

- motivation (internal personal interest in solving a problem, the desire for self-actualization, for the use and accumulation of their own knowledge, even in spite of external motivation – enrichment, career promotion, etc.)¹.

Thus, creativity can be defined as the human ability to generate new ideas and concepts or to establish new relationships between the existing ideas and concepts. Creative products can be very diverse in nature: a new solution to the problem in mathematics and physics, the discovery of a chemical process, the creation of music, a picture or a poem, a new philosophical or religious system, innovations in law, fresh solutions to social problems, etc. Creative products are not only new, they have a pragmatic value. And it should be noted that such value is the result of public assessment and depends on the priorities of the corresponding period of society development and on the qualitative properties of the latter.

The main task of knowledge, information and creativity interpretation is the creation of tangible and intangible goods. It is not enough to increase the amount of knowledge – it should become an effective tool of intellectual activity. Information, knowledge and creativity are not valuable until they are used; in addition, they should be used in the areas where they have the highest economic potential.

Theoretical and methodological analysis proves that the concepts “knowledge”, “information”, “creativity” are interconnected. This connection is seen both in the interconnection between information and knowledge, and in the mutual dependence of creativity, on the one hand, and information and knowledge – on the other hand. Knowledge, formed on the basis of mental human activity and acquired through awareness, systematization, critical perception of information, is the basis for generating a creative (innovative) product.

In our opinion, the formed ability to creativity, which is the transformed intellectual and creative capital of a man, is a subjective, strictly individualized property to create a new quality – an intellectual product with the signs of uniqueness. If we consider an intellectual product in the form of received new knowledge, provided that they are publicly released and accepted for use by other people, the new knowledge becomes a public good. And under conditions of establishing a possibility of securing ownership of previously unknown knowledge, such knowledge moves into the category of a private good.

2.3. Managing marketing research in education as needs for education changing

Education being a component of the human value system results in increased

¹Інституційні засади інноваційної економіки: міжнародний досвід та вітчизняна практика: [Текст] / за ред. В. С. Новицького. – К.: НАУ, 2005. – 200 с.

demand for educational services. This also makes it possible to state that the educational service market is one of the biggest and most important markets.

At the same time, the EU countries emphasize that it is higher education which is of great importance. The explanation is as follows. The population of Europe is aging. In six EU member states, the age group of 5 to 18 years will decrease by 20% by 2040. Other six EU member states face a decrease in the same age group by 10-20%. At the same time, the number of first-time applications for refugee status has tripled since 2013, and over 80% of people applied for such status in 2015 are under 34. Education and professional training are powerful political levers to promote social, economic and cultural integration.

While the European population is changing, trends in employment are changing as well. Living in a technically advanced and globalized economy makes people to get more advanced skills. The higher the educational level, the higher the level of basic skills it requires and more promising employment opportunities it provides. In 2015, the share of employed higher education graduates amounted to 81.9% which is 11.1 pp higher compared to people with no education².

The question arises: "What should a modern education institutions be?"

Changes in the economy affect all spheres of human activity. This is especially true for education. The notion of "free-of-charge education" becomes obsolete, people's needs for education are changing. Now, there are a lot of forms and methods of fee-paid education offered to people with different needs, educational background and level of income. How well do such educational services meet people's needs? An answer to this question determines the demand for educational services and therefore a commercial success of education institutions. Given growing competition in the educational service market, marketing research techniques should be applied to estimate potential demand. Marketing research is aimed at identifying promising needs, assessing how well they are met, validating certain assumptions and forecasting customers' behavior. Thus, it is reasonable to apply marketing research to analyze topical educational problems. An analyzes of the demand for educational services allows to assess the demand for certain majors and prepare the curriculum accordingly.

As our European colleagues note, marketing is described in specialized and general science literature as a philosophy of market participants without any further specification. Marketing as a philosophy becomes both a general and critical factor of market activity principles and practices.

²The Education and Training Monitor 2016 is accompanied by 28 individual country reports & a set of contextual indicators & online visualisation tools. Available at: http://ec.europa.eu/education/sites/education/files/monitor2016_en.pdf

Suppliers of goods and services, including educational ones, shift from a production-oriented approach to a market-oriented approach.

As case studies show, the difference between these approaches for education institutions are as follows.

