

Innovation management as a system management tool in the modernization of the services sector

Marina Vladimirovna Malakhovskaya

Aida Talyatovna Petrova

Olga Nikolaevna Vladimirova

Siberian Federal University, Russia, 660041,

Krasnoyarsk, Svobodnij Prospect, 79

Irada Talyatovna Rustamova

Russian New University, Russia, 105005, Moscow, Radio str., 22

Abstract

The formation of a new quality of services is mediated by the capacity for the continuity of the innovation process. The need for innovation management is caused by the blurring of the boundaries between marketing, organization, processes and products, by the intensified synchronization of production and consumption. Identifying the susceptibility to innovations of the services sector reveals tools and methods for maintaining the innovation process at the stages of creation and delivery of services. The article puts forward and verifies the hypothesis of the need for the end-to-end innovation for business development and the hypothesis of the coherence between the degree of individualization of technologies and products and the innovation capacity of an enterprise in the industry. A model explaining the delay in environmental innovation is also provided. The conditions of the Krasnoyarsk Territory are regarded as characteristic of the innovation processes in the service sector. The representativeness and relevance of the sample are ensured by grouping according to the criteria of the compliance with the sector profile and Russian standards of determining the scale of the enterprise. Selective one-time observation of a diverse population was carried out in November-December of 2013. The authors applied the method of the expert evaluation of innovation level using a questionnaire form. The design of the study corresponds to the classification of innovations according

to the Oslo Manual (technological, organizational, marketing, environmental, social, and informational). The comparability of service industries and types of innovation by the degree of assimilation is ensured by the formation of a matrix of normalized values. The concept and phenomenon of the “end-to-end innovation” are justified by the need to work out in detail the management methodology and reflect the functional specificity of production processes in the segment “service industry”. The verification of the hypothesis of the need for the end-to-end innovation for business development and the hypothesis of the coherence between the degree of individualization of technologies and products and the innovation capacity of an enterprise in the industry shows the directions and possible tools of the state, branch, and corporate regulation of the development rate of this sector through identifying and supplementing the “initial” innovations. The managerial approach of “end-to-end innovation” is regarded as ensuring the sector development rate and the increase in the efficiency of the infrastructure of Russia’s regional and national economy.

Keywords: innovation, service industry, innovation management, end-to-end innovation, diffusion of activity processes, industrializability.

Introduction

Innovations are of particular importance for ensuring general and competitive sustainability of business practices as they are able to change the quality of services, satisfaction with service, increase the number of transactions with a loyal buyer. The ability of innovations to reduce the unit costs of the delivery of a benefit on the basis of the scaling effect through changing technological, technical, operational, and economic parameters of the production of services, widening the range of related services, optimizing the structure of expenses and ensuring the efficient use of resources (including the quality of labor and forms of its motivation) increases the relevance of the requirement for the modernization of the technologies of service industry management.

The purpose of the study is searching for the bases of changing the management approach in the services sector to ensure a flow of innovations as a source of a new quality of economic development resources. The potential of the analytical method of “end-to-end innovation” is shown in transforming the management of services. The need for structuring the objective diffuseness of the activities related to the delivery of services, reflected in the blurring of the boundaries between marketing, organization, processes, and products, determined the application of the “Oslo Manual”. The revealed synchronization of production and consumption, essential synchronization of business processes, and the requirement for the simultaneous innovation across all components of the rendered service determined the need to visualize the obtained results using radar charts, ensuring the visibility of the opportunities for unifying management tools. The presentation of the results of the study is preceded by the review of the sources used for the substantiation of the applied methodological model. The substantiation of the design and methods of the conducted research is based on the previous works by the authors, confirming the validity and consistency of the obtained results. The explanatory hypotheses, put forward in the course of the discussion, are supported by the coherence with independent sources of data on the development of management practices and the processes of creation and delivery in the services sector and enable the authors to classify service industries according to the coherence of innovation characteristics and features of the product and make it possible to suggest using the complementarity as the principle of innovation management in services industries, developed in the logic of the “end-to-end innovation”.

Choosing a methodology

The methodological approach to the study is determined by the current state of economic, institutional and applied managerial knowledge. A change in the place and importance of services in developed economies is reflected in Daniel Bell’s theory of postindustrial society (Bell, 2004), and S.Yu. Glazyev’s theory of technological modes (Glazyev, 2000). The Fischer-Clark-Fourastié three-sector model of social production structure (Fisher, 1939; Fourastié, 1964; Clark, 1957) distinguishes the

service industry as a tertiary sector. The leftover principle of forming the service sector, which includes the activities, not definitely belonging to the primary and secondary sectors (agriculture and industry), influenced the vagueness of the concept of “service” itself. The terminological ambiguity of this concept used by Russian researchers has existed since the period of Soviet economic science and originates in two approaches to the essence of services proposed by K. Marx. The first approach is based on the specificity of the form of labor, while the second approach reveals the specific features of the result, the useful effects of activities. Later, the thesis on the involvement of the service in the delivery process of any goods emerged, which confirms the communicative function of trade in the interaction of buyers and sellers. It is in the context of the communication function of the service that the innovativeness of life practices of the customer, or, wider, the innovativeness of the economic environment, in which the innovation process starts, assumes special importance (Malakhovskaya, 2009). Researchers have traced the connection between the high variability of the economic environment and the speed of transformations in the creation and delivery of services. The studies have confirmed the importance of the competitiveness of the environment and the quality of the ongoing competition (the model of improving or non-aggravating selection).

