

Project Management: Research and Studies at the Faculty of Economics and Management of Kaunas University of Technology

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The article summarizes the results of theoretical and empirical studies in the sphere of the project preparation and realization processes by focusing on the contribution of the researchers, educators and staff of the Faculty of Economics and Management and Project Management Center of Kaunas University of Technology to the development of this relevant sphere of management. The article distinguishes the following basic aspects:

- *Consistent patterns of environmental changes effecting projects, effect of the business intelligence on changes, development of science and technologies and project realization.*
- *Cost reduction factors in project realization processes, the effect of the accumulated project value on its realization, the effect of electronic services on the project realization costs.*
- *Human resources, their competence development with the help of projects.*

The article includes conclusions and suggestions with regard to the development of research projects and studies within the basis of cooperation with the European Union and world universities.

Keywords: *management, knowledge management, projects, project management, education of human resources, teaching and studies, studies programs.*

Introduction

The attention attached to the creation of goods, services and technologies has significantly increased already in the middle of the last century. A gradual satiation of local markets has increased the competitiveness of goods and services. This situation has provoked the reaction both to micro and macro levels. Today the development of science and technologies preconditioning essential changes in organizations remains the main factor determining competitiveness in the European Union. In 2000 in Lisbon the European Council forecasted the objective – to turn the European Union states' economics into a competitive and dynamic knowledge-based world economics with a harmonized economic development and a higher level of qualitative employment.

Lithuania has a well-developed net of research and studies institutions, although one has to admit that the declared attention to the development of science and technologies does not give the anticipated results. Investigations conducted allow to maintain that the development of science

and technologies should be directed towards a common purpose – creation of new products, production and consumption. Against the background of cardinal changes a proper place is attached to the realization based on projects within the organization's total activities or its particular part. The international project management journal maintains that "in the 21st century the traditional functional management will be substituted by the project management" (Lientz, Reaš, 2002; Kerzner, 2006).

Today it has become a common practice that many organizations work with not only separate and complex but very often with several or even more projects. Without a methodology enabling to manage a multi-project environment the project activity will not be effective enough for the increase of organization's competitiveness. Thus a special attention should be attached to a project-based management of organization's activity. This problem is considered by foreign scientists, such as Bennet Lientz, Kathryn Rea (2002, 2003), Charvat Jason (2003), Clifford Gray, Erik Larson (2000), Erling Andersen, Kristoffer Grude, Tor Haug (2004), Samuel Mantel, Jack Meredith, Scott Shafer, Margaret Sutron (2003), Kerzner (2003, 2006). A substantial attention to this work is attached by Lithuanian scientists Rutkauskas, Tamošiūnienė (2002), Būda, Chmieliauskas (2006), Zakarevičius (2003) and others.

An exceptional attention to the object of project management is caused by the following factors: growth of competitiveness and globalization; institutionalization of innovation-based economics; rapid development of technologies (especially IT); usage of outer resources; common quality turning into the philosophy of activity; increase in the significance of consumer's requests; shortening of products and services existence cycle.

- Research object is part of the project existence cycle – project preparation and realization processes.
- Research objective – identification and investigation of the project preparation and realization processes from the functional perspective within the Euro-integration context.
- Research objectives - identification and investigation of the project preparation and realization processes, analysis and assessment of the research results adaptation in the process of studies.

Research methods used in the work: the analysis of literature references and documents, synthesis; direct data collection; statistical data processing; methods of mathematics applied for data processing: statistical and cluster analyses.

Consistent patterns of environmental changes effecting projects

Innovations are based on new knowledge or new ways of their application. Thus, the research and implementation of its results require coordinated actions of researchers, business and government. Lithuania has opportunities to adopt experience of countries which are considered most modern, and thus avoid mistakes of searching for its own way (Baronienė, Neverauskas, 2005).

The increasing role of the knowledge based society encourages a rapid development of different kind of transformations. The choice of changes management means, their economic evaluation becomes the most important ability of an organization to survive and develop under competitive conditions. In spite of the variety of both foreign and country's scientists' opinions business foresight as a system is an effective means for a purposeful preparation for future changes, because it is in the process of foresight that recommendations for decision makers about the future events are created. Virtanen (1999) maintains that an effective foresight process requires an open organizational culture which stimulates organization's learning. Whereas Pollard (1999) maintains that the business foresight process helps the organization to distinguish its advantages and disadvantages as compared with competitors.

From the economic perspective business foresight should be perceived as the result of a continuous cycle of four components – to measure, analyze, plan and improve. The main objective of the existing business foresight models involves providing employees with information, on the basis of which they make either current or perspective decisions. Their aim is to help the organization to achieve the objectives set (Neverauskas, Staškevičiūtė, 2005).

