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“KNOWLEDGE SOCIETY”**

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“TECHNICAL SCIENCE AND INDUSTRIAL
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EDITOR'S NOTE

In this issue of the magazine we start to present the best research papers submitted at IVth International Science Conference Knowledge Society and Vth International Science Conference for Young Researchers "Technical Science and Industrial Management". According to the indicative working programme more than 65 scientific papers will be presented at the conferences from scientists from Bulgaria, Romania, Ukraine, Lithuania, Latvia, Czech Republic, Slovakia representing more than 13 universities and Research and Development Centers.

As a result of high scientific level of the papers, The Editorial Board took decision to publish the best from the papers in 3 issues of the magazine. All scientific papers were put under independent review from two persons with academic rank. They selected most valued scientific papers. Editorial Board express gratitude to the reviewers for their qualitative and thorough work.

In this issue of the KSI Transactions on KNOWLEDGE SOCIETY we published 9 research articles from scientific sections: Higher Education and Business.

Call for Papers: Managing Innovation in Knowledge Society Paper may be submitted for Special Issue of the TRASACTIONS, Managing Innovation in Knowledge Society, until March 31, 2012. Proposal for special issues on topics of current interest in Higher Education, Innovation, Advanced Technologies, Management and Public Administration are always welcome.

Editorial Board

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Impact of Higher Education Reform of Lithuania on the Quality of Education

Влияние реформы высшего образования Литвы на качество обучения

Romualdas Ginevicius¹

Ромуальдас Гинявичюс¹

Abstract: There are three aspects of Lithuanian higher education reform - a significant change in funding arrangements, university management, as well as their status. The article analyzes the pros and cons of reform, examines the impact of the principles of university funding on the quality of the applicants.

Абстракт: реформа высшего образования Литвы осуществляется в трех аспектах – существенное изменение порядка финансирования, управления высшими учебными заведениями, а также их статуса. В статье анализируются положительные и отрицательные стороны реформы, исследуется влияние принципов финансирования университетов на качество поступающих.

Key words: Reform of higher education, university funding, vouchers, educational quality.

Ключевые слова - реформа высшего образования, финансирование университетов, ваучеры, качество образования.

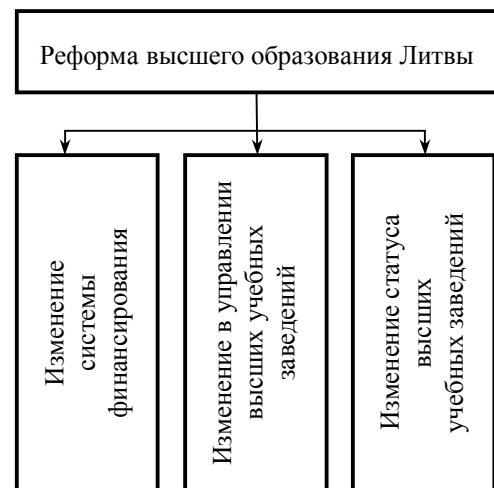


Рис.1 Основные направления реформы высшего образования Литвы

ВВЕДЕНИЕ

С принятием в 2009 году Сеймом (Парламентом) нового закона об образовании в Литве началась реформа сектора высшего образования, который составляют университетские и неуниверситетские высшие учебные заведения, т.е. университеты и колледжи [1].

Основные моменты заключаются в трех аспектах – существенное изменение порядка финансирования, управления высшими учебными заведениями, а также их статуса (рис.1).

Суть изменений в порядке финансирования заключается в введении так называемого ваучера. Раньше правительство выделяло сумму денег на подготовку определенного количества специалистов различных специальностей. Сегодня же эти деньги идут за поступающими, т. е. выпускники средних школ определяют, какое высшее учебное заведение и какую часть от отведенной суммы получит конкретный университет или колледж. С другой стороны ваучеры получает лишь ограниченное количество самых лучших выпускников средних школ. Оставшиеся могут брать кредиты за высокие проценты.

Существенным фактором, влияющим на выбор поступающими высших учебных заведений, является то, что величина ваучера технологических наук почти в два раза выше ваучера социальных наук. В связи с

этим университеты технических наук получают много ваучеров, но мало платных студентов, и, наоборот, университеты социальных наук получают мало ваучеров, но много платных студентов (рис. 2).

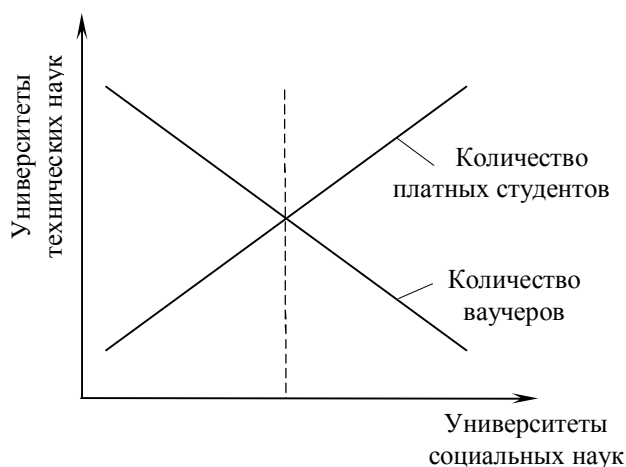


Рис. 2. Соотношение ваучеров и платных студентов в университетах технических и социальных наук

Из рис. 2 можно сделать вывод, что в условиях рыночной экономики при выборе специальности очень важным является финансовый фактор.

Ваучеры согласно узаконенной системы финансирования высших учебных заведений, во многом определяют дальнейшее их функционирование. Исследования показывают, что количество этих ваучеров зависит не только от величины, но и от популярности университета. Эту популярность можно определить следующим образом [...]:

$$\Pi = \frac{\text{Количество ваучеров в исследуемом году}}{\text{Количество ваучеров в предыдущем году}} \quad (1)$$

Определив популярность высшего учебного заведения и количество ваучеров исследуемого года, можно определить их количественную взаимосвязь при помощи следующей функциональной модели:

$$Y = f(x) \quad (2)$$

где Y - количество ваучеров в исследуемом году; x - популярность высшего учебного заведения.

Результаты корреляционного анализа согласно (2) модели даны в таблице 1, а также изображены на рис. 3 и рис. 4.

Таблица 1. Результаты расчета влияния популярности высшего учебного заведения на количество ваучеров

Зависимость	Уравнение	Коэффициент корреляции r	Погрешность S_y
Линейная	$Y = 4,2998 - 0,0436x$	-0,85	0,836
Параболическая	$Y = 5,5507 - 0,1005x + 0,0005x^2$	-0,87	0,774

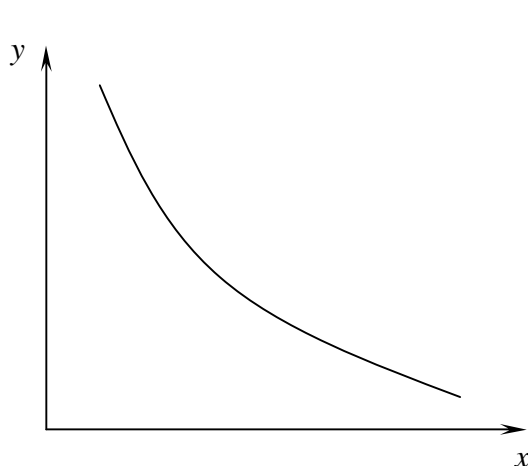


Рис. 3. Параболическая зависимость количества ваучеров от популярности высшего учебного заведения

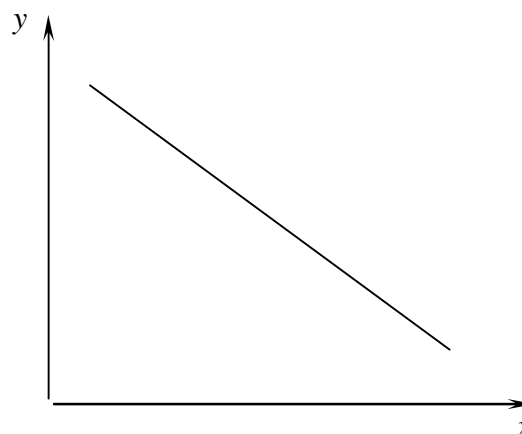


Рис. 4. Линейная зависимость количества ваучеров от популярности высшего учебного заведения

Из Табл. 1 и рис. 3 и 4 можно сделать два вывода. Во-первых, популярность университета существенно влияет на количество ваучеров. Во-вторых, это влияние является отрицательным, т. е. чем популярнее учебное заведение, тем меньше получает ваучеров.



Чтобы дать ответ на эту парадоксальную ситуацию, все университеты согласно их популярности были подразделены на группы – чем выше популярность, тем выше номер группы. Получили, что средний балл популярности технических университетов равен 3, а социального направления – 5,2, т. е. более популярными являются высшие учебные заведения технического уклона. Это соответствует ситуации, изображенной на рис. 1 и объясняет полученные результаты корреляционного анализа.

Суть изменений в управлении высшими школами заключается в том, что изменена их структура и роль органов управления школами. Основным и главным органом становится не Сенат университета (Совет), а министром назначенный Совет, состоящий из 9 или 11 человек. Пятерых членов назначает министр образования и науки, пятерых – высшая школа, а одного – оставшегося – по обоюдному соглашению. Сенату (Совету) университета отводится роль решения лишь академических вопросов. Все остальные жизненно важные вопросы (финансовые, административные, стратегического развития и т. п.), решает Совет. Он также назначает ректора (раньше его выбирал Сенат (Совет) университета).

Суть изменений в статусе высшей школы заключается в том, что из государственного учреждения она становится публичным, т.е. выходит за рамки действия закона о государственных учреждениях.

Новый закон действует уже третий год, поэтому сегодня можно делать кое-какие выводы о его положительных и отрицательных сторонах.

Введение ваучеров вызвало острую, иногда не совсем честную и оправданную конкуренцию среди учебных заведений за поступающих. Положение усугубляет то, что, в связи с демографическими процессами, с каждым годом выпускников средних школ становится все меньше, а также в связи с их эмиграцией за рубеж.

Новый порядок управления высшими школами имеет свои плюсы и минусы. Хорошо, что ректор становится менее зависим от Сената (Совета) школы и поэтому может проводить более существенные реформы внутри учреждения. С другой стороны, общественность вуза отстраняется от решения важных вопросов развития, т. е. университет теряет автономию.

Новый статус высшего учебного заведения тоже имеет свои положительные и отрицательные стороны. Хорошо, что школа получает большую финансовую самостоятельность. С другой стороны, возникает угроза обложения налогом имущества, уплаты прибыли и т. п.

ВЫВОДЫ

Реформа системы высшего образования Литвы, продолжаясь уже третий год, выявила, как положительные, так и отрицательные ее стороны. Положительным является то, что она вызвала перемены в довольно консервативной системе высшего образования. Отрицательным является то, что высшее образование стало доступным меньшему количеству выпускников средних школ, что способствует их эмиграции за рубеж. С другой стороны, учитывая непродолжительный период действия нового закона, окончательные выводы делать преждевременно.

ЛИТЕРАТУРА

- [1] Закон о науке и образовании республики Литвы. Известия Правительства 2009. № 54-2140 (на литовском языке).
- [2] Декрет министра науки и образования Литовской республики от 2 июня 2009 г. № ISAk -1163 “Прелеминарное количество мест студентов, финансируемых государством, на 2009-2010 учебный год”. Известия Правительства 2009. № 67-2731 (на литовском языке).
- [3] Ginevičienė Vanda Birutė. The lessons learned from the admission of applicants to the first-stage and continuous university studies in 2009. *The 6th International Scientific Conference Business and management'2010*: May 13-14, 2010 Vilnius, Lithuania, Selected Papers, Vol.1, Vilnius: Technika, 2010, 545–549.

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Relevance and Satisfaction of Academic Profession in Knowledge Society

Luminita Moraru ¹

Abstract We are analysing the challenges academia must face as a consequence of the new demands of relevance and satisfaction. There is a mutual interaction between these processes: their effects to academia are related to social conditions such as globalization, marketization, and knowledge-based orientation of society, while the reverse effects (influence of academia on these processes) are related to social functions such as research, teaching, service, and administration in knowledge functions.

Keywords - Academic profession, Relevance, Satisfaction, Knowledge Society.

I. INTRODUCTION

The academic profession has always been changing, hopefully improving. This profession is adaptive and responsive to external changes, and it seeks to enact its own environment. While reading historical research or looking at academics' reflections on their situation over time [1, 2, 7, 16, 22], it is striking that, whatever their particular historical moment, these writers all comment that the academic profession is no longer the same. There is clearly no ideal, universal, and stable state of the academic profession. These developments affect the relationships between the academic profession and other parts of society, as well as the position of this particular profession within society. These changes also affect the profession's internal modes of regulation and its autonomy and ability to avoid the intervention of external forces.

Academic careers are influenced by various contexts [15, 20]. Whereas career research traditionally emphasizes personal contexts at the expense of global or societal ones, research on academic careers tends to stress structural factors and conditions influencing careers.

The academic careers have been seen as the prototype for "new" careers [4] and as an opportunity to develop an international academic career [11] and to change employment conditions [14]. There are many international comparative research studies of the academic profession [1, 3] and of faculty members' working conditions [12, 13].

The public reflection on the academic profession is not characterized by satisfaction and equilibrium.

There are opinions that the concept of the traditional academic profession might be history. The professional tensions with which the academic profession has to live with nowadays are included by experts in at least in four categories: massification, knowledge economy, managerialism and competition [21].

Although academic career seems to remain an attractive choice, the challenge seems to be related to questions about the personal costs of succeeding in academic careers and how to maintain balance between work and family, personal satisfaction and career requirements. This "cost-benefit" of academic careers is operating in the general context of abandoning the tenure system and developing of a parallel system of term appointment [19].

II. RELEVANCE AND SATISFACTION

Relevance and importance of higher education must be correlated with societal expectations and their true functions.

It is important to set that to claim relevance is one thing, to prove it is another. Pressures for greater accountability generate new types of requirements for relevance and in particular the need to find measures of it. This means that it has become more necessary to "talk" about relevance, to explicitly make the "claim" for it and, to varying extents, to find evidence with which to provide some justification for the claim [5].

Pressures on higher education for greater responsiveness are not limited only to the economic sphere. The UNESCO World Conference on Higher Education in 1998 produced seven senses of "responsiveness" that could be applied. They were: political responsiveness, responsiveness to the world of work, responsiveness to other levels of the education system, responsiveness to culture and cultures, responsiveness to "all", responsiveness everywhere and all the time, responsiveness to students and teachers.

In this respect, the institutional leaders claim for "excellence" and for "relevance". Somewhat surprising, "relevance" is more generally required of the "mass" elements of higher education than of the "elite".

Lately, it puts strong emphasis on value for money and it links to relevance. This has given rise to a growth in a wide range of evaluation mechanisms within higher

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education. In many of these, students acquire the status of consumers whose needs and satisfaction levels have to be gauged repeatedly.

Last but not least, academics themselves have their own conceptions of relevance. Academics have their own fields of interest in teaching and research that provide one kind of conception of “relevance”. Also, they have their aspirations for career success and recognition that will provide another kind of conception of “relevance”.

Related to quality in higher education, there appears the question: Does relevance in higher education equate with quality? Every programme in higher education attracts the interest of a range of stakeholders with a multiplicity of conflicting concerns about relevance and a multiplicity of conflicting criteria of quality. As Brennan, Locke and Naidoo (2007:169) noted “the point about relevance is that it is generally defined by other people” and not by individual academic [6].

A major challenge in higher education is to demonstrate relevance and educational quality to an increasingly wide range of stakeholders’ conflicting expectations in the name of “accountability”. In many cases accreditation (particularly by professional registration authorities) is deemed to represent educational quality, however the criteria for accreditation is focused on relevance that satisfies only a very narrow band of stakeholder interests, and does not address many other criteria of quality.

Today, more than ever, a new analysis of the strategic role of higher education and university is needed. We need to observe better their relation with the society that often leads the universities towards fundamental transformations and new orientations while preserving the balance between scientific aspects and social commitments. The concept of "social relevance" gains prominence. In many cases, societal relevance is something which is required as part of evaluation processes.

Relevance and importance of higher education need to be evaluated according to the extent of balance between societal expectations from various academic institutions and their true functions. This evaluation must have in view the ethical criteria, political neutrality, the culture of critique, an ever more strengthened link between societal problems and the job market as well as the adoption of long-term orientations with respect to societal needs and objectives. The main source of concern, however, is achieving education for all as well as goal-oriented specialized education with special emphasis on merits and skills, since these two forms of education provide for living in various situations as well as for changing one's job or profession.

From expectations point of view, the quality often depends on perceived relevance to the respective interests of various stakeholder groups (as example: academic teachers who prepare and present the programmes; students who undertake the programmes; graduates who benefit from the programmes; employers of graduates who benefit from the knowledge and skills of the graduates; accreditation bodies who endorse the programmes on

behalf of their respective disciplines; the community that benefits from the contribution of the discipline; education specialists who are concerned with the quality and outcomes of the teaching process).

Each stakeholder group expects all of what it considers relevant to be included in respective educational programmes. What is perceived as relevant by one stakeholder group, however, is often perceived as irrelevant by another, and therefore to be excluded [8, 9]. This inclusion/exclusion nexus creates conflicts between stakeholder perceptions of relevance and quality and dilemma for academics and institutions trying to achieve quality education.

Most studies of the higher education sector reveal a clear perception that teaching is not valued as much as research. Research has been considered critical in the functioning of modern universities and the quality of major universities has been adjudged mainly by their research output. Structural change in the funding of the university sector, combined with management decisions on increasing ‘flexibility’ in staffing appointments, has also resulted in greater separation of “the production of knowledge (research) and its distribution (teaching)” [17]. This separation is contestable, and is regarded by many academics, such as Rowland et al. and the academics in Dunkin’s (1994) survey, as inappropriate. With demands for ‘increased productivity’ academics will come under pressure for more accountability in relation to their dual role as teacher and researcher. However, many academics perceive that the reward system in universities privileges research over teaching.

Job satisfaction has long been identified as a factor which is related to many aspects of behaviour in organizational construct. Job satisfaction deals with whether employers find their employment sufficiently satisfactory to continue in it, either permanently or until they are prepared for greater responsibilities. Low job satisfaction is associated with low performance, poor quality, grievances and other difficulties.

Job satisfaction is an active factor in professionalization. Academic job satisfaction influences the job performance in terms of attitudes, perceptions and reactions. Also, job satisfaction influences both the productivity and morale. It is necessary to find the answer to the questions: Are research-oriented universities more satisfied than teaching universities? These sources of satisfaction or dissatisfaction are similar or different? There are two concepts related with teaching-research nexus in terms of job satisfaction. First of them assumes that the two activities are complementary to each other when research enhances teaching (the academics considers teaching as something which follows from research, rather than their main priority). Second concept considers that the two activities are competitive when teaching affecting the quality of research.

The salary level of the academic staff in higher education and research institutions is one of the key issues of job satisfaction. Governments all over the world are trying to cut down costs, increase efficiency, profits and

accountability of higher education in the economy [18]. “Within developing countries the conditions of work and remuneration of the majority of academics is inadequate ... Academics have to hold more than one job to make ends meet” [10]. On the other hand, as Teichler and Yagci said (2009:108) “in most economically advanced countries, senior academic staff at universities and public research institutes traditionally had permanent employment contracts, while the situation varied for junior academic staff. In some countries, they had similar contracts as seniors from the very beginning, in others their employment security grew gradually over time, while in others permanent contracts were only awarded with the appointment to senior positions.” [21].