In the logic of the utility theory, a service forms the effect required for a customer, representing a new benefit or resulting in a change of the quality of an already existing benefit. This interpretation made it possible to identify the coincidence of consumption and the moment of the delivery of a service as a benefit. On the basis of the broad definition describing the service as any type of benefit, which is basically intangible and is related only to the individual idea of the growth in material well-being, not pointing to the specifics of production processes that create services, F. Kotler develops successful marketing models for the services sector (Kotler, 2014; Kotler, 2012).

Russian researchers attempt to create a classification of services (Korol', & Khlynov, 2014) based on such properties as functionality (industrial, consumer, social, distributional), place in processes (end or intermediate), consumption patterns

(mass, collective, individual), role (main, auxiliary), etc. The International Standard Industrial Classification of all economic activities (ISIC), statistical classification of economic activities of the European Union (NACE) divide all services into 160 positions in 12 large blocks: business services; communication services; construction and engineering services; distribution services; educational services; environmental protection services; financial services, including insurance; health services and social services; travel and tourism; leisure services; transport services; other services. Synchronization determines the objectivity of simultaneous manifestation of innovation in all components of the provided service and imparts to the innovation in the service industry a characteristic of imputed clustering.

Proceeding from the assumptions of the ubiquity of services and their significance for improving the efficiency of economic management, it is reasonable to explore the possibilities of the transformation of service management through changing the innovation management.

Methods. The extreme diversity of services predetermined the need to apply sociological, expert, and statistical research methods. Due to high variability in the definition of the subject in dividing services into sectors, the study relies on the provisions from the All-Russia Classifier of Economic Activities (OKVED). The innovation scenario is taken as the general development approach. The typicality of the conditions of the Krasnoyarsk Territory for Russian practices of the service industry determines the representativeness of the sample of respondents (Vladimirova, & Petrova, 2015). The survey was conducted in November-December of 2013. The representativeness of the expert community is ensured by the position of the head of a business entity operating in the services sector. The relevance of the sample is determined by the functional and informational opportunities of respondents (the sample included mainly the heads of large, medium and small businesses and organizations in the services sector). The survey was conducted using the method of a contact interview.

In accordance with the requirements of the “Oslo Manual” (Oslo Manual, 2010), an evaluation of the implementation of various kinds of innovations by enterprises and organizations in the services sector was carried out on the basis of the expert assessments.

The study design determined the cohort selection methodology as selective simultaneous observation of a heterogeneous population, grouped according to two criteria – on the ground of the sector profile and Russian standards of determining the scale of the enterprise. A survey of experts to assess the level of innovation implementation was conducted using a questionnaire form, and subsequent data processing was carried out using standard tools of *Microsoft Office*. Using the non-continuous survey method, which is traditionally used in collecting data through expert evaluation, 100 managers of large, medium and small enterprises of the service industry of the Krasnoyarsk Territory were polled on a non-recurring basis, which ensured the representativeness of the sample in this region. A comparison between the actual obtained results with the necessary level made it possible to form the matrix of normalized values (Table 2), ensuring the comparability of service industries and types of innovations according to the degree of assimilation. The interpretation of obtained data was carried out after summarizing them in the table, based on the use of the radar chart method.

Results.

The primary polling data are summarized in a table. The initial perspective of the respondents is given in Table 1. To generate the generalized view of innovation implementation by enterprises and organizations of the service industry, the results of expert evaluation, originally having a form of “high”, “medium”, and “low”, were translated into quantitative parameters with the use of a scoring system with points from 1 to 3 for the characteristics of low, medium and high (3 points) level of implementation.

Table 1. Expert evaluation of the level of innovation implementation*

Innovation		Service industry								
Type	Content	Wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods	Hotels and restaurants	Transport and communications	Financial activities	Real estate operations, rent and services	Public administration and military security; social insurance	Education	Health and social services	Other communal, social and personal services
Technological	Creation of fundamentally new technologies, equipment and materials	1	1	3	1	1	1	1	1	1
Organizational	development and implementation of a new organizational structure of management	2	2	3	2	1	2	2	2	1
Marketing	development of new markets and methods of promotion	3	3	3	2	2	1	1	1	1
Environmental	new technologies in the field of environmental protection	1	1	2	1	1	1	1	1	1
Social	Application of new work motivation methods	2	2	2	2	2	2	2	2	2
Informational	new information technologies	1	1	3	2	1	2	2	2	2

*Source: Primary polling data.

