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Historical analysis of Perm's and Urals' development in the 20th century clearly captures the relationship between the evolution of scientific thought, expressed in the origin and development of Perm State University and its scientific schools, and socio-economic development of the region. Understanding this relationship allows to consider University scientific schools as intellectual locomotives of socio-economic development in Perm and the Urals. Considering the humanitarian, social and economic direction in the development of scientific schools it is necessary to note its relationship with the economic growth in Russia and in the Urals in 1908–1914, which got its intensive continuation during the first world war. Economic growth, development of new electrical technologies and electrical devices, as well as organizational forms of large-scale industrial production objectively required the development of University education and as a result the occurrence of higher educational institutions in the Urals. Universities had to become research centers and incubator, able to ensure the modernization of the Urals' economy according to the third industrial-technological structure of industrial production. University scientific schools started to form and develop on the basis of emerged departments. They allowed to solve many scientific and industrial problems of the Russian economy in the XXth century and to provide the Urals' industry in particular with high-qualified world standard (for its time) specialists. Thus, the study of the relationship between socio-economic development of the Perm city, the Perm Krai and the Urall region and the scientific schools functioning in these regions allows to determine the prospects and ways for further development of these territories based on the development of science as a productive force of society and a key competitive advantage.

**Keywords:** management, industrial management, neo-industrial management, technological structures, intangible assets, social management, management cycles, industrial cycles, technological progress, neo-industrial economy.

**Introduction**

From the very beginning two main directions came forward in the development of scientific schools in Perm university. These directions were determined by its first faculties – the Faculty of Physics and Mathematics, the Faculty of History and Philology and the Law Faculty. The first direction includes natural science and mathematics schools, the second one comprises socio-economic and humanitarian schools. These directions appeared in different times, and until the middle of the XXth century the university had no scientific schools of economics and management, as economic research was not conducted systematically.

The expansion of scientific and technical revolution in the middle of the XXth century, which triggered the assimilation of computers and mechanical electronic production technologies, the growth of economic managing methods, objectively gave impetus to development of economic research and economic education in the country including the organization of economic faculty at Perm university and a scientific school.
based on the Department of Branch Economics (these days the Management Department).

In the second half of the XXth century and the beginning of the XXI century the development of this scientific school focused on the economic and industrial revolution dynamics and assimilation of technologies and production organization forms starting with the forth and then moving on to the fifth and the sixth technological modes.

Results and Discussion

In the middle of the XXth century a famous slogan appeared: «Science must become a direct production force of the economy». Production quickly turned to a wide use of computers, automation facilities and mechanical electronic technologies.

At the same time there was a growing necessity to broad and complex use of planning improvement in the managerial practice and expansion of economic methods activating human factor in the assimilation of new equipment and increase in workforce productivity.

On the other hand, socio-economic and humanitarian directions strengthened in scientific research and staff training: the Department of Economic Geography was organized in 1955, the Faculty of History and Philology was divided into two different faculties in 1960 – the Faculty of History and Faculty of Philology.

Alongside with these tendencies a further development of economic education and research was given key importance in Russia in 1950s due to growing attention to economic managerial methods and exchange relationship [2].

As a result of these processes new economic institutes and faculties appeared in the system of Russian education in the end of 1950s, including the Economic Faculty at Perm university which was organized in 1959 and started to prepare a highly qualified specialists for planning and managing the production on enterprises of national economy [6].

The Department of Branch Economics played an important role in the faculty structure, preparing highly qualified economic planners for enterprises and industries of the Urals. In 1960 the Department of Accounting and Finance started to work, its professors focused their attention on the problems of accounting, finance and credit [3].

Two main scientific directions started to form at the Department of Branch Economics from the very beginning, they were studying complex development perspectives of national economy in the western Urals and research in-process reserves of industrial production growth on the enterprises of Prikamie [3].

The origin of scientific school and the formation of its theoretical, methodological and institutional basis was determined to a great extend by the necessity to decentralize the system of command economy formed in the country. It was organizationally connected to administrative-economic reform, which abolished branch ministries, dealing with industry and construction, and organized councils of national economy in republics and regions in 1957. The following tasks were included in the agenda – to disestablish the branch monopoly of ministries, to bring economic boards closer to regions and to enhance their initiative [1].

The researchers of Perm university started to address these issues both theoretically and practically in the frames of the emerging scientific school.

