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## INFORMAL ECONOMIC NETWORKS IN THE SERVICES SECTOR

*This article presents the results of a study of the organisation of informal economic networks and their role in the modern economy. The main characteristics of the network economy are discussed, and an analysis of domestic and foreign approaches to concepts that reveal the content of the informal economic network is conducted. The typologies of network structures are considered, and the classification of types of informal economic networks is presented. Models of informal networks are associated with theories and concepts of the development of economy and society. Management tools for the creation and development of informal economic networks in the services sector are defined and systematised. Disclosed and generalised approaches to the content of informal economic networks of the service sector. Key concepts are disclosed and an idea of the results of their research is given, which can be used in further developments on this scientific problem. The results of this study may be useful to specialists in the field of management and economics, dealing with problems of improving efficiency in modern conditions when studying theoretical and practical issues of management optimisation.*

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Network forms of the organisation of the economic activity of subjects have become the subject of a large number of theoretical works and of the analysis of their application in practice. With its cross-disciplinary character, the network approach is widely used in theoretical-methodical justifications of the processes of the organisation of branch markets, sectors of the economy, corporation and intercompany and boundaries subject interaction as

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a means of creating global and local structures of processing and transferring the information and the like (Baggio, Sheresheva, 2014; Bramoullé, Galeotti, Rogers, 2016).

The set of various network forms comprises the organisational forms of the open (formal) and hidden (informal) sectors of economy, which reflect the institutional conditions and the nature of state social and economic policies, which are a condition of business.

In research into the network organisation of the informal sector of the economy by domestic and foreign scientists, a number of questions of theoretical and methodical content are typically analysed. Such research is not yet fully developed, yet the topics are of particular interest: the prerequisites and means of formation of networks, their types, the nature of the interaction of their participants, their efficiency, and so forth. This subject is relevant due to insufficient research on the network organisation of the informal sector of the economy in Russia and a lack of complex analysis of its essence and functioning, which complicates the objectivity of the assessment of its state and a rationale for solutions to problems.

This article focuses on determining the processes of creation and the defining features of the organisation and functioning of informal economic networks in the services sector in Russia; the economic relations that are the cornerstone of their formation; and the role of such networks in the services sector.

Achieving this goal requires completing the following tasks:

1. Investigating the main characteristics of the network economy;
2. Conducting an analysis of domestic and foreign approaches to the concepts of ‘informal economy’ and ‘informal economic network’;
3. Considering the typology of network structures;
4. Studying communication in models of informal networks using theories and concepts of the development of economy and society; and
5. Defining and systematising instruments for the creation and development of informal economic networks in the services sector.

### **Theoretical Framework and Methods**

In the course of the research, the work of domestic and foreign scientists on the economy (including the informal economy) were referred to, and the organisation and management of activity of the managing subjects in the services sector in relation to the issues of the integration, formation, and functioning of networks were investigated.

The multidimensional nature of the maintenance of informal economic networks demands the use of a corresponding variety of research methods (Goyal, 2015).

The main stages of the process of studying and analysing informal economic networks in the services sector in Russia are presented in Table 1.

Table 1

The Main Stages of the Process of Studying Informal Economic Networks in the Services Sector in Russia

Stage	Content of the Stage
Justification of the concept	Development of the concept of studying informal economic networks in the services sector in Russia.
Statement of the research problem	Description of the problem, the expediency of its research, and the methods of its methods of allowing it'.
Determination of the purposes and research problems	Formulation of the purpose and tasks and the determination of the results of the research.
Action plan	Scheduling the research (the development of activities', terms, contractors, means, etc.).
Collection of information on the research object	Determination of sources. Collection and systematisation of available information on the condition of informal economic networks in the service sector.
Analysis of collected information	The conducting of analysis of the information and comparing it with previous studies.
Forecast of the development of the situation	Identification of regularities and trends; developing a forecast of prospective developments of the situation.
Results of the research	Processing of the results, compiling reports, and conclusions and recommendations'.

*Source: Author-Developed.*

The organisation of the regular monitoring of the state and the regularities of the dynamics of informal economic networks in the service industry assumes access to analytical materials that are not used in the official systems of decision-making. Informal economic networks in the service sector have to be explained as phenomena that have been formed as a result of changing political, scientific, technological, economic, and social conditions. Their potential and opportunities should be investigated for the theoretical development of corresponding directions in economic science and for the implementation of these.

The information base for the research includes the relevant legislation of the Russian Federation, official documents, data from entities that produce statistics, monographs, studies published in periodicals, the proceedings of scientific conferences, and information from the Internet.

### **Literature Review**

Networked forms of the organisations (both open and hidden) have existed for a long time. They reflect a method of interaction of individuals, groups, and communities which form structures and draw boundaries, isolating and allocating the interests of the participants of the integrated formations in public space.

Analysis of the literature allows the network organisation of the activity of people to be allocated to two existing approaches: social, scientific and technical. In the social approach, the emphasis on the maintenance of networks is on methods of coherence and the

organisation of the interaction of individuals and social groups in society. Hence, researchers (for example, Heckethorn and others) note the existence in Europe, on the Neighbour and the Middle East, in Africa, India, China and other countries at the beginning of a new era of Judeo-pagan, Gnostic and Manichean sects, Templars, assassins, and the like (Heckethorn, 2011). It is possible to refer Masonic societies, whose participants today number four million people (Hodapp, 2013; United Grand Lodge of England, n.d.) worldwide, to a number of official and latent network forms of organisation that have existed since the Middle Ages. These societies have extensive networks of various forms of localisation: lodge, grand lodge, supreme councils, chapters, Areopaguses, consistories, federations, and confederations. Their hierarchical structure, centralised management, and activity is directed at the achievement of political, financial and economic, and religious goals in various countries of the world.