The representation of the level of innovation implementation in the form of normalized values in relation to the maximal indicator (3 points) makes it possible to carry out a comparative analysis of the innovative development of service industries and get an aggregated value for each of the industries for all types of implemented innovations.

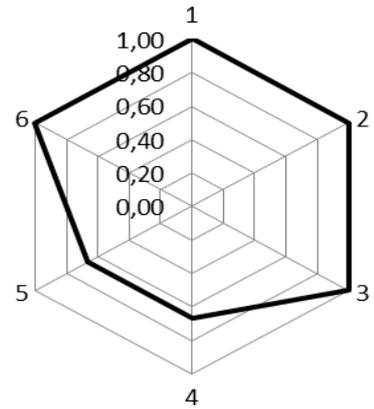
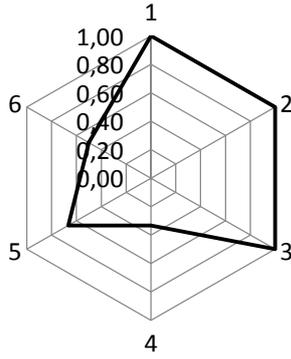
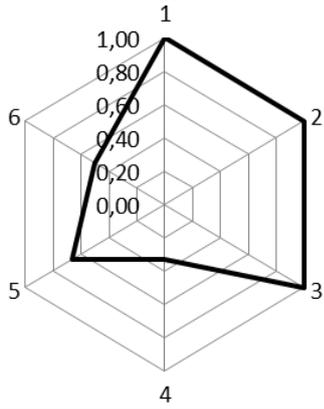
Table 2. Normalized values for the level of innovation implementation by service industries

No.	service industry/innovation type	technological	organizational	marketing	environmental	social	informational	service industry, total
1.	Wholesale and	1.00	1.00	1.00	0.33	0.67	0.50	0.71

	retail trade; repair of motor vehicles, motorcycles, personal and household goods							
2.	Hotels and restaurants	1.00	1.00	1.00	0.33	0.67	0.50	0.71
3.	Transport and communications	1.00	1.00	1.00	0.67	0.67	1.00	0.89
4.	Financial activities	0.50	1.00	1.00	0.33	0.67	1.00	0.71
5.	Real estate operations, rent and services	1.00	0.50	1.00	0.33	0.67	0.50	0.62
6.	Public administration and military security; social insurance	0.50	0.67	0.50	0.33	0.67	0.67	0.56
7.	Education	0.50	0.67	0.33	0.33	0.67	0.67	0.53
8.	Health and social services	0.50	0.67	0.33	0.33	0.67	0.67	0.53
9.	Other communal, social and personal services	0.50	0.50	0.33	0.33	0.67	0.67	0.50
10.	Service industry, total	0.69	0.77	0.71	0.37	0.67	0.70	0.64

The obtained results show the uneven implementation of innovative programs in enterprises and organizations of the service industry. The range of changes in normalized values varies from 0.33 to 1. Thus, the gap in the implementation of various types of innovative technologies reaches 67%.

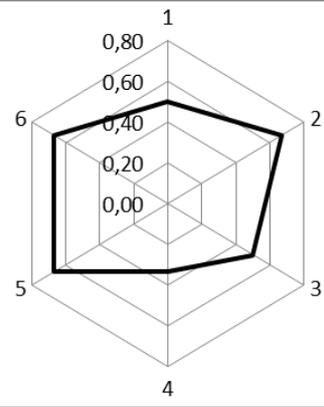
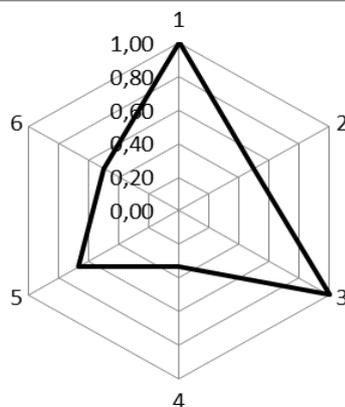
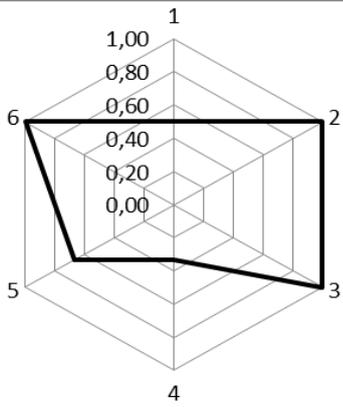
The graphical interpretation by service industries using the radar chart methodology helps to ensure the visualization of innovation built into the activities (Figure 1).



a - Wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods

b - Hotels and restaurants

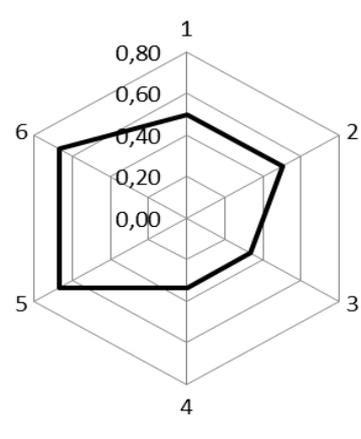
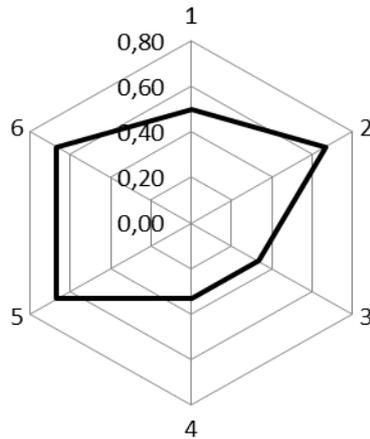
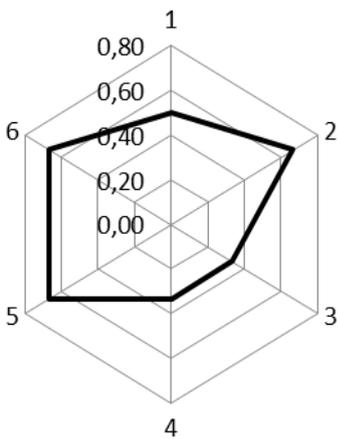
c - Transport and communications



d - Financial activities

e - Real estate operations, rent and services

f - Public administration and military security; social insurance



g - Education

h - Health care and social services

i - Other community, social and personal services

Figure 1. Innovation field by service industries. Types of innovations distributed on the axes of the radar chart: 1 – technological, 2 – organizational, 3 – marketing, 4 – environmental, 5 – social, 6 – informational.

The aggregation of normalized indicators creates a notion of the state of the innovative flow in the services sector.

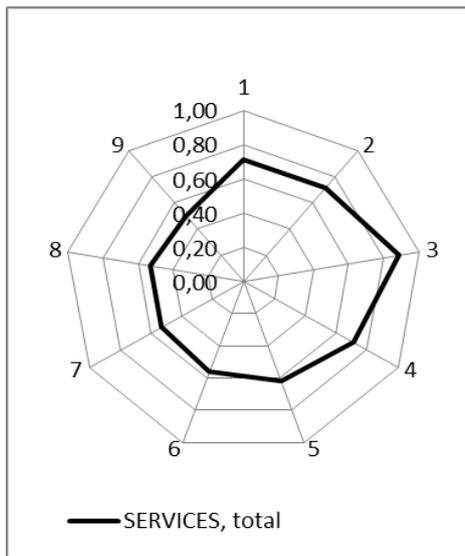


Figure 2. Innovation field by service industries. Types of innovations distributed on the axes of the radar chart: 1 – technological, 2 – organizational, 3 – marketing, 4 – environmental, 5 – social, 6 – informational.

Discussion.

The dynamics of the sector is largely determined by the deployment of innovation. The quality is determined by the end-to-end innovation. ***The end-to-end innovation*** is understood as a type of changing the functioning system of creation and delivery of services (or other benefits), which, even appearing as implemented in one of the elements of the services-producing system (*fragmentary or partial innovation*), objectively forms prerequisites and generates multiple opportunities for their imminent implementation, changing both the integrity and the character of the process of creation, as well as the qualitative characteristics of the delivered benefit itself. The opportunity for a breakthrough development, emerging in this connection, is ensured by mutually supporting changes in technologies: creating a benefit, business organization and management, communication with contractors, purchasers and consumers. Thus, end-to-end innovation results in the transformation of internal and

external (direct impact) environment of a participant in economic life that initiated this innovation process. The obtained expert assessments make it possible to put forward hypotheses explaining the specificity of the area of activity. Firstly, the hypothesis of the need for the end-to-end innovation for business development. Secondly, the hypothesis of the coherence between the degree of individualization of technologies and products and the innovation capacity of an enterprise in the industry. The theoretical basis of building the immanence of the end-to-end innovation for creating the platforms of business development is the thesis about the blurring of the boundaries of the stages of creating such a specific benefit as a service. The empirical basis is the consolidation of practices of successful companies. For example, the manufacturer and supplier of communication and information services “Google” carries out integration at institutional, grocery and technological levels by acquiring the video service “YouTube”, video game streaming service “Twitch”, etc. The network company “Groupe Auchan SA” (retail operator “Auchan”) shows an example of the end-to-end innovation, supporting the following innovations, emerging on the basis of the innovative logic of retail scaling: retail trade innovation (hypermarkets, supermarkets, grocery, household, furniture and other specializations), innovation in banking activity, innovation in real estate management for real and virtual (innovation of spatial specialization) economies in the transnational format, using not only possession or franchising (management innovation) organization of businesses, applying the approach of creating its own brands (operating and marketing innovations) to ensure controlled quality of the offered services.

