



World Scientific News

WSN 86(3) (2017) 193-204

EISSN 2392-2192

Business plan of the company of repair and maintenance outboards and boats – “Technoservice”

Iaroslav Patuk¹, Piotr F. Borowski²

¹Faculty of Agriculture Graduate School of Science and Technology, Niigata University,
8050 Ikarashi 2-no-cho, Nishi-ku, Niigata, 950-2181, Japan
E-mail address: yaroslav_w93@mail.ru

²Faculty of Production Engineering, Warsaw University of Life Sciences,
166 Nowoursynowska Str., Warsaw, Poland
E-mail address: piotr_borowski@sggw.pl

ABSTRACT

This paper describes the results of research done on the enterprise from the outboards' motor market. We examined the relationships between the strategy of this enterprise and its environment in Far East region. This is the first research using such a sample of outboards' motor firms. A research model was created which allowed us to analyze the impact of independent variables (environmental factors) on the dependent variables (strategy), it means strategies implemented by this company. The research model used in this study, describing the functioning of enterprise on the Far East market. The research is also important because it recognizes the influence of macro environment represented by DEEPLIST factors on the choose of the best strategy of development for this kind of firm's activity. The 21st century business environment has become changeable, so the development strategy of enterprises has changed to be more adaptive to this environment. The business environment is also focusing more on environmental and ecological factors so that, nowadays, this environmental factors play a key role in the sustainability of a strategy.

Keywords: outboard, drive shaft housing, strategy development, DEEPLIST analysis

1. INTRODUCTION

The “Technoservice” company sells outboard motors produced in Japan, which were used before by Japanese consumers (second hand sale) and also maintenance and repair of outboard motors and boats. In the company are hired 5 persons. In the article the authors analyze the market position of the company and describe the development strategy. It is the first analysis carried out on this market (Far East of Russia) and the strength of the research is own observation and working experience of one of the authors. A small company can use a number of business strategies, depending on its situation. New companies may face different challenges than companies that are more established. In the strategic management there are five types of business strategies including the growth, product differentiation, price skimming, niche strategy and acquisition strategy which are very often used by those types of the companies. Technoservice as a small company established 9 years ago and decided to develop by implementation the niche strategy.

The company's goal is to get more profits with minimal cost due to the knowledge of the repair and maintenance of such equipment.

Company description

The company is located between the north and south part of Primorsky Krai (red territory on the map) in Ussuriysk. It is good location for this kind of business, because it is the center of the sea area. The company is in a good accessibility from anywhere in the Primorsky Krai.



Figure 1. Primorsky Krai
Source: <http://denstordanske.dk>

The company was established in 2008 and started its operation in the same year. At the beginning the company was engaged in the second hand market of outboard motors from Japan and sale in Russia. Few years later the company bought storage area for boat motors for better conditions of working and began to buy some equipment, because it was a good demand on outboard motors.

A CEO of this company started to think about to expand the business. One of the main premise was a demand for this kind of products. When the company sold the outboards, many clients asked, where and how should they make diagnostic and repairing of outboard. The company decided to answer to clients' expectation. And from 2010 the company got a status of Repair and Maintenance of Outboards.

In our research, we put two basic questions: what was a major premise to open this business and what kind of strategy should be used? It can be assumed that the right strategy for this kind of company is the niche strategy. A good example of niche strategy is a business narrowing its service offerings to target a small but profitable subsection of a market. This strategy is especially useful for the small companies with a limited budget and specialized products. The company tries to build the long term relationship with these small but perspective set of customers. Niche strategy is also a promising global competitive strategy for the future of the company, when the market will achieve the level of mature industries (Parrish et all 2006).

In this region there was no company engaged in such activities - a diagnostic, repair and maintenance of outboard motors and boats. There are a number of companies (indirect competitors) that involved only in sales of outboard motors and an assessment of their competitive is not high. Because of the good location the customers in easy way can get to the company and leave their motor for diagnostics. According to data from 2010 there were about 3000 of outboards, but now in 2016 more than 50000. This is the second aspect of profitability of such kind of business.