The production-oriented approach:

1. Only educational services typical for a certain education institutions or those instructed to be provided by authorities are offered.

2. The range of educational services (ES) is quite narrow, traditional and rarely updated (as it requires less cost and effort). The learning process and techniques are inflexible and hard to adjust.

3. Fees for ES (including those paid from the state budget) are calculated based on nominal cost approved by authorities and also on an approved budgeting plan and actual amount of finance. The notion of profit is either absent, or fixed as a percentage of the cost of ES. However, this does not prevent education institutions from setting fees for some ES at their own discretion.

4. Advertising and other forms of communication with customers and potential partners are not applied to promote ES.

5. Education institutions are usually headed up by certain type of executives which do not have required skills, experience and even desire to duly perform their duties.

6. Scientific educational studies do not cover needs and characteristics of individual groups of potential ES consumers.

7. Managerial functions are often assigned to employees unqualified for such job (for example, in higher education institutions they may be prorectors for administrative and support tasks or commercial department employees).

The market-oriented approach requires the opposite attitude to functions of an education institutions:

1 Only those ES which are or will be in demand must be (mainly) offered, taking into account the required time for providing ES. All activities of an education institutions should be subordinated to this concept.

2. The range of offered ES must be wide and frequently updated based on needs of their consumers and general public, as well as scientific progress requirements. The learning process and techniques are flexible and easy to adjust.

3 Fees for ES are set based on market conditions, competitors' offers and an affordable level for their consumers. A key component of the ES pricing policy must be not the amount of fee, but the aggregate cost of ES to consumers, including all additional costs for using, consuming and mastering ES.

4. Communication with consumers is proactive and aimed at target groups of ES consumers and potential partners. The functions of promoting and selling ES are decentralized.

5. Strategic decisions are prepared and approved by a governing body comprising of qualified executives having skills and experience in education and business. Given the above, the position of deputy director (prorector) for marketing may be introduced, who will be responsible for commercial activities of the education institutions.

6. Scientific educational studies should cover both the subject domain of the institution and the market of the ES provided by it, including identification and forecast of its market trends.

7. A marketing department should be established within the institution responsible for commercial activities and the image of the institution, as well as control and supervision over other departments implementing its recommendations³.

Marketing as a market philosophy consists in putting customers' needs first. Moreover, this does not mean needs of any customers (except for strategies of mass non-diversified marketing) or the public in general, but needs of certain target groups of customers and clearly defined market segments with their specific needs and demand. This approach is particularly new for the field of education.

Marketing studies in education are known to be hard to carry out. Difficulties include budget limitations and a need to cover an entirely new audience every year, while, with development of digital marketing channels, marketing of education institutions becomes a more efficient, but difficult to use tool.

Students now expect education institutions to be present in social networks, students are recruited annually, and education institutions have to review their marketing strategies.

Now many understand that education is a kind of business even for non-profit universities. Recruiting students and planning expected financial results are crucially important for this competitive industry with many players⁴.

Another business activity in globalized environment is provision of ES to foreign students. It must be remembered that foreign students' expectations for training programs are higher and this should be taken into account when developing such programs. Programs offered to foreign students from different cultures and

³Catalin Cosmin Glavaa , Adina Elena Glavab “Moment of Truth” in Educational Marketing. Factors That Contribute to the Decision Making on the Educational Market in Romania // ScienceDirect The 6th International Conference Edu World 2014 “Education Facing Contemporary World Issues”, 7th - 9th November 2014. – p. 170-175. Available at: [n.com/S1877042815014329/1-s2.0-S1877042815014329-main.pdf?_tid=1e496c36-c25e-11e7-bb84-00000aab0f26&acdnat=1509909694_9d00032b5f57e6d79d7e8fb40701b995](https://www.sciencedirect.com/S1877042815014329/1-s2.0-S1877042815014329-main.pdf?_tid=1e496c36-c25e-11e7-bb84-00000aab0f26&acdnat=1509909694_9d00032b5f57e6d79d7e8fb40701b995)

⁴Master’s thesis Master in Business Administration International Business Management 2014 Marjukka Immaisi Productizing and marketing of educational services for export – Case Turku University of Applied Sciences // https://www.theseus.fi/bitstream/handle/10024/77372/Immaisi_Marjukka.pdf?sequence=1

nationalities are innovative educational products. Such students have different expectations which are based on their personal experience. High students' expectations from developed EU countries formed the basis for high education quality standards. Students from these countries became respondents helping to improve the quality of such programs. This approach requires education institutions to be highly transparent, and it can also strengthen the innovation and marketing competences of institutions⁵.