This has affected the structure and organization of the profession, namely, the way academic staff are employed, academic profession as a career, quality, academic freedom, autonomy, relationship between teaching and research, etc. Structural change in the funding of the university sector, combined with management decisions on increasing ‘flexibility’ in staffing appointments, has also resulted in greater separation of “the production of knowledge (research) and its distribution (teaching)” [17]. This separation is contestable, and is regarded by many academics, such as Rowland et al. and the academics in Dunkin’s (1994) survey, as inappropriate. Universally, the status of the profession seems to have declined. According to Altbach, colleges and universities are faced with ‘severe environments’.

IV. CONCLUSION

This short study has reviewed the evolution of academic profession in terms of relevance and satisfaction. Also, we tried to depict changes in the professoriate due to international competition that now affect individual faculty and their institutions and we will seek to understand how academic professionals are affected by these shifts as well how they respond to them.

The relevance cannot be ignored and the academics must be “relevant” spreading knowledge beyond the walls of the academy into all kinds of public domain.

It is clear that new opportunities and new challenges face higher education in its role as actor to a more globalized society. Universities are under growing political pressure for reform in face of more acute competition for public resources in tandem with a marked slowdown in the growth of funding.

In order understand how academic professionals are affected by these all shifts as well how they respond to them, some research question are proposed:

1. Which are the ways to integrate of research, teaching, and learning? Today, the academia must face to new academic research policies that promote the priority accorded to the research universities. In an international dimension, an academic system capable of responding to

worldwide competition in academic productivity is needed.

2. How does academic staff perceive their teaching and research obligations? Are research oriented academics more satisfied with their work than teaching oriented academics? Which is the role of research academics in forming hierarchies within institutions?
3. How relevant is the academic profession to society in the context of economic crisis during the past two years?

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REFERENCES

- [1] Altbach, Philip G. (ed.). (1996), *The International Academic Profession. Portraits of Fourteen Countries.* Carnegie Foundation, San Francisco, Jossey-Bass Inc.
- [2] Altbach, Philip G. (1998), *An International Crisis? The American Professoriate in Comparative Perspective*, in Altbach, Philip G., *Comparative Higher Education: Knowledge, the University and Development*, Greenwich and London, Ablex Publishing Corporation, pp. 75-91.
- [3] Altbach, Philip G. (2000), *The changing academic workplace: Comparative perspective.* Boston: Center for International Higher Education
- [4] Baruch, Y., & Hall, D. T. (2004), *The academic career: A model for future careers in other sectors?* *Journal of Vocational Behavior*, 64(2), 241-262.
- [5] Bok, D. (2004), *Universities in the Marketplace: the Commercialisation of Higher Education.* Woodstock, NJ: Princeton University Press.
- [6] Brennan J., Locke W. and Naidoo R., (2007) *United Kingdom: An increasingly differentiated profession.* In Locke, William and Teichler Ulrich (eds) *The changing conditions for academic work and careers in selected countries* (p 163-176). *Werkstattberichte 66* Kassel, Germany: INCHER
- [7] Clark, Burton R. (1987). *Academic Life, Small Worlds, Different Worlds.* Princeton N.J., Carnegie Foundation for the Advancement of Teaching and Lawrenceville N.J., Princeton University Press
- [8] Cowdroy, R., (2000 a), *At The Boundaries The Rules Must Change*, *les Cahiers de l’enseignement de l’architecture* No 6, European Association for Architectural Education, Louvaine-La Neuve, Belgium.
- [9] Cowdroy, R., (2000 b), *Contract Assessment: Self-Evaluation and Empowerment for Excellence*, *les Cahiers de l’enseignement de l’architecture* No 6, European Association for Architectural Education, Louvaine-La Neuve, Belgium
- [10] Eggins, H. (2008a), *The Changing Academic Profession: Implications for the Asia-Pacific Region.* In: Salazar-Clemeña, Rose Marie and Meek, Lynn V. (eds.), *Competition, Collaboration and Change in the Academic Profession: Shaping Higher Education’s*



- Contribution to Knowledge and Research. Quezon City: Libro Amigo Publishers, pp. 122-133.
- [11] El-Khawas, E. (2002), Developing an academic career in a globalising world. In Enders, Jurgen & Fulton, Oliver (Eds.), Higher education in a globalising world. International trends and mutual observations. A festschrift in honour of Ulrich Teichler (Vol. 1, pp. 241-254). Dordrecht, Boston, London: Kluwer Academic Publishers.
- [12] Enders, Jurgen (Ed.). (2001b), Academic staff in Europe, changing contexts and conditions. Westport, London: Greenwood Press.
- [13] Enders, Jurgen, & de Weert, Egbert (Eds.) (2004), The international attractiveness of the academic workplace in Europe. (Vol. 107). Frankfurt a.M.: Gewerkschaft Erziehung und Wissenschaft.
- [14] Enders, J. (2004), Higher education, internationalization, and the nation-state: Recent developments and challenges to governance theory. *Higher Education*, 47, pp. 361-382.
- [15] Hall, D. T. (2002), Careers in and out of organizations. In Thousand Oaks et.al.: Sage Publications.
- [16] Rice, R. E. (1986). The Academic Profession in Transition: Toward a New Social Fiction, *Teaching Sociology*, 14(1), pp. 12-23.
- [17] Rowland, S., Byron, C., Furedi, F., Padfield, N. and Smyth, T. (1998) Turning academics into teachers? *Teaching in Higher Education*, 3, 2, pp.133-141.
- [18] Slaughter Sheila and Leslie Larry, (1997), *Academic Capitalism: Politics, Policies and the Entrepreneurial University*, Baltimore, MD: John Hopkins University Press.
- [19] Schuster, J., & Finkelstein, Martin (2006), *The restructuring of academic work and careers: the American faculty*. Baltimore: Johns Hopkins University Press
- [20] Steyrer, Jack, Mayrhofer, W., & Meyer, M. (2005), *Karrieren. Eine einführung*. In W. Mayrhofer, M. Meyer & J. Steyrer (Eds.), *Macht? Erfolg? Reich? Glücklich? Einflussfaktoren auf Karrieren* (pp. 12-24). Wien: Linde Verlag.
- [21] Teichler, U. and Yagci, Y (2009), *Changing Challenges of Academic Work: Concepts and Observations* in V. Lynn Meek, Ulrich Teichler, Mary-Louise Kearney (Eds) *Higher Education, Research and Innovation: Changing Dynamics - Report on the UNESCO Forum on Higher Education, Research and Knowledge 2001-2009*
- [22] Wilson, L. (1980), Dialectic Aspects of Recent Changes in Academe. *Annals of the American Academy of Political and Social Science*, 448, pp. 15-24.

Student's social ties as a Knowledge Resource in the Process of Migration

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Abstract The article examines social ties as a source of knowledge enabling an individual to create a network of interpersonal and institutionalized relationships. These are particularly relevant to the examination of student migration in the contexts of employment searching and learning strategies. Findings of the research revealed that students of Lithuanian higher schools named the interpersonal ties as the most important ones representing emotional, intellectual and material support and aid when striving for personal goals and benefits.

Key words – social ties, knowledge resources, students of higher schools, migration.

I. INTRODUCTION

As economics, politics and other domains of the social sphere change unconditionally, knowledge, penetrating all spheres of individual life and supplanting the production factors and means considered as values in industrial society, remains the major force determining the integrity of the contemporary society. Knowledge is fast becoming the key resource of the new global society, while the latter is quite often described as the knowledge society. By creating the knowledge society, individuals are allowed to apply the accumulated knowledge and acquired skills, to become equal members of global society and competent participants of international labour market. This requires from the individuals instantaneous adaptation, quick reaction and the ability to recognize as well as use the knowledge in job-related and social activities.

Knowledge and searching for it, the ability to find accurate and relevant information using different sources represent important features characterizing the knowledge society. In contemporary social life, individuals base themselves upon knowledge and reflective knowing that is constantly built upon and updated; all social actions of an individual are constantly analyzed and modified as appropriate subject to information and knowledge received [1]. In this context, the following knowledge components gain importance: theoretical knowledge, experience, behaviour and links between them [2, 3]. Theoretical knowledge is acquired through teaching/learning, and experience – in activities. Behaviour comprises behavioural information, i.e., behaviour characteristics, which allow application of experience and theoretical knowledge and are reflected

in interpersonal relationships of an individual [2].

Hence, the knowing how to use knowledge is one of the key abilities of every member of knowledge society, because knowledge possessed by individuals permit performing intellectual or physical actions.

In knowledge society, individuals are generally evaluated according to measurable criteria, which reflect the knowledge level and skills possessed.

When analyzing the structure of knowledge, knowledge dichotomy is often cited: explicit and tacit knowledge [4, 5]; however, a different knowledge typology is also referred to: individual, social, procedural, declarative knowledge etc [3]. As noted by authors [3, 6], knowledge types are inter-related and this causes interpretation difficulties; however, tacit knowledge is more valuable than explicit knowledge; this is tantamount to equating an inability to articulate knowledge with its worth.

In the analysis of migration phenomenon, explicit as well as tacit personal knowledge are important, which are associated with individual experience and behaviour, and sharing them [2]. This kind of knowledge is important when examining social ties between migrating individuals (in this case, students). Ties maintained by an individual may be interpersonal (informal) and institutionalized (formal), based on mutual trust. Institutionalized ties include relationships in public space, which are 'invisible', but significant in individual's life: they can provide access to various materials, informative and other resources. Capital created through social ties enables an individual participating in migration process to create a network of interpersonal social ties: with family, relatives, friends and colleagues who help them attain economic and social objectives.

The concept of social ties (network) is frequent in theory and practice of social sciences; however, it is increasingly more often based upon in the capacity of methodological approach in migration studies, when raising problem issues: why migrants move, where to and how this is affected by interpersonal and institutionalized ties.

An important determinant attracting migration to a target country is interpersonal relationships of a migrant, based on family, friendship or descent. Ties based on marriage or family help the migrant to solve everyday problems; however, the key role of such networks is to reduce different costs (not only monetary, but psychological and others, too) and to mitigate the risk associated with migration as well as to facilitate the movement of migrants between descent and target countries. Furthermore, social ties comprise capital, which can be used by the migrants to attain their economic objectives or increase financial capital: foreign labour

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markets, high salaries, saving opportunities, money transfers to native countries, etc. [7, 8].

Recently in Lithuania and scientific literature there have been an increasing number of discussions about discontent with the social, economic and simultaneously political and cultural conditions of the country of residence, which promote the intensification of migration flows. Emigration of young people, students of higher education institutions in particular, is a matter of especially great concern, *defined in detail by the following problem questions: did ties maintained with family, relatives, friends, colleagues/acquaintances and institutions functioning in descent and target countries have any influence to migration experience of the students? How are interpersonal and institutionalized ties approached with respect to method for searching for employment/learning, information on the location of the job sought/ place of residence or studies?* That is a very acute and manifold problem and its solution draws both researchers and practitioners to look for its causes and means to control it.

Object of research – social ties of students of Lithuanian higher schools in migration processes.

The research aims at revealing students' social ties as the source of knowledge in migration processes while invoking a case study of Lithuanian higher schools.

Methods of research: scientific literature analysis, questionnaire survey, statistical data analysis.

II. EMPIRICAL RESEARCH DESIGN

When seeking to identify the social ties of Lithuanian higher school students in migration processes, *methods* for the assessment of migration experience of academic youth were worked up comprising two diagnostic blocks (internal and external migration experience). In both diagnostic blocks, similar criteria were selected (employment searching and learning strategies), with the aid of which the experience of academic youth was identified in searching for employment and learning opportunities in the countries of target and descent.

The main method used to collect the research data was *written survey; survey tool* – questionnaire to the students of Lithuanian higher schools was prepared in line with the studies carried out by scientists and published findings [9, 10].

The article is based upon the findings of the pilot empirical study “Research of attitudes of higher school students representing the migration experience” conducted in March – April 2011. The study involved students of Lithuanian higher schools having international and/or domestic migration experience. A probabilistic method for selection of surveyed groups was chosen – *random selection*. Study sample N = 1187.

Quantitative mathematical statistical analysis of questionnaire survey data was carried out using SPSS 19 for Windows (Statistical Package for Social Sciences). When analyzing the findings of quantitative survey, *descriptive statistics* were applied.

Social – demographic characteristics of students. The research included 69 % of women and 31 % of men. The majority of respondents (80 %) were students aged 22-27, 12 % – aged 17-21. It was determined that the majority were single (80%), had no children (87 %). Only a small number of students (11 %) described their marital status as ‘married and having children’ (13 %).

Familial (or personal) material status is an important social indicator explaining the migration activity of the majority of students. It was determined that monthly income of the majority of students (41 %) was low, up to LTL 800 (EU currency equivalent of 230 €), moreover, the majority (64 %) were unemployed.

Research findings revealed that men had more experience of migrating abroad than women, and their purpose was getting a job abroad.

When analyzing the students' age it was determined that older students (aged 22-27 and 28-32), who had been working in descent country in service (sales, education, construction, hotels and restaurants) sector, tended more to go working abroad. According to the information of Statistics Lithuania of 2010, minimal monthly salary is paid in these sectors (LTL 800, equivalent in EU currency of 230 €), and the predominant low salary acts as economic incentive for students to go to target countries.

III. EMPIRICAL RESEARCH FINDINGS

Employment searching strategy. Social ties between migrants help finding a job, place of residence, obtaining information, contacts, psychological assistance or advice [11]. The importance of these ties is particularly high for employees of lower qualification or education, who are noted for lower adaptation resources. Information on employment opportunities abroad obtained via social connections is particularly important to students when making a decision to emigrate, and the ties with those living in the other country make students more mobile.

After examining the social ties of Lithuanian higher school students in migration processes, it was determined that students' choice to go working abroad was mostly affected by informal ties: family and friends. In the meantime, students who went abroad found employment invoking formal as well as informal ties: through employment agencies in Lithuania (20 %), family members (20 %) or friends living/working abroad (18 %). Analysis of the method of employment revealed that younger respondents (aged 17-21) maintained strong interpersonal ties with friends abroad (50 %), older respondents (aged 22-27) – with family members (22 %) and friends abroad (11 %). When making assessments by gender, it was noted that men maintained close friendly relationships with friends abroad (30 %), in the meantime women – with family members (37 %). Generally the students selected such target countries as the USA, the United Kingdom, Ireland, Germany and Spain, where they worked from 3 months to 1 year. Although strong or friendship-based ties are considered to be a less effective means when searching for employment [12], the research findings nonetheless show that respondents

searched for information about desired jobs in target countries among friends (33 %) and family members (24 %). Internet was noted by respondents as an important source of information when searching for employment. This resource was equally significant to older students (33 %), men and women (30 % and 27 % respectively). Information about places to live in target countries was sought via the interpersonal network (family, friends), characterized by strong relationships, based on trust, informality, security, sentiments of helping and friendship.

When analyzing the migration experience of students in the country of descent, it was established that family, friends, relatives, colleagues and acquaintances (each knowledge source respectively – 30 %) had little influence on their decision to go working to another city and/or district of Lithuania. Such choices were determined by economic considerations such as material conditions of living and salary.

It was determined that students were helped to find employment in the country of descent by local employment agencies (35 %). Although family members have some influence to student mobility (30 %), as many as 25 % of respondents (100 % women) went other cities or districts of Lithuania hoping to get a job. The majority of students (67 %) went to search for employment to the capital city – Vilnius for the period from 6 months to 2 years.

Students, particularly older ones (22-27) sought information about desired jobs on the Internet and enquired of family members; however, information about places to live was sought among friends. The research distinguished the importance of an employer able to provide a place to live; this was noted by respondents of older age (22-27) and men (33 % respectively).

Learning strategy. European Union propagates the lifelong learning idea, enhancement of social dialogue, implementation of active measures of labour market and creation of modern welfare state while focusing on the mobility of highly qualified specialists, particularly academic youth [13].

After examining the social ties of Lithuanian higher school students in migration processes it noted that although a small number (only 19 %) left to study abroad, the majority of them in 2009 and 2010 went to the countries of European Union (UK, Ireland, Sweden, Germany) and non-EU states (Turkey, USA, Canada).

The decision of students to go to study in the target countries was determined by economic and professional factors: salary (70 %), career potential (65 %) and possibility to find employment according to profession (60 %).

The majority of students went for short-time studies (from 5 to 10 months) according to student exchange programmes; they studied in universities and obtained qualification certificates.

When assessing the academic mobility of students, ties providing information on professional opportunities and

fulfilling professional interests are particularly relevant [12, 14]. The research revealed that respondents who went to study abroad used formal ties of the social network: Internet, press, information and aid provided by science institutions and study exchange program coordinator. The last ties were particularly important to the students of older age (22-27 years, 75 %). In the meantime, students did not use the information obtained through informal ties (family, friends and acquaintances) as well as assistance for studies abroad.

The majority of respondents (64 %) sought information about the desired educational institution abroad invoking the Internet – the most broadly used knowledge resource. Information about the place to live abroad while studying was sought in a few sources of knowledge, i.e., Internet (46 %) and among acquaintances (36 %), while 48 % of students were provided accommodation by the schools.

When analyzing the migration experience of students who studied in the country of descent, it was determined that the majority went to study to the higher schools pooling in the largest cities of Lithuania (Vilnius, Kaunas).

The students were motivated to go to study in another city and/or district of Lithuania mostly by professional factors: better career potential (60 %), possibility to find employment according to profession (58 %) and the need for personal freedom (50 %).

In the country of descent, students generally obtained information on the desired educational institution from the formal sources of knowledge: Internet (44 %), fairs/exhibitions/open door events of higher schools (22 %) and in student admission departments (18 %).

The majority of students (35 %) were offered accommodation for the period of studies by the educational institution, thus revealing the significance of formal sources of knowledge.

IV. CONCLUSIONS

Case study of social ties of Lithuanian higher school students in migration processes revealed that when searching for employment in foreign countries students named interpersonal (informal) ties as the most important, while in the country of descent – formal ties.

Although employment agencies serve as a source of information and knowledge on employment and accommodation abroad, however, based on the findings of the research it can be stated that the respondents often received information on employment opportunities abroad from such knowledge sources as family and friends.

Students who chose the learning strategy in the countries of target and descent named the institutionalized ties as the most important ones. Their importance became evident when searching for the necessary information on educational institutions and accommodation.

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REFERENCES

- [1] Constructing Knowledge Societies: New Challenges for Tertiary Education. The World Bank, 2002.
- [2] Shariq, S. Z. (2002), 'Dynamic Knowledge flows and interactions across geography of space, time and tacitness', *Journal of knowledge management*, Vol. 6 (2), pp.1-109.
- [3] Alavi, M., Leidner, E. D. (2001), 'Knowledge management and knowledge management systems: conceptual foundations and research issues', *MIS Quarterly*, March, Vol. 25 (1), pp. 107-136.
- [4] Polanyi, Michael, *Knowing and being: Essays by Michael Polanyi*, Routledge, 1989.
- [5] Nonaka I. (1991), 'The knowledge creating company', *Harvard business review*, 69 (6), pp.96-104.
- [6] Wang, H., Thorns, D. (2009), 'Different forms of knowledge and new Chinese skilled immigrants' adaptation to New Zealand's knowledge society', *International Social Science Journal*, March, Vol.60 (195), pp. 85-95.
- [7] Palloni, A., Massey, D. S., Ceballos, M. E. K., Spittel, M. (2001), 'Social capital and international migration: a test using information on family networks', *The American Journal of Sociology*, 106 (5), pp. 1262-1298.
- [8] Vertovec, Steven. Transnational networks and skilled labour migration (WPTC-02-02). Conference: Ladenburger Diskurs "Migration" Gottlieb Daimler- und Karl Benz-Stiftung, Ladenburg, 14-15 February 2002. Open access via internet: <<http://www.transcomm.ox.ac.uk/working%20papers/WPTC-02-02%20Vertovec.pdf>>
- [9] Repečkienė, Aušra, Žvirelienė, Renata, Kvedaraitė, Nida, Higher school students approach to internal migration: practical aspect, Proceedings of the 3rd international conference Changes in Social and Business Environment, pp. 328-332, Kaunas, November, 2009, ISSN 1822-7090
- [10] Kvedaraitė, N., Žvirelienė, R., Repečkienė, A. (2010), 'Research of economic migration reasons of university students', *Mokslas ir edukaciniai procesai = Science and Processes of Education*, 1(10), T. 2, pp. 62-75.
- [11] Boyd, M. (1989), 'Family and personal networks in international migration: recent development and new agendas', *International Migration Review*, Vol. 23 (3), pp. 638-670.
- [12] Granovetter, M. (1973), 'The Strength of Weak Ties', *American Journal of Sociology*, Vol. 78, pp. 1360-1380.
- [13] Docquier, Frédéric and Marfouk, Abdeslam, Measuring the international mobility of skilled workers (1990-2000): Release 1.0 (August 19, 2004). World Bank Policy Research Working Paper No. 3381. Open access via internet: <http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2004/09/22/000160016_20040922150619/Rendered/PDF/wps3381.pdf>
- [14] Palloni, A., Massey, D. S., Ceballos, M. E. K., Spittel, M. (2001), 'Social Capital and International Migration: A Test Using Information on Family Networks', *The American Journal of Sociology*, 106 (5), pp. 1262-1298.