In a rapidly changing environment a significant role is attached to people possessing modern knowledge and able to apply it effectively. Taking this tendency into consideration, organizations should be oriented to a qualitative resource management, involving both management and economic aspects. Common quality management should help organizations to solve aspects of innovation development projects. Successfully implemented innovative quality management methods provide organizations with means of a better adaptation to a rapidly changing conditions and easier adaptation of various kinds of innovations.

Common quality management takes a significant place. One has to admit that the changing environmental conditions should encourage changes in the attitude towards quality. In the space of knowledge-based economics it is necessary to establish a link between the principles of common quality and implementation of innovations. Common quality management should help organizations to solve economic aspects of innovation development projects. Successfully implemented innovative quality management methods ensure organizations' better adaptation to rapidly changing conditions as well as adaptation of various kinds of innovations.

When analyzing and assessing factors that effect the efficiency of the project realization system, it is worth analyzing the application of project management methods by implementing ISO 9000 standards. The ratio of project

management and ISO standards can be characterized in two aspects: project management as the object of ISO standards; project management as helpful means of standard implementation in the enterprise.

If the organization's activity is based on projects and the project realization process results in meeting the consumer's requirements, project management can be considered as part of the organization's certifying system. Aiming to certify project management bigger requirements are raised to the project management documentation – it is determined by the fact that we judge about the project management quality by documentation

ISO standards do not specify processes which are obligatory in the project management process, although 10 project management processes are recommended (Neverauskas, Stankevičius, 2001). Namely: processes related to costs, resources, personnel, risk, purchases. Nevertheless, application of project management methods would enable organizations to minimize financial and other problems arising during the standard implementation period.

Research and technologies development

Establishment of knowledge economics in Lithuania gives perfect opportunity integration into the European globalization processes. In knowledge economics the principle role is attached to the application of the most recent knowledge encouraging the development of research and technologies. In this case good opportunities for attracting the EU funds emerge. Following the recognized priorities of FP and EU structural support investments for the period 2007 - 2013 organizations' changes will have to meet the requirements of the country's national strategic documents: the State's sustained development strategy, the Lithuanian sustained economics (economics development) strategy, National Agreement on economic and social progress, National cohesive development strategy.

Results of the studies conducted (Velykienė, Neverauskas, 2003) have revealed one of the most significant problems – the establishment of the most recent knowledge encouraging the development of research and technologies as well as its application lack a business-oriented attitude towards projective offers, i. e. the establishment of new knowledge as well as production of new products are targeted at the organization's most significant common goal.

A rapid transformation to the project development based organization is encouraged by such factors as: basic changes in the managers' thinking; a rapid development of IT technologies; attracting foreign partners; a rapid establishment of new project management based market structures (investment funds, commercial banks, etc.) and others.

Kerzner (2000) maintains that “the society begins to realize the advantages of project management as soon as it realizes the importance of strategic management”.

The following stages should be distinguished in the evolution of project application:

- project application for achieving separate special goals;
- a formal validation of project application in the organization;
- project development based organization.

Recently researchers have been discussing the issues on characterization of the organizations' present and future project management processes of the 21st century. In the author's opinion this should be defined as "the age of project management maturity".

The significance of project management has increased during the recent decade due to a considerable activity of investment processes. The analysis of foreign countries' experience shows that in order to avoid the gap between the organization and strategies of future projects, it is necessary either to target the organization to a project development based one or to apply for a specialized project organizations' support. In both cases it is purposeful to analyze and assess the organization's level/maturity with regard to projective management.

Researchers' opinions analysis enables to draw the following conclusion – the organization's maturity from the project management perspective involves its ability to choose and manage projects encouraging a maximum focus on the achievement of strategic objectives.

Project management organizational maturity models enable organizations pursuing an effective project management to assess the present state with regard to the project management system, work out the strategy and tactics of this system's further development.

For the assessment of the organization's projective maturity Stankevičius, Neverauskas (2005) suggest to apply Kerzner's 5-level organizational maturity model. The most important is the 3rd level – a unified methodology based on the assessment of the synergy effect emerging when integrating the project management and other methodologies.

A full conformance to each level criteria and gradual transformation to a higher level contribute to the increase in the effectiveness of the organization's project management system and reduction of project-related risk.

The effect of the accumulated project value on its realization

Competitiveness of the market, necessity to save resources and improve the enterprise's financial position by applying the most recent knowledge make entrepreneurs create and use projects encouraging the development of research and technologies within the organization which strengthens the organization's competitiveness.

