ISSN 2424-5321

ŠIAULIAI STATE COLLEGE
TALLINN UNIVERSITY OF APPLIED SCIENCES

PROFESSIONAL STUDIES: Theory and Practice

2017 / 3 (18)

Social sciences
Humanities

Šiauliai, 2017

PROFESSIONAL STUDIES:
Theory and Practice

2017 / 3 (18)

Published since 2005

Journal is indexed in EBSCO Academic Search Complete

Editorial Office address
Aušros av 40
LT-76241 Šiauliai
Lithuania
Tel. (+370 41) 43 37 93
Fax (+370 41) 52 50 91
E-mail mokslas@svako.lt
www.svako.lt

CONTENT

REPORTS

THE RESEARCH OF ŠIAULIAI STATE COLLEGE STUDENTS‘ ATTITUDE TOWARDS THE ADOPTION OF THE ENGLISH LANGUAGE LOANWORDS

Daiva Civilkienė
Šiauliai State College, Lithuania

Svetlana Toropovienė
Vilnius College of Technologies and Design, Lithuania

Annotation

The paper analyses loanwords used in students' colloquial speech, mass media and the Internet. The basis of the work is a questionnaire. The students of full-time and part-time departments of the Business and Technologies and Medical Care Faculties of Šiauliai College were the respondents to the questionnaire. The respondents answered the following questions: "Do you use loanwords in your colloquial speech?", "How often do you use loanwords in your language?", "Where (what resources) can you usually meet loanwords?". According to the results of the questionnaire we can conclude that loanwords are popular among the students and are very common in the Internet and students' colloquial speech (the analysis of some newspapers and Internet web pages was carried out in the paper). Preference of the use of loanwords can be explained by the influence of the environment, routine activities, which are related to some new realias, phenomena and rapid development of new technologies or just fashion of the English language. The use of loanwords should be taken into consideration by teachers, researchers, sociologists, psychologists, politicians and other specialists in order to avoid the use of the above mentioned words and save the identity of our native language.

Key words: *loanwords, adoption, borrowing, mass media, colloguial speech.*

Introduction

Language changes is a natural phenomenon. Along with the appearance of new life realities, new words occur to identify them. Some of them are created, other are borrowed, and still others are being adopted without being legalized. Consequently, life reality, changing system of values have strong impact on the trends of language development.

Loanwords in languages are very common. Yet, it is necessary to decide whether they are really necessary or it is possible to do without them. As A. Paulauskienė notices, Lithuanian language is "flooded" by new loanwords, which are not properly classified, no appropriate neologisms are created to suit Lithuanian language, though a book on loanwords has been published by V. Rudaitienė and V. Vitkauskas " Vakarų kalbų naujieji skoliniai" (Paulauskienė, 2001, p. 72).

In linguistics the process of loanword occurrence is being analysed in lexicology. A lot of Lithuanian scholars such as J. Girčienė, Pr. Kniūkšta, R. Miliūnaitė, A. Ryklienė, R. Vaskelienė, L. Vaicekauskienė, D. Mikulėnienė, A. Paulauskienė and others have been writing about loanwords and analysing them. They focus on the spelling of unadapted loanwords, morphology, parts of words not a subject to inflection and other non-standard issues. For this reason the need for the development of loanword standardisation strategy is very relevant. "More comprehensive evaluation of loanword standardisation and usage would not be possible without oral language research, which could reveal more detailed view of the relationship of loanwords with the system of Lithuanian language. Currently such research is particularly relevant" (Vaicekauskienė 2007).

Currently various aspects of loanword adoption and usage are being analysed: society attitudes (Vaicekauskienė, 1998, 2006), usage and formation of substituents (Girčienė, 2005), users' reasons for adoption (Girčienė, 2006), the process and reasons for borrowing, the relationship of the loanwords with the Lithuanian language system (Vaicekauskienė, 2007), natural selection of language novelties (Miliūnaitė, 1998, 2000).