In 1981, Bråten introduced for scientific use the term ‘network society’, considering it a model for the interaction of a person with society from the perspective of the theory and experience of sociology and social psychology (Bråten, 1981).

Researchers adhering to the scientific and technical approach to network organisation assume that the results of scientific and technical developments promote the creation of the material and physical bases of network formations which lead to the forming of networks of railroads, cable, telephony, electricity, and the like, and to the relevant economic networks that unite economic entities in industry, infrastructure, and in other communities. Furthermore, from the middle of the 20<sup>th</sup> century, informatisation, computers, the Internet, and multimedia technologies have acted as drivers of a setisation of all areas of society and economy. This has allowed researchers (such as Jan van Dijk, M. Castells Martin J., and others) to analyse network society using a technology paradigm that considers the interactions of the basic elements, including social networks, informatisation, computerisation, and communications (van Dijk, 2001; Castells, 2012; Martin, 1978). At the same time, networks are presented in the form of the particular structures that cover all levels of the elements of society (personal, group, collective, and public) united by electronic communications.

The work of a number of authors (Kevin Kelly and others) has opened an approach to the network economy as one of the types (information economy, electronic, digital, etc.) that, over time, may replace the industrial economy (Kelly, 1997). Features of the network organisation of the economy include changes in production methods, management, and in the relations between participants.

As a result of its expansion, the continuing process of setisation now covers all new industries, spheres, objects, and types of activity. Hence, households and families were traditionally analysed as the official social and economic cells of society in which three principles of activity are inherent: managing, redistribution (restriction), and reciprocity (Polanyi, 2014). It was considered that they are not focused on profit-earning and are not part of a market competitive mechanism. However, the network approach to the organisation of households and networks allows the revealing of the availability of internal and external networks that simultaneously have official status and include hidden activities. It is within similar networks that the social and economic issues connected with reproduction, the development of human capital, the requirements of satisfaction, and the

like are resolved. Households and families act as the centre of concentration of functional networks (for example, educational, professional, leisure, etc.) in which there is creation and distribution of benefits and means on a commercial basis in combination with the non-market character, the “retsiproknykh”, of networks founded on relationships or personal acquaintance. If the formal organisation and activity of households and families is widely reflected in the scientific literature and statistical sources, then their network form and informal organisation demands further research.

This particular interest raises questions of the interaction of formal and informal networks which demand in-depth examination. Official network organisations (e.g., retail, scientific, and other chain stores) often perform hidden activities, forming ‘shadow’ structures. The activity of these The activities of these structures can be both criminal in nature and not related to criminal acts. Recent studies have shown that hidden informal formations manifest themselves in formally open networks. Thus, studying the special scientific network GRAND shows that groups of participants have greater access to research finance (grants) and to internal information that allows them to undertake a greater number of projects. At the same time as the elements of the organisation of networks are scientifically researched in terms of structural possibilities, digital media and entrepreneurship are also considered (Barry Wellman, Dimitrova, Hayat, Mo, Beverly Wellman, 2016).

There is a need to study the reasons for the emergence of such hybrid network forms and to provide an explanation of their nature. In particular, why do formal subjects of the economy move a part of their activity to the shadow sector without fear of expenses and sanctions? Why do organisations function in an intermediate zone between registered and unregistered economies? Does the availability of shadow networks for the open organisation damage its legitimacy and reputation and influence the level of mutual trust between partners? It is obvious that these questions demand comparative statistical analysis of the advantages and efficiency of functioning in open, hidden, and hybrid networks.

An alternative explanation for the emergence of informal economic networks as unique and independent organisational structures is required. It is necessary to demonstrate and explain their considerable variety and their capability of taking various forms. If standard formal organisations are considered slow and passive in the face of change, then informal economic networks have greater flexibility and adaptability in relation to changing environmental conditions. They are capable of providing quicker and more flexible access to inside information, technologies, and knowledge and of bringing these into the legal sector using commercial principles and relying on the principle of reciprocity.

Open economic networks do not violate the provisions of traditional economic theory which operates with such concepts as balance, usefulness, rationality, expenses, price, and so forth. The lack of accounting for a network approach in existing economic theories does not entail a contradiction between them (Gräbner, Heinrich, Kudic, 2017). However, informal economic networks obviously or indirectly break the balance (or promote the violation) of the markets or rationality of the behaviour of economic agents. This circumstance demands the undertaking of further research.

The problem of communication regarding the state of the economy, the level of living of the population, their employment, and state social and economic policy in relation to the

nature of the development of informal economic networks has not been sufficiently studied. In the modern conditions of Russia, the informal network economy is primarily identified with crime and criminal positions, though the author of the term ‘informal economy’, Hart, meant by it a method of self-employment of various categories of the population (Hart, 1987). This concept has been significantly extended and an increasing number of researchers understand it as the field of activity of economic agents who do not answer to established institutional regulations and are not connected with state regulation (Feige, 1990).

The state attempts to counteract the development of shadow activity and the creation of informal economic networks using local non-systemic measures and methods intended for individual economic entities; however, this does not deliver the necessary results. At the same time, at the theoretical-methodological level, in the area of rights, and in actual practice, the conceptual category, the precepts of law, the methods of research and accounting, methods of evaluation, and other aspects that reveal the essence of informal networks, their features, and their role and influence on the service industry and on the national economy have not yet been developed.

Thus, the range of scientific works analysed on the subject of study is characterised by the availability of fundamental and applied works reflecting a single questions of the perspective considered in this article. What is revealed thereby is the lack of theoretical representation and practical research on informal economic networks in the service sector that apply scientific justification and complex tools.

The arguments adduced update the availability and the objective nature of scientific and practical problems in the field of informal economic networks that require further theoretical research and applied development.