The analysis conducted by the author shows that different project control methods applied in the USA, Europe and other countries do not allow deviations from the goal set from both quality and different economic indexes perspective.

The studies have revealed that the choice of the project control method depends upon the organization's strategic goals. The project control is considered as a process during which the project manager assesses the implementation of the goals set, identifies deviations and their causes, corrects the course of works, changes tasks or makes other decisions, in order either to prevent or reduce the project-related economic damage.

For the project preparation and realization-related control the authors suggest applying *the accumulated value method*. Application of this method involves the

assessment of every project-related work or group of works by establishing their value, i. e. costs estimated during the project planning process in the project budget.

The total value of the project equals to the sum of all project-related works values. The value attained at further stages of work or work complex is compared with the value established during the planning process.

The accumulated value method application to projects is based on the following advantages:

- The accumulated value method is the basic and consistent project (its separate work) completion assessment system.

- It enables auditing of the project budget at its any stage.

It is a common practice for the accumulated value methods to use economic indexes. The accumulated value consists of the already completed works value which can be presented both in the expression of value or percentage against planned working costs. The total project accumulated value is established after having fully accomplished all project works. Beside other indexes the following indexes are established:

- *non-conformity/deviation of the budget*, i. e. the difference between actually accomplished works costs and planned costs;

- *non-conformity/deviation of the schedule*, i.e. the difference between actually accomplished works value and the value foreseen in the schedule;

- *non-conformity/deviation of costs*, i. e. the difference between the accumulated value and the value of actually accomplished work.

Negative deviation indicates that the accumulated work or project value is lower than the actual project costs.

Different studies prove the fact that due to inevitable project deviations there is a necessity of the project course control from the economic perspective. In the authors' opinion, the accumulated value analysis method is most suitable for this purpose: identification and economic assessment of the budget and time deviations. For this reason the accumulated value analysis method is applicable for the research and technology development projects in Lithuania involving the project monitoring, assessment of the project progress, decision making regarding further development of the project.

The necessity and significance of the project consumer differentiation

Environmental changes determine the changes within the enterprise management sphere and increase the importance of knowledge and information. A rapid development of research and technologies is an active accelerator of changes. Changes are not possible without projects within a respective sphere. The existence of a direct relationship between the rapidity of changes and their projects preparation, realization of possibilities and results is obvious.

The process of rapid transformations has strengthened the significance of information allowing to adopt project-related decisions aimed at a better meeting customers' requirements than the competitors as well as ensuring the best economic indexes of the enterprise's activity under new business conditions.

The project realization success is directly linked with project consumers who are considered the interested party from the beginning of the project preparation process. The aim of the studies conducted involved revealing the importance of the consumer differentiation system as well as its impact on the compatibility between the cost management and project value accumulation processes.

Scientific literature often involves discussions on issues regarding the urgency of compatibility between the enterprise's cost management and customer-oriented value – as one of the most significant and difficult tasks to achieve of business management (Valančienė, Boguslauskas, Neverauskas, 2004). Investigations prove that the most progressive research studies offer various consumer-oriented cost management and value-related means for the ensuring of process compatibility. However, the main disadvantage of these means involves the consumer-oriented value creation perspective only within the enterprise, by preconditioning that the enterprise's products and services shall meet the consumers' requirements in the future as well. Thus, there is a need to consider the consumer differentiation system and principles of its establishment and recognize the importance of the ratio based on meeting consumers' requirements from one side, and organizational costs from the other. This link is effective when making decisions within the project realization processes.

Impact of electronic services on the project realization costs

A rapid development of informational technologies influences the present basic business processes: dynamic changes as well as innovations encourage transformational decisions, determined by the decision making time, not by the sufficiency of information. A widely spread opinion involves the fact that activities in the virtual environment determine the decrease in the mediation service sphere. Although in other authors' opinion, in spite of the fact that informational technologies create conditions for reduction of transaction costs, they also determine the establishment of new mediation services.

In the case of mediators exclusion from the market the transaction costs can be assumed either by the seller or purchaser. The consequences of transaction costs involve the reduction of the volume of interchange between the supplier and consumer. In the mediator market the transaction costs are covered by the mediator who has two – sale and purchase – prices. As mediators participate in majority of repeating transactions, they can invest into advanced technologies which require high costs, but this reduces marginal costs of further transactions.

Though some authors maintain that a free access to the Internet eliminates transaction costs, in this case the differences of transactions (both physical and virtual) determining more forms of mediation are underestimated. So, costs emerging from transactions between the supplier, mediator and consumer can be minimized with the help of different mediation means.

Aiming to minimize transaction costs by the Internet means one might choose between four mediation forms: a direct market, mediation free market, new (virtual) mediators and re-mediators (Gatautis, Neverauskas, 2005).

