



WORMS/18/07

Marketing model of a university – assessment of the concept and suggestion for implementation

Zbigniew Malara,
Radosław Ryńca, Yasmin Ziaeeian

Department of Infrastructure of Management,
Wrocław University of Science and Technology, Poland

WORMS is a joint initiative of the Management Science departments
of the Wrocław University of Science and Technology,
Wyb. Wyspiańskiego 27, 50-370 Wrocław, Poland

Marketing model of a university – assessment of the concept and suggestion for implementation

Zbigniew Malara¹, Radosław Ryńca², Yasmin Ziaeeian³

Introduction

Changes taking place on the market of educational services, in particular the growing competition and the demographic decline, require the search for new methods and tools supporting the management of universities. These changes imply the need to search for and undertake solutions that will allow the university to keep its higher position as compared to competition. It seems particularly important to search for such a marketing model that would make it possible to undertake managerial actions, effective in the process of satisfying the needs and expectations of various stakeholders of a university. The article presents the marketing model of a university. It also presents the method and conditions for its successful implementation. The presented model takes into account determinants significant from the point of view of various stakeholders in assessing the effectiveness of undertaken marketing actions.

1. Marketing at a university – role and significance in managing a university.

The dynamic environment in which universities have to function requires the search for methods and tools supporting the process of managing universities. It seems especially significant to search for a proper marketing model that would make it possible to improve the competitiveness of a university, increase the number of students and improve the image of a university in the opinion of its stakeholders.

The dynamic changes taking place near universities imply the need to accelerate and transform the previous educational systems towards a learning society⁴. It is thus necessary to search for new rules, principles and methods for their functioning⁵, including conducting effective marketing actions according to the marketing model adopted at the university.

The need for changes in the management of universities in Poland is suggested by many researchers. For example, T. Wawak, according to whom management at Polish universities needs to change and adapt to the

¹ Profesor w Katedrze Infrastruktury Zarządzania Politechniki Wrocławskiej

² Adiunkt w Katedrze Infrastruktury Zarządzania Politechniki Wrocławskiej

³ Doktorantka w Katedrze Infrastruktury Zarządzania Politechniki Wrocławskiej

⁴ L. Dziewięcka-Bokun, Misja szkoły wyższej w Polsce XXI wieku – wyzwania i zadania, W: Misja i służebność uniwersytetu w XXI wieku. Praca zbiorowa pod redakcją Jerzego Woźnickiego, Instytut Społeczeństwa Wiedzy. Fundacja Rektorów Polskich. Warszawa 2013, s.233.

⁵ Z. Malara, Przedsiębiorstwo w globalnej gospodarce, Wyzwania przyszłości, PWE, Warszawa 2006 s.11.

evolution of the management system at top universities all over the world⁶. W.M. Orłowski also indicates the need for the universities to meet the challenges formulated by the society⁷, and the change indicated in the Polish Strategy of the Development of Higher Education 2010-2020, in particular the improvement in competitiveness between universities, the adjustment of the education system to changing social needs, the extension of the university's role towards the society or the increase in the degree of the internationalization of the Polish higher education and the improvement in the position of Polish universities on the international scale, conserve the need for a greater shift of the university towards the market. A similar position was also presented in the Assumptions to the amendment of the Polish Act - Higher Education Law which indicated the poor preparation of Polish universities to functioning on the market and emphasized the need to change their management system and the change for a shift towards the market⁸. Bearing in mind the changing needs of the job market regarding the university graduates' skills, high competition on the market of educational services, the diversity of the students' needs, strong influence of the environment on the provision of educational services, proper management of a university is currently becoming a necessity⁹.

The use of a marketing model relevant for a given university, as part of which the undertaken actions would make it possible to improve the university's competitive position on the market, increasing the opportunity for its development, or to provide services towards the direction expected by the environment, may be helpful in the concerned case. However, this requires the examination of the needs and expectations of the university's stakeholders¹⁰.

The literature on the subject contains numerous publications regarding the marketing of universities. For instance, F. Maringe and N.H. Foscett present the experience of a university related to the use of marketing¹¹ and the possibility of its use by the university's by management¹². In turn, D.M. Lewison and J.M. Hawes draw attention to changes on the educational marker and the need to identify the students' needs¹³. P. Naude and J. Ivy indicate differences in the perception of marketing by various types of universities.¹⁴ The latter also presents the application of marketing research at a university¹⁵. Literature studies regarding the use of marketing at a

⁶Między innymi w: T.Wawak, Jakość zarządzania w szkołach wyższych, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2012; T.Wawak, Nowe trendy w zarządzaniu w szkolnictwie wyższym - uwarunkowania i specyfika w Polsce. Pobrano z portalu: <http://tadeusz.wawak.pl>, dostęp: 20.10.2012.

⁷W.M.Orłowski, Nowa misja polskich uczelni, W: Misja i służebność uniwersytetu w XXI wieku. Praca zbiorowa pod redakcją Jerzego Woźnickiego, Instytut Społeczeństwa Wiedzy, Fundacja Rektorów Polskich, Warszawa 2013, s.179.

⁸Założenia do nowelizacji ustawy Prawo o szkolnictwie wyższym oraz ustawy o stopniach naukowych i tytule naukowym oraz o stopniach i tytule w zakresie sztuki. [http:// www.nauka.gov.pl](http://www.nauka.gov.pl) , dostęp: 22.11.2009, s.12. Patrz także w: T.Wawak, Jakość zarządzania w szkołach wyższych, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2012, s.435-436.