The novelty of this research is connected with the theoretical-methodical justification of a paradigm for informal economic networks in the service sector on the basis of disclosing their content, reasons for and motives of education, identifying the features of their functioning, defining the determinants of their development, and their use in reproduction processes. This method approaches the concept of informal economic networks from interdisciplinary positions in social and economic space. Formations of the new integrative setisated area of economic knowledge correspond to a modern, post-industrial method of public reproduction.

### **Network Forms of the Organisation of Economic Activity**

Networks as organisational forms of the interaction of economic actors became an effective method for the realisation of individual interests in order to achieve agreed targets on the basis of the complex use of the potential for cooperation and job specialisation, integration, synergy, and the more complete embodiment of creative opportunities of a person (Bezrukova, Morkovina, Kryuchkov, 2011, p. 68). In this regard, a number of researchers connect networks with human behavior (Jackson, 2014).

Regularities and features of the formation, development, and transformation of networks became an object of research with the implementation of activities for the development of programmes and projects of a social and economic character (Bolychev, Mikhaylov, 2014, p. 42), the cluster strategy of Russia (Erznkian, Agafonov, 2011, p. 39), and economic vulnerabilities in a number of countries (Castagna, Chentouf, Ernst, 2017).

According to the conventional approach, the network economy is introduced as a form of consolidation of the traditional economy with information resources and technologies (Bugorsky, 2008). At the same time, the connection of the economy and the Internet – technologies with networks are capable of increasing the cost of business (Cheng, 2013). In our opinion, the ‘traditional character’ of the network economy includes the nature of the relations, methods of housekeeping, and features of management at all stages of reproductive changes (production, distribution, exchange, and consumption). Taking into account a research subject multidimensionality, the network economy is further understood as economic activity aimed at providing a living for people on the basis of the network form of its organisation.

The primary link of the organisation of the network economy is an economic network in the form of a set of subjects who are business contacts and who interact among themselves on the basis of a contract for the satisfaction of requirements by means of production, the implementation of work and services, and the consolidation of material and non-material resources, and who are conditionally isolated from the external environment and realise the aligned interests and purposes of the participants.

Economic activity on the basis of networks differs in terms of the multifunctionality of the behaviour of subjects in the modern changeable market and a multidimensionality of the directions of their activity that promotes an increase in the stability of the network economy as a whole.

The differences between a network economy and a ‘pre-network’ form of its organisation is shown in Table 2.

In the ‘pre-network’ economy (regardless of its character – industrial or post-industrial), the enterprise (the legal person) as the formal organisation, the divisions of which are in hierarchical dependence, acts as the main subject.

Subjects in the network economy are various types of legal and natural persons or a combination of these. They can have different forms of ownership, be commercial or non-profit organisations, and act individually or represent an association.

The network, as the primary link of a network form of organisation, can either be hierarchical (with vertical communication) or non-hierarchical, with the latter primarily featuring horizontal business interactions between participants. At the same time, the form of such organisations is defined by the participants of network, which allows them to be more adaptive to environmental conditions. Research shows that the weighed network approach leads to the creation of chains of value in open economies in various countries, allowing the attaining of benefits and competitive advantages (Amador, Cabral, Mastrandrea, Ruzzenenti, 2018).

Table 2  
Comparative Characteristics ‘Pre- Network’ and the Network Organisation of an Economy

Name of Characteristic	‘Pre-network’ Organisation of Economy	Network Organisation of an Economy
Means of economic subjects	Enterprise (legal entity)	Variety of subjects
Orientation of the activity of an economic subject	Produce more products more cheaply (using economies of scale)	Lower expenses, provided necessary values of growth rate and a share of the market
Direction for a solution to problems	Use of traditional means	Search for new ways to develop the organisation
Role of value of goods (service)	The value of goods increases to its limit	The value of goods increases in relation to the plurality of its types
Value of constant expenses of activity	High constant expenses	Rather low value
Activity implementation speed	Rather low	High
Result achievement speed	Rather low	High
Features of the attitude of participants towards result	Rather low; reflects the motivation of certain workers	High; provided with a network of interested participants
Organisational procedure for a solution to questions	The methods slowing decision-making are mainly used formally (or bureaucratically)	Informal procedures that accelerate decision-making are used
Relations with intermediaries	Formalised, which complicates relations with them	Generally, informal procedures are used
Role of innovations	Primary distribution of innovations in the form of copying them	Depreciation of copied innovations. Growth of original, unique solutions
Feature of the relations and communication between partners	Low mobility demands conventional attitudes and communications	High mobility as a result of informal relations and communications

*Source: Author-Developed.*

### **Informal Economic Networks**

The modern Russian and world reality features high rates of emergence of all forms of new, informal networks in organisations. These occur in various industries and involve various types of economic activity, including the services sector.

Systematisation and the analysis of domestic and foreign approaches to the concept of the informal economy and the generalisation of theoretical-methodological and methodical results of research conducted in this area testify to a multidimensionality of its interpretation (‘shadow’, ‘gray’, ‘black’, ‘underground’, etc.) (Barsukova, 2004). In some studies, informal networks are understood as ‘distorted’, unethical, illegal, and criminal networks which exist to advance the defined purposes of specific group (Osifo, 2018).



Furthermore, the informal economy in the field of services is understood as economic activity in which subjects do not observe formal (official) rules; its indicators are not considered in official statistics and its participants violate the conditions of obligatory payments (including tax).

The informal economy in the services sector represents a complete system which has a complex structure which is conditionally isolated in external space. Subjects of the informal economy are enterprises of different legal form, households, natural persons and their combination, in the form of associations and groups. Spheres of application of the activity of these subjects include the markets (work, goods, and services), industries, sectors, and various types of economic activity; exchanges (intercompany and intercorporate; interfamily and intrafamily; and interpersonal and intergroup, etc.); and production, and the like.

