



International Economy

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**BENCHMARKING METHODS
OF MANAGEMENT OF COMPETITION
IN THE WORLD ECONOMY***

Abstract

The authors elaborate methods of forming, developing and disseminating the relations of mutual assistance in the conditions of modern competition. The essence of benchmarking and its historical roots are revealed. The authors dem-

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onstrate the significance of benchmarking in the post-socialist countries, the economies of which are at the stage of creating their own model of a «catching-up leap». The authors develop a standpoint that in order to overcome the traditional ideology of competition, it is necessary to go beyond the purely economic relations and step into the field of ethics. Significant attention is paid to using the excellence model in the system of international standards. The authors believe that benchmarking activity should not be limited to analyzing processes and results; it should encompass the study of the thinking mode of individuals, teams or nations as an element of the motivational mechanism. Benchmarking calls for creation of a system, which would satisfy the interests of both the leaders and the followers, that is, mutual gains. To a large extent, this task can be solved within the frames of collaborative benchmarking, which is especially effective in the conditions of creating innovative cooperation networks and clusters. High level of trust between the partners should lay the basis for the relations of rivalry and mutual assistance.

Key words:

Benchmarking, benchmarking code of behavior, best practice, collaborative benchmarking, competition, individual benchmarking, knowledge benchmarking, lagging behind, leadership, mode of thinking, mutual assistance, rivalry, trust.

JEL: F40, M31.

1. Benchmarking: the history of the formation

Benchmarking is a direction of scientific research and area of practical activity, which has gained broad recognition in the world economy during the last decades of the 20th and early 21st century. Experts working in this field of knowledge define the essence of the term based on its etymology: the English word «benchmark» interprets into Ukrainian as «a notch» or «a starting point». In fact, this term was used to determine the process that started in 1972 in the USA. It was introduced by the Cambridge Institute of Strategic Planning and Prims research and Development Company. These institutions revealed that effective managerial decisions under conditions of competition can and should be developed with orientation towards experience of other companies that successfully

operate in affiliate branches. *This in turn calls for elaboration of a system which would allow to study and use best-practice experience regardless of competition.*

Benchmarking appeared in marketing and management textbooks after 1979 thanks to successful realization of the Competitiveness Benchmarking project by Xerox. It consisted in performing a comparative systemic analysis of the company's costs and products against those of the Japanese companies and entailed elaborating effective measures for implementation of their experience. The study of competitors' business practice was induced by the intensified competitive pressure on the global market thanks to the activity of Japanese companies which started to crowd Xerox out of the market. This helped to detect and solve a number of bottlenecks related to product warehousing, shipping, etc¹. The study was based on the company's subsidiary Fuji Xerox operating on the Japanese market. For comparison the data on copying machinery market prices was used, which allowed to make an indirect assessment of the operational costs of competitors and to single out the areas in which they performed better financially. Assessment of the gap between Xerox and its competitors and determination of its causes and their subsequent liquidation were the findings of the study. It nevertheless took a lot of time to catch up with the leaders. According to publications, only in 1987 Xerox has overtaken its competitors in those areas, which were earlier determined to have obvious drawbacks². All in all, the success of Xerox attracted attention of economists from different areas to benchmarking. Since then, businessmen have started to treat it with trust, while scientists activated their research in the field.

Another experience, which has also set a standard, is that of Southwest Airlines, which managed to increase its competitiveness significantly thanks to comparative testing of order processing, transport operations, business organization and finance. At that, the company did not stop at studying the practice of its competitors, and focused on studying business methods in other industries as well. Thus, having revealed that technical maintenance and refill of airplanes requires no more time than do similar operations in the automobile industry, the managers of Southwest Airlines took into account the experience of «Formula-1» mechanics and reduced the duration of this procedure from 45 to 15 minutes, which allowed to increase the number of flights³.

¹ See Терещенко О. О. Фінансова діяльність суб'єктів господарювання / О. О. Терещенко // [Electronic document]. – Available at: <http://fingal.com.ua/content/view/319/54/1/1/>.

² Ватсон Г. Х. Бенчмаркинг в примерах / Грегори Х. Ватсон // Деловое совершенство. – 2006. – № 8. – С. 29

³ Фуколова Ю. Всё лучшее – себе. Бенчмаркинг / Юлия Фуколова, Игорь Шелухин, Артём Белов / [Electronic resource] // Available at: <http://www.finansy.ru/publ/mark/001.htm>.

2. Study and dissemination of best practices in the command administrative (socialist) economy

Extensive experience in the study and dissemination of best practices accumulated from the former socialist countries within the practice of organization of socialist competition. In the Soviet Union, it began to develop on a large scale with the proclamation of the course of industrialization in 1926 and has become a form of mass labor movement for increase productivity and achievement high production indexes. This tendency originated on the basis of creation the production propaganda bureau, as well as percussion groups of communists, members of factory committees of trade unions and advanced workers. They had to show the masses with their own example models of productivity.

In 30th of the past century mutual assistance in borrowing of best practices was named «a social tug», which reflected a sociable support of backward workers by advanced employees in the areas of performance and over-norms, reducing production costs and quality improvement.

In 1932, there was a widely promoted by a communist party nomenclature «Izotov movement», which is associated with the name of the miner of the mine number 1 «Kocheharka» (Gorlovka, Donetsk (at that time – Stalin) region of Nikita Izotov. He achieved high productivity exceeding output norms 3–4 times through careful study of the coal seam, the ability to make coal mines quickly, coherent labor organizing, proper tools maintenance. However, in Izotov movement the new was assuming by a front-rank worker the obligation to help the backward workers and supervise their work.

The highest stage in the development of socialist competition and dissemination of best practices was the «Stakhanov movement.» Its beginning was laid August 31, 1935 by the miner of the mine «Tsentralne-Irmino» (Kadiyivka, Luhansk region) Alexei Stakhanov. He extracted during his alternation over 102 tons of coal at a rate of 7 tons. In September 1935 A. Stahanov updated his achievement, having extracted 175 tons, and in a few days later he extracted 227 tons. Eventually, his achievements have been used by the ruling party leaders for a broad movement to improve performance, which was transformed into a stirring «record-mania». Only mine «Tsentralne-Irmino», which was renamed as the mine after Stalin, where just for incomplete 1937 one thousand different records of all types of coal works is reached, while the mine fulfilled only 70% of the state plan. The Stakhanov movement propagated by administrative methods in all sectors. However, as a rule, for future advanced worker performance were created all necessary conditions, and when that was not enough, fraud and violations of technical specifications were allowed. So, well-known in Ukraine Stakha-

nov record-holder M. Mazai as a founder of movement for speed steel production reduced the duration of steel melting by 1.5 times, although the open-hearth furnace, according to experts, wore out twice as fast.