It should be emphasized that some mediator's functions cannot be effected by any electronic services supplied by the Internet (confidence, market organization, search for purchasers and sellers, selection, negotiation processes).

Application of informational and communication technologies is a stimulating power for significant changes towards new economic systems. Being a progressive form of trade, E-commerce unites interdependent partners communicating via electronic means with the help of informational technologies.

E-commerce is a part of the whole of all economic, commercial, financial and accounting relations connected with the home and international transaction cycle by applying modern communication means (Neverauskas, Gatautis, Snieška, 2002).

Today we are aware of widely described E-commerce models: Gibson and Nolan's business development, Earl's, Rayport and Jaworski's business development via the Internet, S.Grant's E-commerce maturity, Chan and C.Swatman's E-commerce development models. E-commerce should gradually integrate into the project realization process. Aiming to increase the effectiveness of project realization, it is advisable to apply one of the above mentioned models after having evaluated their advantages and disadvantages.

Application of informational and communication technologies in E-commerce provides a perfect opportunity to strengthen one's abilities in application and implementation of competitive E-commerce strategies.

Chan and Swatman's E-commerce development model has been chosen for the assessment of E-commerce level within Lithuanian enterprises. The investigation results show that 3/4 of Lithuanian enterprises under investigation have started using E-commerce during the recent three years. The main objective of E-commerce application within Lithuanian enterprises involves cost reduction and increase in competitiveness factors. Summarizing the investigation results the following conclusion can be drawn – in majority of Lithuanian enterprises E-commerce is at the initial level.

Risk assessment in projects

Natural characteristics of projects have programmed the project risk-related inevitability. Projects are targeted at the realization of changes through the development of research and technologies. Project assigned for the development of research and technologies, establishment and application of knowledge carry the highest risk due to a maximum generality, possibility for the emergence of unforeseen situations and corresponding consequences. Maylor (1996), Lock (1997), Samuel Mantel, Jack Meredith, Scott Shafer, Margaret Sutton (2003), Trevor Young (2004), Erling Andersen, Kristoffer Grude, Tor Haug (2004) present different definitions of the project risk as their economic phenomenon. Studies reveal the prevalence of means of economic origin in the project risk management sphere, such as the sensitivity analysis, break-even point, resource allocation and other financial means. The author shares the opinion that risk identification and its analysis are the most important stages within the project risk management processes.

Identification of the project risk involves making a list of possible risks at every stage, by indicating the probability of their emergency as well as effect on the project results (Neverauskas, Stankevičius, 2000).

Results of the project risk analysis provide partners with information necessary for their decision regarding their participation in the project as well as for the possible damage estimation and damage prevention means. The following methods can be applied for these purposes: sensitivity analysis, identification of resistance, break-even point and others. An exceptional attention should be attached to the unexpected damage assessment. The economic risk coefficient establishes the size of a possible damage in the expected income, and is considered an instrument for the elimination of the most risky factors of the project from the economic perspective.

The number of big projects is increasing slowly in Lithuania due to specific inner and outside environment characteristics determining a high level of risk.

Contribution of the Project Management Center to the solution of regional problems

The country's higher school should make a significant contribution to the solution of regional human resource-related problems. The authors suggest the following ways of solving this problem:

- Strengthening and development of cooperation between universities and colleges located in the regional centers. The latter material facilities and part of pedagogical staff qualification allows to organize and successfully conduct distant studies outside the university, i. e. provision of studies services in regions.

- Offering new forms of learning to the regional population. Privatization processes have changed the property forms and preconditioned the demand for manpower re-qualification and professional education services. Thus, the traditional forms of studies do not satisfy the qualitatively new requirements for the preparation of a new working market.

Higher education effects regional changes in a direct and indirect way. Lithuania possesses all the necessary preconditions for a rapid technological progress, development of open to knowledge productions. From the other side, rapidly increasing research and technology development projects force entrepreneurs to make cardinal decisions with regard to the solution of the employees' education-related issues. Some part of high school graduates among economically active people is increasing.

The European Union's regional policy is targeted to the reduction of economic and social development differences. Lithuania has several opportunities to provide financial support with regard to the problems – to submit projects for receiving support from the structural funds. Considering the maximum support from the structural funds, the advance orientation to a successful realization of future projects, beginning with the project identification, is of great importance. There are several ways of project identification: orientation to the programs, problem analysis, problem identification, their assessment and only then a search for financial sources.

The second way of project identification is much more

difficult and requires bigger efforts; however, it guarantees a more successful project implementation. It should be noticed that this way requires bigger financial expenses, besides problems concerning human resources emerge. Investigations show the prevalence of the first way among organizations; at the same time they expose themselves to the risk regarding a successful project implementation (Neverauskas, Stankevičius, 2003).