The more individual the product, the more stringent is the requirement for the end-to-end innovation. Generative (initial) innovation can be positioned in any structural component of activity (organization, marketing, processes, products, in accordance with the requirements of the “Oslo Manual”). Creating a unique sequence of managerial (planning, organization, motivation, control), structural and infrastructural components of activity ensures the non-reproducibility of the result and competitive advantages, based on the exceptional resources of the implemented activity. An example is the non-reproducible educational product of the IGMO

University, which implements an innovative concept of the development of organizational, managerial, economic and design competencies in professionals in the field of transport, uniting through internships in Russia and Germany informational, technical, technological and managerial solutions for the routing processes of the delivery of cargoes and passengers, delivery technologies, modeling the traffic flow or a transport system, developing a database, maintaining the functions of gathering data and monitoring production processes.

Service industries have varying degrees of the individualization of customer involvement, and, therefore, various potential of the unification of the generated result (and industrializability of the process of its receipt and delivery). For instance, in the service industries “Wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods” (Figure 1a), “Hotels and restaurants” (Figure 1b) and “Transport and communication” (Figure 1c) the high level of development of technical, organizational and marketing innovations points to the use of serial models of receiving the product, the ability to scale the business, and, therefore, the high level of industrializability.

The configurational similarity of asymmetry observed in the service industries “Education” (Figure 1g), “Health and social services” (Figure 1h), “Public administration and military security; social insurance” (Figure 1f) and “Other communal, social and personal services” (Figure 1i) indicates the presence of similarities in the structure of activity of these industries, contributing to the similarity in the perception of innovation.

The figures make evident the structural heterogeneity of the industries “Financial activities” (Figure 1d) and “Real estate operations, rent and services” (Figure 1e), which form different compositions of the innovation stream. At the same time, the priority of organizational, marketing and informational innovations in the industry “Financial activities” points to the tools ensuring the sustainability of credit activity: stringent regulation of procedures (low permeability for technological innovation), correspondence to reality of the concepts of the financial capacity of households (social innovations) and the development logic of their reproductive

activity methods (marketing innovations), with a strict control function maintaining the resistance to the social fluctuations of the access to the resource (assimilation of organizational innovations).

It is possible that such structural characteristics can to a significant extent determine the methods and tools of innovation management in a specific service industry. This determines the authors' approach to the classification of service industries (Table 3).

Table 3. Typology of service industries based on the coherence between the characteristics of innovation and the specifics of product creation

No.	Service industry	restrictions or opportunities for industrializability	requirement for the reference model of innovation
1.	Wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods	high uniformity, serial or typical character of tasks, not requiring the participation of the end-user	can be fragmented, local
2.	Hotels and restaurants	highly serial character, focused on differentially unified request	end-to-end type supporting the "consumption style"
3.	Transport and communications	high uniformity, serial or typical character, packagability of the product	end-to-end type supporting activity scaling
4.	Financial activities	high uniformity, the rigidity of the rules and regulations of the service provision	end-to-end, taking into account the consistency of the procedures of highly regulated activity
5.	Real estate operations, rent and services	mediated by the properties of the objectified carrier of the result	can be fragmented, local, susceptible to the significant characteristics of the client
6.	Public administration and military security; social insurance	high uniformity, the rigidity of the rules of service provision	end-to-end, taking into account the consistency of the procedures of highly regulated activity
7.	Education	variability of the structure depending on the development trajectory of the required result	end-to-end, taking into account the consistency of the procedures of controlled activities
8.	Health and social services	variability of the structure depending on the development trajectory of the required result at the high uniformity, rigid rules and regulations of activity	end-to-end, taking into account the consistency of the procedures of highly regulated activity
9.	Other communal, social and personal services	diversity of the structure of technological processes due to the arbitrariness of the sectoral classification	end-to-end, taking into account the consistency of the procedures of heterogeneously regulated activity

Source: Compiled by the authors

For instance, the available technological innovations are currently applicable for industrializable industries (wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods; hotels and restaurants; transport and communication; real estate transactions) and remain relevant for the implementation in personalized service industries. The diffusion of informational and technological innovations is very likely for such segments of the services sector. The market reality predetermines the interrelated marketing and informational innovations as contributing to the viability of the business through the communication with the expected user. Organizational innovations, based on the technological changes in the main or supplementary activities aimed at creating a service, perform an adaptive function that determines the degree of the required flexibility of the access to the customer and the reduction in the costs of management impact on the service quality. Social innovations are implemented by all organizations and enterprises due to the need for the compliance to institutional and public factors, mediating the economic activity taking place in direct contact with the end user.

The consideration of the trade as a separate sector related to the function of transaction service makes it possible to reveal the impact of technological innovations, having an organizational form, by comparing conventional forms of trade and Internet retail, defined as organizational and technological trading innovation. The research statistics show that in the first half of 2015 the Russians purchased in domestic online stores goods worth 305 bln rubles (+28% as compared to the previous year) and purchased in foreign online stores goods worth 65.05 bln rubles (+81%). According to the forecast of "Data Insight", the volume of the cross-border online trade in 2015 will amount to about 160.9 bln rubles (+92%), of which 108.56 bln rubles – purchases in Chinese Internet stores (in the previous year – 45.83 bln rubles). The average purchase amount at domestic online stores is within the range of 11,000-15,000 rubles.