It should be noted that the identification and dissemination of best practices within the organization of socialist competition was the focus of the party and state apparatus of the Soviet Union throughout its non-military history. It was about finding an alternative to competition, in which the adversary has to be complemented by openness and accessibility of the best practices under non-market economy levers. Herewith, in the theoretical sense were used the works of Vladimir Lenin, who, particularly in his work «Immediate Tasks of the Soviets» wrote that «all that remains for us now is to organize the competition, that is to ensure transparency, which would give an opportunity for all communities in the state to acquaint about how just out development in various areas – to provide, secondly, the comparability of results of the movement toward socialism in one commune within a country – to ensure, thirdly, the possibility of practical repetition of best practices, made by one community, by other communities – to provide exchange opportunities those material forces, which showed themselves in the best way in the relevant area of the economy or government management⁴». During the time of the Soviet Union a continuous search for different forms of competition and repetition the best practices was going on, but in a command economy, they do not produce the desired result – ensuring the successful economic development. However, can be considered that the worked out methods of analysis, distinguishing the best practices of business entities, individual units of enterprises and employees, and they can be definitely used in the benchmarking system.

3. Benchmarking as a new scientific direction

Taking into consideration the history of benchmarking appearance and development, the extensive set of its definitions, does not bear significant differences. As a rule, benchmarking is defined as a study of another company's experience, as well as assessment of its value for one's own company, organization, industry, or country, and its adoption in own business conditions. In its broadest sense, benchmarking is a reference comparison and tuning of one's own organization and its business processes by using other companies' experience. Today, benchmarking, together with management and marketing, is one of the three most popular methods of business management, which is rightly treated as a new direction in the development of economic science.

⁴ Ленин В. И. Первоначальный вариант статьи «Очередные задачи Советской власти» / Ленин Владимир Ильич // В. И. Ленин. Полн. собр. Соч., т. 36.

When determining the place of benchmarking in the modern science, it would be incorrect to present it as an absolutely new and unknown phenomenon. It cannot be considered by analogy with newly appearing illnesses, like bird or swine flues or global warming. Business espionage always existed in the market economies, competitive and economic intelligence, the goal of which was to study the secrets that lay the basis for other companies' or countries' achievements and success. It is owing to this that the inventors of fire-making, silk-making, porcelain production, and alchemist discoveries were deprived of their monopoly⁵.

In history benchmarking experts single out various forms and methods of attracting foreign experience for commercial success. Such a practice was extremely popular in the countries of the former socialist camp. Worth recalling is the experience of socialist contest organizing, which was widely used in post-communist countries under the planned economy. Since it was based on comradesly rivalry and mutual assistance, the participants of the socialist contest were obliged to share the leading experience. This was the subject of agreements, bilateral visits and traineeships, as well as an instrument used for motivational methods development. Unfortunately, the system of socialist contest could not play a decisive role in economic development because the goals of economic activity were limited by the state plan, and administrative levers of its fulfillment dominated in the economic mechanism. Owing to this, experience sharing more often than not was superficial in nature and reduced to mutual visits and honoring.

It cannot be stated that today the development of market relations in the world, even in the leading countries, has reached such a level that benchmarking has become a functional element of each company's activity. This is mostly true for small and middle-sized companies, 90% of which – according to the European Commission – do not use it in their practice. It is implemented only in big companies with more than 1000 employees. As for the post-Soviet countries, they are considerably lagging behind the European countries in terms of benchmarking use. Today only Russia participates in the European Benchmarking forum (EBF) and prepares official reports for this organization, even though the latter was established back in 1997. This happens regardless of the fact that EBF aims to transform Europe into the world benchmarking leader in order to use it as an instrument of continuous business development and increased their effectiveness in the conditions of intensified international competition. In addition, special attention within the frames of the forum is paid to small and middle-sized business.

It might seem that the most active users of benchmarking ought to be the post-communist countries since they are hugely lagging behind the leaders. It

⁵ Єгоров В. 3 історії розвитку промислового шпигунства // Дзеркало тижня. – 1994. – 31 грудня. – № 13. – С. 14.

might seem that there is no need in persuading that the task of catching up to a large extent **can** be solved by adopting achievements of the leaders. Unfortunately, this doesn't work so far, the reasons to which being the inadequacy of personnel providing with respect to tasks of effective application of benchmarking to solving the problem of competitiveness, as well as management's prejudice against the expensiveness and complexity of its realization. At that, it should be noted that similar factors took place in the developed countries as well. However, in the post-communist countries, their influence is much more powerful.

Today benchmarking grows in significance in Ukraine, the economy of which is at the initial stage of creating its own model of a «catching-up leap». In view of this, it should be kept in mind that similar tasks have already been and are being **solved** to some extent by many national economies, which obtain both positive and negative results.

Ukraine can learn a lot from the experience of both developed and newly industrialized countries. In fact, the «lessons» taught by the latter in many aspects are no less important, especially in those aspects that their reformers started with public recognition of the backwardness and resolute rejection of the previous models and superposition, which appeared to be incapable of ensuring development in the new conditions. The fanfaronade of claims to «imperial greatness» and ambitions of separate population layers were set off with sharp criticism of what had to be «left behind».

The Prime-Minister of Malaysia Mahathir bin Mohamad, who held the office for 22 years, can be a great example. In his book «The Malay Dilemma», which was written during a temporary retrenchment from active political activity, the author critically evaluated the individual character features of Malay people. In particular, he openly wrote about their laziness, sluggishness, a habit of relying on fate, restraint and unwillingness to study, everything that prevented them from being modern. Based on this, he concluded that the Malays had to change themselves. This method is evidence in support of the fact that those who lead the reforms must be willing to move against the currents that impede modernization.

At its very core, Ukrainian modernization faces the Hamletian dilemma of «to be or not to be». Regardless of the fact that the country has spent the last twenty years of its independence building a national version of oligarchic state regime on the ruins of planned economy, it is time to admit that it did not become a foundation for the «Ukrainian miracle». In its functioning, this model hampers the instruments of competition, and the country never reaches the level of global leaders. By controlling entire industries, the oligarchs find no interest in inter-industry movement of capital or structural changes; instead, they accumulate personal wealth through channels of political rent by taking control over public institutions and amalgamating with them. The essential feature of the oligarchic economy is dominance of corruption based on close, partner relations between the economic and administrative-political «elites». At that, both the population of

the country and foreign capital are removed from the privatization processes. Such a situation cannot be improved without the study and brave implementation of international experience adjusted to national peculiarities. Of special importance in this aspect can be the experience of developing national doctrines of settling economic, social and ecological problems at the level of globally recognized standard indicators.

