Classification of Networks in Higher Education: A Marketing Analysis of the Club of Ten (Russia)

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Introduction: the networking as a development practice in business has not yet become widespread. Moreover, there are very few studies of network interactions in the field of science and education. Advances in marketing evaluation of network entities are very rare. The goal of this article is to develop methodological criteria for such an assessment. These methods were tested on findings from the network partnership established by federal universities in Russia.

Materials and Methods: to study and generalise real-world experience, a case study method was used, which the authors understand as an empirical research method aimed at studying phenomena in real time and in the context of real life.

Results: the authors proposed a comprehensive methodology for estimation of networks. The application of this method of analysis enabled identification of the key problems and barriers to the implementation of the project. One of the main problems is the lack of marketing analysis, lack of understanding of its target audience, and, accordingly, the lack of a transparent vision of development. Besides, the authors have developed a classification of network partnerships. The analysis empowers classification of the network of Russian universities as an inter-organisational polycentric partnership of a quasi-integration type, based on a neoclassical contract with relational elements. The analysis of the network development has revealed significant deviations of the results from the initially claimed ones.

Discussion and Conclusions: the theoretical significance of the work consists in the application of the network theory to an atypical object for the economic theory, i.e. the analysis of the sphere of higher education. Practical significance lies in the possibility of application of results obtained through real projects in real-time mode. The results of the study are applicable to educational systems for practically all countries with a transition type of economic and educational systems.

Keywords: networking collaboration, marketing analysis, network evaluation, network analysis, classification, higher education

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Классификация сетей в высшем образовании: маркетинговый анализ кейса Клуба десяти (Россия)

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Введение: сетевизация бизнеса как практика его развития в России пока не получила широкого распространения. Отсутствуют исследования сетевых взаимодействий в сфере образования; в публикациях мало разработок, помогающих осуществить маркетинговую оценку сетевых образований. Целью статьи является попытка восполнить этот пробел и представить методические критерии такой оценки, опробовав их на примере сетевого партнерства, созданного федеральными университетами России.

Материалы и методы: для изучения и обобщения реального опыта в работе применяется кейсовый метод исследования, который авторы понимают как эмпирическое исследование, направленное на изучение явлений в режиме реального времени и в контексте реальной жизни.

Результаты исследования: предложена комплексная методика оценки сетей, применение которой позволило выявить ключевые проблемы и барьеры в реализации проекта. Определена главная проблема – отсутствие маркетингового анализа, понимания своей целевой аудитории и прозрачной концепции развития. Разработана классификация сетевых партнерств, с помощью которой возможно систематизировать сеть российских вузов как межорганизационное полицентрическое партнерство квазиинтеграционного типа, опирающееся на неоклассический контракт с элементами контракта отношений. Анализ развития сети позволил выявить значимые отклонения результатов от изначально заявленных.

Обсуждение и заключения: теоретическая значимость работы состоит в применении теории сетей к нетипичному для экономической теории объекту – анализу сферы высшего образования. Практическая значимость заключается в возможности использования полученных результатов в реальных проектах в режиме реального времени. Результаты исследования применимы к системам образования практически для всех стран с трансформационным типом экономических и образовательных систем.

Ключевые слова: сетевое сотрудничество, маркетинговый анализ, оценка сети, сетевой анализ, классификация, высшее образование.

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them, remained only an elegant concept\textsuperscript{2} [7]. At the beginning of the 21\textsuperscript{st} century, the tendency towards disintegration was arrested and the economic situation began to change: industrial enterprises moved into recovery while the services sector intensified its search for civilised forms of provision as part of a growing process of integration. In these circumstances, the face of traditional marketing changed as the practice of relationship marketing started to take hold. In the scientific literature, an avalanche of elaborations by domestic experts, devoted to the networks between Russian enterprises and the development of marketing through these interactions, was published. Based on studies conducted by their foreign counterparts working in the field, domestic experts have made a significant contribution to the development of network marketing theory and interaction [8–11]. However, a consensus is yet to be reached between Russian and foreign researchers on a number of issues relating to the essence of network forms of interaction and the marketing rationale behind their occurrence. In addition, an analysis of this problem in specific areas, including higher education, is rarely found in the literature.