2. RESULT / EXPERIMENTAL

(DEEPLIST Analysis)

Organizations, enterprises, firms operate in a changeable and unpredictable environment. The environment we can describe as factors which there are outside of organization but have influence on activity of each enterprises or as the major external and uncontrollable factors that influence an organization's decision making and affect its performance and strategies (Borowski 2012). The macro environment is primarily concerned with major issues and upcoming changes in the environment and can be described as DEEPLIST:

Demographics – The demographic environment is one of the basic element of the marketing environment used to identify target markets for specific products or services. This element includes such important aspects as number of the people and their age, growth rates, gender, ethnicity, family life cycle period, occupation patterns, levels of education, actuarial health and morbidity projections.

Economic – Factors from this environment are determinants of an economy's performance that directly impacts a company and have resonating long term effects. For example the rise in the inflation rate of any economy would affect the way companies' price their products and

services. Adding to that, it would affect the purchasing power of a consumer and change demand/supply models for that economy. Economic factors include inflation rate, interest rates, foreign exchange rates, economic growth patterns, unemployment level etc.

Environmental / Ecological – These factors include all those that influence or are determined by the surrounding environment. Ecological factors influencing business are connected to actions and processes necessary to protect natural environment and in the same time maintain or increase efficiency of the corporation. Ecology often take form of so called corporate environmentalism, i.e. all actions promoting sustainability, gaining consumer appreciation of eco-friendly products and services, creating image of responsible corporation.

Political – These factors determine the extent to which a government may influence the economy or a certain industry. Political factors include tax policies, fiscal policy, trade tariffs etc. that a government may levy around the fiscal year and it may affect the business environment (economic environment) to a great extent. The political factor is concerned with government regulations and legal issues that organizations must adhere to. From the political perspective, organizations must consider laws and regulations for their own countries (Tomayess et al. 2010). The political situation of a country affects its economic setting. The economic environment affects the business performance.

Legal – Legal factors are external factors which refer to how the law affects the way businesses operate and customers behave. These factors have both external and internal sides. There are certain laws that affect the business environment in a certain country while there are certain policies that companies maintain for themselves. Legal analysis takes into account both of these angles and then charts out the strategies in light of these legislations. For example, consumer laws, safety standards, labor laws etc.

Informational –The aggregate of individuals organizations and systems, that collect process to distribute or act on information. In present days the world is connected with the internet and social media and this is the main aspect which has impact on the informational environment It is about access a to information and what we can and cannot control.

Social-Cultural – These factors scrutinize the social environment of the market, and gauge determinants like cultural trends, demographics, population analytics etc. An example for this can be buying trends for Western countries like the US where there is high demand during the Holiday season.

Technological – These factors pertain to innovations in technology that may affect the operations of the industry and the market favorably or unfavorably. This refers to automation, research and development and the amount of technological awareness that a market possesses. Firms develop their innovation activity and creativity processes generating new ideas individually or collectively (Szuster 2016)

The last years have seen major economic, political, legal change on a global scale. The purpose of the macro environmental analysis is to determine what outside influences may have an effect on the economy and industry, and, therefore on the business How to adapt to increasingly unstable, unpredictable business environments? The primary purpose of strategic management is to ensure a fit between an organization's external environment and its internal situation (Duncan et al. 1998). Environmental factors play a major role in determining an organization's success or failure. Managers should strive to maintain the proper alignment

between their organization and its environment. All organizations have both external and internal environments. Organizations and their environments affect each other in several ways. Environmental influences on the organization can occur through uncertainty, competitive forces, and turbulence (Griffin 2012). Organizations, in turn, use information management; strategic response; mergers, acquisitions, and alliances; organization design and flexibility; direct influence; and social responsibility to adapt to their task environments. The external environment includes among other things, the regulations, political and law, technologies, demographic and cultural factors. To ensure compatibility and survival, organizations must be able to comprehend those significant environmental shifts taking place around them and to equip strategically their organizations to succeed in the new environment. Effective strategic management requires an understanding of organizational resources and competencies as well as how each contributes to the formation of organizational strengths and ultimately to the development of a competitive advantage. Political and legal environment is one of the fundamental factors because all companies operate on the basis of legal requirements.