Migration of academic youth: assessment of the economic impact on the region

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Abstract The article examines economic impact of academic youth on the region as one of the factors enhancing the competitive ability, the empowerment of which remains problematic due to the ever-increasing economic migration of students. The research of causes of economic migration of Lithuanian higher school students and their impact upon the region revealed that salary is the most significant factor motivating the students to go to work in another city and/or district of Lithuania, whereas a small number of those working and the constantly increasing number of those emigrating reduce the economic impact on the region.

Key words – students of higher schools, migration, economic migration, economic impact on the region.

I. INTRODUCTION

The liberalization of migration policy, increased demand for international labour, rapid development of science and technology all this encourage people to migrate. Migration of Lithuania's residents is fast becoming one of the most serious threats to social-demographic situation not only in the country but in regions as well, business development, innovations, competitiveness, preservation of cultural identity and national intellect.

Migration is a complicated process that is difficult to define and measure; its description, therefore, is often based on classic definitions of migration [1, 2].

From another point of view, migration is perceived as a dynamic phenomenon, analyzed in different spheres of science and revealed as a multi-dimensional social process, miscellaneous and complex phenomenon, gaining an ever-increasing proportion [2, 3]. In this case, due to the absence of a universal migration theory that could explain its nature, formation of flows and factors [2, 4, 5], migration is approached from the standpoints of different theories (neoclassical, two labour markets, social capital and migration network) and on different levels (individual, national, global).

Two migration directions come up: internal migration, including movement of population within a country (between different regions, administrative units, towns) and external or international migration, meaning movement of population to and from a foreign country [4].

The decision of individuals to migrate is affected by economic, social, demographic, political as well as cultural, psychological and geographical factors [3, 6, 7]; however, the biggest influence to all groups interested in migration is nonetheless made by economic factors.

The assessment of the determinants of migration is an important domain of economic migration studies. Unemployment, differences of salaries and standard of living as well as opportunities on the labour market are among the most prominent economic factors causing migration [8, 9].

The increasing flows of migration to economically strong countries and/or regions endorse the idea that migration of the labour force is formed by the disbalance between the labour force supply and demand in countries and/or regions with unequal economic development level. Unemployment and salary differences are emphasized as some of the most significant economic factors cause migration and including increasingly more young people, academic youth in particular, into this process [10], posing a potential threat of the loss of urban/regional/national intellectual capital and skilled work force.

Dynamic labour market of the nowadays demands for qualified specialists able to think freely and critically, to adapt to the changing market conditions and to be active participants of the market; this context, therefore, distinguishes an important role of higher schools – carrying out research and using scientific potential to implement innovation and develop the capacity of future professionals to adapt to ever-changing labour market conditions. Empirical research [11-13] has proved that higher schools often contribute to the development of the competitive advantage of cities not only by training qualified professionals, installing information technologies and adapting them to practical needs, but also by disseminating good practice.

The effect of a group of individuals on a city and/or region is most often defined by economic, social and physical criteria, while the latter may be supplemented by demographic and genetic criteria [14]. Nonetheless, taking into account that lately knowledge has been acquiring the form of value in the economy and reflecting its development and competitive ability in global environment, it can be stated that the spheres of economic impact are possibly gaining the highest significance. Consequently, the article focuses on the assessment of economic impact of academic youth upon the region.

In the theory of economic growth, human capital plays an important role, because the economic development of the region as a part of the country is closely associated with the

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investments in human capital. Number of the higher school students is named as one of the key factors of urban economy growth. Factors economically impacting a city and/or region also include future income of higher school students that is linked with the future stability of purchasing power, decrease of unemployment, growth of productiveness and quality of living, hence, the lower expenditures of law enforcement and health care institutions as well as employee rotation [15-17]. Furthermore, there are emphasized such economic factors that are important to the city and/or region as the structure of economy, local tax system, level of salaries, capital accessibility, number of research and development institutions and industrial clusters [18].

Other authors [19, 20] analyse the effect of higher school students on urban and/or regional economic growth exclusively assessing the expenses of students, their teachers and the higher school itself, treating such expenses as factors with direct effects on economic benefit. It is advised to evaluate the economic benefit to the region using a revenue and cost method.

There are two most widespread methodological approaches in economic value studies: cost-benefit analysis or return on investment and valuation. It is noteworthy that the process of determining value is more important than the result itself, since it requires a thorough assessment of all circumstances and interests of different groups of stakeholders. Regardless of the variety of factors affecting the urban and/or regional economy listed by the examined authors, two major *methodological approaches* for the assessment of this phenomenon emerge – *revenues and costs*. Following this approach, economic impact on the region of higher school students may be expressed in revenues received or costs sustained.

Thus, human capital is one of the key factors determining the regional competitive ability, which may be ensured through the effective use of the academic youth potential. However, the discussions appearing lately in Lithuania on the increasing migration flows stress upon the issue causing great concern - the migration of the young people, in particular – academic youth. *The mentioned aspects determine the scientific problem, which can be elaborated in detail through the following questions: what are the factors determining the economic migration of academic youth? How do the students of higher schools affect the changing of regional economic characteristics?*

Students of Lithuanian higher schools were chosen as the *object of research*. While seeking to evaluate the causes of economic migration of this target group and its impact upon the region, a research of domestic migration experience of Lithuanian higher school students was carried out.

The *purpose of research* is to evaluate the causes of economic migration of academic youth and their impact upon the region.

Methods of research: scientific literature analysis, questionnaire survey, statistical data analysis.

II. EMPIRICAL RESEARCH DESIGN

In order to identify the causes of economic migration of Lithuanian higher school students and their impact upon the region, *methods* were prepared for the evaluation of domestic migration experience of academic youth, comprising two diagnostic blocks (causes of domestic economic migration and economic impact of the students upon the region). The research criteria selected in the first diagnostic block included the factors determining the economic migration (salary, unemployment, future employment opportunities and material conditions of living), while those selected in the second block included factors of students' economic impact upon the region (expenses and their types, financing, employment).

The main method used to collect the research data was *written survey*; *survey tool* – questionnaire to the students of Lithuanian higher schools was prepared in line with the studies carried out by scientists and the published findings [10, 21, 22].

The article is based upon the findings of the pilot empirical study “Research of attitudes of higher school students representing the migration experience” conducted in March – April 2011. The study involved students of Lithuanian higher schools having international and/or domestic migration experience. A probabilistic method for selection of surveyed groups was chosen – *random selection*. Study sample N = 1187.

Quantitative mathematical statistical analysis of questionnaire survey data was carried out using SPSS 19 for Windows (Statistical Package for Social Sciences). When analyzing the findings of quantitative survey, *descriptive statistics* were applied.

Social – demographic characteristics of students. The research included 69 % of women and 31 % of men. The majority of respondents (80 %) were students aged 22-27, 12 % – aged 17-21. It was determined that the majority were single (80%), had no children (87 %). Only a small number of students (11 %) described their marital status as ‘married and having children’ (13 %).

Familial (or personal) material status is an important social indicator explaining the migration activity of the majority of students. It was determined that monthly income of the majority of students (41 %) was low, up to LTL 800 (EU currency equivalent of 230 €), moreover, the majority (64 %) were unemployed.

Research findings revealed that men had more experience of migrating than women, and their purpose was getting a job.

When analyzing the students' age it was determined that older students (aged 22-27 and 28-32), who had been working in descent country or region in service (sales, education, construction, hotels and restaurants) sector, tended more to go working to another Lithuanian city and/or district. According to the information of Statistics Lithuania of 2010, minimal monthly salary is paid in these sectors (LTL 800, equivalent in EU currency of 230 €), and the predominant low salary acts as economic incentive for students to go to another Lithuanian city and/or region.

III. EMPIRICAL RESEARCH FINDINGS

Causes of economic migration of the academic youth. When examining the experience associated with the participation of Lithuanian higher school students in domestic migration processes, it turned out that 52 % of students had left to work in other cities and/or districts of Lithuania. After assessing the choice of the academic youth to go to work in another city and/or district of Lithuania it was determined that this choice was mostly determined by economic causes, whereas the factors causing economic migration (salary, unemployment, future employment opportunities and material conditions of living) 'strongly' or 'very strongly' affected such a choice of the majority of respondents.

It was determined that economic migration of students was mostly caused by salary (78 %), which was the most significant motivator to search for jobs in another city and/or district of Lithuania. For 48 % of students, salary had 'very strong' significance when making the decision to leave the native city and/or district, for 22 % - 'strong' significance. This shows that the striving of academic youth to provide better for them materially is the major factor causing emigration, and the salary may be, therefore, interpreted as the primary motive of domestic economic migration.

Tempting conditions of work and professional realization manifest in the structure of causes of economic migration; the influence of these conditions to emigration strengthens as the education of individuals' increases. Highly qualified labour force is in higher demand and skilled and educated young specialists, therefore, are more prone to migrate. The decision of Lithuanian higher school students to leave to work in another city and/or district of Lithuania was also affected by future employment opportunities (58 %). It was determined that for 46 % of respondents this factor causing economic migration 'very strongly' influenced their decision to leave to work in another city and/or district of Lithuania, and it was not significant altogether only for 4 % of respondents.

Unemployment is another equally significant economic factor driving the individuals to migrate. Losing the job deprives the individuals of income source; they experience the deterioration of the standard of living and psychological discomfort and, therefore, make the decision to emigrate much faster. The level of youth unemployment in Lithuania is among the highest in the European Union, while the assessments of this problem emphasize the inability of a number of young people to establish themselves in the labour market due to low qualification and insignificant working experience. Research findings revealed that 57 % of respondents were driven to work in another city and/or district of Lithuania by unemployment. Among those, as many as 82 % of students have evaluated unemployment as a 'very strong' factor determining such a decision.

When analyzing the experience of domestic migration of the academic youth, another factor causing economic migration became apparent, namely – material conditions of living (41 %). For 22 % of respondents, material conditions of living had 'very strong' importance, for 16 % – 'strong' importance, when making the decision to leave the native city and/or district.

Economic characteristics of the impact of academic youth on the region. Analysis of the characteristics of economic impact of Lithuanian higher school students on the region showed that the majority of respondents by age were young and this determined the distribution of their income by types of expenses.

It was determined that the majority of respondents (64 %) had the following distribution of monthly expenses: the major share of their income (37 % on average) was spent by the students to purchase the basic commodities; clothing and footwear – 17 % on average, transport – 14 %, leisure services – 11 %, housing – 6 %, health care – 9 %, books, stationery and other miscellaneous expenses – 3 % of monthly income respectively.

When assessing the economic impact of academic youth on the city and/or region in terms of financing, research findings revealed that monthly income of 41 % of those surveyed did not exceed LTL 800 per month. Monthly income of 33 % of respondents varied from LTL 801 to 1800 and only 10 % of students had monthly income in excess of LTL 1801. Higher school students are supported by the state and/or municipality, thus reducing the expenses sustained by them. For 47 % of those surveyed, study fee costs were covered by the state, while 8 % of students lived in dormitories, thus cutting down their housing costs.

Employment of higher school students, reflecting their impact on the city and simultaneously on the region, is yet another factor having economic impact even in cases when the student works for at least one hour per week. Research findings showed that only 36 % of the surveyed were employed. The majority of students work in sales (33 %), education (23 %), catering and accommodation (19 %) and finance and construction (9 %) sectors. Moreover, the impact of higher school students' employment on the city or region may be also approached from a social perspective, if they work according to their future speciality, thus providing the synergetic benefit of theoretical and practical knowledge.

IV. CONCLUSIONS

The research of domestic migration experience of Lithuanian higher school students revealed that the decision of the majority of academic youth to leave to work in another city and/or district of Lithuania was determined by economic motives, i.e., unemployment, better and more stable conditions of living, work and professional realization; however, this process was mostly driven by salary, which is the most significant factor motivating to search for employment in another city and/or district of Lithuania.

Although the economic impact of academic youth on the city and/or region is becoming one of the main factors



enhancing the competitive ability, a small number of employed students and the ever-increasing number of emigrating students do not allow ensuring the social - economic welfare for themselves or for the city and/or region. This confirms the idea that optimization of the higher school network is becoming one of the priority tasks of the national regional policy when striving to create competitive cities and/or regions.

ACKNOWLEDGEMENT

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REFERENCES

- [1] Stockwell, Edward G. And Groat, Theodore H., Word Population. An Introduction to Demography, Franklin Watts, 1984.
- [2] Massey, D. S. (1993), 'Theories of International Migration: A Review and Appraisal', *Population and Development Review*, 19, pp. 431-466.
- [3] Richardson, J. (2007), 'Migration: new urgencies replace traditional welcome', *Foresight*, 9 (5), pp. 48-55.
- [4] Castles, Stephen and Miller, Mark J., The Age of Migration. International Population Movement in the Modern World. Houndmills & New York: Palgrave, 2003.
- [5] Weiss, Y., Sauer, R. M., Gotlibovski, M. (2003), 'Immigration, search, and loss of skill', *Journal of Labor Economics*, 21 (3), pp. 557-597.
- [6] Scheurle, J., Seydel, R. (2000), 'A Model of Student Migration', *International Journal of Bifurcation and Chaos*, 10 (2), pp. 447-480.
- [7] White, A. (2007), 'Internal Migration Trends in Soviet and post-Soviet European Russia', *Europe-Asia Studies*, 59 (6), pp. 887-911.
- [8] Filler, Rondall. K., Hamermesh, Daniel. S. and Rees, Albert E., The Economics of Work and Pay, Harper Collins College Publishers, 1996.
- [9] Ehrenberg, Ronald G. and Smith Robert S., Modern Labour Economics: Theory and Public Policy, Addison- Wesley Educational Publishers Inc., 1997.
- [10] Repečkienė, A., Kvedaraitė, N., Žvirelienė, R. (2009), 'External and internal migration insights in the context of globalization: higher school graduates' attitude', *Economics and management = Ekonomika ir vadyba*, 14, pp. 603-610.
- [11] California's Future: It Starts Here. UC's Contributions to Economic Growth, Health, and Culture. An Impact study for the University of California, ICF Consulting, 2003.
- [12] Frick, J. R., Grabka, M., Groh-Samberg, O. (2007), Economic Gains from Publicly Provided Education in Germany, *IZA Discussion Paper No. 2911; SOEP paper No. #28*, July, pp. 1-38.
- [13] Social and Economic Conditions of Student Life in Europe. Synopsis of indicators. Final report. Eurostudent III 2005-2008, W. Bertelsmann Verlag GmbH & Co. KG, 2008.
- [14] Ainley, John, Graetz, Brian, Long, Michael and Batten, Margaret, Socioeconomic Status and School Education, AGPS, 1995.
- [15] Siegfried, J. J., Sanderson, A. R., McHenry, P. (2007), 'The economic impact of colleges and universities', *Economics of Education Review*, 26 (5), October, pp. 546-558.
- [16] Znaniecki, Florian, The social role of the university student, Nakom, 1994:
- [17] Kamerschen, D. R. (2001), 'The Economic Impact of Higher Education: A Case Study of Georgia', *Journal of Public and Business affairs*, pp. 7-13.
- [18] Jensen-Butler, Chris., Shachar, Arie and van Weesep, Jan. European Cities in Competition. European Science Foundation, Aldershot, 1996.
- [19] Ohme, Allison M., The economic impact of a university on its community and state: examining trends four years later, University of Delaware, 2003.
- [20] Wilson, J. H. (2005), 'The student expenditure impact of a university on the local economy', *The Annals of Regional Science*, 9 (1), pp. 122-126.
- [21] Kvedaraitė, N., Žvirelienė, R., Repečkienė, A. (2010), 'Research of economic migration reasons of university students', *Mokslas ir edukaciniai procesai = Science and Processes of Education*, 1(10), T. 2, pp. 62-75.
- [22] Gliniskienė, R., Žvirelienė, R., Micevičienė, D., Daraškevičiūtė, B. (2010), 'The evaluation of high schools students for city use through social-economic aspect', *Profesinės studijos: teorija ir praktika. Mokslinių straipsnių rinkinys = Professional studies: theories and studies. Scientific Journal*, 6, pp. 87-91.

Peculiarities of Projects of Enterprise Resource Planning System Implementation

Rima Tamosiuniene¹, Anna Marcinkevici²

Abstract The main purpose of the presented paper is to evaluate the importance of business and IT alignment under the agility conditions and to develop advanced support model of the ERP implementation projects, which would ensure active enterprises participation and better ERP implementation projects results.

Keywords – Enterprise Resource Planning, Business and IT alignment, project of ERP system implementation.

I. INTRODUCTION

In the fast Information Technology (IT) society of today, there have been various changes in the organization behaviour. The enterprise is forced to be able to perform well under the abundance of information and hyper competition conditions. The basis of the enterprise survival in the market and the core development factors are innovation, improving efficiency, reducing costs and increasing competitive advantage by effectively managing knowledge. The information has become a strategic corporate resource and encourages business to invest in the knowledge management.

There is today an obvious demand for continuous improvement and alignment in enterprises but unfortunately many organisations do not have proper instruments (methods, patterns, best practices etc.) to achieve this.

Different measures are used to support the information and knowledge management processes and one group of them are variety of IT and information solutions such as Enterprise Resource Planning (ERP) system. Nevertheless, whether enterprise can integrate information technology with its organization, overall management, in order to advance its core competition ability, lies on the effective knowledge management during the ERP implementation process. However, there are number of examples where enterprises, who invested in the ERP systems and informationization, fail to fully realize their original purpose. In fact, the ERP implementation projects success rate mostly depends on the level of the enterprises participation in these projects.

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However, the problem of enterprises involvement and active participation in the ERP implementation projects occurs.

The main reasons of lack of active enterprises involvement are weak ERP projects knowledge, passive interest in this area and transferring the responsibility for the project results to vendors and consultants. Actually, consultants' and vendors' target is to enable appropriate knowledge transfer, but enterprises have to be ready to receive this knowledge and to use it to improve ERP implementation project results.

What is more, existing ERP implementation models are imperfect and do not fully adaptive. Therefore, enterprises ERP implementation projects should be encouraged as well as supported by improved and complex models, which would encourage enterprises involvement.

This paper aims:

- to evaluate the importance of business and IT alignment under the agility conditions
- to develop advanced support model of the ERP implementation projects, which would ensure active enterprises participation and better ERP implementation projects results

II. BUSINESS VALUE OF BUSINESS AND IT ALIGNMENT

In an environment marked by continual transformation, competitive organizations increasingly rely on the business and IT alignment based on agility. To survive and thrive, enterprises must capture and exploit new business and IT opportunities before competitors do [7].