Meanwhile, networking and the marketing orientation of actors according to market relations are particularly relevant to this area since they consist in the projection of the unique structure of educational services market entities. The providers of such services, whose product offering takes the form of competencies developed in their students and trainees, consist in higher education institutions. The consumers of educational services take the form of B2B and B2C markets. The B2B market consists of intermediate consumers; this role is played by students and graduates of higher education institutions. Unlike in the traditional business market for goods and services, students and graduates comprise numerous and informal sellers of competences to the end-consumer. The role of organised, finite end-consumers is performed by enterprises, who lack direct relations with the university as provider of educational services. This “overturning” in the organisation of B2B and B2C markets and absence of direct links or networking between end-user companies and universities prevents the formation of a corresponding product offering as well as failing to attract interest on the part of potential investors in educational services.

The main economic motivation that encourages networking lies in the prospects of cost reduction or productivity rise compared with a sole player (market) or a formal structure (hierarchy). In addition, some authors consider the network partnership of universities as a development strategy [12]. Most frequently, this implies international partnerships, opportunities and risks associated with the internalization of higher education [13; 14], various aspects of which were studied in a number of empirical works. University networks can\textsuperscript{3} be established around a specific task [15]. From the knowledge economy perspective, universities can be seen as part of cognitive networks [16; 17]; in turn, network partnerships are a tool for universities’ engagement into regional economic systems [18]. The ubiquitous diffusion of web technologies creates unlimited opportunities for creating network partnerships between universities (for example, BRICS, UNESCO, Virtual Campus for a Sustainable Europe – VCSE). The National Platform of Open Education is a good example of such networking in Russia [19].

The aim of this paper is to develop a marketing approach to the interpretation of the origin, nature and evaluation of networks and provide an analysis of network cooperation between and within Russian higher educational institutions on the basis of a creative adaptation of the integrated reciprocity methodology as presented in


the literature. The significance of the developed method is expressed in the fact that it can be applied to the analysis of network structures in both emerging and transition economies.

The structure of the study includes: firstly, theoretical constructs of a marketing interpretation of the occurrence and formation of networks; secondly, an analysis of various aspects of networking theory and original typological characteristics in relation to higher education; thirdly, an analysis of the first inter-institutional cooperation between the federal universities in Russia.

Materials and Methods

Research into a wide array of literature in which issues of business network integration are raised, indicates that the nature of inter-firm networks is the subject of study of various sciences: social network theory, organisational ecology, new institutional economics, sociology, psychology and others. A definition of the essence of the networking phenomenon may be hard to arrive at due to differences between the objects of these sciences; however, they should not be opposed to each other, since the comparison of the different theoretical approaches reveals a lot of intersections that enrich the networking paradigm.

Representatives of the different approaches carry out objective researches into reasons for the appearance of networks within the framework of the objects of their own respective science. From the marketing perspective, these reasons are to be found in the evolution of the market. Since this evolution is only scantly represented in the literature, for the purposes of this study the authors propose an original treatment, linking development needs with known marketing concepts.

In the pre-industrial era, the needs of the general population were determined by subsistence farming, developed slowly, and were not characterised by diversity. Therefore, marketing as a science had not been conceptualised. During the period from the late 19th to early 20th century, i.e., in the era of the industrialisation of production and the transition to the commoditisation of consumer goods (the concept of improving production), the quantitative growth of material wealth and standardisation of product offerings led to the emergence of new needs as well as in the means by which they were fulfilled4.