⁹I.Seredocha, Potrzeba planowania strategicznego w usługach edukacyjnych, W: G.Nowaczyk, P.Lisiecki, Marketingowe zarządzanie szkołą wyższą, Poznań, Wydawnictwo WSB w Poznaniu, 2006, s.62.

¹⁰M.Krzyżanowska, Marketing usług edukacyjnych szkoły wyższej, W: Marketing szkół wyższych.. Praca zbiorowa pod redakcją G.Nowaczyk, M.Kolasińskiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004, s.37

¹¹F.Maringe, N.H.Foscett, Marketing university education: the South African experience, Higher Education Review, 2002, Vol.24, No3

¹²F.Maringe, Vice chancellor's perception of university marketing: a view from universities In a developing country, Higher Education Review, 2004, Vol.34, No.3.

¹³D.M.Lewison i J.M.Hawes, Student Target Marketing Strategies for Universities, Journal of College Admission. Summer 2007.

¹⁴P.Naude, J.Ivy, The marketing strategies of universities in the United Kingdom, The International Journal of Education Management 13/3, 1999.

¹⁵J.Ivy, Higher education institution image: correspondence analysis approach, The International Journal of Education Management, 2001, Vol.15, No.6

university are also presented in studies by J. Hemsley-Brown and I. Oplatka¹⁶. In turn, N. Ngyuen, G. Leblanc indicate the importance of the university's actions for its image in the students' decision-making processes¹⁷. Collective works by G. Nowaczyk and P. Lisicki¹⁸ as well as G. Nowczyk and M. Kolasiński seem particularly interesting among works by Polish authors.¹⁹ B. Iwankiewicz-Rak²⁰ and M. Krzyżanowska²¹ present the essence and importance of marketing at a university as part of these works. D. Oczachowski²² presents selected problems related to the adaptation of marketing in education, while J. Mazur²³ presents the dilemmas of the marketing of universities. The Polish literature on the subject also includes diverse opinions as to the relevance of marketing actions undertaken by the universities resulting from the conviction on its unethical nature²⁴. This problem was thoroughly discussed in the work by Z. Malara, R. Ryńca.²⁵

Despite numerous, diverse and even contradictory opinions regarding the use of marketing at a university, it seems indisputable that marketing is currently a part of the nature of the functioning of the majority of universities. As is indicated by M. Krzyżanowska, the liberalization of educational services resulting from changes in the environment of a university seems an irreversible phenomenon²⁶.

Despite the various degree of the intensification of marketing actions by universities (significantly greater in the case of non-public universities, resulting from the fact that the student is the main source of income), they are conducted by the majority of universities. Therefore, it seems reasonable to conduct marketing actions based on the marketing model functioning (adopted) at a given university. It thus seems justified to indicate the determinants of the model implying its effectiveness. The indication of differences and similarities in the model's components in various types of universities may also be interesting from the cognitive perspective.

¹⁶J.Hemsley-Brown, I.Oplatka, Universities In a competitive global market place, International Journal of Public Sector Management, 2006, Vol.19, No.4.

¹⁷N.Ngyuen, G.LeBlanc, Image and reputation of higher education institutions in students retention decision, The International Journal of Education Management, 2001., Vol 15, No.6.

¹⁸G. Nowaczyk, P.Lisiecki (red.), Marketingowe zarządzanie szkołą wyższą, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004

¹⁹G.Nowczyk, M.Kolasiński (red.), Marketing szkół wyższych.. Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2006

²⁰B.Iwankiewicz-Rak, Zarządzanie marketingowe szkołą wyższą, W: Marketing szkół wyższych.. Praca zbiorowa pod redakcją G.Nowaczyk, M.Kolasińskiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2006, s. 51; B.Iwankiewicz-Rak, S.Wrona, Jakość kształcenia-czynniki i kryteria oceny, W: Marketingowe zarządzanie szkołą wyższą, Praca zbiorowa G.Nowaczyk i P.Lisieckiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004, s.177

²¹M.Krzyżanowska, Marketing usług edukacyjnych szkoły wyższej, W: Marketing szkół wyższych. Praca zbiorowa pod redakcją G.Nowaczyk, M.Kolasińskiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004, s.29

²²D.Oczachowski, Wybrane problemy adaptacji marketingu w szkolnictwie, W: Marketingowe zarządzanie szkołą wyższą, Praca zbiorowa G.Nowaczyk i P.Lisieckiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004, s.33

²³J.Mazur, Dylematy marketingu szkół wyższych, W: Marketingowe zarządzanie szkołą wyższą, Praca zbiorowa G.Nowaczyk i P.Lisieckiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004, s.21

²⁴Patrz min. W: M.S.Neustadt, Is Marketing Good for Higher Education?, The Journal of College Admission, Winter 1994, s.17-22; A.R.Krachenberg, Bringing the Concept of marketing to Higher Education, Journal of Higher Education, May 1972, Vol.43, s.369-380; L.Litten, Marketing Higher Education, Journal of Higher Education, 1980, Vol.51, No.1, s.40-59.M.Krzyżanowska, Marketing usług edukacyjnych szkoły wyższej, W: Marketing szkół wyższych.. Praca zbiorowa pod redakcją G.Nowaczyk, M.Kolasińskiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004, s.35. Por. R.Ryńca, Z.Malara, Problemy kształtowania konkurencyjności współczesnej szkoły wyższej. Uwarunkowania, instrumenty, działania. Raporty Wydziału Informatyki i Zarządzania Politechniki Wrocławskiej. 2015, Ser. PRE nr 25