The economic subject can be classified as informal economic network by taking into account a number of the following criteria:

- the informal manner of its creation;
- the implementation at least one informal type of activity;
- the existence of specific purposes and rules of functioning;
- the use of informal ways of creating (receiving) economic values (goods) and/or methods of their promotion to consumers;
- the obtaining economic benefits from the result of informal activities, which implies the existence of appropriate methods for its appropriation.

Informal economic networks are created purposefully by taking into account the needs of participants, and the existence of their resources and means of communication. A definition of the role of each participant in the network structure is required to establish the coordination of interaction between them.

The existence of informal economic networks in a state indicates the existence of systemic social and economic problems. First, in the state economic policy pursued, there are zones of insufficient balance of interests between the state, society, and business; undeveloped institutes complicate the implementation of the motives and interests of the activities of a certain segment of legal entities and individuals. Second, in society, reserves of resources are insufficiently involved in the formal process of reproduction.

Third, negative characteristics of the informal sector, which are presented in the form of obstacles to functioning of the 'normal economy', are represented as unproductive and are subject to elimination. Objective research on the reasons for the formation of the informal sector, which serves as a status indicator of the 'official' economy and can act as testing ground for any testing of innovations, are necessary.

It should be noted that research conducted in the various countries shows the existence of a large number of factors in the open economy that create the basis for leaving subjects in the shadow sector of economic activity. Among these can be noted general discrimination in the labour market (Neumark, 2018), ethnic discrimination of a particular set of workers

(Blommaert, Coenders, van Tubergen, 2014), problems with compensating immigrants (Bartolucci, 2014), gender differences in work and payment (Dittrich, Knabe, Leipold, 2012), and questions of unemployment and part-time employment (Nunley, Pugh, Romero, Seals, 2016) among others.

The economic network in the field of services can be formal, informal, or extra-formal. The formal economic network in the field of services is created on the basis of legalised, ordered, and documented requirements and conditions in the form of the norms, standards, organisation, rules, contracts, and the like, considering the relevant purposes, powers, rules, statutes, and so forth. In the legal basis, the lateral structure reflects the functional nature of the division of labour of the participants in such a network, and the vertical characterises the hierarchy of power and the relation of subordination in decision-making.

An informal network can be created in a formal network (or its organisations), and out of its borders as independent formations.

The informal network created in a formal network can perform a positive function (supporting or expanding a range of activities of the official structure). It is also capable of playing a negative, antagonistic role, for example, in the form of confrontation with the purposes of the activity of the official organisation.

The extra-formal network in the field of services acts as a kind of informal organisation created in order to provide a solution to tasks by using ways that are other than officially directed. The basic function of such a network is the orientation of activities to achieve the goals of the formal network.

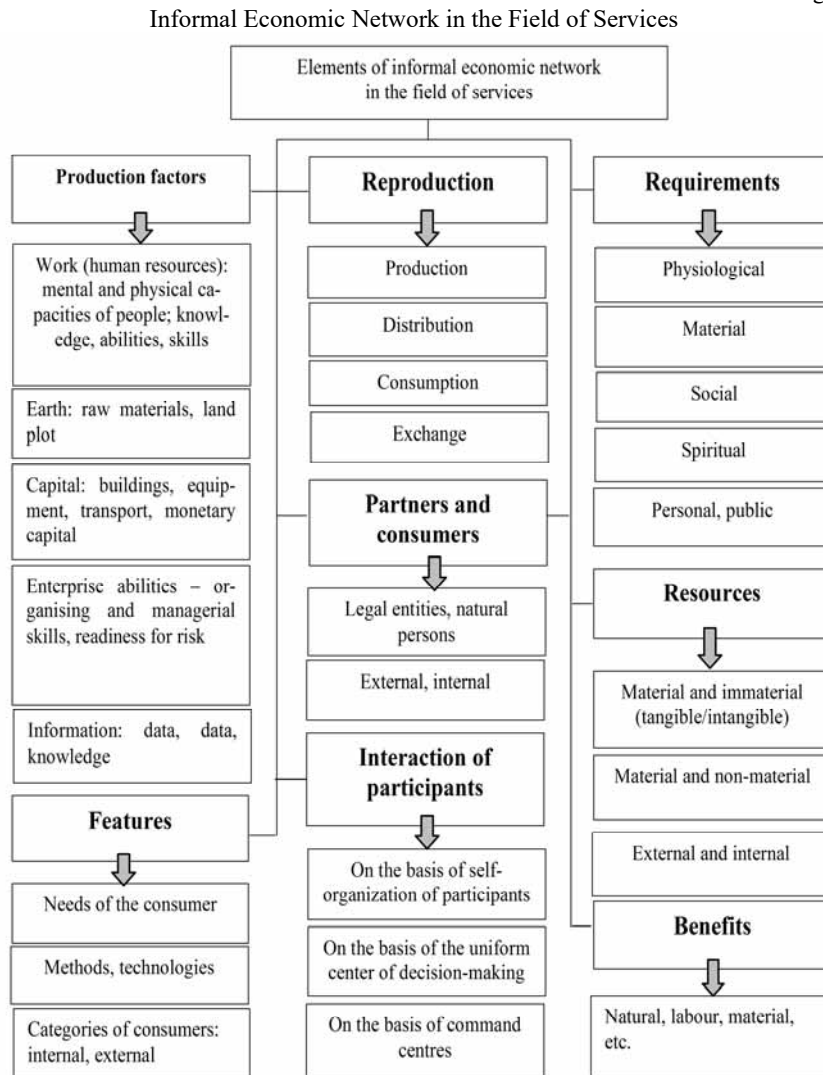
An informal economic network in the field of services is created purposefully or spontaneously on the basis of the voluntary interpersonal interaction of people having similar motives and interests jointly solving similar problems. This network of similarity in many respects acts as a function of the existing social and economic situation. In it, individual projects to ensure the viability of economic subjects based on mutual interest in one another and implemented in the form of collective cooperation are created and implemented. People create informal networks or join their participants for the purpose of obtaining material benefits, access to resources, satisfying a sense of belonging, seeking mutual help and mutual protection. However, in this network, the requirement of legislative, normative, and legal documents for its organisation are substituted by expediency and aspiration to achievement of the desired result.