In the beginning of 1930s, the differentiation of products (product concept) began the process of individualisation of these needs in accordance with the human desire to express those characteristics that distinguish them from other people5. With the intensification of sales efforts following the Second World War, at a time when the production capabilities of military science were being transferred into the civilian sector and the market was being flooded with new products, providers of merchant services developed a whole arsenal of means of influencing consumers to make purchases. In transforming their development, the distribution function of marketing facilitated a convergence in the living standards and consumption patterns of "white-collar" and "blue-collar" workers. However, in providing them with a wide choice of goods, the same function psychologised the individual needs of the population. As a result, the consumer increasingly strove towards a realisation of choice, towards adefinition of the principles and consistency of consumer behaviour and assessment of the degree of satisfaction or dissatisfaction with consumer needs6.

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However, in considering these first three stages of the development of needs, the needs themselves are rarely studied. The main focus of marketing is concentrated on the activation of demand as a value dependent on disposable income and the method of adapting needs to production capabilities.

Individualised and psychologised needs begin to restrain the growth in sales of goods to which they are not relevant. Such a situation requires marketers to stop chasing the contents of shoppers’ purses and move on to a detailed study of consumer needs and demands. If, during the first half of the twentieth century, the differentiation of products was determined by producer interests, during the second it was increasingly preceded by a deep analysis of the market and consumers, allowing the possibility of adapting production to emerging and maturing needs (traditional marketing concept). The personalisation of consumption came to embrace almost all types of consumer goods. Given this requirement, manufacturers are producing a growing number of product versions, designed to meet the same needs. In an effort to best meet the most refined consumer desires and requirements, marketers unleashed the “wheel of consumer analysis”, which exacerbated the problem of raw material reserves, not only developing individualised needs that positively transform the private lives of consumers, but also artificial, excessive desires, bringing about the cult of consumption as a normalised consumer behaviour. In such a consumer society, more and more people, are coming to realise that the processes of their self-expression and personalisation are limited by their material circumstances, i.e. their material comfort; however, for the development of selfhood spiritual and mental activity are required, i.e. work, involving a high degree of intellectualisation.

Realising the poverty of trying to fulfil material and spiritual needs through prioritising the material, consumers are increasingly integrating their consumer activities with work aims, changing their demands and favouring not so much a variety of goods as their quality and service support (the concept of social-ethical marketing). This contributes to goods and services whose mode of production increasingly uses environmentally-friendly and green technologies and products that are not harmful to consumer health even after prolonged consumption. As a result, while spiritual needs continue to increase, the satisfaction of rationalised material needs is organised more rationally, reasonably, expeditiously and efficiently.

If, up until the last quarter of the twentieth century, the consumer first appeared as an increasingly activatable subject of purchasing and in terms of a complex system of individualised, psychologised, intellectualised and axiologised needs, then at the end of the 20th to the beginning of the 21st centuries arose the post-industrial or information age, in which the stage of development of social production produced proliferation not only of goods and services, but also of communications and marketing channels, and the consequent problem of the growth of additional time costs on acceptance of the purchasing decision in relation to the consumer. The solutions themselves today increasingly lie in the integration of goods and services from different vendors (the concept of relationship marketing). The development of the Internet and information technology not only reduces the time for the purchasing process, but also blurs the line between production and consumption, involving consumers in the process of cre-

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ating products that satisfy their particular needs. The main customer values in such a society are, firstly, in terms of the time factor, i.e. a reduction in the time taken for the selection and purchase of goods and services; secondly, full support in satisfying needs for additional goods and services; and, thirdly, a solution to consumer problems concerning when and where it is convenient to the consumer\textsuperscript{10}.

At the core of the increased consumer requirements lie, in the first place, the aggregation of needs, during which one need causes the appearance of another, being converted into the consumer problem complex, and, in the second place, the increasing status of all needs within this hierarchy and their expression in hedonistic terms (even including food products)\textsuperscript{20}. These trends have defined the personalisation and complexity of individualised, psychologised, intellectualised and axiologised needs referred to in terms of “customer-centric marketing”\textsuperscript{21–24}.