A barrier to benchmarking development is the fact that no one in the market economy has managed to remove competition, whereas leaders in technical progress maintain a limited interest in it at most. Thence, the methods of benchmarking are based mostly on using reports as a source for information. A direct study of best practice, a search for mechanisms of engaging the leaders in the process of studying their experience by the lagging companies do not gain sufficient recognition even where the propagation of successful business is performed at a high level. Thus, in Great Britain, the Ministry of Trade and Industry's list of companies, which accept visitors within the framework of the Inside UK Enterprise (IUKE) program, includes 180 companies⁶.

It is beyond doubt that with such a range of best-practice enterprises selected by the government, free advertising and official representation assure their long-term advantages and increased customer loyalty, even though their competitors can be their equals in business excellence. In any case, they promote certain progress, especially on the basis of forming the motivation for improvement. It is no coincidence that IUKE, the largest program of this kind in the world, is popular among entrepreneurs, and dozens of one-day visits to companies for experience-sharing purposes are a proof of that.

Overcoming the traditional ideology of competition is an important aspect of successful benchmarking implementation. This problem exceeds the limits of purely economic relations and calls for discussion in the sphere of ethics. Thus, in the USA and the EU, special rules of conduct are being developed, the aim of which is promoting mutual understanding among potential partners. For example, Ameritech company, a member of the benchmarking council at the US Institute of Strategic Planning, elaborated and approved a code of conduct, which includes nine positions: observe the laws; be willing to provide information analogous to what you want to obtain; respect each others secrets; do not disseminate received information beyond your company; initiate the contact only with those who are in charge of benchmarking; do not make references without permission; be well prepared already for the first contact; study benchmarking well and follow the procedure; determine the object of benchmarking analysis; perform thorough self-assessment⁷.

⁶ Пилчер Т. Бенчмаркинг как средство повышения конкурентоспособности компании / Терри Пилчер // Европейское качество. Дайджест. – 2004. – № 1. – С. 44

⁷ Джордж С., Ваймерскирх А. Всеобщее управление качеством. Стратегии и технологии, применяемые в самых успешных компаниях. – С.-Пб.: Victory, 2002.

By analogy with the USA, the European Foundation for Quality Management (EFQM) developed the European Benchmarking Code of Conduct⁸. It contains ten clauses, which set the foundations of the whole benchmarking process: principle of preparation; principle of contact with consideration for the partners' corporate culture; principle of information exchange; principle of confidentiality; principle of using the obtained information; principle of legality; principle of completion of the assigned responsibilities; principle of understanding and agreement; benchmarking with competitors; and benchmarking protocol⁹.

Experts in the practice of benchmarking often stumble across the problem of adopting the revealed experience. Generally speaking, it cannot be cloned at another enterprise. Moreover, the leaders do not stop in their development, they progress continuously. That is why the concept of benchmarking is not limited to procedures of its realization. Both the leaders and the followers should be equally committed to building all their business activity towards increased performance. The only qualitative difference between them is that leaders are destined to search for new, previously unused methods of business; they are supposed to improve the level of business performance which is currently perceived as the limit of excellence. The followers should be solving a double task: to use the leader achievements and to search for opportunities of higher performance by producing their own ideas and methods of business activity. At that, the former will focus on self-assessment, whereas the latter ones will focus on competitor evaluations.

The reference model developed by the International Standards Organization (ISO) and included in the ISO 9004:2009 offers a considerable support for the growth of national economies in general and separate economic agents in particular¹⁰. The significance of this standard consists in the fact that for the first time it offers a set of analytical self-assessment methods for organization's maturity identification based on techniques of ISO 10014:2006¹¹ combined with traditional auditing of the quality management systems¹².

Economic literature shares a standpoint that the EFQM models do not comply with the individual needs and should be replaced with the individualized models. «Ever more organizations refuse to use EFQM due to its generality and

⁸ European benchmarking code of conduct // EFQM [Электронный ресурс]. Режим доступа: <http://www.efqm.org/en/PdfResources/Benchmarking%20Code%20of%20Conduct%202009.pdf>.

⁹ The principles of the European Benchmarking Code were not officially translated to Ukrainian.

¹⁰ ISO 9004:2009. Managing for the sustained success of an organization – A quality management approach.

¹¹ ISO 10014:2006. Quality management – Guidelines for realizing financial and economic benefits.

¹² ISO 10014:2006. Quality management – Guidelines for realizing financial and economic benefits.

non-compliance with individual needs, and move on to creation of their own, individualized models of self-evaluation, which are continuously being improved along with improvement of the organization»¹³, acknowledges V. Novikov. We can agree with such an approach only in the sense that individual methods of evaluation are really necessary. However, they cannot replace the old ones, they should supplement them. The individualized methods can turn especially feasible and effective when searching for innovative managerial decisions regarding leaping development (for those who lag behind) or preserving the leadership positions (for leaders).

In view of the tendencies in the development of benchmarking methods, it is worth admitting that the analysis of best practice is usually concentrated on two aspects: the process and the results. In the methodological sense, they are defined by T. Conti as «left to right» (from systemic factors through processes to results) and «right to left» (from results through processes to systemic factors)¹⁴. However, from both of these approaches misses an element which accompanies and assures their transformation into a quantitatively and qualitatively superior result – the mechanism of motivating all participants of the process towards best performance. Its absence or deficiency turns benchmarking into an instrument, which cannot always be a sufficient method of achieving the most desired effect – the leadership. Without leadership no excellence is ever gained, even though it is only natural for companies to wish «to play a better game». In this respect, it would be an opportune moment to recall an aphorism attributed to B. Napoleon: «He is a bad soldier who doesn't dream of becoming a general»¹⁵.

Thus, leadership and ambition are essential or even decisive elements in achieving high results. However, they should be regarded in a broader context, proceeding from the fact that they are elements of *the mode of thinking* of individuals, teams, nations, which are predetermined by the motivational mechanism. In our opinion, this layer of activity has almost disappeared from the benchmarking systems; due to this, not all attempts to accumulate and use best practice produce desired results. This is especially noticeable when there is no understanding of the goal and methods of its achievement in the management system.

Understanding of the need to include the study of the thinking modes in the methodology of systems benchmarking is maturing and shaping among scientists. Thus, J. Pfeffer and R. I. Sutton from Harvard Business School conclude that «instead of copying what others do, we ought to copy how they think»¹⁶. Es-

¹³ Новіков В. Діагностичне оцінювання як невід'ємний елемент сучасної системи управління / В. Новіков // Стандартизація, сертифікація, якість. – 2011. – № 2. – С. 40.

¹⁴ Конти Т. Самооценка в организациях. – М.: СМЦ «Приоритет», 1999. – 337 с.

¹⁵ The saying is attributed to General A.V.Suvorov in Russia.