The cumulative profile of the implementation of innovative technologies in the service industry, formed in Figure 3, makes it possible to reveal an objective "subsidence" of environmental innovation in all service industries. Environmental

innovations are in demand only in economies with overabundant supply and a significant share of ethical customers in the markets or in the conditions of providing services in direct contact with the physical habitat (transport and communications). In this regard, innovation management should be prepared to encourage the innovative implementation of business transactions, or (in case of the optimistic scenario of the responsible attitude to the environment of the producer and the consumer) it will face a boom of protective innovation, which will require from management a clear strategy of the systematization of the environmental function in the logic of the commercialization of the result. Besides, the use of an extensive interpretation of environmental processes as all types of processes violating natural background of the territory makes it possible to use a wider range of protective measures: introduction of paperless document flow (reducing the demand for pulp and paper products, reducing paper waste, etc.), switching to a different type of dyes used in hairdressing and household services, the use of a new generation of detergents in the hotel industry, using in all sectors energy efficient technologies of production and room lighting, accommodation of health organizations in “green zones” of urban systems, formation of pedestrian zones and the widespread use of urban electric and mechanical transport, etc.

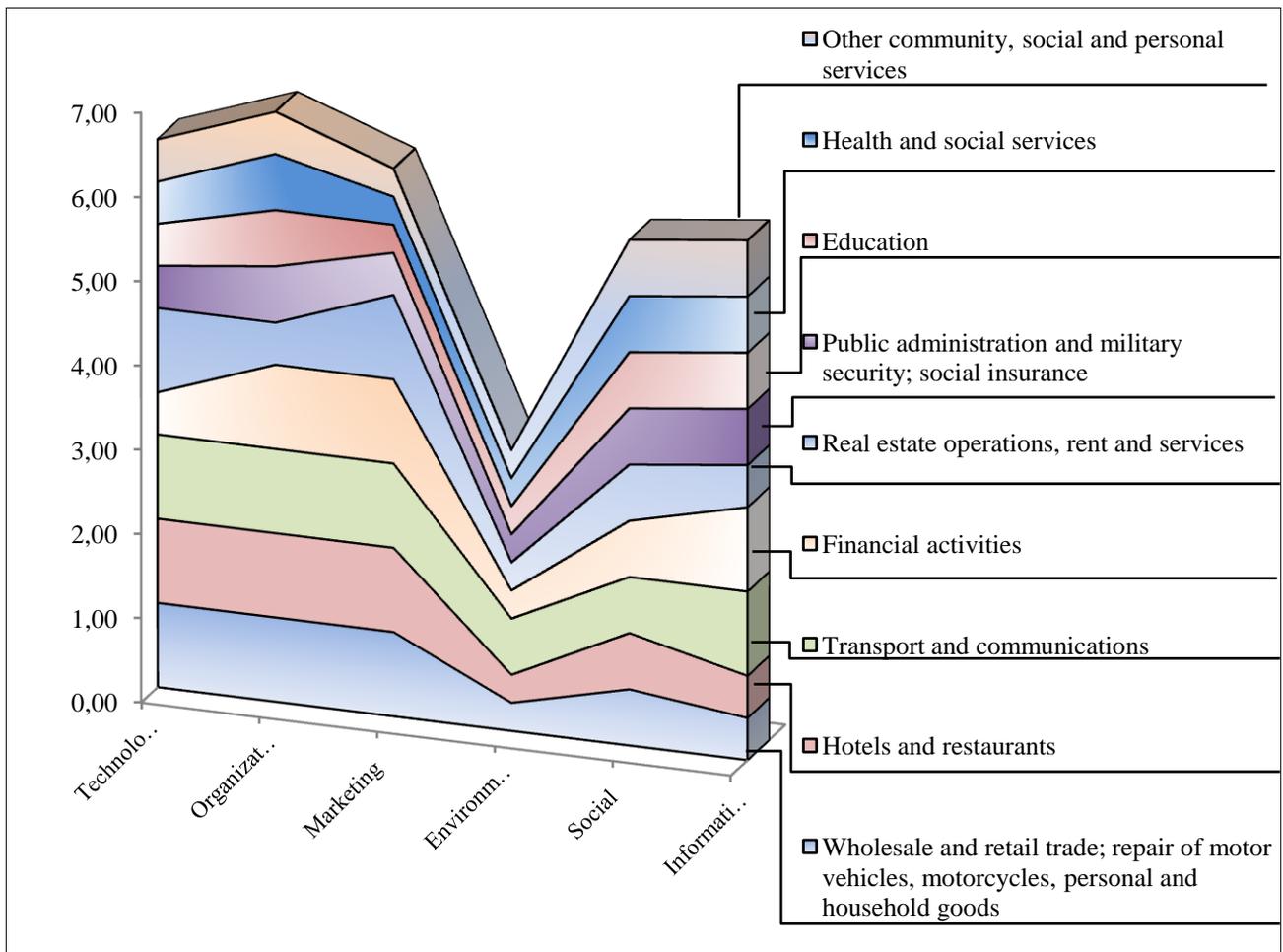


Figure 3. Lack of demand for environmental innovation under the current conditions in the services sector.