It seems entirely obvious that such needs will not be able to be individually satisfied by a single firm. Such a possibility may, however, be realised by means of a business network, consisting in a dynamic partnership between enterprises.

The claim that the emergence of the networking of business arose as a consequence of an evolution of needs coincides with the evolution of marketing relations, characterised by F. Webster in terms of phases of transition from simple to recurring transactions, through long-term relationships to establishing partnerships between the seller and the buyer, strategic alliances and business networks, and, finally, towards vertical integration\textsuperscript{25}. Thus, the networking of business emerged and developed within the marketing paradigm in accordance with the transformation of the market and can be defined as a voluntary and equal intra- and inter-sectoral association of enterprises for the implementation of an overall strategy for competitive advantage and in order to better meet increasingly complex and complexified market needs\textsuperscript{11}. However, a market analysis of emerging network interactions involves the use of theoretical intersections with other platforms. Thus, according to the well-known theory of competitive advantage (M. Porter), the definition of types of networks lies in their focus either on the creation of value for the various market participants or in their reduction of producer costs. From the institutional point of view, network organizations can be treated as “hybrids” using the terminology of O. Williamson\textsuperscript{26}, who conducted a methodological transition from the firm-market dichotomy to the market-hybrid-hierarchy coordinate system. The marketing network analysis platform can be enriched by a scientific classification of its forms. In addition to traditional approaches, hybrid forms, such as quasi-integration, are of particular interest. Hybrid forms include the establishment of controls over the management of the assets by companies not legally affiliated with their owners\textsuperscript{12}.

The marketing characteristic of networks presupposes Williamson’s theory of contracting, which classifies the coordination of agents’ activities as divided into classical, neoclassical and relational contract types\textsuperscript{13}. According to Sheresheva, the contract typology is determined by the market, hierarchical or hybrid (AC) nature of interacting agents\textsuperscript{14}. Specific features of this classification can be used to differentiate network types in higher education as follows:

\begin{itemize}
  \item Integration (vertical or horizontal);
  \item Presence or absence of internal competition;
  \item Presence or absence of barriers to enter the network (inclusive or exclusive nature of the union);
\end{itemize}


\textsuperscript{11} Котляревская И. В. Сетевизация бизнеса и маркетинг партнерских отношений. Екатеринбург : Урал. федерал. ун-т, 2014.

\textsuperscript{12} Шерешева М. Ю. Межфирменные сети. М. : Теис, 2006. 320 с.


\textsuperscript{14} Шерешева М. Ю. Межфирменные сети.
Number of participants;
Degree of equality in relationships (focal or polycentric network);
Stability of the union;
Specific tasks being solved by cooperation of resources and competencies.

The defining properties involve the integration type, presence or absence of internal competition, degree of equality in relationships, and stability of the group. The remaining parameters are primarily descriptive. Grounding on these criteria and taking into account the specifics of educational and research activities, we have identified five types of network links by analogy with commercial networks: strategic alliance, chain, dynamic focal network, polycentric network, and focal network (fig.1).

Strategic alliance is a horizontal union of the closed type. Its participants are institutions working in the same subject and functional fields. The goal of strategic alliances is integration of resources and scientific competencies. Despite the fact that participants in strategic alliances are competitors to each other, such unions are stable due to the restriction of internal competition. Professional associations, control lever in which is access to inclusive resources, are a very good example of this network partnership type. In this case, ideally, each participant has an equal voice in making decisions, although, of course, the size of the participant, its weight in the academic community and a number of other factors will contribute to the distortion of transactions. In the academic environment, an example of such a partnership is the Project 5-100, which aims to include five Russian universities in the top 100 of global university rankings by 2020\(^{15}\). Chain (by analogy with a supply chain) differs from the strategic alliance in a vertical way of integration. Examples of this type of partnerships: collaboration between university and research institution of the Russian Academy of Sciences\(^{16}\) (backward integration); partnership between university

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\(^{15}\) Russian Academic Excellence Project. URL: https://5top100.ru (дата обращения: 01.10.2017).

and manufacturing enterprise\textsuperscript{17} (forward integration).