²⁵Z.Malara, R.Ryńca, Problemy kształtowania konkurencyjności współczesnej szkoły wyższej. Uwarunkowania, instrumenty, działania. Raporty Wydziału Informatyki i Zarządzania Politechniki Wrocławskiej. 2015, Ser. PRE nr 25

²⁶M.Krzyżanowska, Marketing usług edukacyjnych szkoły wyższej, W: Marketing szkół wyższych.. Praca zbiorowa pod redakcją G.Nowaczyk, M.Kolasińskiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004, s.40

The further part of the article presents a proposal for the identification of the marketing model of a university. The proposal presented in the article would make it possible to indicate key factors affecting the effectiveness of undertaken actions related to the university's marketing sphere.

Bearing in mind the fact that the ability to manage information is an important attribute used to create the market potential of an organization, accelerate the decision-making process and introduce changes necessary to build and maintain competitive advantage²⁷, the proposal presented in the article could be helpful in the management of a university, in particular in undertaking effective marketing actions.

2. Marketing methods and tools in the light of the review of the literature on the subject

The analysis illustrates a framework for the design of a universal marketing model and a comprehensive marketing mix. This paper is based on research and consultancy on marketing models around the world, where several frameworks have been tested and implemented. It discusses a wide spectrum of marketing tools and provides frameworks for researchers who would like to study in-depth each technique. Although the suggestions and conclusions presented here are inevitably generalized, the destination managers and marketers can use the suggested methodology in order to design and formulate a universal marketing model.

Firstly, this study will shortly present the well-known marketing models. The contribution of the paper is therefore to synthesize the techniques and to provide a comprehensive framework for destination marketing rather than to introduce original research outcomes. So many marketing models have been developed over the years, that it can be overwhelming to know what to use and when. McKinsey 7S, marketing mix 7P, AIDA Model, Ansoff Matrix and Diffusion & Innovation are major marketing models. In this article, McKinsey and 7P models will be described.

- McKinsey 7S Model

The 7S model has its origins in the classic work, 'The Art Of Japanese Management', by Richard Pascale Tanner & Anthony Athos from the early 1980s. Over the years it has become a widely accepted tool for understanding how a high performing organization must be managed. It describes an external environment that impacts the organization's formulation of strategies, systems, structure, style, staff, skills and synergy²⁸

"Consultants at McKinsey & Co. recognized a circular problem central to their client's failure to effectively implement strategy, and co-developed the McKinsey model, which was successful implementation of strategy requiring management of the interrelationships between seven elements."²⁹

- Marketing Mix

Marketing mix results from the single P (price) of microeconomic theory.³⁰ McCarthy (1964) presented the "marketing mix" as the "4Ps", as a means of translating marketing planning into practice.³¹ Marketing mix is not

²⁷Z. Malara, J. Rzęchowski, Zarządzanie informacją na rynku globalnym. Teoria i praktyka, C.H.Beck, Warsaw 2011, p. 9.

²⁸ Pascale, R.T./Athos, A.G. Geheimnis und Kunst des japanischen Managements, München 1982, P.8

²⁹Hanafizadeh, Payam&Ravasan/AhadZare. A McKinsey 7S Model-Based Framework for ERP Readiness Assessment, International Journal of Enterprise Information Systems archive Volume 7 Issue 4, Tehran 2011, Pages 23-63

a scientific theory, but it is a conceptual framework, which helps the managers in decisions they make by configuring their offerings, that they can prepare suitable consumers' needs. The tools is useful to develop long-term and short-term strategies³². It is possible to modify the proportions in the marketing mix regarding each component and differ from the product to product. The marketing mix management paradigm has dominated marketing thought, research and practice³³, and "as a creator of differentiation" since it was introduced in 1940s. Kent (1986)³⁴ refers to the 4Ps of the marketing mix as "the holy quadruple...of the marketing faith...written in tablets of stone". Marketing mix has been extremely influential in informing the development of both marketing theory and practice.³⁵

Marketing mix is very easy to handle and allows the separation of marketing from other activities of the company and the delegation of marketing tasks to specialists. Also, the components of the marketing mix have influence on a company's competitive position, therefore it is a powerful concept.³⁶ There are also two benefits regarding marketing mix. Firstly, it is an important tool, which makes marketing managers able one to see, to a large extent, a matter of trading off the benefits of one's competitive strengths in the marketing mix against the benefits of others. The second benefit of the marketing mix is that it helps to reveal another dimension of the marketing manager's job. All managers have to allocate available resources among various demands, and the marketing manager will in turn allocate these available resources among the various competitive devices of the marketing mix. In doing so, this will help to instill the marketing philosophy in the organization.³⁷

"However, Möller (2006)³⁸ highlighted that the shortcomings of the 4Ps marketing mix framework, as the pillars of the traditional marketing management have frequently become the target of intense criticism".

The 7Ps are followed:

- Product: This is the package of benefits that the seller offers and the customer receives.
- Price: This is the total cost to the customer of the products.
- Place: Place is the location where the exchange is happening.
- Promotion: It is the marketing communication package used to make the offer known to potential customers, and persuade them to investigate it further.
- People: are crucial to success in marketing, particularly in services, where they usually are the product.
- Process: is the set of activities that results in delivery of the product benefits.