Educational services must be provided on a co-financing basis, even if the fees charged for them are not high.

Developing educational services for adults, except for those offered to foreign students, can be a source of significant marketing innovations for universities and facilitate building relations with environment. Its objective is to develop a range of up-to-date educational services targeted to local communities, especially adults, which expect that new media are used to provide these services. Thus, state-run universities should be open for new functions and relations with environment.

There is an illustrative example of Poland which has extensive experience in providing education to adults, particularly the retired ones as a part of the third age university initiative. This type of education is quite promising and should be treated as a priority. There is also a need to consider new forms of education for socially isolated people and some market segments which require special attention. A new approach is required to accomplish this mission by state-run universities.

Thus, measures are required that are beyond the scope of special EU programs or casual social events.

What is the situation in Ukraine? ⁶ According to the State Statistics Service of Ukraine, there are 657 higher education institutions in Ukraine as of the beginning of academic year 2016-17. The number of students amounts to 1,587,000. In 2016, 387,000 students graduated from higher education institutions that is 61,000 (13.6%) people less than in 2015. In 2017, tuition fees at Ukrainian higher education institutions on average ranged from UAH 12,000 to UAH 18,000 per year. A year of distance learning cost from UAH 6,000 to UAH 10,000⁷.

It must be noted that despite a decrease in the number of education institutions they still strongly compete with each other. This is due to a number of factors, such as demographics and low disposable income. Since every education institutions is

⁵Domański Tomasz Marketing of Higher Education: Future Challenges Journal Management and Business Administration. Central Europe – 2014 No.22 (4) P 118-132
<http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-f1d8d7c4-c9ff-4361-95c5-4dfcbc8dfc56>

⁶<https://pon.org.ua/novyny/5336-vnz-na-pochatok-2016-2017-navchalnogo-roku-derzhkomstat.html>

⁷Моніторинг інтеграції української системи вищої освіти в Європейський простір вищої освіти та наукового дослідження: моніторинг. дослідж.: аналіт. звіт / Міжнарод. благод. Фонд «Міжнарод. Фонд дослідж. освіт. політики»; за заг. ред. Т.В.Фінікова, О.І.Шарова – К.: Таксон, 2014. – 144 с.

affected by market forces, they are interested in improving their images and developing their own competitive advantages. Thus, education institutions readily participate in education industry events like "The Education and Career" trade fair, advertise their services in specialized periodicals like "Where to Go to Study" and other media and carry out marketing research communicating directly with applicants.

All these activities require financing. Unfortunately, higher education institutions do not have enough money to conduct marketing studies as salaries of personnel are one of their main items of operating costs. For most education institutions this cost item ranges from 50% to 80% (68.5% on average) of their operating cost. 40% of operating costs are payments for utility bills. 3% of operating costs are spent on scientific research activities (according to the data for 2015 provided by the Ministry of Education and Science of Ukraine). Some 1.5% of total income from students are spent for marketing and advertising¹⁷¹.

This is why it is reasonable to analyze the educational service market by conducting socially-oriented studies to identify needs and wants of customers and to find ways of meeting them by education institutions.

Marketing studies are useful for developing targets, strategies and missions of education institutions. Besides, they help to analyze markets, economic situation in general and other factors to identify strengths and weaknesses of an education institutions which is an important step in developing a marketing strategy.

Despite a decrease in state financing, education institutions became quite independent, they have new opportunities to find funds for themselves by introducing paid education and providing additional educational services on a fee-paid basis (see Table 2.2).

Table 2.2

Business processes of education institutions

Key:	Auxiliary:
Learning process (main learning process, postgraduate and preparatory learning)	Guideline development process
Scientific research activities	Equipment and material supply
	Construction and renovation
Managerial:	Developing:
Planning	Establishing branches
Arranging the learning process	Expanding the range of services
Employee motivating, training and promoting	Improving quality of services

Identifying and seizing opportunities listed in the table are one of the most important tasks for the marketing function of an education institutions. Thus, it can be stated that marketing studies are a task for the marketing function of an education institutions that helps to develop services meeting needs of their consumers.