Dynamic focal network is formed around a dominant unit that coordinates the activities of other participants. Researchers and research institutions compete with one another for participating in the projects initiated by a network broker. The most important institution that ensures the functioning of this form of partnership is competitive funding of research (e.g., grants). E.g. the Development Fund of the Graduate School of Economics and Management at Ural Federal University\textsuperscript{18} on a competitive basis allocates travel grants for the participation of the Institute’s employees in scientific conferences and professional development programs. The Fund acts to support the academic activities of the Institute and to increase scientific effectiveness, to strengthen the relationship between research and educational process, to increase internationalization indicators, to create conditions for the becoming and professional growth of promising young teachers and researchers, and to develop human capital.

Polycentric network may have either a homogeneous or heterogeneous composition of participants (multidisciplinary, multifunctional). The main motivation for merging is the expectation of a synergistic effect. A classic example of such a partnership is the Consortium for North American Collaboration in Higher Education (CONAHEC)\textsuperscript{19}. The Consortium is a non-profit partnership consisting of 160 universities. The main goal of CONAHEC is the development of cooperation and joint programs among institutions, organizations, and government agencies of higher education in Canada, Mexico and the United States. The Board of Directors acts as the governing body of CONAHEC; besides, there is a small support office, which is based at the University of Arizona. Focal network is similar to polycentric network with the difference that there is a dominant participant in the network configuration. Here we can include the European University Association (EUA)\textsuperscript{20}, which sets a rather ambitious goal of strengthening the role of universities in building the knowledge society. The accent in the work of the Association is put on development of academic mobility opportunities for students and teachers. Unlike CONAHEC, EUA has clearly defined permanent executive bodies – the Board, which is elected for four years, including nine current or former rectors, the President and two Vice-Presidents who constitute the Presidency; the Council consisting of presidents of national associations of rectors. Nevertheless, the General Assembly of the participants make all major decisions. Thus, the border between the polycentric and the focal network is very thin; over time, polycentric associations most often transform into focal ones. The destruction of focal networks occurs when the competence of one participant begins to exceed the competence of the rest of the network.

A significant contribution to the marketing concept of networks was made by Lipnack and Stamps, who formulated the following key principles of interorganisational networking:

- common goal: having a common vision, values and goals shared by all parties supports network resilience by focusing on the desired outcome, supporting synchronisation of operations and network orientation (directionality);
- independence of members: each member of the network is able to continue in independent existence, thus obtaining benefits from its position as part of the network structure;
- voluntary connectedness: the hallmark of networks is the existence of communications in which participants combine efforts and resources on a voluntary basis;

\begin{itemize}
  \item \textsuperscript{17} Science. Technical University of Ural Mining and Metallurgical Company. URL: http://tu-ugmk.com/info/science (дата обращения: 01.10.2017).
  \item \textsuperscript{18} GSEM Development Fund. Graduate School of Economics and Management of UrFU named after the first President of Russia B. N. Yeltsin, 08.06.2017. URL: https://gsem.urfu.ru/ru/about/fond-razvitiya-vshelm (дата обращения: 01.10.2017).
  \item \textsuperscript{19} Consortium for North American Higher Education. URL: https://www.conahec.org (дата обращения: 01.10.2017).
  \item \textsuperscript{20} European University Association. URL: http://www.eua.be (дата обращения: 01.10.2017).
\end{itemize}
— presence of multiple leaders: each participant in the network has something unique, which he contributes to a specific point or part of the process. If there is more than one leader, the network as a whole acquires greater resilience and flexibility;
— integrated levels: networks are multi-level. Cooperation takes place between individuals, entities and organisations, which, in turn, can have both a flat and a hierarchical structure.21