Theoretical and methodological backgrounds and the main applied research directions of the first scientific economic managerial school in the western Urals were worked out in the 1950s by Rector of Perm State University (1951–1961), Doctor of Economics Professor Vasily F. Tiunov (1900–1998) [8].

Vasily F. Tiunov acquired an immense organizational and economic experience working in the administrative field from 1939 to 1951 first as a deputy then as a chairperson of Perm Oblplan (Regional Planning Committee) and the first deputy-chairperson of Province Executive Committee. In 1950s he was elected a people's deputy of the Supreme Soviet of RSFSR.

Working as a rector of Perm university he published three books of the fundamental work «Industrial Development of the Western Urals» in 1954, 1957 and 1958, which formed a theoretical basis for scientific research in the field of improving planning and production management of industrial enterprises and regional economic development of Prikamie.

Vasily F. Tiunov was the first to determine the essence and the role of regional economic area in the country's economic system researching the specialization and industrial development problem of the western Urals in 1950s. Vasily F. Tiunov published about 150 scientific works including 19 books and brochures.

He was conferred a Candidate's of Sciences degree on 19.12.1944 and a Doctor of Economics degree on 20.06.1959, in December 1959 he was confirmed in the academic rank of professor. In 1991 Vasily F. Tiunov was conferred a title of Honored Scientist of RSFSR.

Vasily F. Tiunov initiated the formation of Economic Faculty and its main substructure – the Department of Branch Economics, which started to
train economists – planners and conduct relevant scientific research [5].

A Candidate of Economics, Associate Professor Isaak S. Sandler (the first dean of Economic Faculty) played an important role in the development of the department's scientific school during 1960s, he was the Head of Branch Economics Department in 1959–1966. In 1960s the works of Vasily F. Tiuov and Isaak S. Sandler put forward the ideas about constructing major roads in Prikamie, organizing deeper processing of chemical raw materials and creating regional forestry and refinery production complexes in the Western Urals [10].

The Department had been training specialists first in specialty «National Economy Planning», then «Industrial Planning» from its origin to the middle of 1990s. A postgraduate program 08.00.05 «Economics and National Economy Management» began functioning at the Department in 1965. The first specialized Dissertation Supervisory Committee was opened based on this postgraduate program, dealing first with candidate's and later with doctorate's dissertations. The Committee was headed by Doctor of Economics Professor Vasily F. Tiuov. V.I. Pimenova, T.G. Sheshukova, L.A. Romanova, V.I. Averin defended their candidate's dissertations and E.G. Ginzburg, I.A. Kruchinin, R.A. Korenchenko, V.V. Solomatyn their doctor's dissertations at this Committee [9].

In general, the scientific school conducted research in the field of territorial and spatial planning and management at the initial stage of its development.

The scientific school was formed and developed as a leading economic managerial and scientific system of the Western Urals, influenced by economic reforms of the late 1960s.

This reform planned to introduce the internal self-regulation mechanisms of enterprises' economic activity into the system of planned economy, to increase the material interest of producers in results and labor quality [1]. The scientific school transformed into the school «The Organization of Economic Management and Industrial Enterprises Regulation», which was caused by its development connected with solving tasks set by the economy.

This direction was headed by Rem A. Korenchenko (1926–2010) during 1966–1998.

He joined the Department of Branch Economics in 1959, having left the Department of Political Economy. In 1962 he became Assistant Professor after defending the candidate's dissertation, and later Associated Professor of the Branch Economics Department.

In 1975 Rem A. Korenchenko defended his doctor's dissertation, and in 1977 he was conferred a rank of Professor.

In 1991 he was conferred a title Honored Scientist of Russia, in 1999 he won the first prize of Perm region named after Lev E. Kertman.


Thanks to his active participation the scientific school was formed, its research focused on issues of economic management organization and industrial enterprises regulation.

Forming and developing the scientific school, Rem A. Korenchenko trained 36 candidates of sciences and helped four professors of the Department to receive doctorate degree and a rank of professor. 8 doctor's and more than 60 candidate's dissertations were defended at the Department during his work [9].

In 1980s the researchers of the Department's scientific school started to participate actively in research ordered by enterprises, in working out target programs aimed at industry development of Perm region.

In 1981 two complex topics were formed in applied research of Department members: «Improving Economic Mechanism in Enterprises and Production Corporations for Production Intensification and Increase in its Efficiency» (task set by Ministry of Higher and Secondary Special Education of the USSR) and «Research in Ways and Reserves of Production Intensification Growth Based on Rational Use of Production Forces in the Western Urals» (task set by Gosplan (State Planning Committee) of the USSR).