Project realization-related success is programmed even at the initial stage. Investigations prove the existence of many problems common to several regions. They can be solved by projects uniting regions with problems alike. Thus, the project realization success rate is increased and value added is created because (Neverauskas, Stankevičius, 2005): there is a real possibility of interregional cooperation in solving other regional problems as well; the duration of regional cooperation preconditions formation of a sustainable cooperation strategy, forecasting of common financial sources, accumulation of project teams experience, save project administration costs.

The Project Management Center (hereinafter - PVC) of Economics and Management Faculty, Kaunas University of Technology (hereinafter - KTU), was established in 2000. The PVC is a structural subdivision of the Economics and Management Faculty, operating on the economic basis. The PVC's aims:

- to satisfy the consumers' of the service provided demands;

- to promote the project management development within business and public administration organizations of the Republic of Lithuania;

- to provide consultations to enterprises and organizations on the issues of business or regional development project preparation and implementation;

- to conduct research within the project management sphere.

The main spheres of activity:

- provision of consultations to enterprises and organizations on the project management issues;

- support in the sphere of the search for possibilities to attract financial resources of various funds or other Lithuanian and international organizations;

- preparation, administration and coordination of projects;

- preparation of the project implementation programs;

- support in arranging the contest-related documentation;

- research work in the project management sphere, its coordination and integration into the studies process;

- preparation of teaching programs.

The main themes of the research work: are project risks management; human resources management-related problems; analysis of the value created by the project; application of modern project management processes for the solution of regional problems, etc. The accumulated experience is integrated and used for the initiating and/or implementation of different projects.

The project "Updating and expansion of the postgraduate studies program "Management" following the Lithuanian 2004–2006 FP priority 2 „Development of Human Resources“ according mean 2.5 „Improvement of Human Resources' Quality in the Research and Innovation

Sphere” is significant for the academic activity. The main objective of this project involves the improvement of the human resources’ education and competences in the project management sphere by updating and expanding the present management studies program, as well as establishing better preconditions for the economic development of the country’s industry. This project has increased the Project Management Center’s contribution to the Faculty’s process of studies – a new specialization “Project Management” has been established.

Textbooks and tasks for individual work of two general subjects of management studies program models and five program models of specialized studies “Project Management” have been prepared and published. During the project implementation course seminars - practical training courses were organized: course of moderation, work with the MS Project program, in the WEB CT environment; two courses on the most recent project management methods PMP and PRINCE2.

The Center’s staff maintains working and creative relations with various educational and business institutions in Denmark, Great Britain, Finland, Germany, Sweden, France, Poland, Italy, Greece, Portugal, Belgium and Austria.

Conclusions

1. A rapidly increasing demand for the research and technologies development, intensification of the knowledge based economic creation processes, institutionalization of the globalization phenomena formulate new tasks and challenges for the Lithuanian economics. The emergence of big possibilities offered by the European Union structural funds support has basically changed the role of project management within organizations’ activities. Projects help to ensure a closer relationship within organizations, thus ensuring a faster achievement of results.
2. In the project management sphere a significant role is attached to the project realization stage, which is a purposeful process, in many cases involving more than three interested parties pursuing their own strategic goals. Aiming to optimize the project realization process a special attention should be attached to economic factors effecting the process
3. The Project Management Center’s activities are multiple, targeted to satisfy the demands of regional organizations and institutions.
4. It is purposeful to continue the investigation of economic factors influencing project realization following these directions:
 - forecast of the project realization results at the initial stage of projective activity;
 - forecast and assessment of the virtual project realization results;
 - economic aspects of the formation and realization of the project portfolio.

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Projektų vadyba – mokslas ir studijos KTU Ekonomikos ir vadybos fakultete

Santrauka

Šiame straipsnyje apibendrinami projektų rengimo ir realizavimo procesų teorinių ir empirinių tyrinėjimų rezultatai, akcentuojant Kauno technologijos universiteto Ekonomikos ir vadybos fakulteto (toliau - KTU EVF) ir jo Projektų vadybos centro mokslininkų, pedagogų ir darbuotojų indėlį į šios aktualios vadybos srities plėtojimą. Straipsnyje išskirti šie pagrindiniai aspektai:

- Projektams darantys įtaką aplinkos kitimo dėsninūmai, verslo išvalgų poveikis pokyčiams, mokslo ir technologijų plėtra ir projektų realizavimas;
- Kaštų mažinimo veiksniai projektų realizavimo procesuose, įgytos projekto vertės įtaka jo realizavimui, elektroninių paslaugų poveikis projektų realizavimo kaštams;
- Žmogiškieji išteklių, jų kompetencijų ugdymas pasitelkiant projektus.