¹⁶ Pfeffer J. Three Myths of Management / Jeffrey Pfeffer and Robert I. Sutton // HBS. – Working Knowledge. – 2006. – 3/27.

pecially as experience is always in the past which cannot be blindly copied. The past had its own business conditions, client environment, international situation, etc.

Finally, there is also a factor of human exclusiveness. It can be easily noticeable in companies producing highly creative products and services. However, it is much more complicated to study the role of the leader, principles of team selection, employee motivation, and interpersonal relations at industrial enterprises. However, complexity should not lead to abandoning the study of their resource potential. In preparing for a benchmarking study, it is necessary to elaborate and approve with the partner the methodology of researching the corporate mode of thinking in general and with respect to separate employees and their groups. This element can partly be performed in the aspects of analyzing the volume of knowledge possessed by the organization. The knowledge is scattered within databases, document storages, e-mails, and reports. In addition, a significant volume of knowledge and experience is concentrated in the heads of employees, which can be accessed during individual contacts.

Knowledge benchmarking should include systems of knowledge management. This will allow going beyond simple reviews of separate data sets. It will help to single out a comprehensive business strategy, as well as a system for its realization based on all available information, experience, and employee qualifications. Along with that, reducing the time of adjustment to changes in market conditions, achieving competitive advantages in processing the accumulated knowledge, information updating, and new knowledge generation acquire particular significance.

Finally, knowledge benchmarking is a study of competitive advantages of an enterprise in the knowledge sphere, which calls for the development of special methods and skilled employees. More than that, selection of employees should be performed in such a way that they don't cede to competitor's employees in terms of qualifications and creative potential in order to be able to analytically compare the knowledge management systems at both enterprises. A good example in this respect are the Japanese, who traditionally possess the mode of thinking based on reference models, which allows them to adopt the new knowledge brought from abroad. A popular urban legend says that many ideas published in the Soviet magazine *Yunyi Technik* (translated to English as «Young Technician») were used by Japanese businessmen, whereas domestic experts treated them only as popular information for professional orientation of children and young people.

In revealing the essence of benchmarking, researchers often neglect *creative learning* (studying) as its element. Meanwhile, globalization and modern practice require constant mastery of the new advances in science and technology. Creative learning in the system of benchmarking should be understood as a need to restrain from direct, mechanic copying of the knowledge accumulated by

competitors according to the principle «think as I do; do as I do». Experts in benchmarking should assimilate and develop the achievements of competitors together with the tasks of corporate development in the conditions of scientific and technological progress. Comparing one's own company with an industry leader (standard) should be the basis for development of a new idea or a set of ideas and encourage to innovation. If such activity is performed not occasionally, but on a regular basis, it develops creative skills of employees and shapes the creative work towards building a new image of one's own company. Thanks to this, benchmarking gradually achieves the potential which (if creative learning was successful) will pave the way to leadership.

It should be noted that the benchmarking literature sometimes uses the term «a learning organization». It usually has a double meaning: the study of someone else's experience and its creative adoption in one's own business conditions. Unfortunately, such an interpretation reduces or even beshadows the creative element of *developing original technological, organizational, financial-economic, social, and ecological solutions*. This process can happen only if the study and research are integrated. If not, the essence of benchmarking reduces to the notion that a learning organization has only one «teacher» – the competitor, whose experience it is creatively copying. We believe that creative learning of the «learning organization» should be more precisely defined by the conception of «being one's own teacher», meaning that all previous knowledge is studied mostly to form one's own face in business, market awareness, or one's own alter ego.

4. Cooperation and mutual assistance in the benchmarking system

In the system of competition, benchmarking revives the attributes, which should be inherent in every contest – relations of *cooperation and mutual assistance*. According to the logic of market relations, economic leaders are not interested in having competitors reproduce their results, or even outperform them. This is an element of rivalry. It is a driver of economic progress because it motivates business people to continuously search for, create and realize growth potential. In addition to rivalry in human life and economics, another fundamental law of human evolution is active – the law of cooperation and mutual assistance. Its essence was thoroughly studied by P. A. Kropotkin. In his theoretical concept, cooperation and mutual assistance are defined as a law of nature similar to mutual combat, although combat is more important for development¹⁷. To a large

¹⁷ Кропоткин П. А. Взаимная помощь среди животных и людей как двигатель прогресса [Electronic document] Кропоткин П. А. – Available at: <http://aitrus.info/node/767>.

extent we can agree with D. Maslov, that «common work for the good of the company has a much larger potential than the work which is based on conflict, ranging and contest». The ideas that form the basis for benchmarking never better correspond to the principle «we'll all win together», and thus fit into the paradigm of modern management. In addition, the mechanism of benchmarking methods contains restrictive elements regulated by the benchmarking code of behavior»¹⁸.

The specific of cooperation and mutual assistance relations consists in the fact that from the outside they look as if the interests of the lagging partners dominate. However, a deeper analysis shows that, given the responsible attitude of partner towards one another, both sides win and the weaker side does not necessarily gain more. Thus, the leader, by providing the opportunity of studying his experience, is actually «selling» his second-hand solution. The side which receives it will never be able to automatically reach the level of the leader. More often than not, the experience of others is only an information base for the creative search of one's own concept of development and its realization.

Above, we have already mentioned the interests of leaders towards cooperation and mutual assistance in the aspects of advertising. Another, no less important interest can be expressed by means of a Latin aphorism «docento discimo» – «we learn by teaching». Unfortunately, this side is the least described in the economic literature, and its rarely covered by mass media. The Russian engineer D. Maslov after his visit to Japan made a conclusion about the belief of the Japanese that if a company teaches someone, it educates itself. He puts forward an example of the Russian delegation's visit to a Masashino cleaning company employing 360 employees, which is a winner of the Japanese quality award. Having earned reputation in a relatively unpopular business, the company has opened a new business direction – consulting. Every day it offers paid tours for 5 to 7 delegations and sells its best practice publications¹⁹.

However, it should be noted that the advantages of such cooperation do not always find proper recognition among business people. According to Japanese experience, only 50 to 75% of the companies agree to participate in partner benchmarking. When the matter in question is recognised service quality leaders, the winners of Boldridge National quality award, engulfed by that sort of proposals, usually reject all offers except for their affiliate suppliers and customers²⁰. At that, assessing the most famous global quality awards shows that only the Japanese Deming award system is oriented towards industry and wide dissemination of standardization methods. With the European quality award, the accent is made

¹⁸ Маслов Д. Бенчмаркинг – новое слагаемое успешной стратегии бизнеса в России / Дмитрий Маслов // Деловое совершенство. – 2006. – № 1. – С. 18-19.