English language acknowledgement and prestige, natural need for learning it, opening Lithuania a wider perspective to the world, - this is the reality of historical turning point to the West of our country. Increasing English language prestige and the society bilingualism, demonstration of language awareness are having impact on the attitudes of language users: *imidžmeikeriai (image maker), makdonalda (Mac Donald's), ofisai (office), šopai (shop), parkingai (parking), menedžeriai (manager), invoisai (invoice), burgeriai (burger)* imply a threatening confusion of language codes, a social group identity and negative approach of more conscious language users to the following processes. Present abundance of loanwords can be explained by two reasons: there is a real *necessity* of essential life changes (political, economic, ideological changes), on the other hand there is *Americamania,* when not only technical innovations become attractive, but living standards, behaviour, socialization standards, likings as well. Nowadays English words replace not only Lithuanian words, but the words borrowed from other languages, which have been very successfully adopted, too, for example *sendvičas* (sandwich) instead of *buterbrodas (buterbrod); hitas* (hit) instead of *šlageris (schlager)*; *animatorius (animator) instead of multiplikatorius* (multiplicateur); *displėjus (display) instead of ekranas (ecran)etc.*

Some loanwords having no Lithuanian equivalent are likely to fill the gap and are being used without reservation: *steikas (steak), paparacis (paparazzo), kastingas (casting), feisbukas (facebook),flešmobas (flashmob), blokbasteris (blockbuster)* and other. The users of the borrowed words claim that native equivalent does not reflect semantic meaning of the new phenomenon. Consequently, this determines such option. Some loanwords are adopted intentionally by highlighting expressivity of the borrowed words, though they have standard Lithuanian equivalents (*nonstopas, o'kay, sekssšopas, dance club*), or are used in order to create authentic discourse (*step-by-step, formal dinner, strytas*), putting emphasis on group social isolation and identity.

English terms and abbreviations written in the original language, have flooded magazine pages, newspapers and are widely used by professionals. Girčienė states that "media, a mediator between language specialists and society, plays a very important role of word replacement dissemination, adoption"(2004, p. 67).

The article analyses the process of word borrowing, as one of the English and Lithuanian language interaction components.

Research goal of the article is to get an overview of the loanwords provided in media (the Internet, television, radio, Šiauliai town and regional press releases) and look into the usage of loanwords in the language adopted by the students of Šiauliai State College, analyse the reasons of word borrowing, and students' attitude towards the process of adoption.

Research objectives:

1. The overview of the significance and role of borrowed vocabulary in the system of Lithuanian language, the reasons of loanword appearance.

2. The analysis of the survey on loanword usage in the language of Šiauliai State College students.

Research methods are the following: empirical, theoretical analysis, induction, questionnaire. 300 respondents participated in the survey,196 (65%) male and 104 (35%) female respondents.

Theoretical overview of borrowed vocabulary appearance in a language

One of the ways of vocabulary enrichment is adoption of loanwords. They can be of different types. Normally loanwords are divided according to the language or related language group they are borrowed from, for example Anglicisms, Gallicisms, Germanisms, Latinisms, Polinisms, Slavisms etc. This is the most general classification of loanwords. Nevertheless, loanwords can be classified on another basis: according to the way of their appearance, application of the borrowed word (from a donor language) in the receiving language, prevalence in other languages, according to the accuracy of its usage and other. With the development of political, trade, economic, cultural, scientific contacts and exchanges, accordingly the number of loanwords have been increasingly rising as well.

"Americanisation" trends of the life of Lithuanians are reflected in the living language: a lot of Anglicisms and Americanisms (words or meanings borrowed from the English language or its American version) appear in Lithuanian language.

Previously the Lithuanian language used to adopt words from the English language too; for example: *mitingas (meeting), infliacija (inflation), importas (import),eksportas (export) interviu(interview), doleris (dollar), šampūnas (shampoo), šortai (shorts), džinsai (jeans), krekeris* (cracker) and other. They have turned into standard, legal terms.

The reasons of loanword adoption vary, as is their impact on the system of Lithuanian language:

1. Need to identify new items, phenomena, concepts: *kompiuteris (computer), bleizeris (blazer).*

2. Necessity to specialize terms: *marketingas (marketing), menedžmentas (management) lizingas (leasing), prodiuseris (producer).*

3. The same origin term systems, formed to be adopted for international usage, created on the basis of the English language; for example *computer, sports, modern music etc*.

4. Young people's aspiration to adopt more modern, fashionable words, which would sound more „prestigious", more „ scientific"– therefore, intellectually and acceptably.

Lexis of foreign languages has been penetrating into all the spheres of life, walking into everyday life, eliminating customary words, names; you can hear such words as *biznis (en. business), holdingas (en. holding), monitoringas (en. monitoring), sekond-hendas (en. second-hand), know how(en. know-how),invoisas (en. invoice)* every day. Mass media, radio, TV shows are packed with examples of unacceptable usage of Anglicisms.