Business and IT alignment is closely associated with attempts to improve the business value of IT investments. Business and IT alignment and their agility show how organizations can successfully deal with unpredictable, dynamic, and constantly changing environments. Business agility refers to the ability of an organization to rapidly adapt to change in productive and cost-effective ways through two key capabilities: 1) timely adjustments to supporting business structures, processes, and systems and 2) effective organization and use of human resources [1]. The more agile enterprise is, the higher value and competitive advantage is. Obviously, those firms who leverage IT to create business agility will be the clear winners. IT agility enables business agility as well as business agility enables IT agility. Alignment



can only be successful if it comes from both sides [2]. Therefore, business and IT agility are inextricably linked.

From another point of view as it was mentioned by Hans Jonasson “knowing and understanding the business can be harder than understanding the IT are”. [5] Sometimes it is easier to teach a business person enough about systems to be successful then to teach a systems person about the business side.

Latest sources of information proves that IT needs to become more tightly integrated with the broader business, not just aligned with it, and that means embedding IT throughout the organization. Furthermore, in today’s

economic climate, where trust between business and IT in most companies has never been more fragile, possibilities to completely rethink IT have to be found, and IT have to be transformed into a strategic asset for the companies. Moreover, IT needs to become more tightly integrated with the broader business, not just aligned with it, and that means embedding IT throughout the organization [6].

All the above-mentioned transformations of corporate governance and business management to form a view of the business and IT have to be aligned as well as agile. That allows the company to create higher value only when there is excellence in three elements (see Fig. 1).

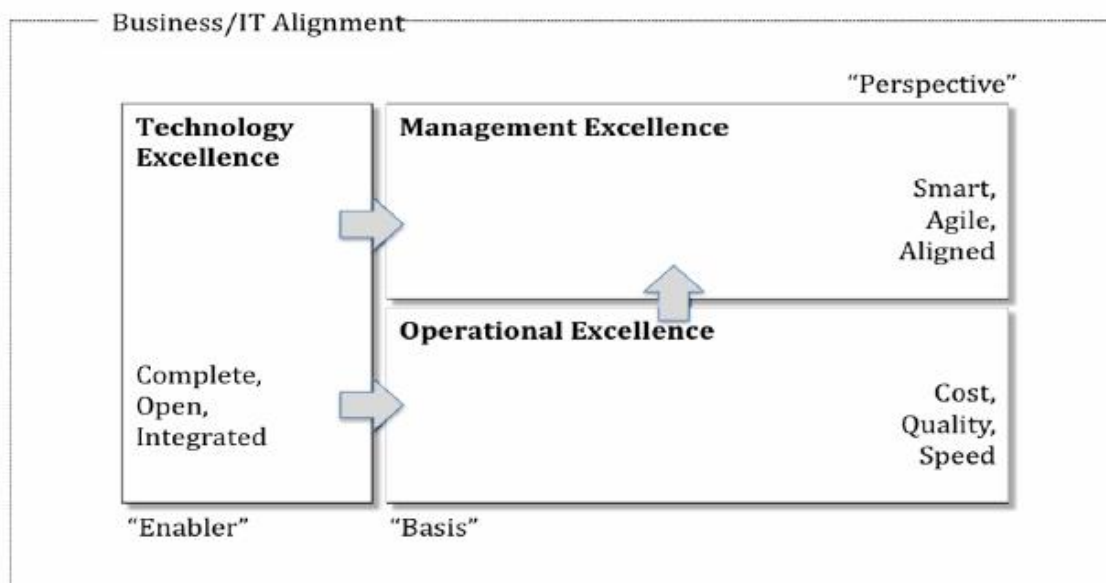


Fig. 1. Business/IT alignment [13]

Most people are familiar with the term operational excellence; optimizing cost, quality, and speed. It has become a prerequisite to fuel the next level of competitive differentiation - management excellence - which is characterized by three other attributes; smart, agile, and aligned. Neither can be achieved without technology excellence; an IT strategy that focuses on being complete, open, and integrated [13].

III. ERP IMPLEMENTATION PROJECTS: BUSINESS VALUE ENHANCEMENT BY MODELLING THEIR SUPPORT

As mentioned above, knowledge management is closely related to the use of IT in business. Hence, we can say that

one of the manifestations of knowledge management is ERP implementation projects which means business processes integration, facilitation and adding value to business.

ERP systems are software packages that enable the integration of transactions oriented data and business processes throughout an organisation [10]. ERP can be defined as “all in one” and as a strategic tool which helps companies gain a competitive edge [3]. ERP system is usually consist of many modules such as CRM – Customer Relationship Management, HRM – Human Resource Management, SCM – Supply Chain Management, EPM – Enterprise Performance Management, BI – Business Intelligence etc. adapted to a wide range of business segments. In most cases ERP software is flexible and allows company to add functionality to the system by adding new modules in the future.

ERP integrates all the enterprise processes, and thus allows controlling and optimizing the business and its individual processes. ERP allows companies to operate more efficiently

and move on to the next and higher quality stage. Companies which implemented ERP are able to perform better and improve the various performance indicators (see Table I).

Because these systems affect so many aspects of a companies' internal and external operations, their successful deployment and use are critical to organisational performance and survival. However, implementations of ERP systems are one of the most

difficult investment projects because of the complexity, high cost and adaptation risks. Unfortunately, number of implementations and surveys (Aberdeen Group 2010, Panorama Consulting Group ERP Report 2011, Lithuanian ERP implementation experts' opinion, ERP users' survey conducted by authors) show that failure rate is still high, number of enterprises fail to fully realize their original purpose and benefits from ERP implementation are under the expected rate [4], [8], [9].

Table I. Sample business benefits derived from ERP [4]

Definition of Maturity Class	Mean Class Performance
Best-in-Class: Top 20% of aggregate performance scorers	<ul style="list-style-type: none"> ▪ 21% reduction in operating costs ▪ 19% reduction in administrative costs ▪ 17% reduction in inventory* ▪ 16% improvement in schedule compliance* ▪ 17% improvement in complete & on-time delivery
Industry Average: Middle 50% of aggregate performance scorers	<ul style="list-style-type: none"> ▪ 14% reduction in operating costs ▪ 10% reduction in administrative costs ▪ 11% reduction in inventory* ▪ 14% improvement in schedule compliance* ▪ 14% improvement in complete & on-time delivery
Laggard: Bottom 30% of aggregate performance scorers	<ul style="list-style-type: none"> ▪ 9% reduction in operating costs ▪ 5% reduction in administrative costs ▪ 11% reduction in inventory* ▪ 13% improvement in schedule compliance* ▪ 7% improvement in complete & on-time delivery

The most common ERP implementation project problems are inadequate feasibility studies and organizational maturity level evaluation, change management and training issues, weak project management, inadequate ERP software, which does not meet the needs of company, selection, underlining only ERP technical possibilities, rather than the emphasis on the needs of business processes, poor top management support, over-expectations, passive enterprises participation and involvement etc [8]. Thus, the main risk factors are internal and depend on the companies' ability to use and manage existing and newly acquired knowledge in this field.

Contemporary market increasingly demands companies that are more flexible and can quickly react to business environment changes. The struggle for leader's position requires organizations to be innovative in searching for new possibilities and modern decisions. Countries, regions, areas of economy and separate companies become the systems more oriented towards projects. The

correlation between the results of business process and the maturity of project-oriented system does exist. Therefore, organizations are acknowledged with Project and Program management in planning and operations processes. The maturity in project-oriented organizations and nations can be estimated and evaluated in terms of productivity with the help of maturity models [9].

Evaluation of project management maturity (PMM) as well as organizational maturity level in order to apply the optimal software for reaching the raised objectives is an up-to-date problem. Many consulting agencies have been set up which can help organizations in evaluating their „level of maturity“ according organization's ability to manage projects [12].

Experience shows that enterprises' knowledge in ERP implementation project field is too narrow and lack of interest in ERP implementation project aspects is noteworthy. ERP users mostly rely on ERP vendors and consulting companies' consultants. However, it is worth noting that company inside information is very valuable and is helpful in every step of ERP implementation project. Each wrong step may destroy a bunch of successful previous steps independently whether it



caused by lack of information or by inappropriate allocation of resources etc. All those reduce return on investment and benefit take-up rate. For these reasons, authors believe that active participation in ERP implementation project is essential and to increase benefit take-up rate. Thus, it is not enough to rely solely on ERP vendors and consultants for high ERP implementation project results.

Implementing an Enterprise Resource Planning (ERP) system is expensive and time consuming. A substantial cost is associated with pre-implementation involvement and training designed to encourage acceptance and effective implementation of the system. Contrary to conventional wisdom, extensive organizational investments in shaping pre-implementation attitudes do not always achieve the desired effects. Despite extensive time, money and effort, length of time with the firm and position had a greater impact on attitudes toward ERP capabilities, value, acceptance and timing than high levels of pre-implementation involvement [11].

Numbers of ERP implementation promoting models were proposed. The main disadvantages of these models:

- Existing models are incomplete – usually few installation steps are proposed and short list of each step tasks is presented. It is not an appropriate kind of support for the enterprises with no or very little knowledge in ERP implementation projects field. Thus, such models can not fully support enterprises, which are eager to participate in ERP implementation project actively.
- Existing models focuses on specific area – usually they are vendors' created models that focus on technical rather than managerial issues of ERP implementation. Thus, these models are created to support ERP vendors, but not ERP users.

Authors offer more complex ERP implementation project support model. This model is based on the active

Using this model, company acquires the knowledge in ERP implementation project field and is able to apply this knowledge to achieve maximum benefit.

IV. CONCLUSION

IT sector is developing rapidly and provides new opportunities for business. Dynamic business conditions stimulate IT application in business as it is an effective way to maintain business agility and to gain a competitive advantage.

ERP implementation project is one of the examples of the IT application in business, which encourages business processes integration, improvement and increases business value. However, experience shows that enterprises' knowledge in ERP implementation project field is too

enterprise participation and involvement as well as maximizes ERP implementation project benefit take-up rate. Model consists of four stages – identification of investment opportunities, ERP implementation project planning, ERP project implementation, ERP exploitation (see Fig. 2).

In the identification of investment opportunities stage company assesses the level of need and preparedness to ERP implementation projects. Company can predict the level of benefit take-up by determining organizational maturity level. The higher level of maturity, the more benefit company gains.

In ERP implementation project planning stage project sketch is designed, detailed task list is made, responsible persons and their roles are appointed, risk management plan, budget plan, communication plan, change management, training plan, monitoring plan and corrective action plan is prepared.

In ERP implementation stage concrete action sequence of ERP software and ERP vendor selection is proposed, the role or project team during ERP implementation is described, effective training is characterized, importance of business process reengineering (BPR) is emphasised.

In ERP exploitation stage continuous process improvement approach is proposed and concrete ERP benefit realization level control and improvement methodology.

First of all, proposed model is informational as ERP user learns about various ERP implementation project aspects. Secondly, proposed model is support measure as different qualitative and quantitative tools (organizational maturity level concrete risk management methodology, force-field diagram as change management tool etc.) as well as concrete action sequence to increase the benefits of project are proposed.

Strengths of proposed model: complexity, informativeness, quantitative and qualitative tools, and most importantly, active enterprises participation in ERP implementation project promotion. Higher level of opportunity control of progress of project allow enterprises increase benefit take-up rate. narrow and they need support in order to participate actively and fully realize their original purpose of ERP software implementation. Thus, knowledge management problems in this field have to be resolved.

Authors proposed model is expected to support ERP users or enterprises implementing ERP and to achieve better ERP implementation project results as well as to increase benefit take-up level.

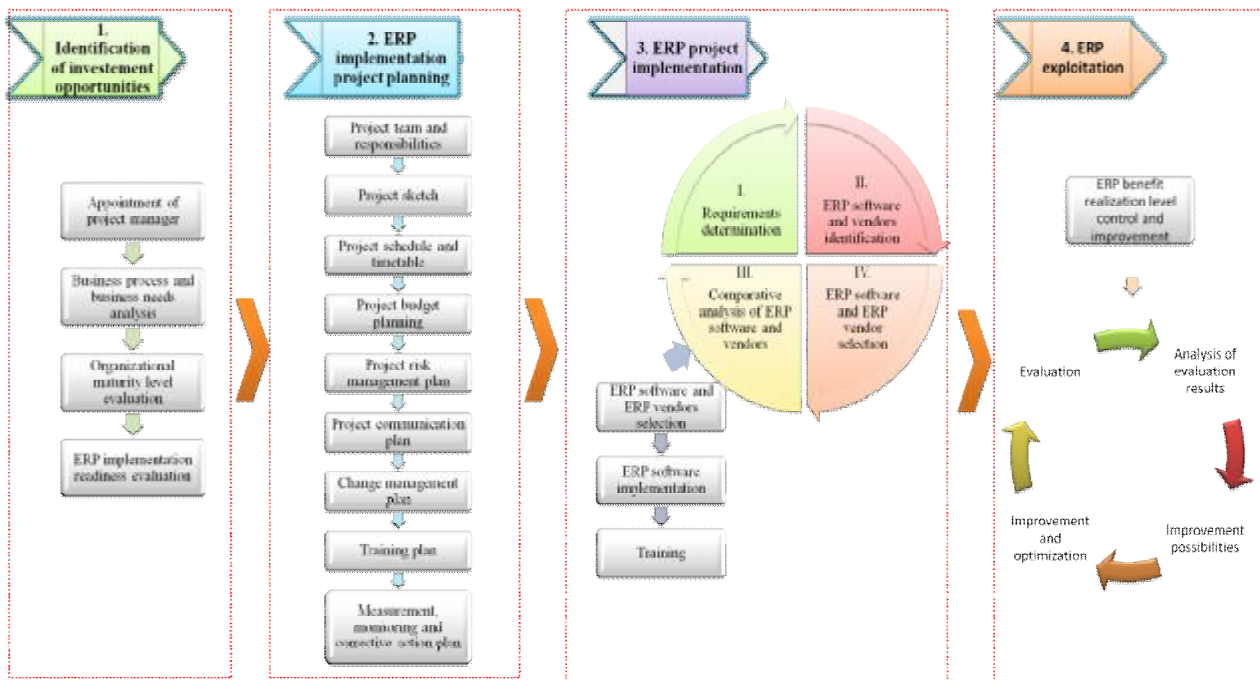


Fig. 2. ERP implementation project support model [Made by authors]

REFERENCES

- [1] Allee, V. 2010. Increasing Business Agility in a Complex World. Value Network Insights, November 2010. Available from internet: <<http://valuenetworks.com/public/item/261609>>.
- [2] Business and IT Alignment: An Oracle View. An Oracle Thought Leadership White Paper, September 2009: p. 19.
- [3] Davidavičienė, V. Elektroninis verslas. 2009, Vilnius: Technika. 465 p.
- [4] Jutras, C. Standardized Best Practices and Technology Adoption in the AEC Industry [online]. 2010. Available from internet: <http://www.primavera-tr.com/docs/papers/aberdeen_report_069877.pdf>.
- [5] Jonasson, H. Determining Project Requirements. Taylor&Francis Group, New York, 2008. 300 p.
- [6] Hinssen, P. Business / IT Fusion. How to move beyond Alignment and transform IT in your organization. Mach Media NV/SA, 2008, p.276
- [7] Mendez, E. 2010. The Age of Agility. Credit Union Magazine, July 2010: 76. Available from internet: <<http://web.ebscohost.com/bsi/pdf?hid=18&sid=23caf2a5-c634-41d0-a865-e95c6f39c0aa%40sessionmgr14&vid=1>>.
- [8] Panorama Consulting Group 2007. In Search of Business Value: How to Achieve the Benefits of ERP technology. Available from internet: <http://panorama-consulting.com/Documents/ERP_Benefits_Realization.pdf>
- [9] Project Management Group. Final Report: The Maturity of Project-Oriented at Region [online]. 2007. Available from internet: <http://www.wu.ac.at/pmg/forschungsprojekte/abgeschlossen/posk-at_ab.pdf>.
- [10] Klaus H, Rosemann M, Gable GG. What is ERP? Inform System Front 2000; 2(2), p. 141.
- [11] Sue Abdinnour-Helm, Mark L. Lengnick-Hall and Cynthia A. Lengnick-Hall. Pre-implementation attitudes and organizational readiness for implementing an Enterprise Resource Planning system. European Journal of Operational Research, Volume 146, Issue 2, 2003, p. 258-273.
- [12] Tamošiūnienė R., Kajutyte A. Peculiarities of project management software implementation in a company, 2011. Triavna. International Scientific Conference "Project Management" April 15-16, 2011, Triavna, Bulgarija. p.p. 82-91.
- [13] Vlek, M. Business Agility, in Oracle day, 2010 conference. Vilnius, October 19th 2010.



Business Process Modeling for effective Cost Management.

Karina Marinska¹, Konstantins Didenko²

Abstract The article deals with on the structure of business proceses, improvement and relevance of this approach. There are differences between the methods approach in managerial accounting, and shows the main factors influence the methodology of costing. The article shows the activity based costing system model, methodology of planning activities and functions, which allow to coordinate this figures and determine the regularity between them. Much attention is devoted to the modeling of functions within the framework of optimization of business processes. The article concludes that require further study of the function , need for quality analysis and management.

Keywords - activities, method, costing, business processs, modeling.

I. INTRODUCTION

Effective cost management becomes more and more topical for companies, especially taking into consideration macroeconomic situation in Latvia – decrease of GDP and inhabitants' purchasing power, labour force migration abroad, limited possibilities to attract foreign investments. During economic downturn every company attempts to mobilise its inner resources in order to maintain its existence, therefore, the importance of cost management increases as this process ensures rational use of limited resources and reduction of products' and services' prime cost in order to gain successful competitive advantage.

Business processes modelling is the source of information on company's operations and functions, connections between them, moreover, this information can be organised into data base that can be used to solve different management problems, conduct cost management and cost accounting calculations.

II. CRITERIA FOR MANAGEMENT PROCESSES MODELLING OF THE ENTERPRISE

The development of business processes' concept is influenced by environment factors: economics, politics, legal acts, social and cultural factors, technology, government etc. Factors that influence the company should be taken into consideration for modelling business processes and functions. This allows to determine necessity of functions that can appear in comparative evaluation and in analysis of company's operations.

Functional modelling of business processes is a fundamental element of conceptual analysis, certain

projection of information systems including management systems' modelling is done. Development of functional model will allow to deeply identify business processes, determine information flows, identify weak points in the company etc.

For every company and organisation it is possible to identify the list of essential functions that will be typical for such kind of companies or organisations. Modern management methodology first of all must solve the problem of flexibility and ability to adapt continuously to the external environment.

Therefore business processes analysis and modelling allows to:

- evaluate business processes and its components of the organisation,
- identify sources of resources,
- check changes in company's function resources consumption,
- optimise volume of functions' consumed resources and avoid development of unnecessary functions.

Following stages can be introduced in functional modelling of business processes:

- development of concept and company's business processes system according to functions;
- functions development;
- Structuring.

Moreover, there is another range of environment factors that do not influence operations directly, but they determine the direction of managerial decisions. The role of economical, political, legal, social, cultural, technological, environmental and geographical factors is rather important. The importance of environmental factors is increasing due to the fast increase in complexity of social systems' relations (social, economical, political etc.). External environment dictates strategies and tactics of organisations.

Internal environment has developed under changing factors influence on functions. It is the structure of the company, its resources. Despite the fact that these factors function inside the organisation, not always they are under direct control of the company and its management. Operations of the organisation is also dependant on energy, information and other external resources.

Control system of business operations and its elements is tightly connected with the concept of management around which fundamental elements of organisation and company should be consolidated:

- all categories of business processes and their costs;
- operations' cost centres;
- planning and budgeting system;

- managerial follow-up system that is developed based on cost centres and budgets;
- strategical management system that is based on value chains analysis, strategical positioning and analysis of cost comprising factors;
- information flows (documentation circulation) that can provide information for managerial decisions;
- control and analysis of company's results;
- analysis of deviations' reasons and controlling the development of functions.

