the indicated instruments on the environment and society. Enterprises activities of promotion mix aims at drawing the attention of customers, generating interest, raising the desire to buy and leading to action – the Attention, Interest, Desire and Action model, commonly known as AIDA (Kotler et al., 2002). The most effective promotion tool inducing the purchase of the product is sales promotion – 182 responses and direct marketing – 123 answers. In the next place, respondents indicated advertising – 47 answers, public relations – 30 and personal selling – 18 responses. Instrument of promotion mix that has the most negative impact on the environment is direct marketing – 295 respondents indicated that instrument. Radio, press and television advertising has been identified as the second promotion tool adversely affecting the natural environment – 55 respondents think that way. Instruments of promotion mix, which have the slightest negative impact on the environment are adequately PR – 10, the personal selling – 16 and sales promotion – 24 answers. Advertising is the most harmful mix promotion tool for society. Positive answer was showed by 173 researched respondents. In the second place was the actions in the field of public relations. Other promotional tools, and so direct marketing, sales promotion and personal selling are indicated as a tool with negative impact on society respectively by 11, 17, and 9 respondents participating in the survey. It should be emphasized that as many as 162 respondents cannot see the negative impact of the promotion mix activities on society, which is a state different in the case of the negative impact of measures to promote the environment, where all respondents confirmed the negative impact of the different mix promotion tools on the state of nature.

## 5. Conclusions

It can be concluded that sustainable 4P is a new and widely unrecognized area of knowledge. The review of the literature points to a small number of publications in this field. Due to the status quo, the knowledge of 4P instruments in relation to sustainable development should be broadened and deepened. Reliable identification of sustainable 4P issues entails the need for empirical research in the area, focused on both, consumers and manufacturing companies which use the tools of the sustainable management.

The essence of this article was to review the literature in the field of sustainable management (public and private), and to present the results of research carried out in a group of 400 consumers on their perception of instruments supporting sustainable development of enterprises. The results of the research presented in this paper contribute to the concept of the



sustainable development comprehending elements of new public management. Obviously, the issue requires further scientific evaluation and the quest for such environmental and social solutions, which will be perceived in the distant future as the far-seeing ones and fully responsible for the fate of the Earth and its inhabitants.

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