It may be so, that the importance of each of the factors may be different to different kinds of industries, but it is imperative to any strategy a company wants to develop that they conduct the DEEPLIST analysis as it forms a much more comprehensive version of the SWOT analysis. It is very critical for one to understand the complete depth of each of the letters of the DEEPLIST. It is as below.

2. 1. DEEPLIST OF "TECHNOSERVICE" COMPANY

In our case DEEPLIST can be reduced to DEEIST. Political and legal environment do not play significant role. We investigated impact of remaining elements.

Demographic factors

Table 1. Demographic factors.

Age of the people, years	% of the population	Comments
25 – 35	10	In the group of 25-35 years old, the people mostly spend their time for professional work to earn money for the family
35 – 45	30	In the group of 35-45 years old there are people who have not too much time to use an outboards in their activity as group of 45-65 age
45 – 65	60	In the group of 45-65 years old, there are many people who are retired and they have much time to use an outboards in their activity

Economic factors

If we talk about the economic environment, we understand factors as following: interest rates, taxes, inflation, currency exchange rates, level of unemployment and consumer income. Level of unemployment:

According to the official information of the local government in Primorskiy Krai there are 1,051,000 people who can work in the age from 15 to 72 years old. From this group 991,500 of people have income status (people employed). The number of unemployed people is 59,500. The level of unemployment is 5.6%

In our case, more significant element is the consumer income, which indicates level of welfare. People who is getting rich, they can spend more money for some extra activities and for pleasure. If the society is growing from economic and market point of view, we can observe that people spend more part of their money for needs of higher level.

In addition, our company will find possibility to exist on the market of outboard motors in order to fulfil the demand.

Environmental / Ecological

Another part of macro environment are the ecological factors such as climate, location and topography of area. Topography describes the heights and shapes of geographical elements such as valleys, hills, mountains and plateaus, as well as the placement of features such as rivers, lakes and cities.

Under the climate factors consideration, the weather is one of the most important elements. If the "weather" is suitable for stay outdoor, to make open air activity, people can spend their free time for sport, tourist and other activities in Primorskiy krai and Far East.

Informational

In our company, we collect the data information of our clients and their opinions about our services. The company has the website and it is involved in social media in order to communicate with environment.

The social media for the company are really important. They are the collective of online communications channels dedicated to local or nationwide community. Social media allow for input, interaction, content-sharing and collaboration. The society can understand more from the website of company activity and it is an enduring reality of online existence. The society should know all movements, plans and actions of the company and should have possibility to share their opinion with the company.

The social media are also very important for the company from the strategic point of view. People can share idea and they can create a huge net which will support but also evaluate the work of the company. Therefore, in the interest of the company is to have a good relationship with a social media and be open for any kind of cooperation.

Social media offer new opportunity to reduce distance between company and their environment, more collaborative and responsive way.

Social-Cultural

Socio-cultural perspective is one of the most important factor influencing decision of managers in our company and created the strategic goals. Wide range of the customer's group will include professionals fishing, who have a job in this area, but also includes lovers of

fishing and poacher. Like many places in the Russian Federation, poaching is a big problem in Far East. Teams of professional poachers work the upper streams of rivers during the short summer fishing season. Poachers use illegal gill nets to target female fish for red caviar. Often they stretch those nets across the entire streams, in the process destroying entire fish runs. In theoretical way, those kind of people also can become as a clients of our company.