The overview of mass media (TV, radio, the Internet, regional press releases of Šiauliai town and district) carried out in 2015-2016 confirmed that loanwords were adopted not only individually but in entire thematic groups:

1. Public and political lexis: *brifingas (en. briefing), spikeris (en. speaker), impičmentas (en.impeachment)*;

2. Scientific technical lexis: *apgreidas (en. upgrade), atačmentas (en. attachment), brauzeris (en. browser), displėjus (en. display), failas (en. file), multimedija (en. multimedia), saitas (en. site), linkas (en. link), trafikas (en. traffic)*.

3. The lexis of Economics, related with business activity: *akauntas (en. account), baneris (en. banner), biznis (en. business), dedlainas (en. deadline)*, *vaučeris (en. voucher), brokeris (en. broker), dileris (en. dealer), kontraktorius (en. contractor), distributorius (en. distributor), dempingas (en. demping), holdingas (en. holding), invoisas (en. invoice), marketingas (en. marketing), barteris (en. barter), ofšoras (en. offshore), roumingas (en. roaming)*.

4. Sports lexis: boulingas *(en. bowling), fitnesas (en. fitness), kerlingas (en. curling), dopingas (en.doping), kikboksas (en. kickboxing), overtaimas (en. overtime), skeitbordas (en. skateboard), kaitavimas (en. kiteboarding) šeipingas (en. shaping)*.

5. Every day, household lexis: *bukletas (en. booklet), leiblas (en. label), mikseris (en. mixer), organaizeris (en. organizer), baikeris (en. biker) plejeris (en. player), tosteris (en. toaster), kempingas (en. camping), fanas (fan), bestseleris (bestseller) and many more.*

6. Modern art (pop art) lexis: *bendas (en. band), džiazas (en. jazz), bliuzas (en.blues), performansas (en. performance),imidžas (en. image), rimeikas (en. remake), gigas (en. gig), diskas (en. disk), singlas (en.single), koveris (en. cover), hitas (en. hit), topas (en. top), prodiusuoti (en. produce), kantri (en. country), šou (en. show)*.

7. Cosmetology, health care lexis: *ingredientas (en. ingredient), pilingas (en. peeling), masažas (fr. massage*), *manikiūras* (fr. manucure en. manicure), *stilistas* (en. stylist).

„Media not only disseminates new lexis of Lithuanian language but carries out preliminary selection of its adoption – determines some certain rules of its usage" (Girčienė, 2005, p. 91).

The examples of loanwords used by mass media channels provide a very clear current reflection of the state of modern Lithuanian language. From the point of view of word formation new loanwords in L. Vaicekauskaitė study (2007) are divided as follows:

- Words formed from foreign root morphemes or fundamentals: *alkotesteris, aromaterapija, bankomatas, multivitaminai, supervizija, interaktyvus* and other.
- Words formed out of familiar and more modern component: *aiskrimas, kriomasažas, toplesas, eurooptimistas, topmodelis, taimautas* and other.
- Fixed meaning compound words with authentic spelling: *duty free, second hand, body art* and other.
- Derivatives from a foreign language root with a Lithuanian suffix component: *internet**ininkas**, reiting**uotojas**, sponsor**ystė**, miks**uoti*** and other.
- Word combinations of a foreign root and international ending of the word: *printeris, kileris, pulverizatorius, prezentas, visažistas, brifingas and other* (nouns with the suffix – ing-, which are the forms of English language verbal nouns such as *boulingas, roumingas, liftingas* and other dominate, the words containing suffix - er- e.g. *baikeris, brokeris, stajeris, snaiperis* and other are very common too.
- Borrowed foreign word components used in young people's slang, adopted and used as separate words: *pop-, techno-, super-, ultra- and other.*

The language of newspapers, magazines, advertisements is also overcrowded with Anglicisms, which can be and have to be substituted by Lithuanian equivalents for example: *mass media, sekond hendas, supermarketas, hypermarketas* and other.

The English language origin words, used without any motivation, usually become agnonyms, the words, meaning of which is not clear and unknown to the majority of the language users. Usually such words require special code and semantic explanation. Such vocabulary contaminates the language, makes it not understandable and can be easily replaced by Lithuanian equivalents: *autobanas (greitkelis), boileris (katilas), lizingas (išperkamoji nuoma), parkingas (automobilių aikštelė), tenderis (konkursinis pasiūlymas), tiuningas (puošyba), sensorius (jutiklis), suportas (stabdžių apkaba)* and other.