Integrated components of company's business processes model can be interpreted in the following way:

- model of business processes that are included in chosen classes;
- management system model for every level of business processes and chosen groups for business processes levels;
- the model of quality provision system.

Business processes models, managerial systems and quality provision systems' models for companies can be developed using different instruments, different graphical methods. The aim of the model – achieve better results in following directions of company's operations: costs indicators, efficiency and productivity.

III. RESULTS

The model of company's functions is graphical depiction of its functions composition and interaction (presented in hierarchical structure) or mathematical depiction (matrix). In the graphical representation of functional model main functions of the company are situated on the first (top) level, on the second level there

are basic functions, on the third and following levels there are supplementary functions of the company and its units.

ABC analysis anticipates following actions:

- cost division between cost centres, cost attribution to main operations and supplementary operations, cost formation for products, clients categories, sales channels;
- analysis of products, services and branches profitability according to cost centres;
- discovery of non-efficient processed, actual costs comparison with historical indexes and aimed indexes.

Several stages, management levels (degrees) and connections are identified in the organisational management structure – horizontal and vertical, their main meaning is to coordinate actions of people that are unified by the structure of the company in order to achieve aims of the company. Author divides management levels into 3 main categories:

- 1) strategical level (in literature term “institutional level” can be found, but in author's opinion it is more attributed to large companies);
- 2) managerial level;
- 3) technical level.

Author notes, that in all management levels managers execute not only managerial functions, but also executing functions, although the higher the level the less is the weight of executing functions. In the model that the author have developed the weight of these functions in highest management level is around 10%, in middle level – 50%, but in the lowest level – 70% from total volume of functions (image).

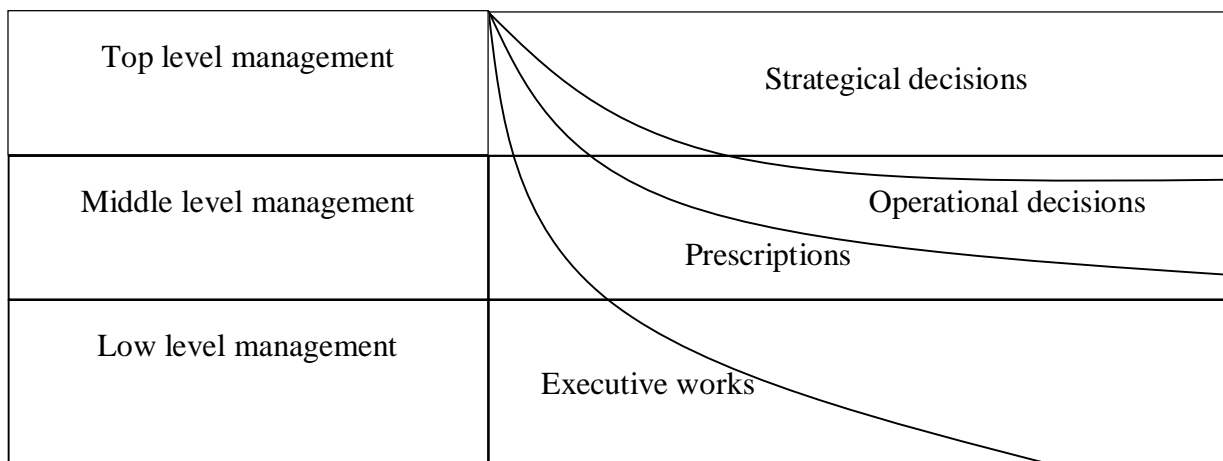


Fig.1. Classification of managers' time expenditure according to management levels

Such division of time is determined by the fact that managers of all levels perform two types of tasks: managerial tasks and specialised tasks. This means that manager of any level uses part of his time for decision making and the other part of his time for decision making

in his specialisation. As we can see in the image 2.2 at the top levels the weight of specialisation decision decreases and the weight of managerial tasks increases.

Every company has functional division of business functions, where associated costs can be accumulated. Author offers to arrange these functions according to management levels in order to use this model for cost

division for attribution to cost objects according to ABC method. Management range is mostly defined by delegation which means that some managerial functions are delegated to lower level managers retaining

responsibility. Division of activities between management levels according to author's model is represented below:

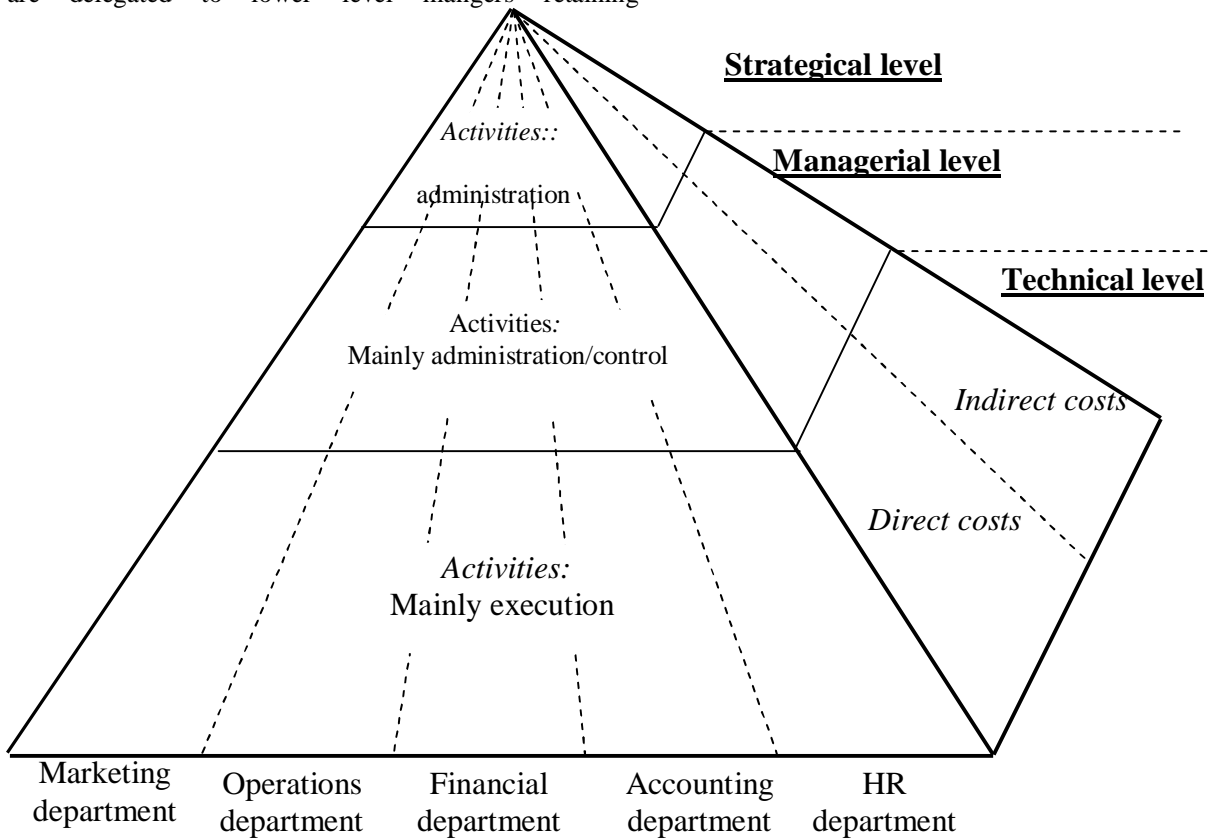


Fig.2. Activities division between management levels

The developed model is based on operations functional fields (marketing, accounting etc.) that correspond to company's sections, departments or units, these fields are realized at every management level. It can be seen that depending on management level both the content and the direction of activities changes: the higher the level the more activities are connected with administration and the less they are connected with executive works and vice versa.

The model has three management levels that are characteristic to small and medium sized enterprises in Latvia: strategical level, managerial level and technical level. Strategical level has the least number of managers in comparison with other levels and usually it has all or most of shareholders depending on the size of the company and shares number. Common positions are president, executive board member, chairman of the board, executive director, director deputy etc.

Managerial level of this model consists of middle management that subordinated to the top level managers and organises the work of lower managers, coordinates and controls them. Managers of this level are usually managers of departments, managers of functional units etc.

Technical management level is represented by low level managers. These managers usually supervise the work of several employees. In small companies there might not be

managers on technical level and in such case the workers of technical level are directly subordinated to middle management.

The specifics of different management levels lies in the fact that top management is dominated by interests and needs of shareholders, middle management is dominated by interests of clients, but in low management the most important is the result of executed works.

Such division of interests and priorities is explained by the fact that top management works to gain profit and maximise shares value as they own the capital or their remuneration and bonuses are greatly dependant on operations' results.

Middle management focuses on clients as usually they interact with client a lot and their results are dependant on number of attracted clients, clients' satisfaction and loyalty. Technical level employees (including lower management) focus on executing prescriptions and assignments of higher level managers and specific works results. In manufacturing companies workers of main processes usually do piecework where the volume and quality are most important.

IV. CONCLUSION

On of the problem of small and medium companies of Latvia that is a substantial obstacle for long term development and competitiveness is the fact that top and middle management is focused on costs decrease and not on costs management. This problem become especially important during economics downturn. In short term it allows to save resources and increase profit, but in the long term perspective it will inevitably lead to value reduction for the client. Therefore it is important for SME managers to change their way of thinking and pay more attention to development. And one of important components of this development is cost management that allows to optimise costs without value decrease for the client.

REFERENCES

1. Lapsley, I., and J. Pallot. 2000. Accounting, management and organizational change: A comparative study of local government. *Management Accounting Research* 11:213-229.
2. Cynthia Dereli. 2003. Strategy and strategic decision-making in the smaller local authority. *The International Journal of Public Sector Management* Vol. 16 No. 4, pp. 250-260
3. Robert Johnston, Lin Fitzgerald, Eleni Markou, Stan Brignall, (2001) "Target setting for evolutionary and revolutionary process change", *International Journal of Operations & Production Management*, Vol. 21 Iss: 11, pp.1387 – 1403
4. Joshua Abor, (2007) "Industry classification and the capital structure of Ghanaian SMEs", *Studies in Economics and Finance*, Vol. 24 Iss: 3, pp.207 – 219
5. F. Backlund, J. Hannu, (2002) "Can we make maintenance decisions on risk analysis results?", *Journal of Quality in Maintenance Engineering*, Vol. 8 Iss: 1, pp.77 – 91
6. John M. Trussel, Larry N. Bitner, (1998) "Strategic cost management: an activity-based management approach", *Management Decision*, Vol. 36 Iss: 7, pp.441 – 447
7. Kaplan, R.S.1990b, 'The Four-Stage Model of Cost Systems Design', *Management Accounting*, February, pp.22-26.

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Models of Business Efficiency Management: BSc as the Main Aspect of Crisis Management

Модели управления эффективностью предприятия: BSc как основной аспект антикризисного менеджмента

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Ирина Могорит¹, Константин Диденко², Анатолий Фагиденко³

Abstract. Crisis is a complex and many-faceted notion, which cannot be described using two-three words or even definitions. As a result, crisis management (CM) is a rather complex phenomenon as well. Some of the main problems of CM are monitoring, control, as well as feedback creation at an enterprise. Thus, the objective of this article is to find models of business efficiency management for CM at small and middle-sized enterprises. It can be considered one of the main aspects necessary for performing CM. In order to accomplish the set objective, different models have been analysed. In addition, particularities of one of them – Balanced Scorecard – have been shown, because it can implement CM tasks in the most effective way. Altogether, it allowed evaluating positive and negative sides of the model chosen by the authors.

Key words: crisis management, index system, efficiency, management model.

ВВЕДЕНИЕ

Рассматривая и анализируя различные аспекты антикризисного управления (АУ), был сделан вывод, что данную систему внедрить гораздо легче, если использовать модель управления эффективностью предприятия. Исходя из этого, любое управление должно дополняться антикризисным, а содержание и методы эффективного и антикризисного управления есть две стороны одной медали.

Для решения данной проблемы авторы предлагают рассмотреть различные модели, а также показать особенности одной из них – BSc (Balanced Scorecard), т.к. она может наиболее результативно реализовать поставленные задачи АУ.

I. Ф ОДЕЛИ УПРАВЛЕНИЯ ЭФФЕКТИВНОСТЬЮ КОМПАНИИ

В мировой практике существуют известные модели управления эффективностью деятельности компании. Нужно отметить, что они отличаются друг от друга по принципу построения и ориентированы на различных пользователей. К таким моделям управления эффективностью относятся:

- модель Европейского фонда управления качеством (European Foundation for Quality Management, EFQM);
- призма эффективности (The Performance Prism);

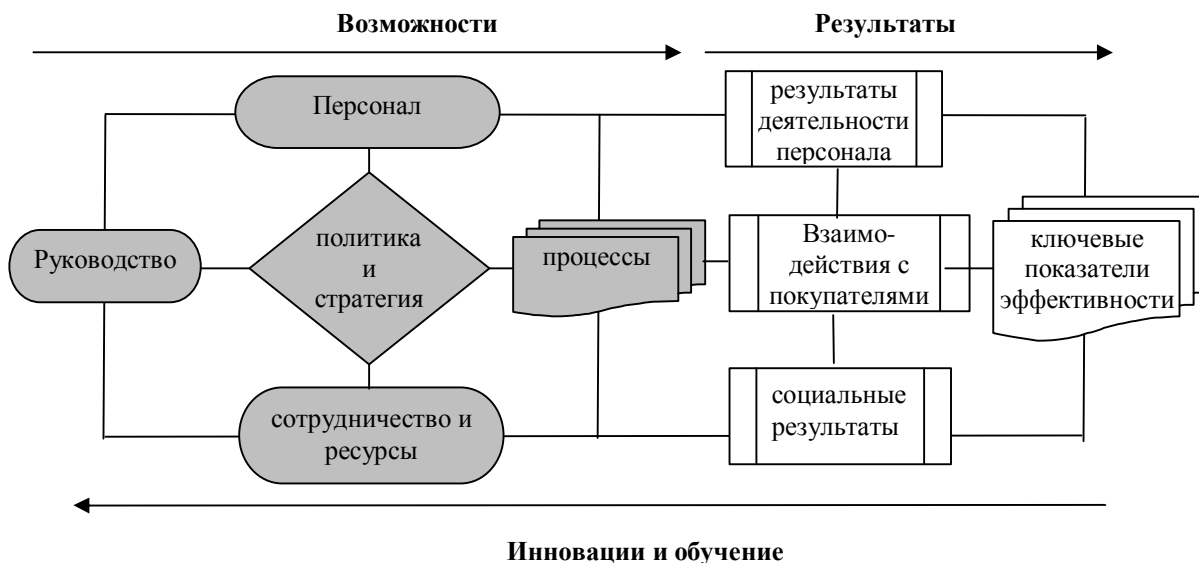
- панель управления (Tableau de Bord).
- модель оценки эффективности компании на основе ROCE и WACC
- сбалансированная система показателей (BSC)

Концепция EFQM предполагает содействие развитию бизнеса за счет оценки его сильных сторон и определения направлений деятельности, в которых для достижения целей необходимы улучшения. В модели EFQM выделено девять блоков (см. рис. 1). Управление компанией осуществляется на основании воздействия на показатели пяти исходных (или, как называют их авторы модели, «ресурсных») блоков: руководство, персонал, политика и стратегия, сотрудничество и ресурсы, процессы. Результаты управления бизнесом сгруппированы в четыре «результатирующих» блока показателей: результаты деятельности персонала, взаимодействия с покупателями, социальные результаты, ключевые показатели эффективности деятельности компании. Отличительной особенностью модели EFQM является ориентация на социальный результат, то есть результат взаимодействия с обществом. Поэтому данная модель быстро перешла из частного сектора в правительственные и общественные организации. Сегодня модель EFQM используется в более чем 20 тыс. английских и европейских компаний.

Tableau de Bord позволяет увязать стратегию и тактику компании. В этой модели по аналогии с системой сбалансированных показателей используются как финансовые, так и нефинансовые показатели, ответственность за исполнение которых четко распределена среди менеджеров компании. [9]

Для каждого подразделения могут быть предусмотрены свои цели и показатели эффективности.

Все показатели делятся на стратегические и диагностические. Стратегические показатели отражают фактические результаты деятельности компании по достижению намеченных целей (достигнуты или нет). Диагностические позволяют отследить ход реализации стратегии (динамику успешности достижения целей). На основе диагностических показателей принимается решение о необходимости корректировки мероприятий по реализации стратегии.



1. Рисунок. Модель EFQM

Компания, применяющая данную модель, может оценивать результаты работы управленческого персонала любого уровня и сравнивать их между собой.

Преимущество модели в том, что она подходит для бизнеса любого масштаба, для любой отрасли и структуры управления. Принципиальное отличие Tableau de Bord от системы сбалансированных показателей — отсутствие жесткой группировки показателей по проекциям. [9]

Призма эффективности в большей степени предназначена для тех пользователей, кто заинтересован в результатах деятельности компании в целом (stakeholders). Это могут быть инвесторы, покупатели и посредники, персонал компании, ее поставщики, регулирующие органы. Призма эффективности позволяет выявить цели деятельности организации, установить показатели их достижения, разработать систему измерения, обеспечить реализацию разработанной стратегии (см. рис. 2).

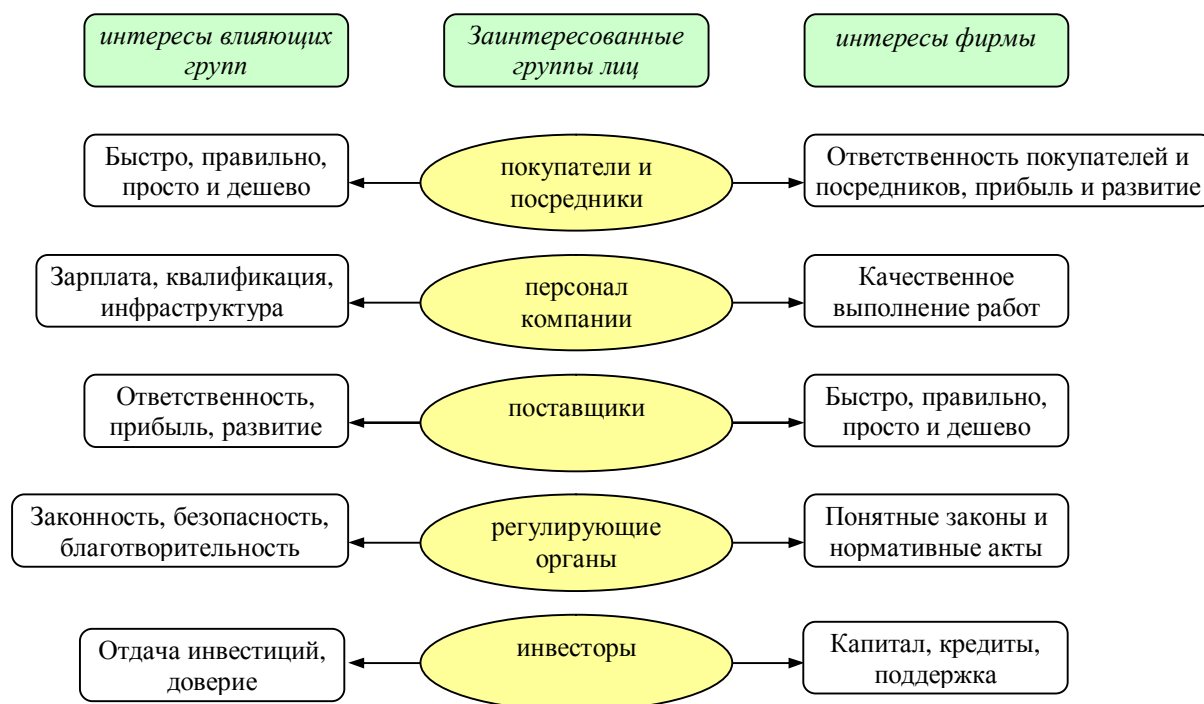


Рисунок 2. Призма эффективности

По данным авторов, описанные выше модели (EFQM, The Performance Prism, Tableau de Bord) на латвийских предприятиях не используются.