³⁰Chong, K. W. The Role of Pricing in Relationship Marketing - A Study of the Singapore Heavy Equipment Spare Parts Industry, PhD Dissertation, International Graduate School of Management, University of South Australia 2003, P1-13

³¹Bennett, A. R. The Five Vs - A Buyer's Perspective of the Marketing Mix. Marketing Intelligence & Planning, 15(3), 1997, P. 151-156.

³²Palmer, A. Introduction to Marketing - Theory and Practice, UK: Oxford University Press 2004, PP.20

³³Grönroos, C. From Marketing Mix to Relationship Marketing: Towards A Paradigm Shift in Marketing, Australia 1994, P.4-20

³⁴Kent, R. A. Faith in the four Ps: An alternative. Journal of Marketing Management, University of Stirling 1986, P.145-154.

³⁵Möller, K. The Marketing Mix Revisited: Towards the 21st Century Marketing by E. Constantinides. Journal of Marketing Management, 22(3), 2006, P. 439-450

³⁶Grönroos, C. From Marketing Mix to Relationship Marketing: Towards A Paradigm Shift in Marketing, Australia 1994, P.4-20

³⁷Low, S. P. & Tan, M. C. S. A Convergence of Western Marketing Mix Concepts and Oriental Strategic Thinking. Marketing Intelligence & Planning 13(2), 1995, P. 36-46.

³⁸Möller, K. The Marketing Mix Revisited: Towards the 21st Century Marketing by E. Constantinides. Journal of Marketing Management, 22(3), 2006, P. 439-450

-Physical evidence: is the lasting proof that the service has happened.³⁹

3. Marketing Model

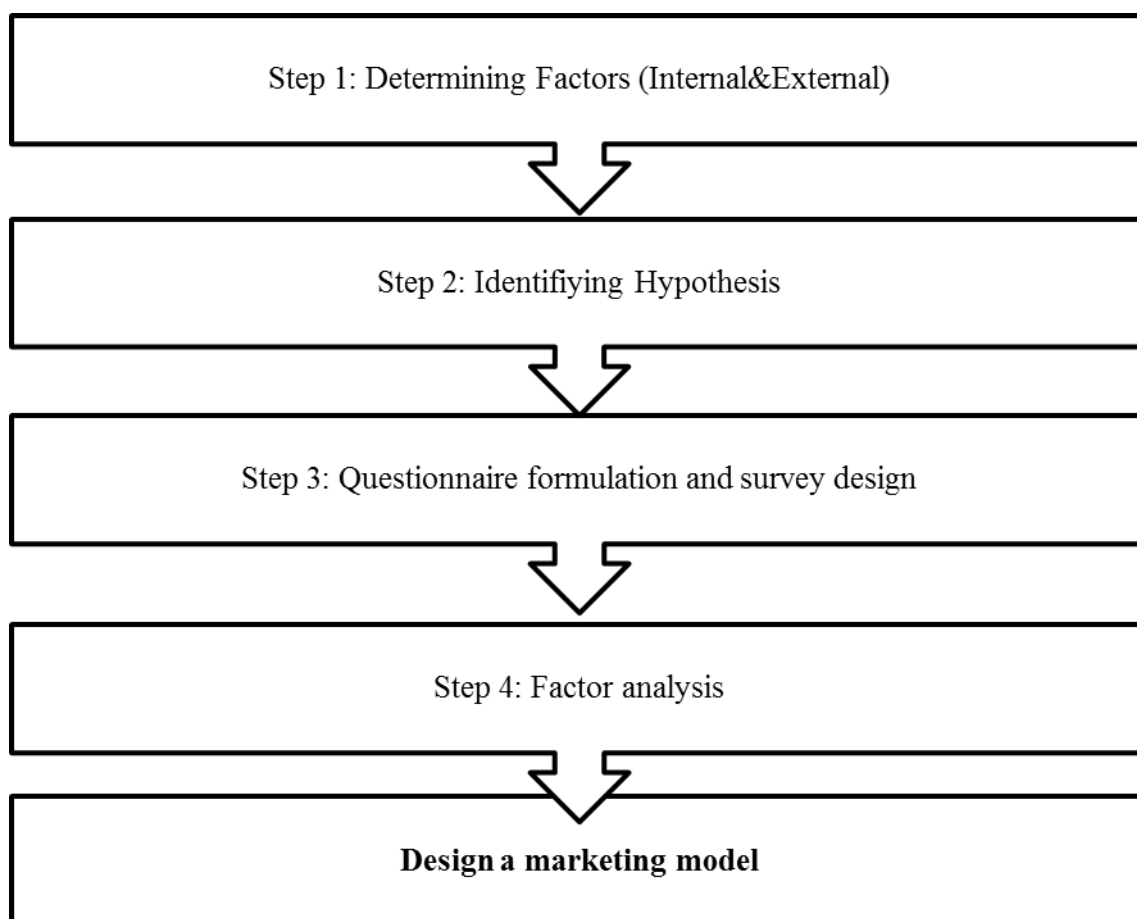
3.1. General Framework

As it was mentioned, the objective of this paper is to show how to design and formulate a marketing model in different universities and in different sectors of education. Based on marketing researches, the study determined existing factors in these models and through the building of a framework will be defined the steps for creating an efficient model, which can be used at international universities.