Market reforms of 1990-s forced a sudden change in approaches to economic management, that in turn, triggered qualitative moves in the development of the Western Urals' scientific school. Research was refocused on ways and reserves of improving enterprises' and companies' economic system management and territorial economic complex of Prikamie in competitive environment of market economy.

The increase in competitiveness of goods, enterprises and Perm Krai economy in general became the research priority of economic – managerial scientific school in the Western Urals. Researches published works discussing the issues


Since 1991 Institute of Economics, the Ural Branch of Russian Academy of Science, Perm Suboffice has been headed by the representative of the scientific school, Professor of Management Department, Doctor of Economics, Professor A.N. Pytkin.

In 1994 the scientific school guided by Rem A. Korenchenko was given an official name «The Organization of Economic Management and Enterprise Regulation» [9], reflecting the research focus of that time on problems of «enterprises», i.e. corporate themes.

In 1994 the Department of Branch Economics was transformed into the Department of Economics, Entrepreneurship and Management and started to train specialists on leading-edge programs, teaching the profession «Management». During 1998–2008 the Department had been training specialists in profession «State and Municipal Government».

In this period immense and intensive academic work started to be combined with research work systematically, analyzing regularities and principles of market economy, forms and mechanisms of its implementation in special Russian economic and historical conditions at the turn of the XXth and XXI centuries.

From 1998 to 2003 the Department of Economics, Entrepreneurship and Management was headed by Doctor of Economics Professor Ludmila A. Romanova (1944–2004), who made a great contribution in the development of regional research at the Department [17] and the formation of supplementary vocational economic education.

As previously stated the scientific school of the Management Department had always quickly reacted on changes in economy and society. For example, the research focus was changed by the economic crisis of 1998–1999 and a post-crisis development of the country and the Western Urals in the first decade of the XXI century. Due to that the researchers' attention was drawn to new strategic key factors providing the necessary efficiency level of managing corporations and economic development of Prikamie in general competitively [16].

In the beginning of the XXI century Russia faces three main directions of economic development: market-stagnate, resource producing, and innovative.

All this gradually shifted the research and academic focus of the scientific school on the ways to organize and increase the management efficiency of organizations' innovative development (corporate and regional socio-economic systems) in market economy conditions.

In 2003 Professor Rem A. Korenchenko published his book «The general Theory of Organization», which was a pivotal moment in the development of scientific school's theoretical basis. The book marked the start of fundamental research in management theory at the Department. The research focused on studying regularities, methods and technologies of «organizing the innovative and competitive development management in socio-economic systems (corporate and regional)» [4].

Due to these circumstances the school needed to restructure its scientific research and transform its name taking into account the transition to innovative model of economic development.

Theoretical management gradually singled out and started to develop. It included the theory of organization, organizational behavior, managerial solutions, general and strategic management, human resource management. A special emphasis is placed on regional management development (managing regional socio-economic system). The planning on industrial enterprises gradually transformed into the development of corporate industrial management.

A contemporary period in the development of scientific school in transitional stage to neo-industrial innovative economic model – «organizing management of innovative-competitive development in socio-economic (corporate and regional) systems».

Since 2003 the Department of Management has been headed by Doctor of Economics Professor Vladimir G. Prudskiy.
In the first and the beginning of the second decade of the XXI century the scientific school turned to working out theoretical and methodological basis and instruments for managing innovative-competitive development of regional and corporate organizations in market economy conditions. The emphasis is placed on strategic, project and program-target approaches [13].

V.P. Petrov successfully completed and defended a doctor's dissertation on this problem in 2006.


In 2011 the Department started a bachelor's degree program «Management», specialization «Innovative Management» and a master's degree program «Management», specialization «Project Management».

Since 2014 there has been a bachelor's degree program «Personnel Management». In 2016 the specialization «Organization Management» is introduced into a bachelor's degree program «Management».

Being a graduate chair the Department of Management (Branch Economics) has given diplomas to specialists, bachelors, masters and post-graduate student for 50 years. More than 8000 people graduated the Department, more than 200 graduates and lectures defended candidate's dissertations, about 30 people became Doctors of Economics.