Модель оценки эффективности компании на основе ROCE и WACC. Даже если компания получает прибыль, это не обязательно свидетельствует о том, что



ее деятельность эффективна. Не менее важно, чтобы бизнес приносил доход, который покрывал бы затраты на инвестированный в него капитал. Для этого довольно удобно использовать в качестве ключевого показателя ROCE (Return on Capital Employed, рентабельность привлеченного капитала). Обычно он применяется в комплексе с WACC (Weighted Average Cost of Capital, средневзвешенная стоимость привлеченного капитала), поскольку превышение ROCE над WACC говорит о том, что бизнес действительно доходный. Можно выделить следующие этапы внедрения системы показателей, основанной на ROCE и WACC[9]:

1. Декомпозиция ROCE и WACC до ключевых показателей.

2. Расчет целевых значений показателей исходя из планируемого уровня рентабельности и распределение ответственности за их достижение среди менеджеров компании.

3. Разработка политики управления и плана мероприятий по достижению поставленных целей.

4. Вводится система мотивации ответственных за показатели. Обычно величина премии зависит от процента исполнения заданного показателя.

Следует отметить, что модель оценки эффективности компании на основе ROCE и WACC может быть использована также при принятии решений о покупке бизнеса, отборе и оценке потенциальных объектов инвестиций, эффективности отдельных подразделений в структуре холдинга, а также для оценки бизнес-планов при открытии нового бизнеса.

Balanced Scorecard (BSc)(сбалансированная система показателей) — это система стратегического управления организацией на основе измерения и оценки ее эффективности по набору показателей, подобранному таким образом, чтобы учесть все существенные (с точки зрения стратегии) аспекты ее деятельности (финансовые, производственные, маркетинговые и т. д.). Система BSc транслирует миссию и общую стратегию организации в систему взаимосвязанных показателей.[3]

II. ОСОБЕННОСТИ СИСТЕМЫ УПРАВЛЕНИЯ НА ОСНОВЕ BALANCED SCORECARD (BSC)

Сбалансированная система показателей (Balanced Scorecard), так же как и реинжиниринг, «пришла со стороны» — из среды организационных консультантов. И хотя BSc была практически сразу же использована в проекте «б сигма» «Дженерал Электрик» как один из инструментов системы менеджмента качества и именно вследствие успеха этого проекта приобрела популярность, она подается как совершенно отдельная методология развития компании.[10]

Преимущество BSc состоит в том, что поощрение и вознаграждение работников в процессе достижения долгосрочных целей организации происходит на основе как финансовых, так и нефинансовых показателей.

Рабочие показатели дают краткую, но полную иллюстрацию продвижения организации к достижению целей и выполнению задач. Организации, выбравшие BSC, сообщают о различных уровнях успешности ее применения как средства мотивации и обратной связи.

Создатели системы BSc Роберт Каплан (Robert Kaplan) и Дэвид Нортон (David Norton) (авторы концепции, впервые представившие ее в 1992 г.) утверждают, что для успеха в конкурентной борьбе в информационный век нужны новые навыки. Включив в систему оценки результатов все критические факторы успеха, организация будет лучше видеть, каким путем можно преодолеть кризис. [1]

Однако только финансовых показателей, используемых при управлении деятельностью компании, для реализации разработанной стратегии может быть недостаточно. Не менее важны для бизнеса развитие отношений с клиентами, управление персоналом, качество продукции, эффективность внутренних бизнес-процессов, внедрение и развитие информационных систем, то есть те аспекты деятельности, которым сложно дать стоимостную оценку.

В рамках системы сбалансированных показателей выделяют четыре основных аспекта деятельности компании (четыре группы показателей), которые дают ответы на следующие вопросы[7]:

- как компанию оценивают акционеры;
- как ее оценивают клиенты;
- каким образом можно добиться улучшения качества деятельности;
- какие процессы могут обеспечить компании исключительное положение на рынке.

BSc добавляет к традиционным финансовым аспектам нефинансовые: удовлетворенность клиентов, внутренние бизнес-процессы, обучение и рост. Итоговые показатели (the lagging indicator) смешиваются с текущими (the leading indicator), так как, согласно Каплану и Нортону, итоговые показатели без текущих умалчивают о том, как именно получены итоги[3].

Сбалансированный комплекс рабочих показателей это лаконичный, но полный рассказ о достижениях и итогах продвижения к целям, общая картина происходящего в организации. Увязав эти показатели с вознаграждением, BSc помогает сотрудникам принимать наилучшие решения в интересах компании.[8]

Ключевые особенности системы управления на основе BSc следующие:

- в систему входят показатели, относящиеся ко всем стратегически важным аспектам деятельности (как минимум их четыре);
- причинно-следственная связь всех показателей в системе;
- причинно-следственная связь показателей, входящих в систему, и стратегических задач компании;
- связь результирующих показателей и определяющих факторов;
- связь всех показателей с финансовыми результатами деятельности.

Все эти особенности полностью совместимы с сутью АУ и решают большую часть его проблем.

Результатом внедрения BSc Р. Каплан и Д. Нортон видят создание организации, ориентированной на выполнение стратегии. Согласно исследованию американского Institute of Management Accountants, IMA (1999 г.), в компаниях, использующих систему Balanced Scorecard, менеджмент оценивает эффективность своей системы управления почти на балл выше (по пятибалльной шкале), чем менеджмент не использующих данную систему компаний. В то же время, многие менеджеры, попробовавшие внедрить эту систему, отзываются о ней как о гораздо более сложной, чем кажется на первый взгляд.[2]

Это, конечно же, существенный недостаток для малого и среднего бизнеса, но не является неразрешимой проблемой.

Р. Каплан и Д. Нортон совершили маленькую научную революцию в менеджменте, дополнив наше понимание (систему координат) бизнес - пространства новыми измерениями. Однако они не претендовали на то, что предложенная ими система из четырех координат («Финансы», «Маркетинг», «Персонал», «Внутренние процессы») полностью описывает все бизнес-пространство. Они всего лишь указали на то, что система измерения, достойная современной компании, должна включать в себя, по крайней мере, 4 указанных измерения и что в зависимости от конкретной ситуации в разных компаниях могут быть приняты и другие, дополнительные измерения. Это вполне похоже на современную науку. Однако, в отличие от фундаментальной науки, где в гипотетическом «пятом измерении» (или в любом другом n-ном измерении) доподлинно что-то измерить пока невозможно, в экономике компании, использующей концепцию Balanced Scorecard, вполне успешно применяют системы измерения большей размерности.

Согласно исследованию, которое легло в основу методики Balanced Scorecard, в большинстве случаев, когда реализация стратегий не принесла ожидаемых результатов, причиной не удач было не качество самих стратегий, а их плохая реализация (по данным исследований, это большинство составляет до 70% от всех неудачных реализаций). [3]

BSc и TQM

Сейчас часто проводят параллель между BSC и TQM. Это выглядит следующим образом: [10]

BSc реализует управление по целям — это полностью соответствует идеям современного менеджмента качества;

BSc рассматривает 4 категории целей — рынок (value proposition для клиентов компании, расширение позиций, маркетинг), финансы (финансовые показатели деятельности), управление (внутренние бизнес-процессы), ресурсы (обучение и рост персонала, материальные ресурсы и технологии), такая система целей полностью соответствует «логике качества»;

BSc считает эти 4 категории целей равноправными — а вот здесь следует отличительная особенность. Можно привести цитату: Д. Т. Керенс,

исполнительный директор компании «Ксерокс» (80-е гг. XX в.)

«Уравнивание в правах» всех трех показателей было ошибкой. Тем более что в их равнозначность для руководства все равно никто не верил. Все считали, что прибыль — прежде всего. Теперь я глубоко верю в то, что необходимо сосредоточить все внимание на непосредственном потребителе продукции и это само по себе приведет к финансовым успехам. Думаю я так с самого начала, мы сэкономили бы минимум год, а может быть, и два...»

Итак, в результате, главная задача BSc:

BSc позволяет Руководству и Учредителям оценить степень достижения стратегических целей предприятия посредством разработки и мониторинга финансовых и нефинансовых показателей, оценивать результаты их деятельности с точки зрения реализации стратегии, используя ключевые показатели эффективности[4].

Общая вышесказанное, приходим к выводу, что без BSc в АУ не обойтись. Ведь кризис — это из области стратегии, оценить возможности его наступления, и, тем более, его последствия, необходимо. Проще всего это сделать, используя различные систематизированные, т.е., сбалансированные группы показателей.

III. СФЕРЫ И ВОЗМОЖНОСТИ ПРИМЕНЕНИЯ BSC

Итак, идея Balanced Scorecard основывается на двух ключевых гипотезах:

1. Опыт большого числа компаний показывает, что «правильная» (т.е. хорошо организованная) реализация стратегий имеет более высокое значение, чем качество самих стратегий.

2. Использование в управлении одних только финансовых показателей не позволяет успешно следовать цели долгосрочной максимизации стоимости компании. [3]

Что, как мы выяснили, полностью соответствует АУ.

BSc может применяться для достижения таких целей как:

- разъяснение принятой стратегии, в том числе и стратегии АУ;
- доведение стратегии до сотрудников организации;
- согласование со стратегией задач подразделений и персональных целей сотрудников;
- увязка стратегических задач с долгосрочными целями и годовым бюджетом, включив туда затраты по АУ;
- выявление и координация стратегических инициатив;
- периодический и систематический пересмотр стратегии;
- установление обратной связи для корректировки стратегии, что обязательно для успешного преодоления кризиса.

Использование системы сбалансированных показателей призвано обеспечить целостность системы управления бизнесом, т.е. обеспечить принятие управленческих решений по отдельным направлениям



в контексте общих целей и задач компании. При этом, с одной стороны, эффект от внедрения системы сбалансированных показателей зависит от того, насколько рационально эта система будет встроена в общие процессы ведения планирования, учета, контроля, анализа и принятия решений. С другой стороны, если сложившаяся практика ведения учета и контроля не дает необходимой информации для управления бизнесом, внедрение системы сбалансированных показателей должно включать изменение и оптимизацию документооборота, но лишь в той мере или настолько растянутое во времени, в которой это не создает рисков текущего управления. [10].

Соответственно, при выборе системы сбалансированных показателей необходимо учитывать как используемые технологии ведения учета и контроля, так и допустимые границы их изменений. В принципе принятая система сбалансированных показателей может модифицироваться по мере изменений общих процессов ведения учета и контроля, если изменение этих процессов может быть реализовано только поэтапно и только на протяженном временном отрезке.

IV. РАЗРАБОТКА СИСТЕМЫ ПОКАЗАТЕЛЕЙ ДЛЯ МАЛОГО И СРЕДНЕГО БИЗНЕСА: РЕАЛЬНЫЕ ПРОБЛЕМЫ

Обобщив различные показатели и модели, авторы предлагают использовать систему показателей, для АУ на основе BSc, при помощи которых любой пользователь может представить, что ждет его предприятие, разумеется, с определенной долей вероятности. Предлагаемая система имеет ряд преимуществ, таких как:

1. Экономия времени;
2. Экономия денег - не нужны лишние специалисты;
3. Анализ сразу группы и даже групп показателей;
4. Возможность выбора нужных показателей;
5. Возможность изменения видов анализа;
6. Возможность интерпретации данных – если есть необходимые данные;
7. Простота анализа – видимая, т.е. для пользователя, а на самом деле используется серьезные математические методы;
8. Доступ к конечному результату в любое время.

В BSC рассчитывается итоговый рейтинг (*Score*) по взвешенным показателям по каждой из проекций. Для выделенных и установленных для наблюдения уровней управления оформляется карта показателей (*Score card*), в которую заносятся текущие значения показателей проекций, допустимые значения показателей проекций, текущие значения рейтинга и допустимые границы изменения рейтинга.

Методология предусматривает не только измерение показателей и их анализ, но и проведение корректирующих и предупреждающих действий.

Можно выделить следующие ключевые факторы успеха применения системы показателей как инструмента управления бизнесом:

- система не должна быть избыточной;
- система должна быть прозрачной — правила расчета показателей должны быть четкими и базироваться на «наблюдаемых» значениях измеримых показателей;
- методы достижения целей должны эффективно корректироваться на основании информации об отклонении результатов деятельности от целевых показателей;
- система должна быть гибко настраиваемой под изменяющиеся цели и задачи предприятия;
- система мониторинга, анализа и контроля, установленных сбалансированных показателей, должна использовать общие процессы учета и контроля, реализованные на предприятии;
- должен быть принят согласованный план изменения процессов ведения учета, ориентированный на повышение управляемости компании, повышение эффективности издержек учета;
- применяемые технологии мониторинга, контроля и анализа должны быть достаточно гибкими для использования в изменяющихся условиях управления бизнесом.

Для того чтобы в управлении применять систему показателей, необходимо, чтобы управление компанией строилось с использованием следующих основных принципов:

- наличие цели — цель сформулирована и документально оформлена;
- декомпозиция общей цели на цели и задачи различных уровней и направлений управления — формулировки целей являются четкими и понятными для руководителей и для персонала соответствующего уровня/направления управления;
- наличие механизма достижения — сформулирован, документирован и понятен механизм (метод) достижения поставленных целей и решения задач, составлен и утвержден бизнес-план;
- измеримость цели — планом утверждены целевые значения, являющиеся индикаторами достижения цели;
- наличие записей — ведутся и поддерживаются в рабочем состоянии документальные записи количественных показателей, соответствующих заявленным целям;
- наличие процесса анализа — на соответствующем уровне проводится регулярный анализ достижения поставленной цели, результаты анализа и выводы документируются;
- результативность управления целью — по результатам анализа разработаны, осуществлены и документально признаны результативными корректирующие и/или предупреждающие мероприятия;
- пересмотр набора и значений целевых показателей — сформулирован, документирован и понятен механизм (метод) изменения набора и значений целевых показателей, при необходимости качественного изменения цели;
- согласованность — установлены допустимые границы изменений целевых показателей для задач

«низкого уровня», которые гарантируют достижение целевых показателей «высокого уровня».

Неправильным было бы не рассмотреть минусы предлагаемой системы.

1. В первую очередь, это, конечно же, наличие данных, причем подробных, иначе возможны неправильные прогнозы. Это возможно практически только в одном случае – если систему антикризисного управления и, желательно, систему показателей вводить на начальном этапе работы предприятия.

2. Наличие программного обеспечения, что понесет необходимые, правда, доступные расходы.

3. Хотя какое-то понятие о показателях и их значениях. Как показали исследования, многие предприниматели (представители малого бизнеса) даже представления не имеют о показателях, кроме как рентабельности, а некоторые и даже о рентабельности не слышали. Конечно же, таким „предпринимателям” очень сложно помочь, хотя, в принципе, возможно. К сожалению наш, латвийский малый бизнес, в большинстве своем, находится именно в таком состоянии, и тем не менее, ему тоже надо помогать, тем самым спасая экономику в целом. И, впоследствии, этот бизнес выйдет на новый уровень.

4. Не все предприниматели считают нужным использовать подобного рода системы, объясняя это тем, что я и так могу представить, как будет развиваться мое предприятие в частности, и рынок, в целом. Но почему бы хотя бы ради любопытства не сравнить свои представления и работу программы, ведь это не так сложно?

Это актуально для малого бизнеса, где предприниматель и директор, и администратор, и бухгалтер, в общем, ему практически не до качественного анализа, и, тем более, прогнозирования.

По мнению многих, BSc все-таки очень полезная вещь. BSc воспитывает многих латвийских менеджеров, которые вообще не привыкли видеть

других показателей, кроме финансовых, приучает их к «логике качества». Но:

- в «чистом виде», т.е. в полном соответствии с идеями Каплана и Нортонa, BSC можно внедрять только на развитых предприятиях, имеющих действующую и эффективную Систему менеджмента качества а таких у нас в стране немного, — и руководители, и сотрудники уже настолько вовлечены в процессы менеджмента качества, в процессы повышения удовлетворенности потребителей, что поверят, что не «прибыль прежде всего»;

- для «обычных» компаний мы можем только рекомендовать внедрять BSc в «модифицированном» виде. [10]

Чего должны касаться модификации?

Во-первых, не рекомендуем «взвешивать» показатели и считать суммарный рейтинг (Score). Считаем, что слишком велик риск повторения ситуаций с критериями соревнования. Лучше управляться с показателями по отдельности. Во-вторых, рекомендуем к финансовым показателям добавлять отдельной строкой прогнозные финансовые показатели с учетом потерь качества из-за низкой удовлетворенности потребителей.

V. АЛГОРИТМ РАЗРАБОТКИ СИСТЕМЫ

Один из основных вопросов - Как разработать систему ключевых показателей деятельности.

Проект внедрения Сбалансированной системы показателей - это создание действия механизма компании на пути к реализации стратегических целей. [4]

Типовой проект разработки BSc включает 9 этапов. Эти этапы идут в определенной последовательности. Отобразим на схеме в виде пирамиды.



Рисунок 3. проект разработки BSc



Эта перевернутая пирамида показывает, что разработка каких-либо показателей идет от большего количества работ к меньшему, и, соответственно, начало есть самое трудоемкое. Дадим характеристику этих этапов.

1. Изначально, существуют цели у каждого предприятия. Тем не менее, как только речь заходит о их формализации, возникает масса разногласий. Понять и согласовать общие задачи, которые стоят перед фирмой, а также принять во внимание цели АУ - первый и необходимый шаг в построении "стратегически ориентированной организации".

2. определить направления деятельности, которые необходимы для ее реализации стратегических целей.

3. Суть этапа состоит из дальнейшего уточнения и корректировки задач, выполнение которых ведет к достижению основной цели: Рост прибыли; Минимизация статей расходов; Увеличение качества оказываемых услуг и др.

4. Выяснить, как влияет выполнения тех или иных задач на достижение цели, и каковы взаимосвязи между задачами, не менее важно, чем понять общие цели деятельности. Определение факторов влияния помогает привести задачи и цели к единой системе и завершает этап создания стратегии.

5. Степень выполнения каждой стратегической задачи и общей цели должна измеряться определенными показателями, которые должны быть выражены в цифрах. В рамках построения BSC показатели эффективности определяются для каждой задачи. Каждый из показателей эффективности имеет нормативное значение, которое говорит о том, что цель достижима в необходимые сроки. На основе показателей и их нормативных значений, а также допустимых границ отклонений от целевого значения формируется Карта показателя, необходимо установить показатели и их нормативные значения

6. Целевые программы разрабатываются для осуществления необходимых изменений на наиболее проблемных участках деятельности компании, где показатели невозможно существенно улучшить в рамках управления текущей деятельностью. Выявляются "проблемные места" в цепочке стратегических задач. Определяется и размер инвестиций, необходимых для реализации.

7. На основе разработанных показателей распределяются человеческие и финансовые ресурсы, устанавливается зона ответственности за выполнение задач. Все интегрируется в планово-бюджетную систему предприятия и в управленческую отчетность. На этом же этапе мотивация сотрудников связывается с выполнением задач

8. реализуется план изменений, и система управления компанией начинает функционировать на основе разработанной концепции BSc

9. Сбалансированная система показателей и связанная с ней система АУ не может не развиваться вместе с предприятием. Выполнение задач, резкие изменения на рынке требуют анализа и коррекции BSc компании. Пересмотр и коррекция BSC в зависимости

от скорости изменений в организации проводится в среднем раз в год.[3]

Т. о. BSC переводит миссию и общую стратегию компании в систему четко поставленных целей и задач, а также показателей, определяющих степень достижения данных установок в рамках четырех основных проекций.