Participants in informal networks independently set norms, rules, standards of activity, hierarchies, features of decision-making, control mechanisms, and so forth. The network interaction of economic subjects allows them to perform works which it would be impossible or unprofitable to undertake using other forms of the organisation; obtain economy at an activity scale; decrease the transactional costs of obtaining information and the transfer of knowledge and technologies, and the implementation of coordination and control. It should be noted that the benefits to subjects of participating in an economic network are not distributed evenly between all of them. Similarly, benefit, getting an economic form of excess profit, can have two components: a current (short-term) result and a long-term strategic character.

The current (short-term) result of the participation of subjects in an economic network is defined by the possibility of them receiving additional short-term profit for each commercial operation.

The long-term strategic result is based on the favorable conditions of the synergistic effect and the possibility of maintaining competitive positions in the market for the future.

Figure 1



The informal economic network in the field of services includes a set of interchangeable elements relating to the localised sphere of activity and the rendering of services in a certain direction (Figure 1).

The architecture of a network depends on the presence of three main groups of factors of both a non-economic and an economic nature: environmental conditions that determine the choice of an economic entity as concerns participation (or non-participation) in the informal economic network; the nature of the social relations between network members; and the management mechanism and resource allocation.

In many respects, the architecture depends on the scale, sustainability, and the degree of 'informality' (partial, complete, and so on).

This affects the behaviour and result of the economic actions of the subjects, which, in turn, affect the structure of the informal network organisation.

The mechanism for managing and allocating resources is the ability to make decisions based on the principle of action (for example, the presence or absence of a single centre, decision making, the distribution of income, and the like).

In an informal economic network, a set of organisational and formative factors should be distinguished, thanks to which it obtains the necessary data and focuses on the final result of the activity: administrative and regulatory, technological, economic, logical, organisational, behavioural, and psychological.

Administrative and regulatory factors make it possible to determine the state of affairs in the hierarchy, the functions, powers, responsibilities, and methods of reporting and control. These demonstrate the methods of influence and impact on the network participants and on the nature of their relationship.

Technological factors are associated with technology and the nature of the network operations performed. They include the composition and sequence of labour processes and types of activities; the nature and modes of work; the placement of people in certain working places; the creation of a material environment for the operation; and so forth.

Economic factors of the informal economic network involve addressing issues of planning revenues, profits, costs, pricing, methods of payment and incentives for participants, efficiency, and the like.

Logical and organisational factors determine the order of the functioning of the informal economic network, its communications, operations, information capabilities, decision-making features, and the availability of feedback.

Specific factors characterise the peculiarities of the participants' behaviour, their compliance with the norms, rules, and standards established in the network, and the possibility of crisis situations and conflicts.

Psychological factors are associated with a focus on joint, interdependent activities, common values, interests, perceptions, and the like.

It should be noted that in informal economic networks, formal relations are widely used and may take the following forms:

- subordinate – relations involving the level of hierarchy between managers and their subordinates (relations of power, dependence, domination, and subordination);
- functional – relations concerning the implementation of specialised activities, that is, their duties. This kind of relationship is not necessarily related to the subordination of one network member to another;
- paternalistic – relations between elders (by status, by role, etc.) who take binding decisions for other members of the network; and
- contractual – requirements, norms and rules on joint activities, undertaken obligations, Which are recorded in the documents.

The most important sign of the level of organisation of the informal economic network is the consolidation of the conditions for the interaction of partners on the basis of verbal agreements and their necessary observance of these.