¹⁹ Маслов Д. Бенчмаркинг – новое слагаемое успешной стратегии бизнеса в России / Дмитрий Маслов // Деловое совершенство. – 2006. – № 1. – С. 18.

²⁰ Джордж С., Ваймерскирх А. Всеобщее управление качеством. Стратегии, технологии, применяемые сегодня в самых успешных компаниях. – СПб.: Victory, 2002.

on customer protection and environment, whereas the Boldridge award is targeted towards popularization of strategic planning²¹.

Cooperation and mutual assistance in the modern world are global phenomena. Creative adoption of national achievements in socio-economic development is a new and actively spreading trend. Although in the second half of the XXth century, most interest was concentrated on the American, European and Japanese models, the modern reformers in different countries are thoroughly studying the systems of more or less successful countries. The Chinese, Indian, Singaporean, and Turkish models are popular in emerging economies. Many African countries, such as Ghana, Kenya, Mozambique, Nigeria, Senegal, Rwanda, Tansania, and Madagaskar, are successful to various degrees in adopting the Indian model in information technology sphere. The World Bank popularizes the Brazilian system of conditional cash transfers, which appeared to be innovative in boosting school enrolment, reducing child and mother death rates, and reducing poverty without material budget losses²². In this system, the conditions for welfare transfers are not only low household incomes, but also getting regular check-ups at the doctor's office and vaccinating children, enrolling them at school. Welfare transfers can take the form of grants awarded to talented offspring's of poor families for study at prestigious federal and private universities. The Columbian system of public transport TransMilenio is very popular in large cities of many countries, providing high-speed bus lines, and bicycle lanes, large-scale construction of libraries, schools, and sports areas. In recognition of the significance of this system, the Mayor of Bogota was granted «The Golden Lion», the highest award of Venice architectural Biennale. He also presented his achievements in Moscow and Kyiv.

As the forms of mutual assistance and cooperation we can identify membership in special funds and cooperation with organizations, which offer best-practice information dissemination services. In this respect, significant benefits offer membership in the European Foundation for Quality Management (EFQM), which accumulates best-practice experience in the field of management. Members of the fund, having interactive access to its information base, can freely receive a range of benchmarking options. Similar services can be offered to companies which are not members of the fund, but on less beneficial terms.

Considerable popularity have gained the services of the best practice department at the Department of Trade and Industry of the UK and a set of intermediaries (Training and Enterprise Councils, Business Links, etc), also known as Connect, Benchmark Index i Inside UK Enterprise. A radically simplified procedure for providing consulting services offers the Connect scheme which uses a

²¹ See report «Национальная премия качества Л. Болдриджа (MBNQA). – Electronic document / Available at: <http://bibliofond.ru/view.aspx?id=538198>.

²² See Васильев С. Модернизация Бразилии: эпоха двух президентов. – Electronic document/ Available at: (<http://www.polit.ru/article/2010/11/15/brasil>).

series of interactive modules on CD-ROM. The task of comparative assessment of key business indicators is solved by means of Benchmark Index, which covers 80 areas of high quality information on the state of finance, management and business excellence. The Inside UK Enterprise program is targeted at direct co-operation; it has already organized dozens of thousands of one-day visits to selected best-practice enterprises with the aim of sharing the experience and carrying out open discussions in a close circle of colleagues. The focus is made on questions of flexible automated production implementation, teamwork organization, and supplier relations.

The relations of cooperation and mutual assistance are based on trust. It is the essential resource for experience sharing and promotion of the leader's achievements. The development of productive relations among economic agents in the conditions of mutual trust and belief in sincere help develops cooperation in such a way that in the end, it brings a synergy effect for all partners. The basis for the philosophy of trust relations is mutual understanding of the fact that each of the partners should mutually share everything that is needed for the benefit of both sides. This mode of behavior will ensure that each partner can expect to obtain what he wants, and even more than that. Under such conditions develops a sense of confidence in the feasibility of partnership. If not, then, according to J. Keynes, arise chaos, uncertainty, irresponsibility, breach of cooperation, etc. According to research of V. Kurylyak, the lower the level of trust in the market, the more restrained become its agents even if decisive action is required, thus leading to decreased rates of economic growth or even a crisis when the level of distrust increases²³.

In its historical aspect, cooperation and mutual assistance are represented as an evolutionary process, typical of the whole natural world and human society in particular. P. A. Kropotkin wrote: «Thus, the moral progress of the human kind in its broad sense seems to be a process of gradual widening of the foundations for mutual assistance, from the primal family to the nation to the commonwealth of nations; in other words, groups of tribes and peoples become larger and larger until finally these foundations cover all of the humanity, regardless of religious, language and racial differences»²⁴. This conclusion becomes ever more actual in the era of globalization, when global economy turns into an organic integrated system of national economies and becomes a complex mono-organism with classical systemic attributes, among which the ability of self-development, management of internal organizations, and interrelations take on an essential importance.

²³ Куриляк В. Є. Цивілізаційні і міжкультурні виміри міжнародного менеджменту / Віталіна Євгенівна Куриляк // Тернопіль: Автореферат ... д-р економ. наук, 2011. – 17 с.

²⁴ Кропоткин П. А. Взаимная помощь среди животных и людей как двигатель прогресса [Electronic document] Кропоткин П.А. – Available at: <http://aitrus.info/node/767>.

P. A. Kropotkin, the prince and progeny of Zapoporizhzhya Cossacks, was not destined to implement his theories of anarchism. He also didn't live to see the «life and death» of real socialism and transformation of capitalism. Looking back in time, we can conclude that the relationship between rivalry in the form of economic contest or competition, and cooperation of economic subjects develops in different ways. At certain stages of human history, the factor of mutual assistance plays a more important role. This is typical of primal, archaic, even savage forms of human existence. It is thanks to mutual assistance, that humans paved the way to progress. Further development passed through increasing role of contest and its transformation into competition. It is just the competition that made it possible to speed up technical progress, discover steam engine, gain exceptional achievements in electronics and chemistry, and create computers. From the standpoint of overall human development, the apogee for competition was reached in 18th–20th centuries, notable for industrial and science and technology revolutions.

Globalization enhances the factor of mutual assistance and cooperation. At first, this tendency appeared mostly at the global and international regional levels in the geopolitical and geo-economic dimensions. First of all, after the World War II a network of global governance institutions was established, including UN, IMF, World Bank, WTO, etc. Later, regional associations started to emerge, the EU being one of the most developed ones. In modern times, this tendency develops in the direction of expanding the functions and authorities of the existing bodies and unions, and establishing the new ones. At that, the institutions that were established earlier focused mainly on the tasks of peaceful co-existence and economic development, whereas the new ones tend to work towards increasing cooperation in the field of ecology, development of natural resources and global ocean, space research, and global climate change.