Pateiktos išvados ir pasiūlymai, kaip plėtoti mokslinius tyrimus ir studijų projektus vadybos srityje, bendradarbiauti su ES ir pasaulio universitetais bazėje.

Dėmesys naujų produktų, paslaugų ir technologijų kūrimui pastebimai sustiprėjo dar praėjusio šimtmečio viduryje. Palaipsniui prisitariant vietinėms rinkoms, ypač svarbus vaidmuo teko prekių ir paslaugų konkurencingumui. Į šią situaciją reaguojant ekonomikos subjektai tiek mikro lygmeniu, tiek makro lygmeniu. Šiandien pagrindinis konkurencingumą lemiantis veiksnys Europos Sąjungoje tebėra mokslo ir technologijų plėtra, kuri sudaro prielaidas esminiams organizacijų pokyčiams. Lisabonoje 2000 m. Europos Taryba numatė tikslą – Europos Sąjungos valstybių ekonomiką paversti konkurencinga ir dinamiška pasaulyje žinių pagrindu augančia ekonomika, kurioje būtų suderinta darni ekonominė plėtra su didesniu ir geresnės kokybės užimtumu.

Lietuvoje gerai išplėtotas mokslo ir studijų institucijų tinklas, tačiau tenka konstatuoti, kad deklaruojamas dėmesys mokslo ir technologijų plėtrai dar nėra reikiamai rezultatyvus. Atlikti tyrimai leidžia teigti, kad mokslo ir verslo plėtra siektų bendro tikslo – naujų žinių ir naujų produktų kūrimo, gamybos bei naudojimo.

Kardinalių pokyčių fone deramą vietą užėmė organizacijos veiklos visumoje ar tam tikros jos dalies projektais grįstas realizavimas. Tarptautinio projektų vadybos instituto žurnalo tvirtinama, kad „21-ame amžiuje projektų valdymas pakeis tradicinę funkcinę vadybą“ (Lientz B. P., Rea K. P., 2002; Kerzner, 2006).

Šiandien jau įprasta, kad daugelis organizacijų dirba ne tik su pavieniais ir sudėtingais projektais, bet dažnai jų turi keletą ar keliolika. Jeigu nebus metodikos, leidžiančios valdyti daugiaprojektinę aplinką, projektinė veikla bus nepakankamai efektyvi didinant organizacijos konkurencingumą. Todėl projektams grįstam organizacijos veiklos valdymui turi būti skiriamas ypatingas dėmesys. Šią problemą savo darbuose nagrinėja užsienio šalių mokslininkai Bennet P. Lientz, Kathryn P. Rea (2002, 2003), Charvat Jason (2003), Clifford F. Gray, Erik W. Larson (2000), Erling S. Andersen, Kristoffer V. Grude, Tor Haug (2004), Samuel J. Mantel, Jack R. Meredith, Scott M. Shafer, Margaret M. Sutron (2003), Kerzner H. (2003, 2006). Didelį dėmesį šiems darbams Lietuvoje skiria A. Rutkauskas, R. Tamošiūnienė (2002), V. Būda, A. Chmieliauskas (2006), P. Zakarevičius (2003) ir kt.

Išskirtinį dėmesį projektų valdomo objektui lemia tokios priežastys: konkurencijos augimas ir globalizacija; žiniomis ir inovacijomis grįstos ekonomikos išsivertinimas; sparti technologijų (ypač IT) plėtra; išorinių išteklių naudojimas; visuotinės kokybės kaip veiklos filosofijos tapimas; vartotojų pageidavimų reikšmingumo augimas; produktų ir paslaugų gyvavimo ciklo sutrumpėjimas.

Mokslinių tyrimų objektas yra projektų gyvenimo ciklo dalis – projektų rengimo ir realizavimo procesai.

Mokslinių tyrimų tikslas – identifikuoti ir ištirti projektų rengimo ir realizavimo procesus funkciniu požiūriu eurointegracijos kontekste.

Tyrimų uždaviniai: 1) identifikuoti ir ištirti projektų rengimo ir realizavimo procesus; 2) išanalizuoti ir įvertinti tyrimų rezultatus pritaikymą studijų procese.

Darbe taikomi tyrimo metodai: literatūros šaltinių ir dokumentų analizė, sintezė; betarpiškas duomenų rinkimas, statistinių duomenų apdorojimas; duomenų apdorojimui pritaikyti matematiniai metodai: statistinė ir klasterinė analizės.