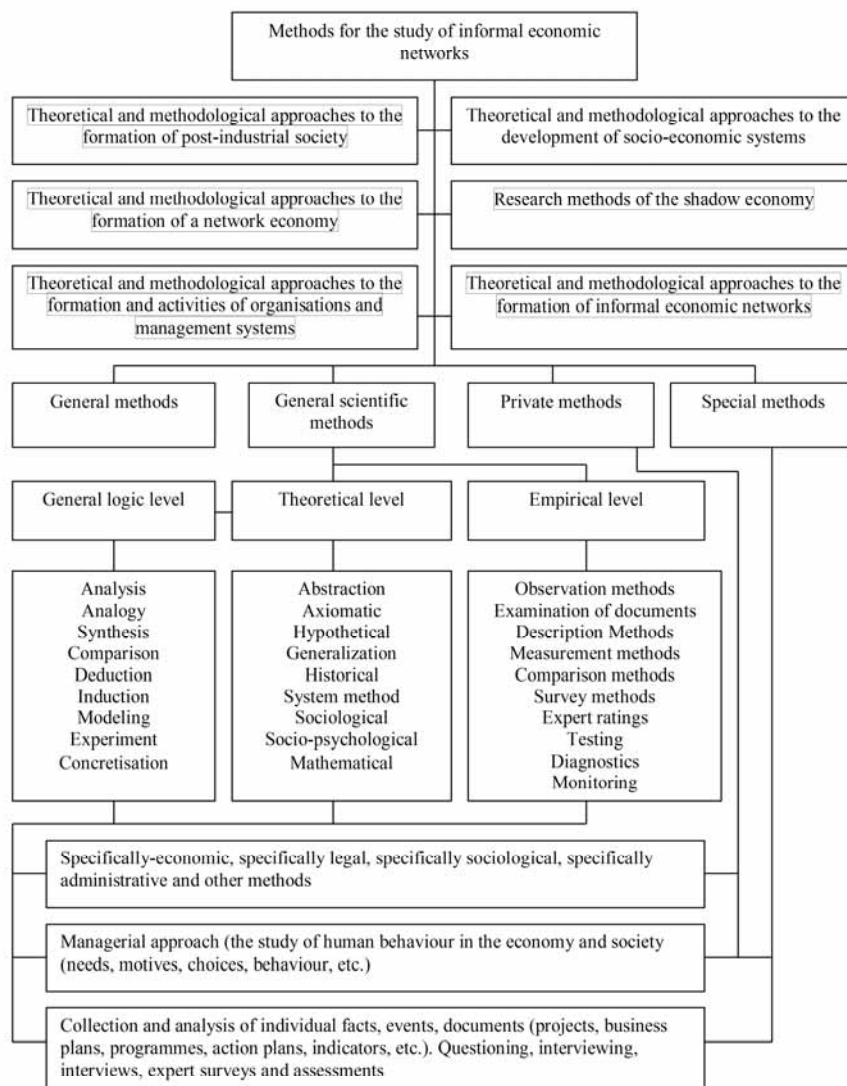
The complexity of the organisation and the multidimensional nature of the functions of informal economic networks means that complex methods are required for their study. In this regard, the study of this type of network requires an analysis of the external situation in order to identify the prerequisites and conditions for its formation and functioning. In addition, it is advisable to study a number of concomitant factors that determine the characteristics and types of informal economic networks. Thus, the study of informal economic networks requires the use of a set of theoretical and methodological approaches to the formation of a post-industrial society; to the development of socio-economic systems; the formation of a network economy; the existence of the shadow economy; the formation and activities of organisations and management systems; and approaches to the study of informal economic networks, taking into account their significant species and functional diversity.

The approximate composition of the main methods of research of the various aspects of informal economic networks is shown in Figure 2.

It is necessary to use methods of a universal character, general scientific, private, and special. The basis of the research of the scientific problem under consideration can involve a systemic approach, including its subject and object function and structure, resource and target aspects, and various instrumental techniques for conducting specific scientific research.

Figure 2

Composition of Research Methods for Informal Economic Networks



Source: Author-Developed.

### **Typology of network structures**

There are many reasons for ranking network structures by the various types: by subject, by object, by composition, by scale, and so forth. Hence, in the works of Oleinik (2004) and other scientists, the content of the following types of network structures is disclosed:

- community – village gathering with the participation of heads of peasant families, which implies autarky, i.e. decentralised decision-making procedure (Akhiezer, 1998);
- clique – a type of community of specially selected participants capable of violating the norms of other citizens;
- clan – relationships based on familial and friendly relations (Fukuyama, 2004);
- clients – a network with disproportionate distribution of power resources and based on informal, but hierarchical relations between the ‘patron and client’ (Afanasyev, 2000). This is the basis for the formation of criminal organisations (Gambetta, 1996);
- “Buddy System” – a network based on informal relations between friends and acquaintances;
- district – a model for local interactions of industrial enterprises concentrated in a limited space and specialising in the production of similar types of products. It requires norms of mutual trust and wide family ties;
- cluster – a group of interrelated firms concentrated in a certain territory; and
- project – this temporarily unites completely different people who actively interact with one another for a relatively short period of time.

In the services sector in Russia, there is a substantial number of economic agents who co-create the institutional basis for networked forms of organisation, both in the formal sector of the economy and in its shadow component.

As components of a wide variety of economic networks that play a significant role in the services sector of the Russian Federation, the following types should be noted: household networks (a form of organising the private life of individuals living together); networks of legal entities (commercial and non-profit organisations); networks of entrepreneurial structures (forms of interaction between business entities); networks of credit and financial services (banks, microfinance structures, funds, etc.), trade networks (networked retail); franchise networks; Internet commerce networks (Internet shops); and network marketing.

In actual practice, many types of informal economic networks, which can be classified according to a number of characteristics (Table 3), exist in Russia.

Each type of informal economic network has differences in its structure, manifested through an organisational structure, which is understood to be the composition of its elements, connected in a certain configuration through links and interactions between them. Any network (formal or informal) is an organisational structure in which its elements (participants), relationships, coordination and management bodies, responsibility and authority, etc. are represented. The organisational structure may be vertical

(hierarchical), horizontal, functional, and the like. If the organisational structure of entities (divisions, companies, and networks) that operate in the open sector of the economy is accessible to researchers, the structure of informal networks is closed not only for outside observers, but also to most of their direct participants and partners.

Table 3  
Classification of Types of Informal Economic Networks in the Service Sector

Sign (criterion)	Type of Informal Economic Network	Brief Description
Attitude to the environment	Internal External	Internal networks are part of any organisation or network
Size (scale)	Large Average Small	Size is related to the number of participants, the volume of activities, the coverage of industries, etc.
Locality of activities	Formal sector Informal sector	An informal network can function in the formal sector, in the informal sector, or both at the same time
Profitability	Commercial Social Retsiproknye	Gain and distribute income Product: power, prestige, and career Retsiprokny exchange
Hierarchy	Horizontal Vertical Diagonal	In the horizontal network, one coordination center is created; in other species, several
Stability of interaction	Stable Dynamic	Long-term contracts Temporary contracts
Level of centralisation	Centralised Decentralised	One or more decision-making centres Functions on the basis of the participants' self-management
Type of needs	Needs-oriented networks Special needs networks	Provide services that meet the mass needs of the market Provide services that meet specific needs of certain categories of the population
Type of targets	Strategic Operative	Achievement of strategic goals Achievement of current goals
Main participants	Individuals Legal entities	Individuals, groups, and households Enterprises and their associations

*Source: Author-Developed.*

Among the main factors influencing the type of organisational structure of the network are the following: the goals and objectives of its activities and development; the industry specificity of the activity; the characteristics and features of the work and services performed; the composition of the participants and the content of their functions; the features of the relations between the participants and the methods of their management; the technical means; consumer demand; labour organisation; and the skill level of the participants.