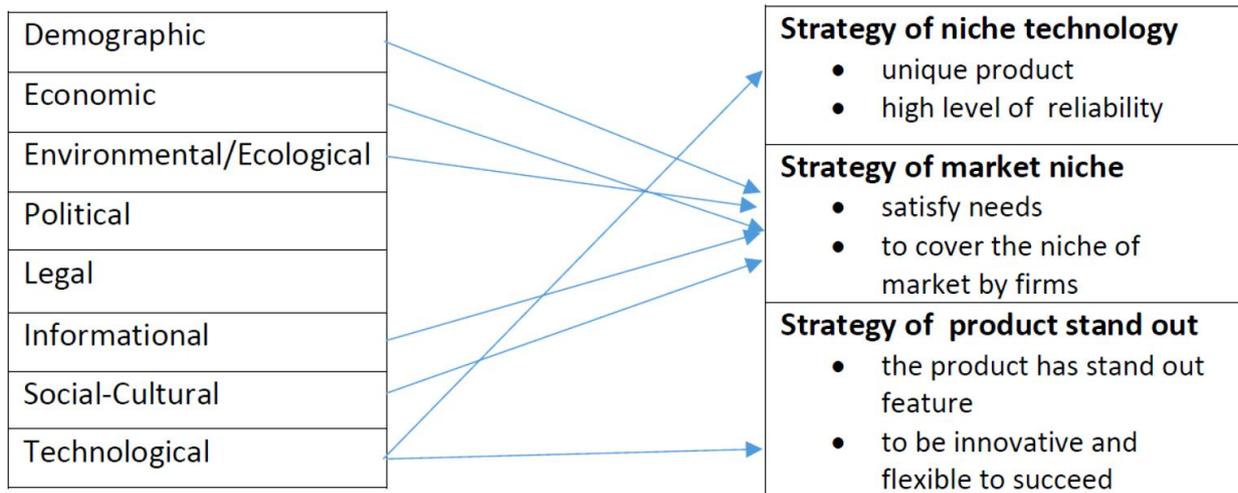
Technological

Outboard motor technology has advanced to the point in which engines are more reliable, weigh less and are more fuel efficient than models of the past. Just choosing an outboard engine to power new boat is not enough. To get the most out of investment of the clients, which they invested to their outboard, clients should be sure that their outboard is always ready to use. And our company follows the new technology for diagnostic, repair and modernization of outboards in order to organize everything for that.

2. 2. MODEL VERIFICATION

During the research carried out, we investigated influence and linkage of environment elements on strategy chosen by Technoservice” company.

Table 2. Model verification.



2. 3. SWOT OF "TECHNOSERVICE" COMPANY

The SWOT analysis was conducted and the results of the research are presented in the table Through the SWOT analysis, strengths and weaknesses (environmental analysis) and opportunities and threats for technoservice company (external environmental analysis) were extracted. The results were based on various indices, market data, regulations, interviews with specialists in the company and as well as based on own observations.

Table 3. SWOT analysis.

Strengths	Weaknesses
<p>good image of the company; knowledge and experienced personnel in the field; knowhow how to adapt the technology for Russian conditionals; own technical solutions to improve service; unique position on the outboards on the market; robust sales growth; knowledge of the home(regional) market; the most valuable brands of engines such as Yamaha; Suzuki; Honda etc. ; good cooperation with Japanese market.</p>	<p>limitation of funding; not enough space for service area; problems with updates of tools and equipment for service; high cost structure; heavy dependence on one market “of raw material”.</p>
Opportunities	Threats
<p>good water conditions in Far East; availability to buy equipment by wide group of customers; high level of technological barriers; changing customer needs; demand for boats; wide range of the customer's group.</p>	<p>unpredictable changes in exchange rate; unpredictable rules of business providing; Rising cost of domestic and Japanese “raw material”.</p>

2. 4. RECOMMENDATION FOR THE DEVELOPMENT OF SELECTED ELEMENTS OF THE STRATEGY

Creation and improvement this business and the development of the target market in the next 5 years will be as follows:

- discount system will be developed for customers for sale of outboard motors;
- creating a diagnostic card. The purpose of creation is for statistical and accounting of repair and diagnostics of outboard motors;
- creating a system of discounts for large customers (wholesale) for repair and diagnostics of outboard motors and boats to large companies;
- practical training for staffs of company for developing their skills in repairing and diagnostic of outboard motors;
- creating better working conditions and the purchase of modern equipment and tools;
- the development of the company's Website and YouTube channel;
- buying a new territory for the purpose of business expansion;
- attracting new investors for investment in new projects and equipment.