Sprendžiant regionų projektų valdymo problemas, svarbų indėlį galėtų suteikti šalies aukštosios mokyklos. Autoriai siūlo tokius šios problemos sprendimo būdus:

– Bendradarbiavimo tarp universitetų ir regionų centruose esančių kolegijų stiprinimą ir plėtojimą. Pastarųjų materialinė bazė ir dalies pedagoginio personalo kvalifikacija leidžia organizuoti ir sėkmingai vykdyti nuotolines studijas už universiteto ribų, t. y. suteikti studijų paslaugas regionuose.

– Naujų mokymosi formų pasiūlymą regionų gyventojams. Privatizacijos procesai pakeitė turto nuosavybės formas, sudarė prielaidas atsirasti darbo jėgos perkvalifikavimo ir profesinio ugdymo paslaugų poreikiui.

Aukštasis išsilavinimas tiesiogiai ir netiesiogiai veikia regionų pokyčius. Lietuva turi visas prielaidas greitai technologinei pažangai, žiniomis imlių gamybų plėtojimui. Kita vertus, spartūs mokslo ir technologijų plėtros projektų didėjimo tempai verčia verslininkus kardinaliai spręsti darbuotojų išsilavinimo klausimus. Daugėja žmonių su aukštojo išsilavinimu tarp ekonomiškai aktyvių gyventojų.

Europos Sąjungos regioninė politika orientuota į ekonominio ir socialinio išsivystymo nelygumų sumažinimą. Lietuva turi keletą galimybių finansškai remti minėtas problemas – teikti projektus struktūrinių fondų paramai gauti. Galvojant apie maksimalią struktūrinių fondų paramos naudą, būtina iš anksto orientuotis į būsimų projektų sėkmingą realizavimą, kurio ištakos turi siekti projektų identifikavimą. Galimi keli projektų identifikavimo būdai: orientavimasis į subsidijų programas, gaires; problemų analizė, problemų identifikavimas, jų įvertinimas.

Antrasis projektų identifikavimo būdas užtikrina didesnę būsimų projektų realizavimo sėkmę. Būtina pažymėti, kad šis būdas yra ilgesnis ir jam reikalingos didesnės finansinės išlaidos, atsiranda problemų su žmogiškaisiais resursais. Tyrimai rodo, kad organizacijos prioriteta dažniausiai teikia pirmajam būdiui, kartu rizikuodami projektų realizavimo sėkmingumu (Neverauskas B., Stankevičius V., 2003).

Projektų realizavimo sėkmė yra užprogramuojama dar jų inicijavimo etape. Tyrimai rodo, kad yra nemažai bendrų keliems regionams problemų. Joms spręsti turėtų būti rengiami projektai, vienijantys regionus, turinčius panašių problemų. Tokiu atveju padidėja galimybė gauti Europos Sąjungos struktūrinių fondų paramą, taip pat padidėja projektų realizavimo sėkmė, nes (Neverauskas B., Stankevičius V., 2005): susiformuoja reali galimybė bendradarbiauti tarp regionų sprendžiant ir kitas regiono problemas; regionų bendradarbiavimo trukmė sudaro prielaidas suformuoti ilgalaikio bendradarbiavimo strategiją, numatyti bendrus finansavimo šaltinius, sukaupti projektų komandų patirtį, taupyti projektų administravimo išlaidas.

Kauno technologijos universiteto (toliau - KTU) Ekonomikos ir vadybos fakulteto Projektų vadybos centras (toliau - PVC) įkurtas 2000 m. PVC yra KTU Ekonomikos ir vadybos fakulteto struktūrinis padalinys, veikiantis ūkiskaitiniais pagrindais. PVC siekia – tenkinti teikiamų paslaugų vartotojų poreikius, skatinti projektų vadybos plėtrą Lietuvos Respublikos verslo ir viešojo administravimo organizacijose, konsultuoti įmones ir organizacijas rengiant ir įgyvendinant verslo ar regionų plėtros projektus, vykdyti mokslo tiriamuosius darbus projektų vadybos srityje.

Pagrindinės veiklos sritys: verslo įmonių ir viešojo administravimo organizacijų konsultavimas projektų vadybos klausimais; pagalba ieškant organizacijų plėtros galimybių pritraukiant įvairių fondų ar kitų Lietuvos ir tarptautinių organizacijų lėšas; projektų rengimas, administravimas ir koordinavimas; projektų įgyvendinimo programų rengimas; pagalba rengiant konkursinę dokumentaciją; projektų vadybos mokslo tiriamųjų darbų vykdymas, koordinavimas ir integravimas į studijų procesą; mokymo programų kūrimas.