Marketing studies are aimed at identifying promising needs, assessing how well they are met, validating assumptions and forecasting consumers' behavior.

The most important issues tackling of which determines target educational services can be described as follows:

- Desired social and economic characteristics of students;
- Learning objectives and appropriate balance between humanitarian, fundamental and professional knowledge;
- Duration, forms and stages of learning;
- Type of education institutions considering its location;
- Learning and testing methods;
- Knowledge and skills of teachers;
- Equipment and materials used in the learning process;
- Finding potential consumers of educational services and identifying their needs;
- Monitoring the educational service market;
- Marketing studies and patents;
- Opportunities for offering new educational services.

Marketing studies ensure good knowledge of the markets being studied and the ability to quickly respond to market changes.

Marketing activities should not be spontaneous or occasional, otherwise their results may be incorrect. Marketing studies should always be integrated and strive for mitigating uncertainty, while their results must determine targets and strategy of the education institutions. Before applying any technique for marketing research, it needs to be verified if it is appropriate for a certain market.

Marketing study results should be translated into practical developments to select and implement marketing strategies and activities justifying the need for such study.

Marketing study techniques are deemed effective if their results can be used to back up decisions regarding the educational service market. During a marketing study, information required to resolve current problems is collected and processed.

Marketing studies can be classified according to their tasks and objectives that is summarized in Table 2.3 based on scientific studies^{8,9,10,11}.

⁸Артыкбаева С. Ж. Сущность и особенности маркетинга в сфере образования (Обзор литературы) [Текст] // Проблемы и перспективы развития образования: материалы VIII междунар. науч. конф. (г. Краснодар, февраль 2016 г.). — Краснодар: Новация, 2016. — С. 43-47.

⁹Василькова Н. В. Маркетингові дослідження у сфері вищої освіти / Н. В. Василькова // Стратегія економічного розвитку України: зб. наук. праць / М-во освіти і науки, молоді та спорту України, ДВНЗ “Київський нац. екон. ун-т ім. Вадима Гетьмана”, Український Союз промисловців і підприємців, Ін-т світової екон. і міжнар. відносин НАН України; голов. ред. А.П. Наливайко. – К.: КНЕУ, 2012. – № 30. – С. 192-198. □[Web publication]. Available at: http://ir.kneu.edu.ua:8080/bitstream/2010/4333/1/2012_30_%28192-198%29.pdf

Types of marketing studies

Type	Characteristics
Exploratory	Raw data is collected to study operations of the education institutions in details and its positioning on the educational service and labor markets. This study is intended to identify a sound marketing strategy for the education institutions
Descriptive	Detailed description of factors and phenomena is given, as well as their relations and influence on the education institutions and its markets.
Casual	Checking and validating assumptions about cause-and-effect relations between certain characteristics of educational services provided by the education institutions and demand for such services.

Marketing studies can be classified by their subjects – studying the market, individual components of the marketing mix (educational services, demand, promotion, etc.), behavior of educational service consumers, actions of competitors and so on; by their orientation – studying external or internal environment of the education institutions.

Some researchers also classify marketing studies according to information collected and processed during the study: qualitative and quantitative studies; secondary information (cabinet) and primary information (field) studies.

It should be noted that marketing studies are usually classified as qualitative and quantitative studies (see Table 2.4).

There are other marketing research techniques: Qualitative study projection methods, watching customers, interviews by experts, studying physical response of respondents, etc.

Some of the above techniques we used to carry out a marketing study.

Our study was aimed at assessing efficiency of media for advertising campaigns of the university run to raise awareness of its educational services.

Its results suggest that the most efficient media for informing potential customers are print media and the Internet. This study demonstrates trends in efficiency of the following communication channels: trade fairs, open houses, schools, followers, graduates of the Kyiv National University of Technologies and Design (KNUTD).

The results suggest that the scope of educational services is optimal.