The development of the hypothesis on the need for the end-to-end innovation points to the diffusion as a tool of engagement and management for the types of open innovations and diversification as a tool of borrowing new ways of carrying out the enterprise's activity from other sectors and other service industries. The management of the fragmented management innovation, which is able to give direction or change the rate of business development, most likely requires a deep understanding of the regularities of unevenly emerging consumer readiness (consumer integration of innovations), customers (budget load) and the maturity of an innovative event (the extent of its compliance with the logic of the industrial processes in the sector).

On the basis of the on the established view on the state of innovation activity in the discussed sector in Krasnoyarsk, generalizing the analytical results of the discussion, it is logical to put forward a hypothesis of structuring the management of the innovative process (Table 4) through the introduction of the complementarity principle, under which the authors understand the possibility of industrializability and diffusion of the creation of a service.

Table 4. The use of complementarity as a principle of innovation management in the services sector

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No.	Service industry	restrictions or opportunities for industrializability	requirement for the reference model of innovation	The structure of innovation (failures of the end-to-end innovation)		Diffusion of the innovative process
				initial	complementary	
1.	Wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods	high uniformity, serial or typical character of tasks, not requiring the participation of the end-user	can be fragmented, local	technological, organizational, marketing	informational, environmental	on the basis of the objective requirements of activity scaling (using network opportunities): investment in the use of WEB-technologies (improving the transparency of delivered benefits and delivery process, introducing a possibility of the customer control over the product configuration), using non-waste loops of operational processes or “environmentally friendly” emission recycling models
2.	Hotels and restaurants	highly serial character, focused on differentially unified request	end-to-end type supporting the “consumption style”	technological, organizational, marketing	environmental, informational	Changing the technologies of product “packaging”, enhancing the contactless access (expanding the number of participants of “electronic signature”) and paperless technologies
3.	Transport and communications	high uniformity, serial or typical character, packagability of the product	end-to-end type supporting activity scaling	technological, organizational, marketing, informational	environmental, social	Expansion of communication networks with financial activities, creation of new information access technologies
4.	Financial activities	high uniformity, the rigidity of the rules and regulations of the service provision	end-to-end, taking into account the consistency of the procedures of highly regulated activity	organizational, marketing, social, informational	technological, environmental	Changing the technologies of product “packaging”, enhancing the contactless access (expanding the number of participants of “electronic signature”) and paperless technologies
5.	Real estate operations, rent and services	indirectly, by the properties of the objectified carrier of the result	can be fragmented, local, susceptible to the significant characteristics of the client	technological, marketing	organizational, environmental, social, informational	Expansion of communication networks with financial activities, creation of new information access technologies
6.	Public administration and military	high uniformity, the rigidity of the rules of service provision	end-to-end, taking into account the	organizational, social, informational	technological, marketing, environmental	Changing the technologies of communication with

	security; social insurance		consistency of the procedures of highly regulated activity	1	1	service consumers, using the electronic signature” and paperless document flow technologies, diversification in the assortment policy, branding as a tool of increasing the social responsibility of a service provider, changing the technologies of operational management using the methods of teamwork, job description, guidelines on the implementation of works.
7.	Education	variability of the structure depending on the development trajectory of the required result at the high uniformity, rigid rules and regulations of activity				
8.	Health and social services					
9.	Other communal, social and personal services	diversity of the structure of technological processes due to the arbitrariness of the sectoral classification	end-to-end, taking into account the consistency of the procedures of hetero- geneously regulated activity	social, informational	technological , organizational, marketing, environmental	

* Source: compiled by the authors on the basis of the results of the analysis

Conclusions.

Thus, the concept and phenomenon of the “end-to-end innovation” reflects the need to work out in detail the methodology and tools of the management of the functional specifics as diffusion of production processes in the segment “service industry”. The verification of the hypothesis of the need for end-to-end innovation for business development and the hypothesis of the coherence between the degree of individualization of technologies and products and the innovation capacity of an enterprise in the industry reveals the practical managerial importance of the management of changes as identifying the directions and tools of state, branch, and corporate regulation of the development rate of the sector. The proposed authors’ approach to identifying and supplementing the “initial” innovations, by providing a certain rhythm (the simultaneity of corresponding and mutually supporting innovative changes at all stages and in all processes of providing services), contributes to the increasing efficiency of industries and organizations of the sector as the components of the infrastructure of the territorial and national economy of Russia. The management approach in the methodology of “end-to-end innovation”

in the process of its implementation is regarded a way of transforming the practices of the services sector management through the management of its innovations.