In terms of marketing, the vitally important role played by networking in ensuring coordination between network partners, is acknowledged by many researchers. There are two main positions in the interpretation of network cooperation. Under the first approach, cooperation is understood as between equal participants, based on trust and the equality of interests of all of its members;22; under the second approach, cooperation is under the second approach, cooperation is associated with strategy, control, authority, dependency, conflict, competition and inequitable exchange.23 Cooperative ties based on equality of rights are more strongly correlated with polycentric network configurations, conforming to agreed participant functions, but not unifying them.

Co-operation based on mutual dependence is more strongly correlated with the allocation of the central agent (focal company). Hence differences in the mechanisms of coordination: across focal networks, coordination generally takes place in a hierarchical manner through a central participant at both the strategic and operational level.24 The tools of coordination consist of plans and programmes – on the development of which the central participant exerts a strong influence – as well as pricing mechanisms or negotiations in selecting participants and fulfilling their orders. A special feature of the coordination of such a network is the establishment by the focal participant of a coordinator, who assumes a coordinating function.

With polycentric networks at the strategic level, the coordination of interests of network participants predominates in terms of coordination tools, along with pricing mechanisms and negotiations. At the operational level, it functions the same way as focal networks, using programmes and plans supplemented by pricing mechanisms. However, the level of democratisation in using these tools is greater in a polycentric network than in a focal network.

Thus, in support of a marketing assessment of networks should be used: 1) characteristics of the needs to whose satisfaction the network is directed; 2) the definition of the class of network; 3) type of network contract; 4) the conformance of the network to the principles of networking; 5) characteristics of cooperation in the network; 6) definition of the competitive advantages of the network.

The selection of networking criteria in the next section of the study is used to present an analysis of the networks of a number of federal universities in Russia alongside a consideration of its practical results. It is noted that such an analysis at the initial stage of formation of the network will certainly be different from a future in-depth study following the accumulation of additional information.

Results

The object of this study in the sphere of higher education was not chosen at random. It is specifically in this area, in develop-

22 Шерешева М. Ю. Межфирменные сети.
ing the intelligence of the country in the form of higher education institutions, that a broad range of the material and spiritual needs of students, teachers and prospective employers are met. To achieve this goal, it is necessary for the university as subject of market relations to form and strengthen the numerous synergies between itself and other business entities, while saving financial and other resources.

As an example of such a network, we refer to the “Club of Nine” established by a number of Russian federal universities in 2013. This network includes the Ural, Baltic, Far East, Kazan (Volga Region), Northern (Arctic), North-eastern, North-Caucasian, Siberian and Southern Federal Universities. Later, the Crimean Federal University became a member of this network, updating its name to the “Club of Ten”.

The purpose of the Network was the coordination of the activities of universities in the development of higher education, dissemination of experience on the organisation of educational process, scientific research, training of personnel, improvements in the system of continuous education, social protection and support of members of university teams, to enhance the impact of higher education on the level of socio-economic, educational and cultural development of Russia.

Although not explicitly declared as such, the main strategic aim of the Network can be seen in terms of the formation of a Network of universities included in the programme of academic mobility of students, since each university has fairly extensive links with its foreign counterparts. When considering, for example, a new or improved competence in the educational programme of another network of the university produced by students, it would be difficult in the absence of an analysis of their needs, to analyse the related needs of students to realise such a possibility.

Thus, the purpose of the Network attested more to the possibility of using university networks to share limited resources. At the same time, the social and ethical aspects of Network plans should be noted. Therefore, the following are assumed:

– creation of joint socio-cultural centres for the development of macro-regions, to accomplish modernisation of the educational process of networked joint educational programmes, to form a unified innovation infrastructure and information space on the basis of the association of all resources (including electronic library systems and informational databases) for collective use.