Сбалансированная система должна использовать измеряемые показатели, по крайней мере, в следующих направлениях[6]:

- финансовое направление, рассматривающее эффективность деятельности компании с точки зрения отдачи на вложенный капитал;
- оценка полезности товаров и услуг компаний с точки зрения конечных потребителей;
- внутренняя операционная эффективность, оценивающая эффективность внутренней организации бизнес-процессов;
- инновации и обучение, т. е. способность организации к восприятию новых идей, ее гибкость, ориентация на постоянные улучшения.

Выбор в пользу классического подхода или системы сбалансированных показателей будет зависеть от уровня развития бизнеса. Система сбалансированных показателей дает более полное представление о деятельности предприятия.

К существенным недостаткам системы BSc можно отнести то, что она рассчитана в первую очередь на топ-менеджмент и стратегическое управление. При внедрении возникают сложнейшие взаимосвязи между показателями.

Следует отметить, что в процессе создания системы ключевых показателей деятельности придется столкнуться с различными проблемами: сопротивлением сотрудников, необходимостью корректировать учетную политику для целей бухгалтерского и управленческого учета; обеспечить сбор необходимых данных для расчета выделенных ключевых показателей деятельности; периодически пересматривать составленный список показателей и т.д. Однако организации, внедрившие у себя данную систему, как правило, добиваются хороших результатов, поскольку создается понятная менеджменту система индикаторов эффективности работы, а ответственность за управление делегируется широкому кругу менеджеров[3].

Анализируя предложенные схемы, нельзя не отметить, что ошибок по внедрению BSc будет не меньше, чем при внедрении АУ.

VI. ОШИБКИ ПО ВНЕДРЕНИЮ BSC

Используя опыт различных компаний и аналитические данные (компания по стратегическому управлению ГК «ИНТАЛЕВ» [5]) также постараемся выявить типовые ошибки и их предотвратить.

1. ТАБЛИЦА.
ХАРАКТЕРИСТИКА И ПРЕДОТВРАЩЕНИЕ ОШИБОК

Основные ошибки	Предотвращение ошибок
1. Концепция в сути своей идеи достаточно проста: реализация стратегического замысла организации через управление оперативно-тактическими результатами в разрезе ключевых аспектов деятельности. Именно эта простота и содержит ловушку. Прочитав первоисточник или, того хуже, его видоизменения, менеджмент организации смело берется за проектирование собственной Сбалансированной системы показателей. В итоге, зачастую, ни системности, ни сбалансированности там не обнаружить.	Лозунг – «фокусировка». Необходима концентрация на ключевом стратегическом приоритете. Остальные факторы успеха рассматриваются как дополнительные, оцениваемые не с точки зрения случайного усиления одним другим, а, в первую очередь, с точки зрения отсутствия системных противоречий.
2. Наиболее часто встречающиеся искажения идеи: Вместо карты показателей – карта стоимостей. Некое «инновационное» дублирование существующих систем планирования, учета и контроля. Выхолащивается сущность, а именно, что через изменение способов мышления и действий персонала в текущем периоде организация обретает способность управлять своим будущим, в том числе, финансовым, результатом.	Чтобы получить реально работающую карту показателей, необходимо постичь ее истинную суть. А в общем случае в верхней перспективе всегда некий стратегический Результат. Для бизнес - организации он зачастую – финансовый, и это логично. Но не обязательно. Есть социальная ответственность бизнеса, есть экология, есть много еще чего в этой жизни, что может стать отражением высшего смысла. Но, логичнее, для бизнеса: результат – это деньги.
3. Механистический подход к проектированию карты показателей: что вызывает ассоциации с финансово-экономическим аспектом деятельности – в финансовую перспективу; где встречались слова – рынок, клиенты, маркетинг, продажи – помещаем в клиентскую.	Финансово – экономические показатели могут появиться в любой перспективе. Важна их доля, которая в «хорошей» карте не превышает 30 – 40%. Клиентская перспектива отражает реакцию рынка на нашу деятельность, а саму деятельность организации характеризуют цели и показатели перспективы внутренних процессов.
4. Стремление использовать Сбалансированную систему показателей для управления регулярной деятельностью, такую систему тотального контроллинга процессов.	Следует помнить, что это в первую очередь – инструмент стратегического управления. А если появилось намерение соединить стратегию с полным функциональным потоком организации, то именно стратегия и становится задающей системой для всего потока процессов, а ССП стратегическая может быть продлена в карту показателей процессного контроля.
5. стремление взять «лучший», успешный, но, увы, чужой, опыт.	Чужая карта, чужие показатели работать в вашей организации не будут. Система показателей – это квинтэссенция конкурентного преимущества.
6. Контроль для оценок и «раздачи слонов». Контроль не для управления. Искажение информации, подведение ответа под задачу, очковтирательство – вот что делает систему показателей громоздкой и неудобной в текущей деятельности.	Система показателей – внутренний инструмент. «Нет самообману» - ключевой лозунг. Это инструмент стратегического управления через контуры оперативного и тактического контроля процессов. Обмануть можно только самих себя.
7. „Все и сразу”, „Чем больше, тем лучше”	Дж. Траут - «Сила простоты». Минимальный набор максимально информативных показателей, сведенных в логику причинно-следственных связей – вот хорошая система показателей.

Опираясь на такую логику, спроектированная система АУ способна обеспечить реализацию стратегии. Через управление ментальными моделями персонала организация настраивает свою деятельность на максимальное удовлетворение ожиданий ключевого окружения, которое даст нам ресурсы, обеспечивающие запланированный результат.

Система BSc, конечно же, наиболее приемлема, как оправдавшая надежды многих предпринимателей, и эффективно работающая уже на протяжении долго периода времени в различных компаниях, но... именно в компаниях. А разве мы можем назвать малый бизнес, особенно, где работают 10 человек (а ведь это тоже малое предприятие) компанией? Даже организацией с большой натяжкой.

Очевидно, что необходима адаптация и модернизация.

ЗАКЛЮЧЕНИЕ

Однако, всё это лишь подготовительный, либо “докризисный” этап, хотя от этого и не менее важный. Далее идет сама антикризисная программа, что является уже более стандартным и разработанным, а также применимым. Авторы полагают, что данный метод – использование системы показателей – будет достаточно эффективен с точки зрения, как недопущения кризиса, так и его быстрого предотвращения, а вернее, превращения такого негативного явления как кризис в такое позитивное как новый этап развития, оправдывая тем самым само определение понятия кризис.

Однако, на наш взгляд, существует одна, довольно серьезная проблема – во всех предоставленных



исследованиях мало ссылок или, скорее, поправок на малый бизнес. Почему-то считается, что все предложенные системы реально применить и в малом бизнесе. Но с реальной точки зрения, малому бизнесу не до таких «сложных» и многогранных проблем. Зачастую, они даже и не представляют, что же такое стратегическое планирование и как им пользоваться, не говоря о миссии, правильно поставленных целях и пр. Другими словами, предприниматели такого уровня не считают нужным в подобное углубляться, правильно полагая, что разобраться сразу во всем не представляется возможным. Боимся, что именно в этом и заключается главная проблема – нежелание, неумение и желание пустить все “на самотек”. Однако, не будем рисовать нашего предпринимателя черными красками, ведь именно в условиях кризиса происходит естественный отбор и данная сфера не исключение. Таким образом, мы можем рассчитывать на то что в ближайшем будущем наши бизнесмены все же будут принимать во внимание современные и классические тенденции в экономике. И, конечно же, не надо их сразу же пугать сложными формулами и расчетами. В этом и заключается наша основная задача – в доступной для современного малого бизнеса пояснить как необходимо работать, чтобы не только получить кратковременную, часто малозначущую, прибыль, но и выжить, выйти на новый виток, не только сейчас но и будущем, т.е. наладить такую систему, которую достаточно легко наблюдать и контролировать, а также развивать.

BSc в АУ это инструмент, представляющий компании возможность систематизировать и концентрировать свои усилия на выполнении долгосрочной стратегии, позволяющий эффективно управлять реализацией стратегии, используя будущее в качестве ресурса. И успех будет зависеть от того, как предприятие будет использовать данный инструмент.

ЛИТЕРАТУРА

1. Kaplan R.S., Norton D.P. The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment. — Boston (Ma., USA): Harvard Business School Press, 2001. 423p
2. Paul R. Niven, Balanced Scorecard Step by Step: Maximizing Performance and Maintaining Results (New York, NY, John Wiley & Sons Inc., 2002)
3. Кашеев Р. Balanced Scorecard: новое заклинание или стратегия управления? <http://www.cfin.ru/management/controlling/>
4. Сбалансированная система показателей (BSC) <http://www.infotech-consalt.ru/consult/ssp/>
5. Сбалансированная система показателей BSC: Как избежать ошибок [\[http://www.intalev-siberia.ru/index.php?id=16074\]](http://www.intalev-siberia.ru/index.php?id=16074)
6. Фатхутдинов Р.А. Стратегический менеджмент. – М.: ЗАО «Бизнес-школа «Интел-Синтез», 1999
7. Хлебников Д. Как разработать систему ключевых показателей деятельности.// Финансовый директор.- 2006. - № 10
8. Ши-Джен Кати Хо, Руг МакКей. Два взгляда на сбалансированные показатели Источник: Applying the Balanced Scorecard, Society of Management Accountants of Canada(1999)
9. Шицков Максим. Развитие бизнес-систем.// Финансовый директор.- 2006. - № 10

10. Шишков Г. Менеджмент качества: реинжиниринг и BSC .
11. http://www.elitarium.ru/2007/07/02/menedzhment_kachestva_reinzhiniring_i_BSc.html

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Needs for customer capital in banks

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Abstract Regardless of new technologies or products what banks will offer for its existent and future customers, the banks will not be able to hold them, if a special attention will not be turned to one of the main undisclosed value of balance sheet - customer capital.

The goal of this study is to define the concept of "customer capital" and its role and impact on the bank's financial performance.

Keywords - Customer capital, Banks, Latvia.

I. INTRODUCTION

Taking into consideration the fact that each bank has different priorities and dynamics, it is essential for them to realize a sophisticated risk management. And in order to maintain competitiveness of them, in the economy of today's knowledge it is more than not sufficient with determination of material values and inclusion in the balance sheet value, therefore essential importance shall be paid also to the nonmaterial values of the bank, such as customer capital and containing elements of them.

Analysis of scientific literature has shown that the idea of customer capital significantly influences the results of bank operations. Customer capital is considered to be as the key source of competitive advantage in the economy of knowledge [1] and it is an essential element of structural fund for any kind of company, especially for the know-how companies, which include financial services industry, such as banks, insurance companies. Banks have to invest both the time and money for their potential customers before making a decision on the necessity of the certain financial service, therefore it is very important to create reliable relationship with customers, which will result in the increase of profitability and thus ensure the increase of customer capital value in the future. According to Sveiby, in order to choose the right customers, it is very important to understand which of the customers are profitable, increase the proficiency of the company, create the image of the bank, as well as recommends the bank to some other potential customers. Upon making the right choice in terms of the customer and the ability to maintain it, thus such customers may provide high level customer capitals for the know-how companies [2].

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While based on other resources of literature on building relationships with customers, it is mentioned that every customer is essential, because entering the initial cooperation it is not possible to assess the profitability of each customer, but it may affect the income of the bank in future.

The purpose of this research is to establish theoretically and empirically what does a customer capital, as well as components of it means for the banking industry.

To achieve the goal were used the following research methods: a questionnaire, quantitative and qualitative methods, including the method of sociologic research, monographic and descriptive method.

II. LITERATURE REVIEW

A. Customer capital

Not only the scientists but also the bankers were found when customer capital is in the words unspeakable balance of intangible assets added value. One of the first banker who introduced concept of customer capital was St-Onge, she describe when they are knowledge's who makes relationships what organization to keep with the customers [3]. But Sveiby, one of the first were classified customers by their comparative investments in the intangible value creation process to subdivide them into three groups: the first improves the learning competencies and staff development of ideas, the second improves the external structure but the third improves the internal structure, thereby to support the knowledge further deliver [2]. Also Bontis to accent when customer capital is the external structure and it continuously need for expand, which included knowledge implementation processes and customer relationships [1;4], but Cegarra and Rodrigo to indicate when customer capital is internal structure which includes employers, leaderships and shareholders [5]. While Roos and Roos recommend to merge external and internal structure and define it by new term – "relationship capital" [6]. Customer capital also raises relationships importance with those customers, providers, community and country as a whole [7], how also it consider for most important privilege of competition in the knowledge economy [8; 9]. By Duffy customer capital includes the processes which to support the customer development how also value of revenues in present and future [10]. In compliance with Rust et al. customer capital is the company's total value for all customers, how also important role play brand and attitude by it and company's corporate ethics [11].



B. Components of customer capital internal structure:

Intellectual capital

The intellectual capital as a concept emerged when a difference in value between tangible assets and market value was realized (Sveiby, 1997; Brooking, 1997; Bontis, 1998; Edvinson, 2000; Joia, 2000), as well as it shows the ability to introduce innovations that will determine the future operations of organization [12].

Stewart considers the intellectual capital, like knowledge, information, intellectual property and experience, being used to create richness [8].

Knowledge management

Knowledge as a basis to success emerged in the 21st century [21]. Knowledge is not used appropriately if they are used to solve organisational problems, because knowledge is value which survives in contradistinction to assets included in balance sheet, which may be amortized or replaced [13].

Knowledge management is the ability of the organization to support and organize the training process in the organisation, taking into consideration the demand for necessary information [14].

Structural capital

Structural capital is the organization's ability to develop with internal and external challenges. This includes infrastructure, information systems, procedures and organizational culture [15].

Relationships

According to Lewis, world has never been so interdependent, because all trends indicate on the fact that a cooperation is the foundation of a successful business development – relationship marketing [16].

Berry considered that the relationship marketing is a strategy, enabling to attract, maintain and improve relationship with customers [17]. While Rapp and Collins stated that a purpose of the relationship marketing is to create long-term relationship between a company and a customer, which thus provides mutual benefits to both parties involved [18].

Customer retention

Customer retention include the cost of goods and services, competition as well as the changing of variable character size like the customer service experience [19].

C. Components of customer capital external structure:

Reputation

As shown by the scientific literature, the reputation is an important factor in determining the company's further survival and development, according to Hal, it is a strategic asset that can influence the company's business assets [20].

Brand and marketing knowledge

According to Rust et al. (2001) brand and marketing knowledge is assets that can affect the equity of own capital, as well as the customer's subjective and intangible assessment, treatment, and the corporate ethics [11].

Customer satisfaction

Customer satisfaction is also so important factor as trust that to establish and to form customer loyalty, as well as to forecast the future possible development tendencies [21].

III. METHODOLOGY

The research was to realize from March till July 2011 for evaluate the theoretically and empirically concept of customer capital. Initially to perform summarize of scientific literature and based on obtained information was create the questionnaire. During the research the obtained data were collected and displayed graphically.

A. Defining the concept of customer capital

Finding the answer on the question what is the customer capital, were found the 151 definitions. The achieved information the authors were summarized and used sociological research methods – text analyzing program TextStat were showed who included customer capital and it characteristics of the frequency. From achieved data authors create customer capital model what included internal and external structure.

B. Questionnaires

To found the understanding for needs for customer capital from bank customers and employers and their external elements how one of the most important intangible indicators were used the questionnaires which to take part one Latvian commercial bank customers and bank employees to evaluate and define the concept of customer capital. Questions of questionnaire were developed based on the acquired model of customer capital, which includes also demographic type of questions. The questionnaire includes only elements characterizing the external factors. Each element group consisted of three questions.

Measurements were made on a five-point Likert-type scale (1 - completely disagree, 5 - completely agree).

Based on the data acquired during the questionnaire, the results were summarized and compared with each other between the answers of the customers and employees of the bank.

C. Comparing of customer capital theoretical and empirical data

Theoretically acquired data were also equalized with a Likert-type scale in order to clearly establish whether there exist or not mutual regularities between theoretical and empirical data of customer capital.

IV. RESEARCH RESULTS

A. Defining the concept of customer capital

Summarizing the information available in literature, the analysis of data showed the frequency of elements containing the concept of customer capital. As shown the obtained quantitative data, then most of elements which are referred such as customer capital characteristic are

intellectual capital, bank reputation, knowledge management in the bank, customer loyalty, relationships (customer-bank employee, external service providers-bank employee), brand and marketing knowledge, structural capital, products and services (included innovation), customer satisfaction, customer data bases, customer trust, customer profitability (Fig. 1).

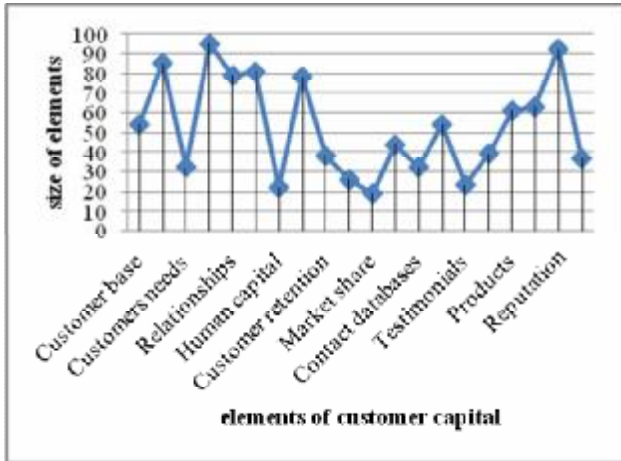


Fig. 1 Theoretical assessments of customer equity elements

Based on the obtained quantitative data it is possible to identify elements of customer capital and divided them into two groups: external and internal factors, and thus create customer capital model for banks (Fig. 2).

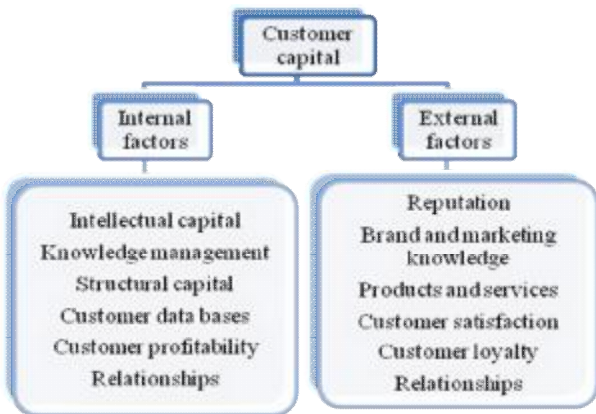


Fig. 2 Customer capital model in bank

B. Questionnaires

The questionnaires were sent electronically total 90 questionnaires, of which 65 were received back, including 27 of the bank customers and 38 of the bank employees. In the Questionnaires took part one of the bank employees and bank customers. Questionnaires the bank customers and employees the key purpose was to verify the obtained information of theory about customer's capital external factors.

The findings about demographic and personal data of customers show that 31% of all respondents are women and 13% of men. 15% of respondents are aged 20-29 and

20% of 30-39 years and 18% over 40 years. Most part of the respondents, 19% have higher education, 9% have master's degree but 21% secondary education.

Findings about the demographic and personal data of bank employees show that 38% of all respondents are women and 18% of men. 26% of respondents are aged 20-29 but 13% of 30-39 years and 6% over 40 years. Most part of the respondents, 35% have higher education, 12% have master's degree but 4% secondary education.