At the same time the researchers of the scientific school participate actively in R&D in Institute of Economics, the Ural Branch of Russian Academy of Science, Perm Suboffice, which are conducted according to plans of General Committee of Russian Academy of Science. Currently a joint research is being conducted on the topic «Theoretical and Methodological Development of Adaptive Management in Regional Industrial Complex in Competitive Environment». A scientific Journal «Theory and Practice of Corporate Management» is published annually on the basis of the scientific school (in 2015 the journal № 12 was published). The Journal received the RSCI status in 2012. It includes research results of the scientific school members, devoted to corporate management issues.

Since 2009 Perm university has been conducting international forums for post-graduate, master and undergraduate students on project management, based on the Department of Management supported by Perm branch of PMI and «Parma-Telecom» Ltd. The forum results in scientific Journal «Strategic and Project Management» (in 2014 the Journal № 6 was published), which received the RSCI status in 2012. The scientific and creative «Center of Corporate Innovative Studies» has been functioning since 2008 based on the Department.

International research and practice conferences «Improvement of Strategic Management in Corporate Unities and Regional Innovative Industrial Policy» has been held annually since 2007 based on the Management Department and supported by Ministry of Industry, Innovations and Science of Perm Krai and Institute of Economics, the Ural Branch of Russian Academy of Science, Perm Suboffice. The Department conducts a section «Modern Management: Strategies and Innovations» at the annual regional research and practice conference for young scientists, organized by Economic Faculty of Perm State National Research University. The research results are published in a special section of Collection of Scientific Articles.

Since 2003 post-graduate students, post-graduate degree seeker and professors of the Department have defended 1 doctor's and 10 candidate's dissertations. 1 candidate’ and 24 master's dissertations were defended in 2013 and 2014. 1 doctor's 3 candidate's and 5 master's dissertations are prepared for defense in 2016.

Scientific school development perspectives in transitional period to post-industrial innovative economic model

The current development stage of the scientific school is connected with the implementation of research project «Forming Russian Model of Post-industrial Management as a Key Factor of National Competitive Success in Transition to Innovative Economy». This project is included into priority area of scientific-educational complex «Forecasting and Managing Socio-Economic Development Processes of Countries and Territories Based on Modern Information Technologies», which in turn is incorporated into development program of Perm State National Research University «Environmental Conservancy:
Forecasting and Management Technologies of Natural and Socio-Economic Systems».

This research project determined the main study focus of the Department, which includes the following directions according to State Rubricator of Scientific and Technical Information:

1. Working out theoretical and methodological basis to form and develop innovative mechanisms and tools of Russian model for organizing strategic, project and program-target management of corporate, state and municipal structures (06.39.31 «Theory of organization and economic decision making»).

2. Working out theoretical and methodological basis of Russian model for managing human resource and developing corporate social responsibility in transition to innovative economy (06.39.41 «Theory of management»).

3. Working out theoretical concept, mechanisms and technologies of Russian model for innovation industrial policy, state regulation of economy and for implementing state-private partnership aimed at securing stable transition of Russia to post-industrial economy (06.39.31 «Economic Policy. State regulation of economy»).

Also Candidate of Economics Associate Professor I.Yu. Merzlov is completing his doctor's dissertation on the topic «State-Private Partnership in Infrastructure as Factor Enhancing Competitiveness of Regional Economy». His research results are being actively used to make a draft law of Perm Krai «On the Basis of State-Private Partnership in Perm Krai», as well as in activities of working group on increasing state-private partnership at the Committee on business development of Perm Chamber of Commerce [7].


Inferences

Modern economic stage is characterized by post-industrial development of market economy, connected with an increase in production automation, knowledge-intensive services and information technologies assimilation. But at the same time market economy is the one of constant organizational-competitive development and permanent competition [19].

In 1990s M. Porter elaborated the competitive advantages theory [11], having generalized facts of scientific-technical revolution and globalization influence on competition character in the modern world. A new theoretical vision of competition and competitiveness problems demonstrated that the comparative advantages theory of David Ricardo, characterizing XIXth and XXth centuries, has outlived. These are innovations and their economic efficiency that become the main advantage in competition, but not the abundance and cheapness of production factors.

Two interconnected mainstreams can be singled out in innovative competitive development based on the concept of modern industrial economy neoindustrialization and the competitive advantages theory. They are goods producing and management organization [18].