With this Method, every University can formulate its effective marketing model to achieve the goals.

Figure 1 shows a framework of whole steps to design a marketing model:

Figure 1. General framework for formulating a marketing model



Source: provided by the authors

³⁹ Blythe J. Key concepts in Marketing, Soga Publication, London 2009, P.130

Step 1 : Determining Factors (Internal External)

a) Influencing factors of marketing mix-model in high education sector

Based on literature review, in this article major factors which have impact on each elements of marketing mix have been listed. In Table 1., these factors are described in detail:

Table 1. Marketing-mix factors in high education sectors

Product	Price	Place	People	Process	Promotion	Physical evidence
<ul style="list-style-type: none"> - Programms for <u>Students</u> - Offers for the fields of study - Offers for postgraduate studies - Modern and effective teaching methods - Effective schedule regarding expectations of students - The high level of teaching - Coordination of teaching content by the university - Offers for elective courses - Offers for specialized courses - The selection of teaching staff appropriate to the content of the curriculum 	<ul style="list-style-type: none"> - Condition of payment - The entry fees at the university - Cost of teaching - Cost of additional extracurricular activities - Access and the amount of scholarship and scholarship system - The amount of government for education at the university - Cost for books and materials - Cost for accommodations 	<ul style="list-style-type: none"> - Location of campus - The attractiveness of the town where the university is located - Access to information resources and information - The possibilities of using e-learning - Opportunity to study in long distance - The number of candidates per seat in the university 	<ul style="list-style-type: none"> - Qualifications and achievements of scientific staff - Technical and organizational efficiency of university management - The number and structure of employees in terms of the scientific level - Incentive scholarship system - The possibilities of scientific development - Opinion for academic teachers and employees 	<ul style="list-style-type: none"> - The structure of classes - Teaching methods (eg. Lectures, seminars, field classes) - Cooperation with the business environment - International Cooperation (student exchanges, lectures visiting) - Cooperation with employers (eg. Practice) - The possibility of further study at university - Research Projects - Monitoring of careers for graduates 	<ul style="list-style-type: none"> - Public relations activities - Creating the visual identity of the university (logo, name of institution, stationery, clothing workers, decor) - Participation of academics in all kinds of national and international organizations and committees - The attention to external and internal appearance of the university - Publishing own magazine university and handouts - Create favorable relations with the local community - Sponsorship of cultural and sports events, festivals - Using of modern forms of communication, eg. Via the Internet 	<ul style="list-style-type: none"> - Equipment of universities - Infrastructure of Library - Access to computer labs - Access to electronic research databases - Equipment of classroom, eg. Furniture, audio-visual equipment - Wireless Internet access in classrooms - Technical state of scientific and teaching - Center for foreigners - Architecture of <u>university</u>

Source : (R.Ryńca, Z.Malara, Problemy kształtowania konkurencyjności współczesnej szkoły wyższej. Uwarunkowania, instrumenty, działania. Raporty Wydziału Informatyki i Zarządzania Politechniki Wrocławskiej. 2015, Ser. PRE nr 25)

Many factors as internal factors can be identified by each component of marketing mix model. As shown in the table, the most important factors for price, product, promotion, place, process, people and physical evidence in high education sectors are determined. The number of such factors can be defined and described by different universities as it is possible and there is no limitation. The starting point for considerations in terms of product is the necessity of quoting the product definition. In terms of marketing the product it is understood that everything "could be on the market, to gain attention, be acquired, used or consumed, satisfying one's desire or need." This

definition indicates that the product is a set of characteristics that motivate and induce consumers to purchase. Satisfying the needs and expectations followed by the wording of a special school, which occupies a central place educational service. Formation of an appropriate pricing policy educational services is essential for the functioning of higher education. This is a particularly important element in the case of private universities, where the student pays for the service. The location of the service, including the location of the campus in the academic city is also very important as one of the key factors of another marketing mix component, Place. It is important that the management of the university has provided an effective incentive system to its employees, which would allow their respective commitment to continuous development, including the possibility of gaining further degrees.

Given the large competition among colleges, universities should implement programs to raise the evaluation of its staff numbers. It seems that, given the accelerating pace of leveling the differences related to infrastructure, equipment between universities, university staff will be an essential element to distinguish the college market. It is also important to ensure an adequate number of professors who can significantly contribute to building and strengthening the image of the university. Regarding process, an important factor seems cooperation between the university and businesses as a consequence of the possible need to develop teaching methods, enrich teaching by incorporating in its projects for the economy, the development of student internships, or to formulate a profile of college education, involving the adaptation of content to the changing requirements of the economy, consequently adjusting the offer to the needs of the market. Promotion of the university should be defined as a way to communicate the organization with its environment. The aim of the promotion is shaping the attitudes and behaviors of potential customers, gaining competitive advantage and creating a positive image. Finally, great significance may gain size of library infrastructure, equipment, classrooms, or access to free wireless Internet on a campus.

This emphasis of the management of the institution of the physical environment of services is an important point of view of shaping the image of the university.

b) External factors

This analysis will be used to study the marketing macro environment of universities and the impact of its factors, which were classified as social, cultural, economic, physical, technological and international factors, communication and infrastructure-based factors, administrative and institutional factors, and legal and political factors. Relationships of universities with business projects, competitiveness of universities or abundance of natural resources are some of such factors. In this step, the universities should analyze environmental factors which could have impacts on its marketing activities. Federal and state regulations on universities can also influence how the sector performs. The state of the economy and environment has a major influence on ability of applying the students at universities. If the economy is experiencing a recession, people may not be able to entry to universities. Political factors also have some influences. If a university seems to support one specific political party over another, the university may alienate potential students or employees. The competitive analysis in a university's marketing plan is an ongoing study of the activities of the competition and how those activities affect university's market share. The relationship between a university and its competition is dynamic.