Informal economic network uses the form of its organisational structure, which is beneficial to it for a given period of time. In this regard, they are dynamic and regularly undergo



changes if the volume of activity and the size of the networks increase or decrease; the list of activities (the range of products, works, and services) is expanding or shrinking; environmental conditions change significantly; the system of relations between the participants of networks is complicated etc.

When they choose a type of informal economic network, its creators are guided by the main provisions discussed below.

First, special attention is paid to management issues, that is, the definition of the entire community of relations both within the management system and between management and executives in the course of the activity. Of particular importance is the relationship between managers who have a direct impact on all other interactions of network staff and thereby influence the final results of activities.

Second, the hierarchy, powers, and responsibilities of all employees are manifested in the organisational structure of the network, which determines the speed of communications and the transfer of interactions according to the ‘task-execution’ principle.

Third, the organisational structure of the network indicates the priority of each participant in the management hierarchy, which allows him or her to determine his or her responsibility, authority, level of payment, and access to social benefits provided by the organisation as a whole. These circumstances make it possible to include each employee in social groups, thereby forming a special relationship among network members.

The research conducted reveals the connection between the models of informal networks and theories and concepts of the development of the economy and society (Table 4).

Table 4

Communication Types of Models of Informal Networks in Relation to Theories and Concepts of the Development of the Economy and Society

Name of the Approach/Feature	Type of Informal Economic Network Model
Classical approach	Qualifying
Neoclassical approach	Polyfunctional
Institutional and neo-institutional approaches	Multi-criteria network with functional specialisation
Evolutionary approach	Evolutionary network
Behavioural approach	Behavioural network model
Restructuring and re-engineering of business processes and structures	Model based on a radical transformation of the network structure
Change management approach	Network models that take into account changes in the environment
Strategic approach	Network model based on the strategic development horizon
Corporate culture	Network model based on a specific corporate culture
Project management concept	Network model based on project management

*Source: Author-Developed.*

The existence of a link between models of informal networks and theories and concepts of the development of the economy and society is explained by the reasons that follow. First,

the informal sector is merely a component of the economy as a whole in which the provisions of the theories and concepts that define the features and directions of development of the entire society are implemented. In this regard, innovations that are implemented in sectors of the economy affect the informal sector, thereby influencing its content. Failure to comply with this provision will lead to an increasing lag for economic entities in the informal sector in relation to macroeconomic development trends, their ‘falling out’ from the system of economic relations.

Second, the reorientation of the economy and society to new theories and concepts of development requires the timely and adequate adaption of subjects of the informal sector to these, if only to preserve the old nomenclature and the volume of benefits received. This forces the economic agents of the informal sector to constantly monitor the situation in order to predict the nature of events and evaluate the consequences of their occurrence.

The formation of the organisational structure of the network is based on the following basic principles:

- the optimal number of stages both in the control system and in the entire network;
- the unambiguity of the distribution of official functions and duties both between the network subdivisions and between their managers;
- the adaptability of the structure of the units depending on the operating conditions of the network as a whole; and
- the profitability of the organisational structure of the network in terms of the cost of its maintenance.

The principle of the optimality of the organisational structure of the informal economic network implies determining the number of subjects, divisions, and individual elements, the rational relationships between them, and the division and specialisation of work.

An excessive number of elements can increase communication between departments and the time required for the passage of information between them and complicate the entire process of managing the network. On the other hand, excessive specialisation requires an increase in the productivity of workers. However, it creates difficulties regarding the interchangeability of workers and leads to the fragmentation of their functions and responsibility for the timeliness and quality of work.

Increasing the concentration of work, for example, in the form of creating large units, contributes to the implementation of complex work. However, excessive concentration can complicate control over the activities by the top management.

The principle of unambiguity used in the distribution of functions and responsibilities between groups, departments, and individual employees allows the elimination or reduction of the likelihood of the repetition of work and functions, as well as of parallelism, and of the ambiguity of submission. This implies a clearer definition of the boundaries between divisions and individual network workers’. The principle is based on the rule that one immediate superior relies on a small number of performers (1-7 people), which requires clearly defined responsibilities for them within the framework of the work performed.