Thus two directions are distinguished in revealing, development and implementation of competitive advantages inside the scientific school «organizing the innovative and competitive development management in socio-economic systems (corporate and regional)». They are production-technological and organizational-managerial.

Organizational-managerial advantages represent innovative advantages in organizing public labor, which (first of all strategic competitive competences and abilities) create conditions for accelerated assimilation of production-technological innovations resulting in prerequisites for increase in labor productivity and production cost optimization [12].

The scientists' research changes in modern economy, which show the growing role of knowledge-intensive technologies and research resource in industrial production, influenced by scientific-technological revolution. As a result intangible assets can be singled out in the structure of enterprise assets alongside with tangible ones. These assets make up intellectual capital of companies and include intellectual property objects and a business reputation.

The intellectual property system consists of following objects: the exclusive rights of patent owner to an invention, industrial sample, utility model; the exclusive author rights to computer programs, databases; the author's or the other right holder property rights to microelectronic integrated circuits; the exclusive owner rights to brand and service mark, name of goods origin; the exclusive rights of patent owner to selection inventions [14].

In our point of view, the management system should gradually occupy a special place in the intellectual property structure of companies in the XXI century, as it represents a special factor of
its business reputation and an important competitive competence. The reason for this is the fact that innovations implementation in business serves as a basis for increasing enterprise competitiveness in forming knowledge economy. Moreover managerial innovations are gaining more importance alongside with technological and production ones for strengthening competitive positions [15].

Russian and foreign economists consider that the world economy is at the threshold of a new economic-technological era, connected with the transition to the 6th technological mode of industrial production and knowledge economy, to neo-industrial economic model. Russian economist German O. Gref suggests that this will result in changes in both character and content of competition and competitive development of socio-economic systems, such as enterprises, corporations, municipal, regional and national economies.

Competitiveness and competitive positions will be defined to a great extend not by competitiveness of goods, but by the one of relevant management models as a key factor for increase in cost efficiency and effectiveness of scarce resource use resulting in competitive success.

Conclusion

Thus nowadays socio-economic management act as a specific kind of intellectual labor, and its accumulated novations and achievements are becoming a major intellectual resource and competitive advantage of organizations as well as society in general.

It should be noted that management itself is evolving, intellectualization and humanization are becoming key tendencies of its content. Organizations are becoming «softer», virtual, individuals play a growing role in organizations representing the key component of their development and the source of positive changes.

References

ОРГАНИЗАЦИЯ УПРАВЛЕНИЯ ИННОВАЦИОННО-КОНКУРЕНТНЫМ РАЗВИТИЕ
СОЦИАЛЬНО-ЭКОНОМИЧЕСКИХ СИСТЕМ

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Исторический анализ развития Перми и Урала в ХХ в. отчётливо фиксирует взаимосвязь развития научной мысли, выразившейся в возникновении и развитии Пермского государственного университета и его научных школ, и социально-экономического развития территорий данного региона. Понимание этой взаимосвязи позволяет рассматривать научные школы университета как интеллектуальные локомотивы социально-экономического развития Перми и Урала. Рассматривая гуманитарное, социально-экономическое направление в развитии научных школ, нужно отметить его связь с экономическим подъемом в России и на Урале в 1908–1914 гг., который получил свое интенсивное продолжение во время первой мировой войны. Экономический подъем, освоение новых электрических технологий и электротехнических устройств, а также форм организации крупного промышленного производства объективно потребовали развития университетского образования и, как следствие, возникновения на Урале высших учебных заведений. Университеты должны были стать научными центрами и кузницами кадров, способными обеспечить модернизацию уральской экономики соответственно третьему индустриально-технологическому укладу промышленного производства. На базе появившихся кафедр в университете начинают формироваться и развиваться научные школы, которые позволили в ХХ в. решить многие научно-промышленные проблемы российской экономики и прежде всего обеспечить уральскую индустрию кадрами высшей квалификации на уровне мировых (для своего времени) требований. Таким образом, исследование взаимосвязи социально-экономического развития г. Перми, Пермского края и всего Уральского региона и научных школ, функционирующих в этих регионах, позволяет определить перспективы и пути дальнейшего развития данных территорий на основе развития науки как производительной силы общества и ключевого конкурентного преимущества.

Ключевые слова: индустриальный менеджмент, неоиндустриальный менеджмент, технологические уклады, нематериальные активы, социальное управление, управленческие циклы, промышленные циклы, технологический прогресс, неоиндустриальная экономика.

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