Full description of the proposed actions:

1. Development of discount system of sales of outboard motors will be for customers in order to identify the greatest interest among customers to buy the product on the market from us. For support and keep customers and stimulate their activity will be created "loyalty program". The principle of gradual increase for customer discounts - as spending their funds to pay for goods or services. The company will organize the program for better cooperation with customers.

Under this program the company will present to the people that the product is more profitable and it is not necessary to buy the original product, which is more expensively. For each product will be developed individual price. As they depend on the individual characteristics of the outboard motors and will include many items.

2. Creating a diagnostic card. The purpose of creation is for statistical and accounting of repair and diagnostics of outboard motors in order to know the results of the job and develop better and better conditions in the working area.

3. Creating a system of discounts for a V.I.P customers (wholesale) for repair and diagnostics of outboard motors and boats to large companies also will be in order to identify the greatest interest among customers for diagnostic and repair in the company. The people will see the results of repairing their outboards motors, because the company will be able to show them the card of diagnostic and repair and they will know when they should bring outboard for next diagnostic visit.

4. Practical training will be organized for staffs of the company for developing their skills in repairing and diagnostic of outboard motors. It help to improve the skills of professional communication of technical activity. Also will make their working hours more productive and useful for work activities. This will correctly distribute the working time, as well as save it and not to waste for other activity. "More concentrated on job, a job is done".

5. Creating better working conditions and the purchase of modern equipment and tools. That is necessary to have a high quality of diagnostic and repair, because during the test you need to properly define the problem for a quick fix and repair. The high quality of diagnosis can save working time and speed of repair. This is a reason to buy new equipment and tools and to develop it from time to time.

6. The development of the company's Website and YouTube channel. Youtube channel and Website are the main point of advertising and need to improve the quality of videos and information on the Website.

7. The company is planning to buy a new territory for the purpose of business expansion.

This is not only give an additional opportunity for expansion, but also give an opportunity to increase the turnover of the whole product as a provision of services in repairing and selling outboard motors. "More merchandise turnover - more profit".

8. To increase the attracting of new investors for investment in new projects and equipment depends on place for expansion of business - "There is a place for business-there is a business". This item depends on the point No 7.

2. 5. TECHNOLOGY OF CUTTING OF OUTBOARD (CONVERTING A LONG SHAFT OUTBOARD TO A SHORT SHAFT) FOR ADAPTATION TO WORK IN PRIMORSKY KRAI

As mentioned above, the company buys boat engines on the Japanese market and sells in Russia. In order to successfully sell used outboards they need to be adapted to the conditions of the Far East.

The company is engaged in the professional modernization of boat motors of any brand, such as Yamaha, Suzuki, Tohatsu, Honda and many others. The most important modernization is the changing of a drive shaft housing¹; it means to make its shortening.

This kind of modernization is necessary because of special conditions in Far East. This includes not deep rivers and lakes, but also the coastal waters of the Sea of Japan.

Technological process of Cutting of a drive shaft housing include - diagnostic work and replacement of spare parts if it is necessary.

Technological process of Cutting of a drive shaft housing (converting a long shaft outboard to a short shaft):

1. Dismantling of an engine of an outboard
2. Shortening of a drive shaft housing
3. Painting parts after shortening
4. Outboard parts assembly of outboard engine
5. Testing of outboard
6. Give to client

The period of performance of works takes in 2-6 days, it is depending on the brand of the outboard and the busy schedule of the workshop.

In this way, the company uses Japanese quality of outboards with modernization by cutting the parts of outboards.

On the Figure 2, there are shown several examples which give the opportunity to see and understand the main products which make up the strengths of the enterprise. On this picture it is easy to compare the company's work, which involves adaptation the outboard with the result of the adaption of other company products, as well as an example of the finished product that is needed to repair operation.