Step 2: Identifying Hypothesis

If science is in part a systematic formulation and arrangement of facts in a way to help understanding, then the building of the marketing model may possibly be considered a small contribution in the search for the science of marketing.

In our opinion, it is important to have information as to which factors have significant impact on marketing activities and which marketing elements are most importance in compare to another. Such Information helps managers to improve the universities functions.

After determining the factors, hypothesis should be determined. For formulating the marketing model in international environment, there are 2 main hypotheses:

- H1: It is possibility to identify the key factors, which are influencing the marketing model.
- H2: The importance of marketing models can be observed at different universities.

Step 3: Questionnaire formulation and survey design

In the next step, through determined hypotheses, it is possible to formulate the questions. It means that, by each hypothesis, the importance of each influencing factor will be measured. In this step, the construction of questionnaire is very important. It means that questions should be close-ended. A survey question should offer response categories. Another point is context effects – the effects that prior questions have on subsequent responses. Reporting should take place in the most recent part of a reference period, or have a tendency to select the last-presented response alternative in a list. Also the period of time for which a respondent should be asked to report is important. The effects of variations in question wording, order, instructions, format, etc. should be observed. The time between events should be remembered and attempts to recall them should be made. Questions should be designed to identify specific conditions. The wording and order of questions and response choices should be scripted in advance and administered as worded by interviewers. Here, the scales should be determined. The format of a typical five-level Likert item, for example, could be 1: Strongly disagree, 2: Disagree, 3: Neither agree nor disagree, 4: Agree and 5: Strongly agree

For example some questions can be formulated as follows:

Q1: The University builds good reputation by offering different programs for students

Q2: Conditions of Payments are based on the expectations of students

Q3: Publicity and public relations to enhance the image of university

Q4: Using multi-distribution channels attracts more students in every field

Q5: Satisfaction of students and employees is measured systematically and frequently

Q6: Using high and modern technology at University

Step 4: Factor analysis

Factor analysis is a common method, which used mostly for data reduction purposes. In this method will explain why a number of variables are correlated with each other. it is because they have one or more factors in

common. Factor analysis removes redundancy or duplication from a set of correlated variables and represents correlated variables with a smaller set of “derived” variables. Factors will be formed that are relatively independent of one another. In this article, the influence of individual factors will be identified as being either an important element, or not important element for universities based on an ordinal 1 – 5 scale. Applications of factor analysis allows us to describe many variables using a few factors and helps select small group of variables of representative variables from larger set. It also helps us to put objects into categories depending on their factor scores. Factor analysis summarizes correlation structure.

In this case, achieving a result will lead managers to realize the importance of each factor and component. With such a method, education sectors can provide an effective marketing model to focus of the most important elements.

- Limitations

Such research will be limited regarding perceived data and every survey contains some missing, and useless data, which have to be excluded from the assessment. In order to discard the unreliable set of answers, standard deviation among the answers of each respondent should be calculated.