Our language is being contaminated with barbarisms i.e. words originated from other languages, erroneously constructed and used by leaving their phonetic and graphic form, for example *cool, faina*, *lūzeris*, *autsaideris.*

Standing out of general society context is a universal feature of modern young people. Anglicisms play a very important role here (viskas cool, crazy laida, gimė baby). This feature, particularly common in spoken language type, is revealed in electronic communication (Rykliene, 2001). Sometimes even reporters, radio and television journalists indulge in barbarism adoption.

“Referring to identification of lexis units of different languages, various *interjargon* versions are created – young people, computer, professional musical, urban and so on. Slang constantly supplements the vocabulary of one or another area. Basically it is spoken language, referring to one activity area” (Girčienė, 2004, p. 118). In some cases it is a particular linguistic game, especially when following modern young people‘s slang, which allows young generation in some cases isolate themselves from adults, create own, though illusory world – it is a specific, emotional, expressive style of direct communication. „Special language” is used as a password among the people belonging to the same social or age group, as a linguistic signal.

„Slang is alien to the spirit of Lithuanian language. It is impossible to believe that slang might become a normal word of a general language, and the English language possesses a substantial amount of such words with jargon origin. The origin of the words donkey, fun, mob, odd, pinch, snob, trip, hitch-hiker and other also refers to jargon” (Paulauskienė, 2001, p. 75).

“Jargonism which is used only temporarily and then forgotten does not have negative impact on a native language. A loanword integrated into a foreign language and being widely used in that language is usually incorporated into the phonological and morphological system of the language” (Celiešienė, 2003, p. 18). ”The standards of a language are not violated, when the speaker has the sense of outstepping the limits of general language, but it is still worse when such sense is absent, and the speaker is not aware of Lithuanian equivalent” (Paulauskienė, 2004, p. 115). J. Girčienė, having looked into the trends of new loanword adoption in oral language claims that “communication environment has impact on the choice of loanwords and Lithuanian equivalents” (2004, p. 144). This also applies to the usage of barbarisms and jargonisms. Definitely, in science fiction and in some other cases (proverbs, songs and other) the usage of inappropriate loanwords i.e. barbarisms can be acceptable for the reasons of style, though this article does not analyse this issue.

A big number of Anglicisms and Americanisms entering the Lithuanian language is a natural phenomenon, reflecting more active economic, political, cultural and public relations over the last decade and cooperation with English speaking countries. When trying to copy western examples, Lithuanians tend to loose national language identity more and more, as language is a reflection of life and mentality. Loss of interest in own mother tongue, literature and culture, incorrect pronunciation, language literacy and general cultural recession is an inevitable outcome of these processes. Potentially, where Lithuanian language is sufficient, any foreign language components should not be adopted only because of the intention to pay tribute to fashion and support the trends not only to live but think „European way“ too.

Standardization of loanwords is the worry and strategy of modern policy. Language scholars have projected such stages:

1. Provide Lithuanian equivalents and replacements to the loanwords.
2. Influence language users’ attitude, consolidate the position of native language and increase its prestige. This has been highlighted in the law on the state language. (Republic of Lithuania law on the state language 1995, January 31)
3. Ensure the functionality of the Lithuanian language in all the spheres of public life, by raising the reputation and the value of the mother tongue.

Results of the Research

The situation of loanword adoption among students was analysed in the research. The analysis of newspapers „S plius“, „Šiaulių naujienos“, „Šiaulių kraštas“, „Lietuvos rytas“, electronic publications and web pages allowed to state the abundance of loanword adoption in the means of mass media, relevant to students.

The survey was carried out in 2016-2017 academic year, during autumn and spring terms. The respondents were full-time and part – time students of Šiauliai State College, the faculties of Business and Technologies and Health Care.

The survey revealed that students‘ opinions on loanword usage vary. The students are not against borrowing foreign words, they use them and do not think that the language is being contaminated. The data is provided in the chart below.