Further global development consolidates the tendencies of mutual assistance and cooperation not only horizontally at the level of international and inter-country communications. They diffuse deeply at the level of enterprises, local authorities, clusters, ect. This is a manifestation of the Hegel's dialectic law of negating the negation. It should be interpreted as an idea that globalization does not interrupt development, but becomes an heir to the past, replicating its certain features at a new stage in an improved form. For economists, it is associated with the concept of «creative destruction» introduced for the first time by the German economist W. Sombart and popularized by the Austrian and American economist and sociologist J. Schumpeter. The matter in question is that in the process of development, old relationships are destroyed, and the new ones are being formed. However, the later ones recover the values which have been abandoned in the past, but can generate new stimuli for the development in the new conditions. This process, by its nature, is a double negation, according to which everything that hampers development is removed, whereas new opportuni-

ties for future progress are created by taking all the useful attributes from the previous stages.

For the development of cooperation and mutual assistance relations at the level of competitive enterprises, it is essential that they are organically included in the economic system. At that, the element of rivalry should not be excluded or weakened. The new economy needs both intense competition and effective cooperation. This is such an important problem that the effectiveness of the economic system which is being formed in the 21st century depends on its solution. Without including the relations of cooperation and mutual assistance into the economic mechanism, it is impossible to assure the successful and balanced development. A weighty argument in favor of this statement is the fact that the breakdown of socialism was decisively driven by the removal of cooperation and mutual assistance relations from the economic system. Finally, socialism was devoid of the innovative and dynamic essence, and destined to apply imitation in development and production of new products.

Table 1

New technology diffusion: steel industry, continuous casting (in %)

Country	Continuous casting to total output ratio		
	1970	1980	1987
Socialist countries			
Bulgaria	0	0	10
Czechoslovakia	0	2	8
GDR	0	14	38
Hungary	0	36	56
Poland	0	4	11
Romania	0	18	32*
USSR	4	11	16
Capitalist countries			
France	1	41	93
Italy	4	50	90
Japan	6	59	93
Spain	12	49	67
UK	2	27	65
USA	4	20	58
Federal Republic of Germany	8	46	88

Note: *1986

Source: СССР и зарубежные страны в 1987 г. – М.: Финансы и статистика, 1988. – С. 109.

As Kornai admits: «Within the frames of the socialist system, we can speak of its inability to create revolutionary new products, as well as underperformance of many technical progress indicators in comparison with the capitalist system. These features are not a result of political mistakes, but represent deeply rooted attributes of socialism as a system. Unfortunately, this obvious advantage of capitalism has not earned critical acclaim. It is totally ignored by the majority of people and even those who studies alternative systems»²⁵. Y. Kornai mentions 87 revolutionary innovations implemented worldwide after 1917 (the year of socialist revolution in Russia), and innovative companies. It is noticeable that the development of new innovative products took place exclusively in capitalist countries. The countries of the socialist camp at best managed to use innovations created in capitalist countries, engaging instead in alternative solutions or imitating, which is much easier to do. The data in Table 1 proves that it occurred with lengthy delays.

5. Collaborative benchmarking: cooperation and mutual assistance

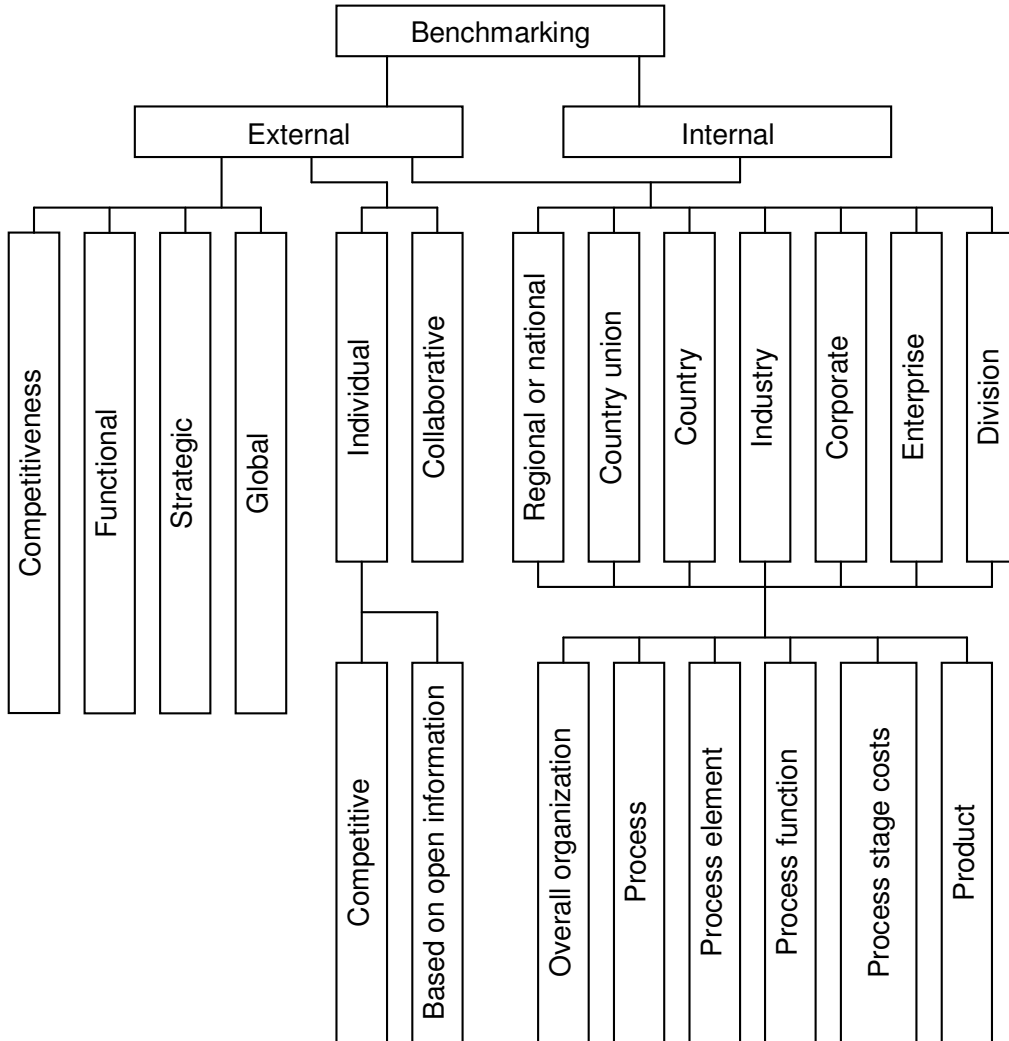
Economic literature contains more or less acceptable classifications of benchmarking. Among them, we can single out internal and external benchmarking, which are also divided into separate subcategories: competitiveness benchmarking; functional benchmarking; strategic benchmarking; global benchmarking; individual benchmarking; collaborative benchmarking; regional or national benchmarking; country union benchmarking; country or industry benchmarking; corporate benchmarking; enterprise benchmarking; corporate subdivision benchmarking; overall organization benchmarking; process benchmarking; process element benchmarking; process function benchmarking; processing cost benchmarking; product benchmarking (Scheme 1)²⁶. Decomposition of the forms and types of benchmarking can be further performed with respect to managerial, financial, social, ecological, and other aspects. However, the common attribute is that all the above forms can either be realized individually or together with a partner.