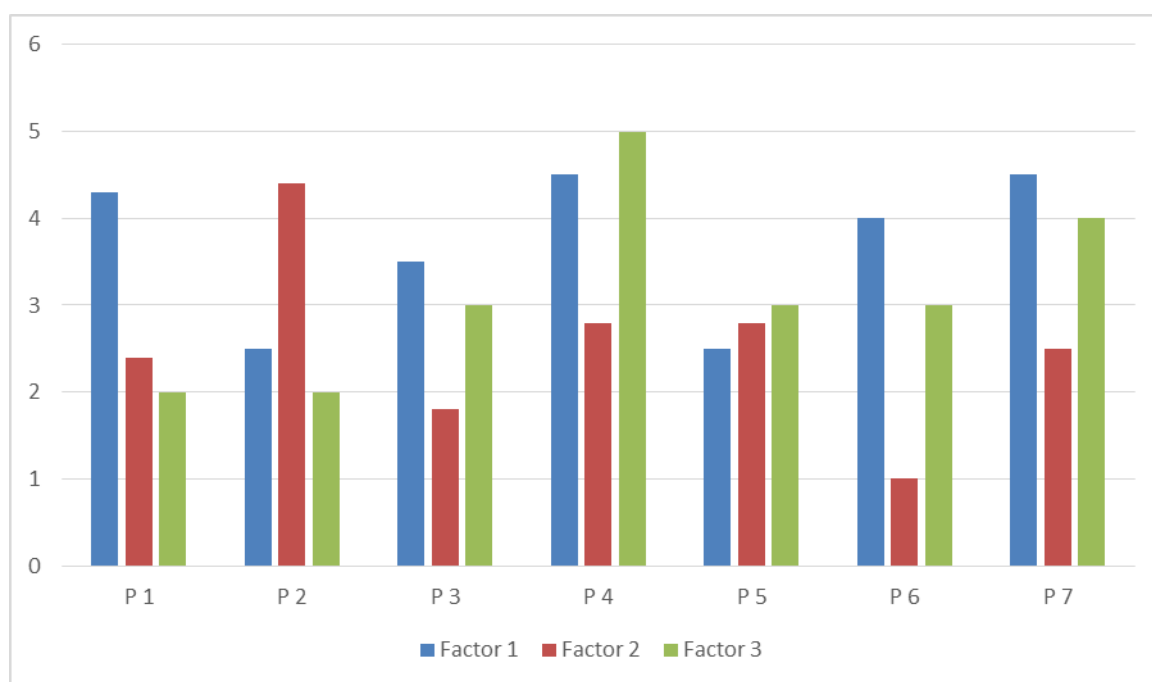
Result: Design a Marketing Model

Understanding the author's point of view helps managers to design an effective marketing model to achieve their goals. By this method, the importance of major factors will determined. For example, if analysis shows that the factors of price and products are correlated together and has strong impact on marketing activities, then managers should invest in those aspects. This method gives an opportunity to the managers, so that they can observe and make focus on importance of activities to choose effective marketing model, which is one of key aspect of success by every organization.

Example of statistical analysis:

In figure 2, we are using a chart as an example of what can be achieved by a statistical analyzing:

Figure 2. Statistical analysis between marketing activities and factors



*Source: provided by the authors

This figure shows, as an example, the most significant factors, which have impact on the marketing activities. Each *P* represents each Marketing mix activity: Price, Promotion, Product, Process, People, Physical evidence and Place. And factors can be Technology for example, cultural or economic factors. These factors are determined in the second step and then during survey, their importance and scales analyzed. Finally, the importance of all factors will be compared. Through this chart, we can analyze the impact of particular factors on specific marketing factors, and it can be helpful for managers to consider which factors are relevant for improving each marketing activities. Because as we mentioned, marketing model is one of the key success of each sectors. High education sectors, can use this conceptual framework, which we have presented, to analyze the factors influencing marketing models and determine the important factors, and through such analysis, to build an effective marketing model.

Conclusions

Changes taking place on the market of educational services require the search for new methods and tools that would make it possible to maintain the competitive advantage. Marketing actions conducted by the university, which should be undertaken according to the marketing model functioning at a given university, should also be emphasized. Taking into account the fact that maintaining the competitive advantage requires incurring substantial expenses by universities. The continuous improvement in the functioning of the university and the satisfaction of the needs of the university's various clients seems important.

The market focus of a university, consisting in shaping active relations with the market environment, seems reasonable⁴⁰. It is thus necessary to identify the needs and expectations of the various stakeholders of a university, in particular the students, their interests and aspirations.

From this perspective, the role of marketing of a university seems invaluable⁴¹. The university's management should build a management system using the methods and tools that will make it possible to achieve the assumed improvement objectives, in consequence. The article presents the marketing model that may be helpful in the hands of managers, in particular in the process of building the competitive advantage on the market.

References

- [1] Bennett, A. R., The Five Vs - A Buyer's Perspective of the Marketing Mix. *Marketing Intelligence & Planning*, 15(3), UK 1997, P. 151-156.
- [2] Blythe J., Key concepts in Marketing, Soga Publication, London 2009, P.130
- [3] Chong, K. W. The Role of Pricing in Relationship Marketing - A Study of the Singapore Heavy Equipment Spare Parts Industry, PhD Dissertation, International Graduate School of Management, University of South Australia, 2003
- [4] Dziewięcka-Bokun L., Misja szkoły wyższej w Polsce XXI wieku – wyzwania i zadania, W: Misja i służebność uniwersytetu w XXI wieku. Praca zbiorowa pod redakcją Jerzego Woźnickiego, Instytut Społeczeństwa Wiedzy. Fundacja Rektorów Polskich. Warszawa 2013
- [5] Grönroos, C., From Marketing Mix to Relationship Marketing: Towards A Paradigm Shift in Marketing, Australia 1994, P.4-20.
- [6] Hanafizadeh, Payam&Ravasan/AhadZare.A, McKinsey 7S Model-Based Framework for ERP Readiness Assessment, *International Journal of Enterprise Information Systems archive* Volume 7 Issue 4, Tehran 2011, Pages 23-63

⁴⁰M.Krzyżanowska, *Marketing usług edukacyjnych szkoły wyższej*, W: Marketing szkół wyższych.. Praca zbiorowa pod redakcją G.Nowaczyk, M.Kolasińskiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004, s.34

⁴¹M.Krzyżanowska, *Marketing usług edukacyjnych szkoły wyższej*, W: Marketing szkół wyższych.. Praca zbiorowa pod redakcją G.Nowaczyk, M.Kolasińskiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004, s.37