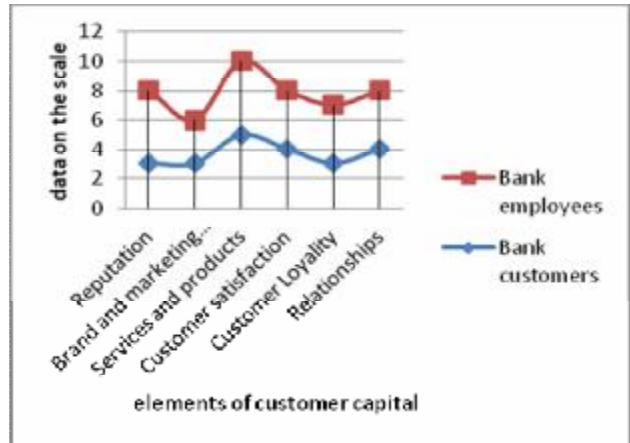


Fig. 3 Practical assessment of customer capital elements

As shown the obtained data in Figure 3 then the bank's customer appreciation the major role of customer capital development are for bank's products and services, customer satisfaction, relationships, and the lowest brand and marketing knowledge. In the similar thoughts about the importance of customer capital elements also are bank employees.

C. Comparing of customer capital theoretical and empirical data

During the comparison of the acquired data, the results demonstrated that there is a connection between theoretically and empirically acquired data in customer capital (Fig. 4).

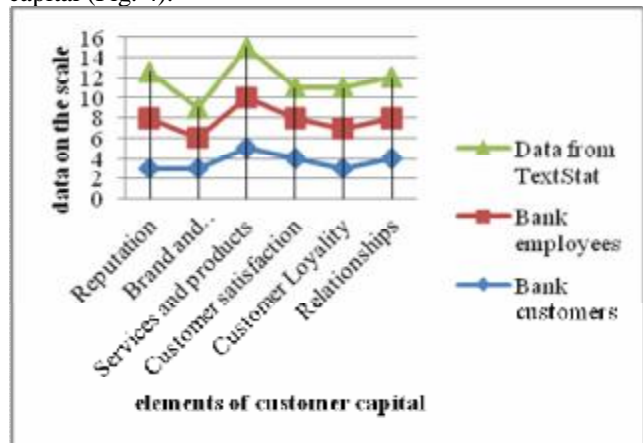


Fig. 4 Comparing of customer capital theoretical and empirical data



IV. CONCLUSION

With this research the authors were able to define those elements of customer capital they are based on, as well as establish a model of customer capital for a financial services industry – banks, which is developing between a bank and a customer. Data acquired during the research also confirmed the existence of regularities between results acquired theoretically and empirically.

With the increase of competition between banks and taking into consideration the fact that the range of services provided by banks is practically the same, an increasing attention is being paid to the nonmaterial values of the bank, especially the customer capital, which is a foundation of successful operations of the bank. This question is actual not only for researchers but also for bankers including bank management, shareholders and employees.

During the research the authors were faced with some limitations. The external structure of customer capital was discussed in the research, based on the acquired model of customer capital, because the research of the internal structure was not possible to obtain with the help of questionnaire, taking into consideration the different educational level and knowledge on economics of the employees and customers of the bank.

Further researches on the customer capital of banks should be managed in the whole banking industry, using the existing questionnaires for external structure, but the empirical evaluation of the internal structure should be managed with a help of interviews, choosing customers and employees with high level of knowledge.

Authors established customer capital model can be used in the banking sector, and can also be used as a basis for other industries to determine the customer capital.

REFERENCES

[1] Bontis, N. (1999), "Managing organizational knowledge by diagnosing intellectual capital: framing and advancing the state of the field", *International Journal of Technology Management*, Vol. 18 No.5/6/7/8, pp.433-62.

[2] Sveiby, K.E. (1989), *The Invisible Balance-Sheet*, Affärsvaerlden/Lsdarskap, Stockholm.

[3] St-Onge, H. (1996), "Tacit Knowledge: The Key to the Strategic Alignment of Intellectual Capital", *Strategy and Leadership* 24(2), pp.10-14.

[4] Bontis, N. (1998), "Intellectual capital: an exploratory study that develops measures and models", *Management Decision*, Vol. 36 No.2, pp.63-76.

[5] Cegarra, J., and B. Rodrigo (2003), "Relational Learning Process as a Bridge between Human and Customer Capital", *Journal Universal Computer Science* 9(12), pp.1469-1486.

[6] Roos, J., Roos, G. (1997), "Measuring your company's intellectual performance", *Long Range Planning*, Vol. 30 No.3, pp.45-62.

[7] Chwalowski, M. (1997). "Intellectual Capital Matters", *The Electricity Journal*, Vol.10 No.10, pp.88-93.

[8] Stewart, T. (1997), *Intellectual Capital: The New Wealth of Organizations*, Doubleday, New York, NY.

[9] Edvinsson, L., Malone, M.S. (1997), *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*, HarperBusiness, New York, NY.

[10] Duffy, J. (2000), "Measuring customer capital", *Strategy & Leadership*, Vol.28 No.5, pp.10-14.

[11] Rust, R.T., Lemon, K., Zeithaml, V. (2001), "Modeling customer equity", Marketing Science Institute, Cambridge, MA, Working Paper Series, No.01-108.

[12] Bontis N., Crossan M., Hulland, J. (2002), "Managing organizational learning systems by aligning stocks and flows", *Journal of Management Studies*, Vol.39 No.4, pp.437-469.

[13] Wiig K. (1997), "Integrating intellectual capital and knowledge management", *Long Range Planning*, Vol.30 No.3, pp.399-405.

[14] Spender J. (2002), "Knowledge uncertainty and an emergency theory of the firm", in Choo C, Bontis N. (Eds), *The Strategic Management of Intellectual Capital and Organizational Knowledge – New York: Oxford University Press*, pp.149-162.

[15] Huizing A., Bouman W. (2002), "Knowledge and learning markets and organizations", in Choo C., Bontis N. (Eds), *The Strategic Management of Intellectual Capital and Organizational Knowledge – New York: Oxford University Press*, pp.185-204.

[16] Lewis, J.D. (1991), *Competitive alliances redefine companies*. *Management Review*, 80, 14-19.

[17] Berry, L.L. (1983). *Relationship marketing*. In Berry, L.L., Shostack, G.L., Upah, G.D. (Eds), *Emerging perspectives of services marketing* (pp. 107-123). Chicago: American Marketing Association.

[18] Rapp, S., Collins, T. (1990) *The Great Marketing Turnaround*. New York: Prentice-Hall, Englewood Cliffs.

[19] Bolton, Ruth N. (1998), "A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction", *Marketing Science*, Vol. 17 No.1, pp.45-65.

[20] Hall, R. (1992), *The strategic analysis of intangible resources*, *Strategic Management Journal*, Vol.13 No.2, pp.135-144.

[21] Morgan, Neil, Eugene Anderson, and Vikas Mittal (2005), "Understanding Firms' Customer Satisfaction Information Usage," *Journal of Marketing*, 69 (July) pp.131–151.

International Cooperation against Terrorism – Economical Necessity of the Knowledge Society

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Abstract The correlation between the dynamics of growth of GDP per capita and the commission of terrorist acts is given. The analyzing of time-territory depending of the origin of the conflicts is given too.

Keywords - terrorism, global economy, relationship.

I. INTRODUCTION

Formation of a new system of international relations, globalization processes, the formation of a unified world community does not guarantee the arrival of stability and harmony. There are new destabilizing forces and trends that have returned the old conflicts. Threatening poverty is the problem of transnational terrorism. He, as a socio-political phenomenon, associated in most cases with national borders, is becoming worldwide problem, faced by the economies of most countries.

As majority of economists recognize, for the successful functioning of a market system rather 20% of skilled workers. Most of them have already integrated into the countries – so the title of "golden billion". Enough is possible that 80% of other employees under the current scenario have some space fringe of the world economy. Therefore, this hard policy of social degradation and "pushing" of the significant part of the working population to the periphery of the world civilization can be implemented seamlessly, without causing a corresponding reaction in those countries, which nations and social groups are marginalizing.

Terrorist attacks are becoming increasingly well-organized and violent each year, using the most modern equipment, weapons, means of communication. In various regions of the world's political and nationalist radicals, have adopted methods of terror to achieve their goals, organized an extensive network of underground arms caches and explosives, providing a framework of financial institutions.

As a cover for terrorist organizations are operating system, related companies, banks and funds. It is evident to deal with this extremely dangerous phenomenon requires the coordination of efforts by all States at the highest level, creating a network of international organizations. For effective action against terrorism is also need to develop his unified international legal concepts, precise legal characterization of the crime [1].

II. RESULTS OF RESEARCHING

Terrorism does not puts the killings and bombings as the main aims, they need extensive information about the terrorist acts. The primary effect of the conflict - the information but the information itself, as such, the terrorists do not need. They seek exposure information.

Terrorism has become an important factor in the international economy. But not as dangerous as armed conflicts and political assassinations. Infrequently separate terrorist attacks - for example, bombings or killings, may have lasting and significant impact on the economy. Such an influence, or terrorist campaign, continuing a long time, or a particularly large and bloody attacks, which have a significant psychological effect.

We suggest to remember the major conflicts in the world of 2000-2009 years. [2]:

- 17/07/2009 city - Indonesia. The authorities reported nine dead and 50 wounded.
- 26.11.2008 - India. The number of victims amounted to 179 people.
- 18.10.2007 - Pakistan. The number of dead reached 140 people, more than 500 injured.
- 10/13/2005 city - Russian Federation. Killed 47 people were injured - 100.
- 07.07.2005 - United Kingdom. Killed at least 54 people, injuring at least 700 people. Actually ripped off the summit was the Big Eight »(G8).
- 01/09/2004 city - Russian Federation. The result of the action were more than 330 dead.
- 05/29/2004 city - Saudi Arabia. As a result, 16 people died.
- 03/11/2004 city - Spain. Killed 192 people, more than 1500 injured.
- 11/20/2003 city - Turkey. As a result, 28 people were killed, 450 injured.
- 11/15/2003 city - Turkey. As a result, 24 people were killed and 300 injured.
- 11/09/2003 city - Saudi Arabia. In a suicide attack killed 18 people, more than 120 injured.

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- 08/25/2003 city - India. In a suicide attack 52 people were killed and 150 wounded.
- 13.05.2003 - Saudi Arabia. 34 people were killed and 194 - were injured.
- 10/23/2002 city - Russian Federation. During the storm killed 117 hostages.
- 13/10/2002 city - Indonesia. Killed about 190 people, more than 300 injured.
- 06/10/2002 city - Yemen. Wounding 12 of the 25 members of the crew. Approximately 90,000 barrels of crude oil fell in the sea, forming a spot size of 500 km².
- 11/09/2001 city - the United States. In New York, killing 2,749 people in Washington, DC 189, Pennsylvania 44.
- 10/12/2000 city - Yemen. Killing 17 U.S. Navy sailors and injuring 39.

How many victims of terrorist acts carried away we know. However, definitely not estimated the damage terrorism on the world economy. Consider its effect on some macroeconomic indicators of the economies of affected countries. Since per capita GDP can be regarded as a measure of human well-being of the country, it is advisable to initially consider the impact of transnational terrorism in this figure.

Consider the following reduced diagram, which displays the dynamics of growth of GDP per capita in the country, victims of terrorism in 2000 - 2009 years., U.S. (see Figure 1):

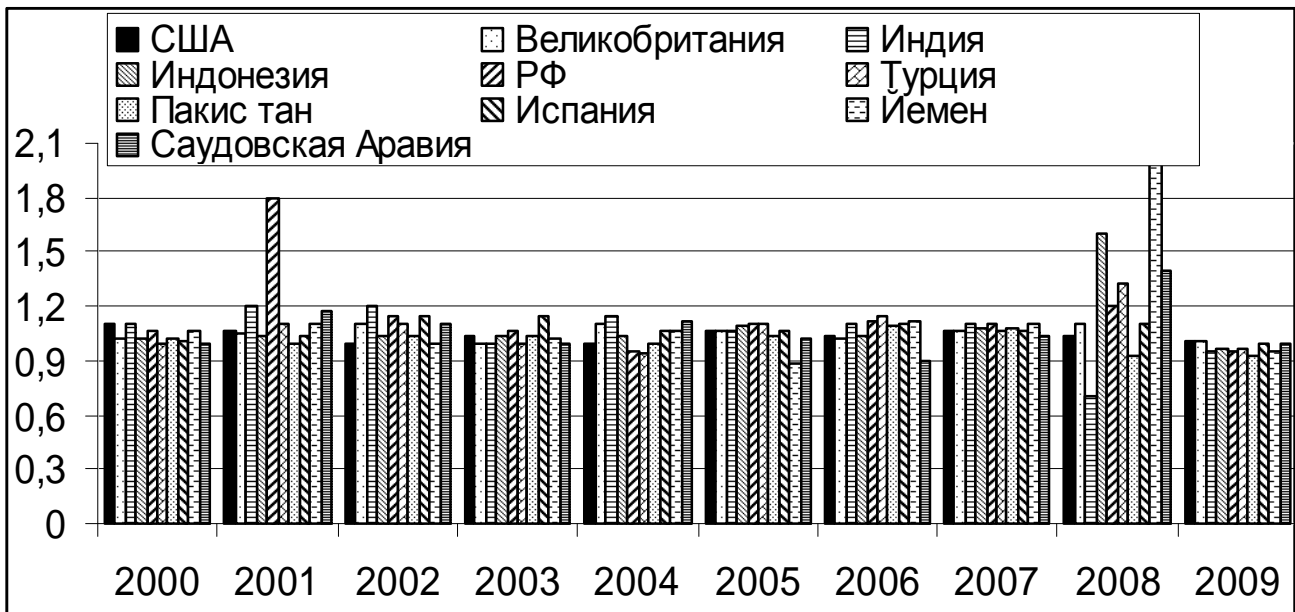


Fig. 1. Dynamics of growth of GDP per capita in the country, victims of terrorism in 2000 - 2009 years, %

As you can see, the above-mentioned large-scale conflicts preclude long-term growth of GDP per capita. Despite this, we can see relationship between the dynamics of growth rate and the commission of terrorist acts.

In the short term, most affected by global economic losses, the ones who least could afford to incur such losses. Although in some poor countries have experienced some economic growth through increasing participation in the global economy as recession, not only would undermine their economic prospects, but also could threaten their political stability.

It is considered that the poor state of the economy - one of the key factors that create a breeding ground for terrorism. But studies have shown a different relationship. The revealed dependence determined that a year before committing the armed conflicts in the countries was recorded the highest increase in GDP per capita, compared with previous years. That is, when the country reaches a

certain level of economic development in the next year or two made conflicts, attacks, which reduced the growth rate.

Can assume, given the above given information, which is probably a supra-national governance, as the title of "world government". The organization of such large-scale action is unlikely under the force of any of the known terrorist organizations (we are talking about tens of millions of dollars). Only one preparation of participants requires considerable investment and time (at least a year). During this time, the plans of organizations would have to recognize special service agents who are in almost every similar organization. Nature of the preparation and conduct of operations suggest that perhaps such actions are organizing by some powerful transnational structure with the participation of international financial institutions. This is indirectly confirmed by a rare coordination of actions of the global financial elite has been immediately after the attacks, as well as the fact that conflicts are virtually have

little impact on the economy and the state of the country's financial system. It can be assumed that international terrorism is a tool for the global economy.

Consider the territorial and temporal location of conflict in 2000-2009. (see Fig. 2):

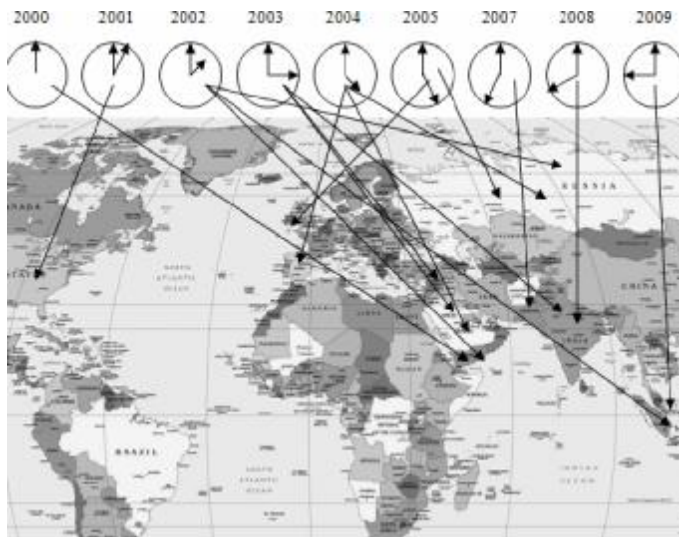


Fig. 2. Territorial and temporal location of conflict in 2000-2009

After analyzing the upstream temporarily-territorial relationship we can note a gradual annual migration of action conflicts in eastern countries in the world map. In the industrialized countries of the world conflicts occur more frequently than in "poor", but the economic damage caused by them was smaller. As a result, major terrorist attack varies investment scheme - private investment is reduced, the volume of public investment, by contrast, increases (for example, because the state hires additional security personnel and increases the size of the armed forces).

In recent years, the world's noticeably more frequent conflicting actions with respect to individual campaigns, oil infrastructure (it helps to influence world oil prices) and individual states (terrorists are trying to worsen the situation in their economies and reduce the investment attractiveness). Thus, terrorists gradually become an important factor in the global economy.

Counter-terrorism measures are costly to the global economy. As a result, consumers are faced with a gradual rise in prices for goods and services. Especially serious in the fight against such actions affect the value of goods transported by air and sea - in airports and seaports, tightened security measures, which increases the time of transporting goods: in particular suffer from the dealers in foodstuffs. Moreover, the country's position in international trade could be seriously weakened, if the terrorist threat has considerable scope, and security measures are beginning to have a negative impact on business travel, transportation, and investments [3].

Consider the example of the United States. Estimated Bureau of Economic Analysis, the U.S. economy after the

events of September 11, 2001 lost about \$ 80 billion in retail sales dropped by \$ 6 billion (2.1%), the volume of new orders for durable goods decreased by \$ 11.6 billion (6.8%); The number of new applications for unemployment benefits increased by 50 thousand - the largest jump in over a month since August 1982. Industrial production fell in September by 1%. Airlines immediately reduce the number of flights by 30%, but even the remaining planes were not filled. U.S. economy over the last four months of 2001 has lost 1.1 million jobs. Due to the introduction of more stringent inspection rules at the border crossings and ports formed "tube" in supply chain management. In September 2001, the supply of durable goods fell by \$ 9.2 billion because of transportation problems contributed to confusion in the flow of orders, and pushed up the cost of shipping goods. Sharply increased insurance costs, and in some cases, the monthly cost of insurance has risen by 300% compared with the period before the attacks. At the same time, increased sharply and security costs [1].

IV. CONCLUSION

As a result, all major terrorist attacks have demonstrated negative dynamics of traditional stock indices of the affected countries, sharply declining real estate values in the affected city or region. Moreover, these conflicts lead to an increase in the number of unemployed and closure (permanent or temporary), many companies or industries, increase the cost of insurance services [2].

It should be noted that the joint work of the international community in combating international terrorism and eradicating the true causes of its generating really began. In this area there are some serious obstacles and barriers. Only joint efforts can provide very real benefits that translate into the effective security system for each state and the world community as a whole. This problem cannot be solved only by military means or by force intelligence operations. It is necessary to solve the economic, political, ideological and other levels.

REFERENCES

- [1] Washington ProFile [electronic resource]: Washington ProFile. - Electron. data (2 files) - 2010 - Mode of access: www.washprofile.org. - Title from home page of the Internet.
- [2] Eye of the planet [electronic resource]: Eye of the planet. News, analysis and information. - Electron. data (2 files) - 2009 - Mode of access: www.oko-planet.su. - Title from home page of the Internet.
- [3] The world and the market economy [electronic resource]: the world and a market economy: articles and books. - Electron. data (1 file) - 2009 - Mode of access: www.knukim-edu.kiev.ua. - Title from home page of the Internet.