At those pictures, we can noticed the good example of utilizing the *know how* by company in order to adopt the parts of outboards to environmental requirements. The quality of parts which is easy to observe on the pictures can explain, why clients have chosen the technoservice company. On the picture A the view of the long and short (after cutting) drive shaft housings is given. We can see how the drive shaft housing looks like and for how it is shorter after cutting. On the picture B the big difference between qualities of cutting of drive shaft housing is easy to observe. On the picture B on the foreground there is drive shaft housing performed by one of the companies, in the background there is the result of technoservice company. On an item made by an unprofessional company there are large seams on the surface of drive shaft housing and they are not processed after welding. We can also notice that the seams are not painted by a special paint which prevents corrosion of the

¹ A drive shaft housing - it is the part of outboard which connects the engine itself and the gear housing

metal. The first negative result of this job can occur after a certain time, this part will be destroyed by corrosion.

On the picture C the example of the new part made by the company in comparison with worn out part is shown. This part of outboard is necessary to change in the course of the operation of cutting of drive shaft housing. The company can produce this part by themselves for using in the case of cutting of drive shaft housing, because it is more profitable than to buy new at the market.

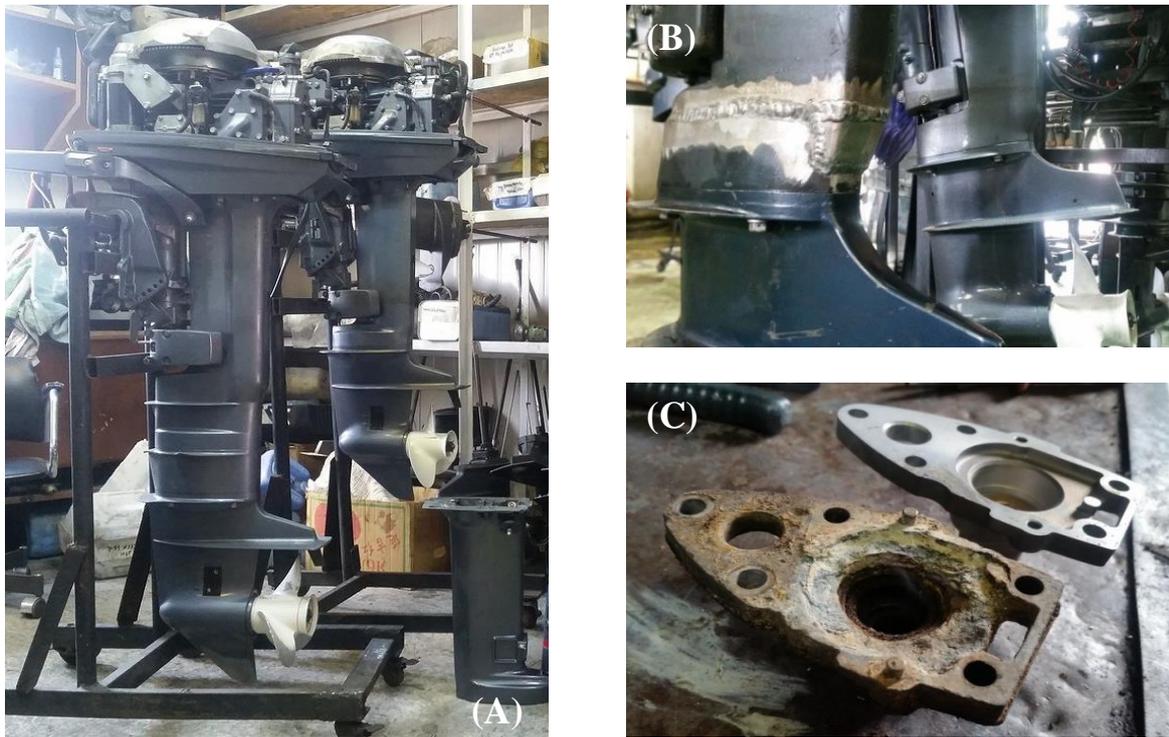


Figure 2. Examples of adaptations of outboards to environmental requirements
A) – examples of long (left) and short (after cutting – right) drive shaft housings;
B) – example of the results of drive shaft housing cutting realized by the techno service company (right) and the other company (left);
C) – example of the new part made by the techno service company (right) in comparison with worn out part (left).