¹⁰Галеєва Р.Б. Маркетингові дослідження в сфері освіти / Р.Б. Галеєва // Казанський педагогічний журнал “Економіка і освіта” □ 2005. □№ 3. □С. 47-52. □[Web publication]. Available at: <http://cyberleninka.ru/article/n/marketingovye-issledovaniya-v-sfere-obrazovaniya>

¹¹Решетілова Т.Б. Маркетингові дослідження: підручник : [Webpublication] / Т.Б. Решетілова, С.М. Довгань; М-во освіти і науки України, Нац. гірн. ун-т. – Електрон. текст. дані. – Дніпропетровськ : НГУ, 2015. – 357 с. – [Webpublication]. Available at: <http://mk.nmu.org.ua>

Table 2.4

Qualitative and quantitative studies

<i>Qualitative studies</i>			
Characteristics	It is conducted to find out root causes of decisions made by customers, associations brought out by products or brands, options for advertising campaigns, etc. This study is a kind of intelligence to answer the questions "How?"		
Key techniques	Detailed interview	Focus group	Protocol analysis
Technique description	A sort of interview, a qualitative assessment technique for sociological and marketing studies. Its distinctive features are duration, comprehensiveness, lack of standards, taking into account non-verbal signs like intonation, gestures, posture and special attention to respondent's personality. It's intended to reveal the examined issue in details, finding out its aspects and new facts relating to it.	Several (6-12) respondents discuss the subject proposed by the moderator. Unlike traditional interview, respondents mainly speak to each other, while the moderator gives a general direction to their conversation. This technique helps to reveal people's motives, identify ways of their perception of the problem.	During a protocol analysis, the respondent is proposed a choice situation to describe in details all reasons behind a respondent's choice. It is used to build a decision making model for buying a product (service)
<i>Quantitative studies</i>			
Characteristics	It is used to make a conclusion or verify certain assumptions. A random sample is used to make a conclusion and extrapolate it over the entire target audience; the number of participants is large		
Key techniques	□ Respondents are interviewed about their preference, awareness and attitude to the product. Two methods are applied:		
	Filling in a questionnaire	Interviewing	
Technique description	Respondents are questioned in written using a questionnaire	Interviewing respondents informally in a friendly way	

Visitors of the Education and Career trade fairs have been interviewed for many years. Results of these interviews make it possible to quickly determine a university's place in the popularity ranking. Education industry trade fairs provide an opportunity to watch and analyze efforts made by education institutions to promote their educational products and services. These events enable to collect information about current competitors' prices for their services. Analyzing sources of information used by potential customers (applicants and their parents) can also be useful.

Efficiency of different communication channels can be assessed by collecting data on phone calls received by an education institutions. The results confirm

efficiency and variable significance of marketing channels ranging from the Internet to personal contacts. The Internet is the absolute leader. Developing an education institutions website does not require much money, but does require a marketing competence and good designing and technical skills of website developers.

The price is the most important channel of communication. Customers assess the quality of services offered by education institutions and reputation of their brands based on prices for their services. Pricing in marketing is grounded on customer demand assessment. Accuracy of demand assessment depends on how well customers are segmented. Identifying a target group of customers, finding out their attitude to the brand, their preferences and career ambitions are important tasks.

Many education institutions often carry out surveys among students to find out their opinions of professors and training programs. We questioned 72 graduates of two KNUTD faculties. The results turned out to be quite illustrative. The survey was aimed at finding out graduates' opinions of education they received at the university. A survey objective was to study competitiveness of graduates in the labor market.

Graduates were asked: "Does your current job relate to education you got at the university?" – 39% of respondents answered "Completely relates", 50% – "Somehow relates", 11% – "I am unemployed". Graduates were asked: "Do you satisfied with your current job?" 58.2% of respondents answered positively. 40% of respondents said that education they received at KNUTD made them feel confident in the labor market. 15% of respondents would like to continue their education as postgraduates and 53.6% wanted to take a second university degree. The analysis of respondents' answers to open questions revealed that a high cost of taking a second degree at KNUTD is the main reason preventing them from taking it.

Thus, the results we obtained are a reliable source of information to make managerial decisions.

It must be noted that a choice of survey techniques depends on objectives of the survey.

Marketing research in education is a set of methods aimed at studying, planning, implementing and monitoring the developed programs intended for sharing educational values with target markets and reaching objectives set by the education institutions.

Consumers of educational services with their social and psychological characteristics are a priority in marketing in education. These characteristics determine consumers' behavior and help to estimate market demand and supply, find ways to balance them and to identify market opportunities.