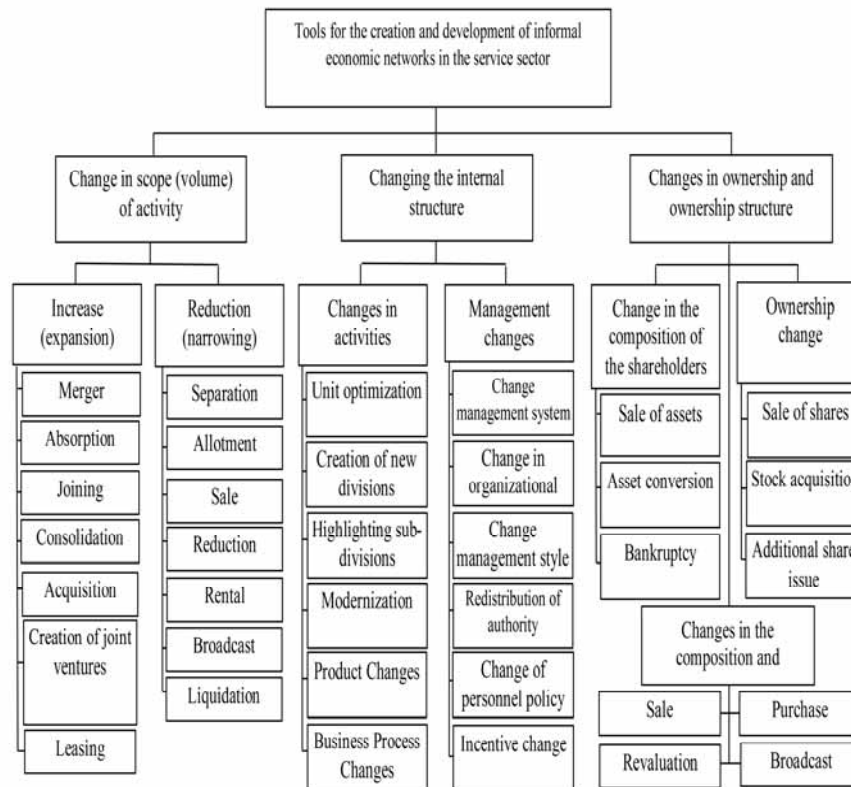
The principle of the adaptability of structures, that is taking into account the environmental conditions, is aimed at the timely restructuring of the constituent elements of the network, thereby optimising their relations with one another, which is necessary in cases of the emergence of new tasks and activities.

Orientation to the efficiency of the organisational structure of the network in terms of the cost of its content suggests that the creation and improvement of units and links will be optimal, not exceeding what is economically necessary.

Use of the principles discussed above allows their creators and participants to improve the organisational structure of the network in order to ensure the actualisation of the modern form of their organisation and rationality of functioning.

Figure 3

Tools for the Creation and Development of Informal Economic Networks in the Service Sector



Source: Author-Developed.

The formation of network structures is carried out in various ways, using diverse tools, including integration and disintegration: the creation of new structures and their elements, the transformation of existing structures, the merging of several elements, the conjoining of some elements, making use of the cooperation of subjects, the division of labour and functions, the selection of some elements from the composition of large structures, the elimination of unnecessary elements, and the like (Figure 3).

Different countries and industries use different tools for creating and developing informal economic networks in the service sector. Hence, for example, the modern Internet industry, which is becoming increasingly mature, is moving into the era of the mobile Internet, which activates in it the processes of restructuring, transformation, and the merging internet businesses. The reasons are strategic: the need for the rational allocation of the resources of a mobile terminal and the growth of new market and technology needs. Attracting investment in innovations, creating alliances, mergers and acquisitions, and other network-based media have been used by Internet companies for cross-border expansion (Ma, 2017; Jing, 2014).

### **Conclusion: Ways to Legitimise Informal Economic Networks in the Service Sector**

Network research has become popular in many areas of science due to the need to solve various global and national problems. It offers a holistic view of the structure of inter-organisational, interfirm, intergroup, and interpersonal interactions.

The use of online forms of organising activities around the world continues to grow. In this regard, it can be predicted that the growth in the number and diversity of informal economic networks in the service sector will also continue. Below, we note a number of directions of their legitimisation and the modification of their negative qualities into positive ones.

*Change of public policy paradigm.* The majority of participants in the informal economic networks in the service sector are not enemies and criminals of society – they are forced by circumstances to engage in hidden activities. The fight against the shadow economy and the illegal self-employment of the population, which is currently primarily subject to criminal administrative prosecution, must be complemented by a real solution to the social and economic problems of the population. In particular, it is necessary to ensure unconditional compliance with laws in the field of labour relations. Many workers in the formal sector of the Russian economy do not have legally binding labour relations with their employers; they often work irregularly and do not receive timely wages. Employers themselves actually go to the informal sector of the economy and contribute to its expansion at the expense of their employees, who are forced to earn extra money for their survival.

At present, participants in informal economic networks do not have a permanent platform for interacting with government authorities and trade unions to express their problems. In addition, there is actually no other party that could (and should!) listen, study comments, suggestions, and jointly solve these problems. It is necessary to establish and maintain the connection of ‘informals’ with politicians through meetings at local, regional, and federal

levels, which will allow for the understanding, protecting, and satisfying of the needs of people who are, for various reasons, employed in the informal economy.

*The development of survival skills by the population.* The vast majority of workers who are exclusively employed in the informal sector of the economy (tens of millions of people) do not have reliable sources of income for life or the opportunities and financial resources to start their own business. Therefore, they and their families are vulnerable to the risk of possible economic crises, business risks, and various negative life events. The country should provide an opportunity for informal workers to create self-help groups (cooperatives, funds, etc.) that combine their small free monetary resources to use as a source of loans. This will require financial literacy courses and training for a wide range of people.

The development of survival skills should be the subject of special programmes for the populations of economically problematic regions of the country. Features of normal life such as work and pay, economic mobility, and careers in such regions are frequently associated with low levels of education, limited skills. Government investments are needed for the development of entrepreneurial skills of workers in order to extricate them from the informal sector in order to increase their wages, diversify their work, and expand their employment opportunities.

*Strengthening market relations.* In some regions of the country, many entrepreneurs often operate in small markets in conditions with a high level of monopolies and corruption and the suppression of market freedom, which forces them to work into the informal sector of the economy, which significantly reduces the sales volumes of their goods and services, which then leads to a reduction in income and the development of irregular employment. It is necessary to significantly expand freedom of access to the market and to optimise competition in order to ensure the linking of producers to consumers and buyers. The development of cooperative and social entrepreneurship will allow many people employed in the shadow sector of the economy to legalise their activities. It is advisable to create fully transparent supply chains of products and services and to establish direct and feedback links to connect manufacturers in all production chains with consumers.

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