Pagrindinė mokslo tiriamųjų darbų tematika: projekto rizikų valdymas; projektų žmogiškųjų išteklių valdymo problemos; projekto sukurtos vertės analizė; šiuolaikinių projektų vadybos procesų panaudojimas sprendžiant regionines problemas ir pan.

Sukaupta patirtis integruojama ir panaudojama inicijuojant ir/ar įgyvendinant projektus, skirtus administraciniam gebėjimams stiprinti šalies apskrityse, taip pat kitus projektus: „Smulkiųjų projektų fondo sekretoriatas“; „Projektų, pateiktų Baltijos jūros regiono „Bendradarbiavimo

abipus sienos programai-2001“, atranka ir vertinimas“, „Bendradarbiavimo abipus sienos Baltijos jūros regione programos sekretoriato paslaugų pirkimas“, „Lietuvos gebėjimų įsisavinti Europos Sąjungos struktūrinių fondų lėšas stiprinimas“, „Vietinių gebėjimų stiprinimas ties būsimo ES išorinėmis sienomis“.

Išskirtinumu pasižymi projektas „Magistrantūros studijų programos „Vadyba“ atnaujinimas ir išplėtimas“ pagal Lietuvos 2004–2006 m. BPD 2 prioriteto „Žmogiškųjų išteklių plėtra“ 2.5 priemone „Žmogiškųjų išteklių kokybės gerinimas mokslinių tyrimų ir inovacijų srityje“. Šio projekto pagrindinis tikslas atnaujinant ir išplečiant turimą vadybos studijų programą yra pagerinti žmogiškųjų išteklių išsilavinimo ir kompetencijų projektų vadybos srityje kokybę bei sudaryti šalies pramonei geresnes ekonominio augimo prielaidas. Dėl šio projekto padidėjo Projektų vadybos centro indėlis į Fakulteto studijų proceso tobulinimą ir plėtrą: sukurta nauja ir patraukli specializacija „Projektų vadyba“.

Buvo parengtos ir išleistos mokomosios knygos ir savarankišku darbų užduotys, skirtos dviem bendrųjų dalykų vadybos studijų programos moduliams ir penkiems specializacijos „Projektų vadyba“ studijų moduliams. Vykdamas projektą, organizuoti seminarai-praktiniai mokymai: moderavimo kursai; darbo su MS Project programa kursai; darbo WEB CT aplinkoje kursai; dvejį naujausių projektų valdymo metodų PMP ir PRINCE2 kursai.

Centro darbuotojai palaiko darbinis ir kūrybinius ryšius su įvairiomis Danijos, Didžiosios Britanijos, Suomijos, Vokietijos, Švedijos, Prancūzijos, Lenkijos, Italijos, Graikijos, Portugalijos, Belgijos, Austrijos mokslo ir verslo institucijomis.

Remiantis tyrimų rezultatais, parengtos išvados, kuriose apibendrintos šios pagrindinės nuostatos:

1. Sparčiai augantis mokslo ir technologijų plėtros poreikis, žiniomis grįstos ekonomikos kūrimo procesų intensyvėjimas, globalizacijos reiškinių įsitvirtinimas suformuoja naujus uždavinius ir iššūkius Lietuvos ekonomikai. Atsiradusios plačios Europos Sąjungos struktūrinių fondų paramos galimybės iš esmės pakeitė projektinio valdymo vaidmenį organizacijų veikloje. Projektais organizacijose užtikrinamas glaudesnis ryšys, taigi greitesnis rezultatų pasiekimas.
2. Projektinio valdymo procese pakankamai svarbią vietą užima projektų realizavimo etapas, kuris yra kryptingas procesas, apimantis daugeliu atvejų daugiau nei dvi suinteresuotas šalis, siekiančias savų strateginių tikslų. Siekiant optimizuoti projektų realizavimo procesą, ypatingas dėmesys turi būti skiriamas jam darantiems įtaką ekonominiams veiksniams.
3. Projektų vadybos centro veikla yra daugiaplanė, orientuota į regiono organizacijų ir institucijų poreikių tenkinimą.
4. Ekonominių veiksmų, darančių įtaką projektų realizavimui, tyrimą tikslinga tęsti tokiomis kryptimis:
 - projektų realizavimo rezultatų prognozavimas projektinės veiklos inicijavimo stadijoje;
 - virtualių projektų realizavimo rezultatų prognozavimas ir įvertinimas;
 - projektų portfelio formavimo ir realizavimo ekonominiai aspektai.

Raktažodžiai: *vadyba, žinių vadyba, projektai, projektų vadyba, žmogiškųjų išteklių ugdymas, mokymas ir studijos, studijų programos.*

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