3. CONCLUSIONS

After market analysis and analysis of customer demand, which were conducted from 2010 to 2016, we can make a conclusion concerning the strategy which will be most suitable for the company. The whole range of goods and services concerning this kind of business are profitable and prospective. The business of outboard motors and adaptation process of Japanese outboards for conditions of Primorsky Krai has a large potential for growth and development. This company owns a know-how concerning the engine adaptation and it's a leader at the local market. The company can follow the path of niche strategy development.

BIOGRAPHY

Iaroslav Patuk, Niigata University, (E-mail: yaroslav_w93@mail.ru)

Graduated as B. Sc., at Primorskaya State Academy of Agriculture, and as M. Sc., at Stavropol State Agrarian University from the Faculty of Mechanization of Agriculture, a Ph. D student at Niigata University at Faculty of Agriculture Graduate School of Science and Technology. The grant holder of "Fund for the promotion of innovations" within the framework of the program "UMNIK 2016", which held on October 26, 2016. In academic year 2016/2017 – fall and summer semesters studied in Poland under Erasmus plus program at Warsaw University of Life Sciences at the Department of Production Engineering. Holder of scholarship of the President of the Russian Federation in the period 2013-2015 academic years.

Piotr F. Borowski, Warsaw University of Life Sciences (E-mail: pborowski@autograf.pl)

Graduated as M.Sc., and Engineer from the Faculty of Power and Aeronautical Engineering at Warsaw University of Technology, and as Ph.D. from Warsaw School of Economics, an assistant professor at the Department of Production Engineering of Warsaw University of Life Sciences, a member of the Faculty Council (2008–2012 and 2012–2016) and of the departmental committees for quality of education, for teaching, and for didactics. Member of the Rectors' Committee for Quality of Education (2016–2020). Multiple Erasmus programs scholar, under which he lectured at universities in France, Ireland, Turkey, Portugal and Italy. Member of the International Soil and Tillage Research Organization, organizer and participant of many international scientific conferences, including in Turkey (2008, 2009, 2014), Ukraine (2008, 2010), Egypt (2011, 2013), Dubai (2012, 2014), and Greece (2013). Specialist in transport biofuels and CO₂ emission reduction. Author of numerous papers in the field of renewable energy, adaptation strategies in the power sector. Co-author of monographs related to biofuels. Former editor-in-chief of "Zarządzanie i Edukacja" [Management & Education] bimonthly.

References

- [1] Borowski P. F. (2016). What are the social media channels used by your government? Why are they important?, United Nations Public Administration Network.
- [2] Borowski P.F. (2012). Adaptation as a mode of the company development in changeable environment, International Conference on Education, Applied Sciences and Management, Dubai, pp. 153-156.
- [3] Duncan, W.J., Ginter, P.M., Swayne, L.E. (1998). Competitive advantage and internal organizational assessment. *Academy of Management Executive* 12(3), 6-16.
<https://doi.org/10.1108/02634500610711860>
- [4] Griffin, R.W. (2012). Management, 11th edition, Texas A&M University.
- [5] Parrish E.D., Cassill N.L., Oxenham W., (2006). Niche market strategy for a mature marketplace. *Marketing Intelligence & Planning*, Vol. 24, Issue: 7, pp. 694-707,
- [6] Parrish J.R., Gulyas K.D., Finley R.L., (2006) Yeast two-hybrid contributions to interactome mapping. *Curr Opin Biotechnol* 17(4), 387-93
- [7] Issa T., Chang V., Issa, Issa T. 2010. Sustainable business strategies and PESTEL framework. *GSTF International Journal on Computing* 1 (1), pp. 73-80.
- [8] Szuster M. Innovation and creativity management in enterprises. *World Scientific News* 57 (2016) 416-425

(Received 18 August 2017; accepted 05 September 2017)