In the enumeration of Network tasks, considerable attention is given to the development university staff, their mobility and the creation of a single human resource centre.

From the perspective of marketing, this Network does not diverge from the ruinous Russian tendency to fail to base the approach to marketing on the development of business. The consumers, to the satisfaction of whose needs the Network activity is ostensibly directed, are not distinctly defined. The requirements of personnel as the internal consumers, the needs of students as intermediate consumers and the needs of the employer as the end product consumer of the network are only approximately denoted. The absence of a statement of the needs and requirements of these consumers of higher education services means that their needs cannot be classified.

Also lacking is a clear definition of the Network products. Thus, the international academic mobility of students, academic staff and administrative staff could be provided by any university in the Network, since each university has fairly extensive links with its foreign counterparts. When considering, for example, a new or improved competence in the educational programme of another network of the university produced by students, it would be difficult in the absence of an analysis of their needs, to analyse the related needs of students to realise such a possibility.

Thus, the purpose of the Network attested more to the possibility of using university networks to share limited resources. At the same time, the social and ethical aspects of Network plans should be noted. Therefore, the following are assumed:

– creation of joint socio-cultural centres, providing for the development of each university – members of the Network and of their home regions;
‒ development of measures and proposals to improve the social situation of all categories of students and university staff;
‒ dissemination of knowledge among the population;
‒ development of a system of labour incentives and targeted social support for staff and others.

In these aspects, the socio-ethical orientation of the Network's management is visible, showing the humanistic orientation of its professional goals and, therefore, a stronger marketing concept.

In attempting to classify this Network, then, strictly speaking, it is intra-firm, having a single owner – the Russian Federal government. At the same time, members of the Network have autonomy within the framework of autonomy granted to them in accordance with the Federal Law “On Autonomous Institutions” № 174-FZ, which entitles the Federal University to operative management of property, with the exception of real estate and valuable movable property assigned to them by their founder. This broad autonomy – and declared principles of coordination and collaboration as a relationship management tool between members of the network – characterises its format as an inter-organisational cooperation network.

The absence from the side of each federal university of control over property – combined with the establishment of partial control over those active memberships composing the basis of their interaction – means that it possible to classify this network as quasi-integrated, although with some caveats. In particular, this concerns the contract type, which can be described as neoclassical and usable within the relational framework.

The management system of the Network includes the Council of Rectors of Network Universities and the Educational Programme Network Council (EPNC). The Council of Rectors comprises a focal point whose competences include the development of strategic directions of the Network’s development in domestic and foreign education markets, decision-making on new admissions to the Network and the output of the composition of existing educational institutions. The Council is headed by the Chairman and his deputy. Information and documentation support for the activities of the Council is provided by the secretariat. The Board of the educational programme network consists of one representative of each university. This council carries out operational functions with respect to the provision and implementation of educational programmes and determines the specific models of cooperation of universities.

Despite the presence of Rectors Council as the focal point, this network, in which the Council is not an independent participant, is polycentric: the principle of coordination of activities of the Network is carried out by means of reconciling the network participants’ interests, negotiations, orders, programmes, plans and price mechanisms required to implement compensatory (financial) relations.

Due to the insufficiency of information concerning the Network, a response in the format governed by the principles of Lipnack and Stamps is not possible. Thus, Network Regulations reflecting the university value system, the benefits accruing from the integration of its members and the uniqueness of their contributions are not represented in the documentation. It is also difficult to assess the cooperation ties between the university network, since principles of their corporate culture and specialisation based on areas of strength – the most important conditions of networking – do not find a place in the security documents. The only principle of a Network having an unconditional characteristic of the type described by Lipnack and Stamps is the voluntary nature of the connection between participants.