References:

1. Bell, D. (2004). *Gryadushchee postindustrial'noe obshchestvo. Opytsotsial'nogoprognozirovaniya* [The Coming of Post-Industrial Society. A Venture in Social Forecasting] (Trans. from English, 2nd ed., revised and enlarged). Moscow: Academia.
2. Fisher, A.G.B. (1939). Production, Primary, Secondary And Tertiary. *The Economic Record*, 15(1), 24-38. Retrieved October 26, 2015, from <http://hdl.handle.net/10.1111/j.1475-4932.1939.tb01015.x>.
3. Fourastié, J. (1964). Tekhnicheskii progress i kapitalizm s 1700 po 2100 god [Technological Progress and Capitalism in 1700-2100]. In A.M. Rummyantsev (Ed.), *Kakoe budushchee zhidaet chelovechestvo?* [What Future Awaits Humanity?] (pp. 144-159). Prague: Mir isotsializm.
4. Clark, C. (1957). *The Conditions of Economic Progress* (3rd ed.). London: Macmillan; New York: St. Martin's Press. Retrieved October 26, 2015, from <http://trove.nla.gov.au/work/7473112>.
5. Kotler, Ph., & Kotler, M. (2014). *Winning Global Markets: How Businesses Invest and Prosper in the World's High-Growth Cities*. Hoboken, NJ: John Wiley & Sons. Retrieved October 26, 2015, from <http://www.marketingandsalesbooks.com/en/books/13216/winning-global-markets>.
6. Kotler, Ph., Hessekiel, D., & Lee, N. (2012). *Good Works! Marketing and Corporate Initiatives that Build a better World... And the Bottom Line*. Hoboken, NJ: John Wiley & Sons. Retrieved October 26, 2015, from <http://www.marketingandsalesbooks.com/en/books/119/good-works?authors>.
7. Malakhovskaya, M.V., & Skryl'nikova, N.A. (2009). Formirovaniye motivatsiy k sozdaniyu innovatsionnoy ekonomiki v Rossii [Forming the Motivation for the Creation of Innovative Economy in Russia]. *Vestnik Tomskogo gosudarstvennogo universiteta. Ekonomika*, 1, 24-38.

8. Korol', A.N., & Khlynov, S.A. (2014). *Uslugi: opredelenie i klassifikatsiya* [Services: Definition and Classification]. *Uchenyeyazmetki TOGU*, 5(4), 1323-1328. Retrieved October 6, 2015, from http://pnu.edu.ru/media/ejournal/articles-2014/TGU_5_357.pdf.
9. Vladimirova, O.N., & Petrova, A.T. (2015). Methodical Approaches to the Assessment of Innovative Region Susceptibility. *Mediterranean Journal of Social Sciences*, 6(3), 11-19.
10. Demidova, A. (2015, October 5). *Vakantnost' narynketorgovoy nedvizhimosti po itogam 2015 goda budet rekordnoy* [Vacancy in the Retail Property Market will Be Record-Breaking According to the Results of 2015]. Retrieved October 6, 2015, from www.vedomosti.ru/business/articles/2015/10/06/611553-vakantnost-rinke-torgovoi-nedvizhimosti-goda-budet-rekordnoi.
11. *Avtonovosti* [Auto News]. (n.d.). Retrieved October 7, 2015, from http://auto.newsru.com/article/25sep2015/calif_comp.
12. *Google kupil video servis YouTube* [Google Bought YouTube Video Service]. (2006, October 10). Retrieved October 21, 2015, from <http://lenta.ru/news/2006/10/10/youtube/>.
13. Budrina, E. (2015, September 29). *"Innovatsionnyy transportnyy tekhnologii"* – *unikal'naya programma dlya apgrejdanavykov spetsialistov v oblasti transporta* [“Innovative Transportation Technologies” – a Unique Program for Upgrading Skills of Experts in the Field of Transport]. Retrieved October 21, 2015, from <http://www.ifmo.ru/ru/viewnews/5143/>.
14. *Google kupil servis translyatsiy video igr Twitch* [Google Bought the Video Game Streaming Service Twitch]. (2014, July 26). Retrieved October 21, 2015, from <http://www.interfax.ru/business/387927>.
15. *Groupe Auchan*. (n.d.). Retrieved October 21, 2015, from <http://www.groupe-auchan.com/en/our-businesses/hypermarket/>.

Rekomendatsii posboru i analizudannykh po innovatsiyam [Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data]. (2010). Moscow: Centre for Science Research and Statistics (TsiSN) of the Ministry of Education and Science of the Russian Federation. Retrieved October 21, 2015, from <http://www.twirpx.com/file/568260/>.

17. Muchie, M., & Baskaran, A. (Eds.). (2013). *Creating Systems of Innovation in Africa. Country Case Studies*. Africa Institute of South Africa. Retrieved September 25, 2016, from <http://www.globelics.org/wp-content/uploads/2013/01/Book-Notification-Creating-Systems-of-Innovation-in-Africa.pdf>.