- [7] Hemsley-Brown J., I.Oplatka, Universities In a competitive global market place, *International Journal of Public Sector Management*, 2006, Vol.19, No.4.
- [8] .Iwankiewicz-Rak B., Zarządzanie marketingowe szkołą wyższą, W: *Marketing szkół wyższych.. Praca zbiorowa pod redakcją G.Nowaczyk, M.Kolasińskiego*, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2006
- [9] Iwankiewicz-Rak B, S.Wrona, Jakość kształcenia-czynniki i kryteria oceny, W: *Marketingowe zarządzanie szkołą wyższą*, Praca zbiorowa G.Nowaczyk i P.Lisieckiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004
- [10] Ivy J., Higher education institution image: correspondence analysis approach, *The International Journal of Education Management*, 2001, Vol.15, No.6
- [11] Kent, R. A. Faith in the four Ps: An alternative. *Journal of Marketing Management*, University of Stirling 1986, P.145-154.
- [12] Krachenberg A.R., Bringing the Concept of marketing to Higher Education, *Journal of Higher Education*, May 1972, Vol.43
- [13] Krzyżanowska M., Marketing usług edukacyjnych szkoły wyższej, W: *Marketing szkół wyższych.. Praca zbiorowa pod redakcją G.Nowaczyk, M.Kolasińskiego*, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004
- [14] Litten L., Marketing Higher Education, *Journal of Higher Education*, 1980, Vol.51, No.1.
- [15] Low, S. P. & Tan, M. C. S. (1995). A Convergence of Western Marketing Mix Concepts and Oriental Strategic Thinking. *Marketing Intelligence& Planning*, 13(2), 36-46.
- [16] Malara Z., *Przedsiębiorstwo w globalnej gospodarce, Wyzwania przyszłości*, PWE, Warszawa 2006
- [18] Malara Z., Rzęchowski J., *Zarządzanie informacją na rynku globalnym. Teoria i praktyka*, C.H.Beck, Warszawa 2011
- [19] Maringe F., Foskett N.H., Marketing university education: the South African experience, *Higher Education Review*, 2002, Vol.24, No3
- [20] Maringe F., Vice chancellor's perception of university marketing: a view form universities In a developing country, *Higher Education Review*, 2004, Vol.34, No.3.
- [21] Mazur J., Dylematy marketingu szkół wyższych, W: *Marketingowe zarządzanie szkołą wyższą*, Praca zbiorowa,
- [22] Möller K., The Marketing Mix Revisited: Towards the 21st Century Marketing by E. Constantinides. *Journal of Marketing Management*, 22(3), 2006, P. 439-450
- [23] Nowaczyk G. i Lisieckiego P., *Wydawnictwo Wyższej Szkoły Bankowej*, Poznań 2004

- [24] NaudeP.,Ivy J., The marketing strategies of universities in the United Kingdom, The International Journal of Education Management 13/3, 1999.
- [25] Neustadt M.S., Is Marketing Good for Higher Education?, The Journal of College Admission, Winter 1994
- [26] Ngyuen N., LeBlanc G., Image and reputation of higher education institutions in students retention decision, The International Journal of Education Management, 2001., Vol 15, No.6.
- [27] Nowaczyk G., Lisiecki P. (red.), Marketingowe zarządzanie szkołą wyższą, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004
- [28] Nowczyk G., Kolasiński M. (red.), Marketing szkół wyższych, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2006
- [29] LewisonD.M. iHawes J.M., Student Target Marketing Strategies for Universities, Journal of College Admission. Summer 2007.
- [30] Oczachowski O., Wybrane problemy adaptacji marketingu w szkolnictwie, W: Marketingowe zarządzanie szkołą wyższą, Praca zbiorowa G.Nowaczyk i P.Lisieckiego, Wydawnictwo Wyższej Szkoły Bankowej, Poznań 2004
- [31] Orłowski W.M., Nowa misja polskich uczelni, W: Misja i służebność uniwersytetu w XXI wieku. Praca zbiorowa pod redakcją Jerzego Woźnickiego, Instytut Społeczeństwa Wiedzy. Fundacja Rektorów Polskich. Warszawa 2013, s.179.
- [32] Palmer, A. Introduction to Marketing - Theory and Practice, UK: Oxford University Press 2004,PP.20
- [33] Pascal R.T., Athos A.G., The Art of Japanese Management, Simon and Schuster; New York, 1981, W. C. Ouchi, Theory Z – How American Business Can Meet the Japanese Challenge, Addison-Wesley; Massachusetss 1982
- [34] Ryńca R., Malara Z., Problemy kształtowania konkurencyjności współczesnej szkoły wyższej. Uwarunkowania, instrumenty, działania. Raporty Wydziału Informatyki i Zarządzania Politechniki Wrocławskiej. 2015, Ser. PRE nr 25
- [35] Seredocha I., Potrzeba planowania strategicznego w usługach edukacyjnych, W: G.Nowaczyk, P.Lisiecki, Marketingowe zarządzanie szkołą wyższą, Poznań, Wydawnictwo WSB w Poznaniu, 2006
- [36] Strategia rozwoju szkolnictwa wyższego 2010-2020 - Projekt środowiskowy, s.124-130 <http://www.krasp.org.pl/pl/strategia/strategia>, dostęp: 1.02.2013.
- [37] Wawak T., Jakość zarządzania w szkołach wyższych, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2012
- [38] Wawak T., Nowe trendy w zarządzaniu w szkolnictwie wyższym - uwarunkowania i specyfika w Polsce. Pobrano z portalu: <http://tadeusz.wawak.pl>, dostęp: 20.10.2012.

[39] Założenia do nowelizacji ustawy Prawo o szkolnictwie wyższym oraz ustawy o stopniach naukowych i tytule naukowym oraz o stopniach i tytule w zakresie sztuki. [http:// www.nauka.gov.pl](http://www.nauka.gov.pl) , dostęp: 22.11.2009

Abstract

This article has a theoretical nature and its aim is to show a framework to design and formulate a universal marketing model in high education sectors. This study focused on marketing mix and their components in the universities based of literature review. It encompasses also conceptual steps for managers to build up a marketing model considering influencing factors.

Keywords:Marketing in der High School, College-Management, Marketing-Modell