²⁵ Корнаи Я. Инновации и динамизм: взаимосвязь систем и технического прогресса / Корнеи Я. // Вопросы экономики. – 2012. – С. 4. (Earlier report was presented at the conference UNU-WIDER «Reflections on Transition: Twenty Years After the Fall of the Berlin Wall», Helsinki, September 18-19, 2009).

²⁶ See.: Кане М. М. Системы, методы и инструменты менеджмента качества: Учебное пособие / М. М. Кане, Б. В. Иванов, П. В. Корешков, А. Г. Схиртладзе. – М., СПб.: Питер, 2008. – С. 460.

Figure 1

Benchmarking classification



Source: Кане М. М. Системы, методы и инструменты менеджмента качества: Учебное пособие / М. М. Кане, Б. В. Иванов, П. В. Корешков, А. Г. Схиртладзе. – СПб.: Питер, 2008. – С. 460.

Individual benchmarking is not, in fact, an utterly new business technique. It reflects traditional methods of data collection used by companies in the process of competition. It is a sort of salient industry intelligence realized by accumulating and analyzing open information and occasional «mining» for insider materials. In analyzing individual benchmarking, the authors of «Системы, методы и инструменты менеджмента качества» acknowledge that it is «on the verge of

industrial espionage, which is denounced by the society and, if revealed, can lead to substantial material and image losses»²⁷. Dismissing the illegal methods of data collection, individual benchmarking should be regarded as an element of collaborative benchmarking, providing a possibility for an unburden some study of the leading experience for the partners. At that, new scientific achievements are used in information processing.

Collaborative benchmarking is a modern form of cooperation and mutual assistance for various types of organizations, primarily economic agents. It requires a partner agreement based on mutual interest of the parties. Collaborative benchmarking entails conclusion of an agreement on performing common comparative studies of own enterprise activities or other organizations and unions. The goal of collaborative benchmarking is to reveal and disseminate leading experience among business partners and to provide mutual assistance for further development. Along with that, it can be carried out by enterprises operating in different industries, as well as enterprises operating in one industry, that is competitor companies. The later form of benchmarking is a direction that should be disseminated in the new global economy in order to reduce the negative effects of competition and encourage common activity in the interests of overall economic development. In any way, collaborative benchmarking is a certain retreat from rivalry for the benefit of cooperation, as is demonstrated by the Japanese experience²⁸.

An important motive for cooperation in the frames of collaborative benchmarking is the fact that neither company is or can be absolutely successful in all directions of its activity. That is why joint analytical work, search for better sides of each company's activity, mutual assistance in sharing revealed advantages is a condition for each company's gains from cooperation. At that, partners agree that benchmarking results will not be used to harm parties to an agreement.

Collaborative tendencies in benchmarking development are not limited to enterprise level. Today they diffuse to various spheres of activity and can include regional (in national and international aspects), national and international levels. Benchmarking is also starting to be actively used in cooperation network and cluster development.

Demonstrative is the cooperation between Germany and Korea in comparative analysis of innovative cooperation networks²⁹ and clusters. This bench-

²⁷ Кане М. М. Системы, методы и инструменты менеджмента качества: Учебное пособие / М. М. Кане, Б. В. Иванов, П. В. Корешков, А. Г. Схиртладзе // М., СПб.: Питер, 2008. – С. 463

²⁸ Исикава К. Японские методы управления качеством. – М.: Экономика, 1988; Михайлова Р. М. Бенчмаркинг – универсальный инструмент управления качеством / Р. М. Михайлова [Electronic document] // Available at: <http://quality.eup.ru/MATERIALY5/benchmark.html>.

²⁹ It should be noted that starting from 1990s, Germany has been trying to develop innovative economy by means of harnessing industry concentration at the regional level.

marking study was initiated by the German Federal Ministry for Education and Research and performed in continuation of its twenty-year long cooperation program with Korean Ministry of Education and Science and Ministry of Knowledge Economy. Realization of the study was delegated to Berlin Institute for Innovation and Technology. It should be admitted that the German side did not act only on its own initiative, but represented the European Union.

The applied significance of benchmarking study fulfilled by the Institute for Innovation and Technology in the case German and Korean clusters consisted in assuring the development of international regional cooperation of cooperation networks and clusters in the area of research and innovative development with further expansion of cooperation to small and medium enterprises. It was also expected to generate positive effect in questions of increasing the competitiveness of German business in Asia. This work satisfied the interests of Korea regarding closer cooperation with the EU in the field of education, science and R&D. Research findings were fully published in the Internet³⁰ and translated into languages of the EU countries³¹.

The realization of collaborative benchmarking in the area of cooperation networks and clusters, which integrates research and development initiatives acquires new features compared with benchmarking in other areas. Within the frames of this form, much significance is attached to comparative analysis of priority goals; assessment of the experience and openness with a view to prospects of international cooperation development; forming recommendations for the funds and state authorities decision-making, aimed at financial support of the processes of including national science and technology and business organizations into foreign cluster and network arrangements.

Thus, the Institute for Development and Innovations, together with its Korean partners, has initially studied the existing cooperation networks and clusters

With this aim regional conglomerates are being created, also known as «competence networks» (Kompetenznetze). An important task of these networks is to perform research which goes beyond traditional industry limits. For that, integration of the most successful innovative groups and complexes of the country is encouraged. The organisation of such networks is realised in nine categories: biotechnology; micro-nano-optical technology; production and processing; transport and mobility; healthcare and medicine; energy and environment; new materials and chemistry; information and communications; aviation and space technology. The practice of creating competence networks is becoming popular in the EU, although it is much less known in Ukraine and CIS countries.

³⁰ Meier zu Köcker G. Cluster als Instrumente zur Initiierung von FuE-Aktivitäten zwischen Deutschland und Korea / Gerd Meier zu Köcker, Liane Garnatz. – [Electronic document] // Available at: <http://www.vdivde-it.de/publikationen/studien/cluster-als-instrumente-zur-initiierung-von-fue-aktivitaeten-zwischen-deutschland-und-korea>.