At this stage of the analysis of the Network, it is quite difficult to give a single-valued answer to any questions concerning its competitive advantage. This advantage is likely to have a basis in an expansion of the offer of educational services and their differentiation, and in accessing new knowledge, which will facilitate the entry of the Network into new markets, reduce
competition and extend control over the market environment. A strong emphasis in the Network Provisions on the formation and concentration of the resource component of its activity will facilitate the access of its participants to resources in order to achieve this advantage.

In the 2015–2016 school year, federal universities implemented 16 network masters programs in 12 areas and 2 undergraduate programs\(^25\). We can list a program in the biological field “Human and Animal Physiology” as an example of a master’s program successfully implemented in a network form. It is implemented jointly by the Northern (Arctic) Federal University, Ural Federal University named after the first Russian president B. N. Yeltsin, North Caucasus Federal University, Kazan (Volga Region) Federal University, and Crimean Federal University named after V. I. Vernadsky. As for undergraduate programs implemented in a network form, we can refer the program “Advertising and Public Relations”. One of the problems facing the development of the Club of Ten is that it is quite difficult for federal universities to implement a number of projects without other participants of the educational space, in particular, national research universities. Federal and national research universities cooperate in the framework of the Project 5-100\(^26\) as well as the federal platform for distance education\(^27\).

**Discussion and Conclusions**

The methodological and empirical analysis of networking in the field of education, carried out by the authors from a marketing perspective, has shown that the evaluation of such a form of interaction could not be carried out using any one theoretical platform. The interdisciplinary approach taken by the authors in this study allowed the assessment methodology to be identified and integrated according to the following criteria:

- characterisation of needs to whose satisfaction the network product is directed;
- determination of the network class;
- determination of the network contract type;
- evaluation of compliance with the principles of network interaction;
- determination of the features of the cooperative ties between the members of the network;
- evaluation of the competitive advantage of the network.

This technique can form part of the conceptual study underlying a network creation project.

The analysis of the Network created by the ten federal universities of Russia, which was carried out by the authors employing this procedure, showed that the information presented in the network documents does not suffice to provide a single-valued evaluation according to the chosen criteria. The inability to identify this Network is explained not only by the weak preparatory work at the conceptual stage of the project’s creation, but also by the objective variety of types of networking, which prevented an unambiguous classification according to real-world examples\(^28\).

Nevertheless, the set of criteria laid down by the authors in the methodology of the marketing assessment of the networking of ten Russian universities, allows some conclusions to be drawn.

1. Since the “Club of Ten” Network has no marketing analysis of its target audience and its needs, it is doubtful whether the formation of academic mobility programmes on behalf of all the universities comprises a major strategic objective of the Network. It is, however, possible that the joint resources and competencies in terms of the assets and experience of the network university contribute to the resilience of the network.

2. The analysis of the classification of the Network characterises it as quasi-integrated type of inter-organisational collaboration, which is based on the neoclassical contract with elements of the relational contract.


\(^{26}\) Russian Academic Excellence Project. URL: https://5top100.ru (дата обращения: 01.10.2017).

\(^{27}\) Open education. URL: https://openedu.ru (дата обращения: 01.10.2017).

\(^{28}\) Шерешева М. Ю. Межфирменные сети.
3. Since the network has a focal point, which is not endowed by participant functions, it consists of polycentric mechanisms coordinating interests, programmes and pricing management tools.

4. With reference to the five principles of the organisation of successful networking, the Network certainly corresponds to the principle of voluntary participation. However, in terms of the other principles – common views and values, benefits of integration and integration of the unique contributions of levels – it is not possible to assess compliance due to the lack of a project concept when creating the Network.

5. The competitive advantage of the Network can be evaluated by referring to the expansion of the range of educational services offered, by their differentiation and access of users to new knowledge, by output to new markets, decrease in competition and expansion of influence on the market.

The formation and development of such a network, which was created by ten universities of Russia, requires the use of project management methodology and an understanding of the marketing concept of the project. However, the material submitted for analysis indicates that Russian organisations, including universities, tend not to take such an approach towards managing their activities.

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