³¹ Thus, in Poland, the publications in Polish were realised by the Polish Agency for Business Development under the auspices of the Minister of Economy and with financial support of the EU.

focusing mainly on determining the national peculiarities of this form of organization. The researchers studied different aspects of cooperation networks and clusters activity by analyzing primary and secondary documents and interviewing Korean experts and managers. Later, it became possible to determine similarities and differences of network and cluster organization in Germany and Korea. Finally, mutual interests in the area of research and development cooperation were established.

Finally, it should be noted that collaborative benchmarking does not entail public disclosure of the research materials. As a rule, the parties agree to conditions of nondisclosure. For example, the German Institute for Innovations and Development does not publicize the names of the clusters under study and does not publish key figures in the fields of technology, energy and natural environment, pharmacy and biotechnology, microsystems and nano-technology in their reports.

Discussing issues of collaborative benchmarking, it can not be helped noticing is that its release as a single species can challenge doubts because in itself benchmarking should always be accompanied by the interaction. In the absence of contacts based on consent to provide opportunities to inform and apply collaborative experience, benchmarking takes the form of industrial espionage, intellectual property infringements, or at least borders on these forms of competition. Therefore, organization of collaborative benchmarking should always have a legal component, primarily contractual. Partners must clearly stipulate the order of benchmarking study, the form and terms of participation rates for each partner, the working group composition, the working methods with information sources and use of its results, ensuring the confidentiality, training procedures and so on.

Unlike industrial tourism, the organization of benchmarking do not need building «Potemkin villages», fraud and pretentious. Benchmarking is able to benefit each partner in terms the study of the real situation and acquiring of the external evaluation. It creates a new trend in the development of market relations that corresponds to the principle of competition in favor of cooperation, which is characteristic for the E. Deming concept of solving the crisis³², and which compliance most definitely can be traced in the activities of Japanese firms³³. In practice, for the successful use of benchmarking to increase production efficiency working groups with employees of partner companies, experts and consultants were created.

Significant recommendations of benchmarking workgroups developed in terms matching of analysis results and conclusions of each workgroup, especially when considering the various discrepancies. Except, when guidance has not sufficient justification, and therefore not «fit» into general system of innovation of

³² Деминг Э. У. Выход из кризиса. – Тверь: Альба, 1994.

³³ Исикава К. Японские методы управления качеством. – М.: Экономика, 1988.

specific groups, contradictions in the result of collaborative benchmarking are explained by the laws of cognition. So, they may arise from the use of different methods of investigation; the accumulation of lack of facts which involve casual ones; the shortfall of material to identify relationships and sources of ignorance the conditions of partners activities. Joint work on removing inconsistencies provides deepening of analytical research and bringing the results to the real needs of economic practices of each partner.

Significant opportunities for collaborative benchmarking using are created in the result of a merger because here is very favorable terms for borrowing the best practices. Although, the primary motivation of decision-making regarding the merger is financial reasons, in particular feasibility of maximization profits through expansion of the owning with production and marketing process or acceleration the growth of revenues compared to costly, in practice, often most benefits derived from the distribution of experience in the new company. Thus, at the merger of car companies Daimler-Benz and Chrysler the major effect was obtained from exchanges of visits of engineering and manufacturing personnel, rather than combining marketing networks and unification components. Experts penetrated into in technical and technological components (for example, methods for applying glue on sealing of the doors), implementation of which gave million profits³⁴.

In modern conditions, collaborative benchmarking is an effective tool in the implementation of national scientific and technological policies across concentration of individual entrepreneurial efforts in the form of technoparks and business incubators. Successful research of improvement the efficiency of business support infrastructures was carried out by the European Commission in 2002 and the network Entrepreneurship Research and Education Network of Central European Universities in 2006. This enabled to identify effective tools of strategic and operational management for new organizational structures by innovative development.

The dynamic development of technoparks in the European Union led to a wider study of best practices in their operation. Noteworthy the experience of Poland, where, due to receiving support from EU structural funds under operational programs, since 2004 the tendency of dynamic development of technoparks was started. Due to heterogeneity and ambiguity of these processes, the study of groups of technoparks were carried out by the consortium of companies F5 Konsalting Sp.z.o.o. commissioned by the Polish Agency for Enterprise Development on the subject and the Polish Chamber of Commerce of high technologies (Polska Izba Gospodarcza Zaawansowanych Technologii) «Organization and benchmarking of tech-

³⁴ Козаченко С. В. Управлінський інструмент підвищення конкурентоспроможності компаній / Козаченко С. В., Акімова І. С. // Вісник МНТУ імені академіка Юрія Бугая. Збірник наукових праць. Серія Економіка. 2010. – № 1. – С. 51.

noparks in Poland»³⁵. For benchmarking realization the approval was received by 18 technoparks, one of which after reviewing the design information frameworks, refused to participate in the study.

Thank to the research, it became possible to formulate recommendations of the basic character. Polish experience indicates the need to improve the efficiency and productivity of existing assets by increasing the number and quality of services and streamlining costs. The scope of technoparks contacts allows to increase cooperation with enterprises, research institutions and financial institutions, and on this basis to receive the additional quantity of patents and innovative implementations, as well as to develop tangible and intangible resources. Benchmarking has shown the feasibility of decisive increase of spin-off companies («separated» firms – new companies formed in the course of gaining independence by employee / employees of the parent company or research organization) and start-up (just academic enterprise formed by students or graduates). According to researchers, residents insufficiently attract investments such as venture and seed capital in their development. Herewith, the «bottleneck» of the Polish economy is a small number of patents and trademarks which are protected by the law.

Development of affiliate marketing has great prospects in view of the formation of the knowledge economy. The European Union took the initiative to create a unified educational and scientific space in Europe. In 1995, the European Commission established a network of Innovation Relay Centres (IRC), whose purpose is to create a European platform for promoting international technology transfer and services in the field of innovation. Organizations of this type already exist in Ukraine. In particular, several centers for technology transfer are created, including a group «Science» and at the national technical universities. Apart from that, the Ukrainian Technology Transfer Network and the National Technology Transfer Network are functioning, which are built according to the methodology and models of the European network «relay centers»³⁶. Currently, there is a need of the benchmarking analyses of the centers for technology transfer functioning, and development of recommendations aimed at promoting the development and use of innovations.

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³⁵ Бенчмаркинг технопарков в Польше. Общий отчёт [Электронный ресурс]. Режим доступа: http://www.pi.gov.pl/PARPFiles/file/OIB/Benchmarking_parkow/Benchmarking_of_TP_Report_vRussian.pdf.

³⁶ Національна мережа трансферу технологій. Офіційний сайт / <http://www.nttn.org.ua/?idm=1&lng=1>.