Table 1

Students' attitude towards loanword prevalence in the language (%)

Statement	Female	Male
I agree that loanwords add diversity and enrich our language	70%	30%
I agree that adoption of certain political, economic, technical terms is a necessity	25%	75%
I know Lithuanian equivalents of provided loanwords	90%	10%
I agree that a new loanword is inapplicable but it is popular among peers	60%	40%

All the respondents agree that adoption of some specific political, economic, technical terms is a necessity, especially in the area of Information Technologies, when the appearance of computer introduced plenty of technical terms into Lithuanian language.

The survey revealed that men (70%) tend to choose loanwords more often than women (30%), who prefer the equivalents of loanwords, and young people do not avoid using loanwords in their spoken language, as they are popular among peers.

The analysis of loanword adoption in mass media (see pic.) indicated that the majority of the borrowings are used on the internet webpages (51%) and students' spoken language (20%). A smaller part of loanwords is used on the radio/television (8%) and the press (17%). In order to find out the popularity of Anglicisms in students' language, the respondents were provided 72 examples of realities in English and were given their Lithuanian equivalents. The survey revealed that 6 realities (8,4%) were identified as loanwords (*lizingas, multimedija, prodiuseris, saitas, topas, hitas*); 3 realities (4,2%) as only standard words (*megztinis, etiketė, žiniasklaida*); 62 realities were identified as both loanwords and Lithuanian equivalents.

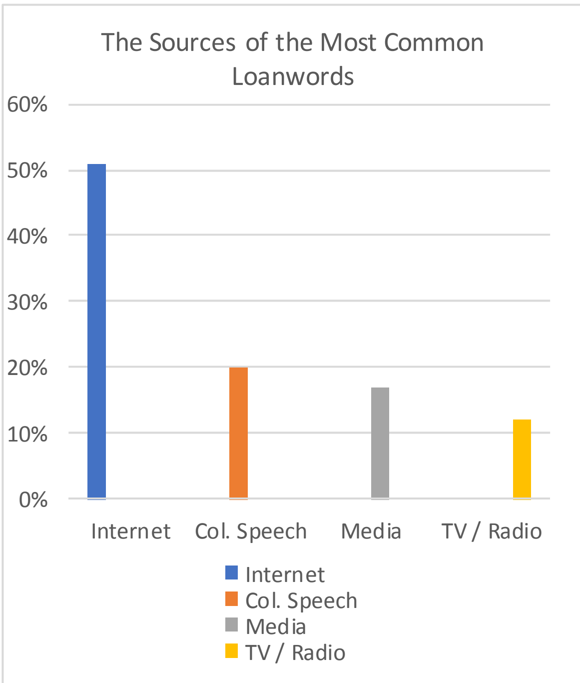


Fig.1.The sources of the most common loanwords

In accordance with the survey results, Lithuanian equivalents of new realities in students' spoken language are slightly more popular than the borrowed ones; the ratio is ≈1:2.

It is obvious that the loanwords such as *invoisas, atačmentas, impičmentas, know-how, keteringas, kontraktorius, vaučeris, brauzeris* are not popular among the students. Unpopularity of these words can be explained by their dependence to different professional group, not to the group of the researched.

On the basis of the survey we can draw the conclusion that the most common loanwords are as follows: *lizingas, ingridientas, saitas, failas, mikseris, multimedija, hitas, topas, prodiuseris, tiuningas, plejeris.* Their popularity can be explained by the simplicity, convenience and frequent usage in mass media.

Following the survey results, it has become obvious, that there are economic, political, technical and sports terms, which are not common in students' language e.g. *plėtotė (apgreidas, en. upgrade), akmenslydis (kerlingas en. kerling), kontroliuojanti kompanija (holdingas en. holding), apkalta (impičmentas en. impeachment), ieškas (peidžeris en. pager), dailymankštė (šeipingas en. shaping), econ. numetimas (dempingas en. dumping), informacijos* *mainų srautas (trafikas en. traffic).* Unpopularity of these words among the students can be explained by the lack of English language knowledge, incomprehensible word meanings and their uncommonness in the language.

The survey results revealed, that 60 (20%) of the students aged 31 – 43 use both loanwords and Lithuanian equivalents, as these words are common to them. This way they demonstrate their competence in one or another area. The rest 240 respondents (80%), aged 18 – 31 use more borrowings than Lithuanian equivalents. This is determined by young people's communication environment.

Having analysed the survey results, we can state that in *written language*, the loanwords are substituted by their Lithuanian equivalents e.g. *greitkelis* (autobanas ger. autobahn), *verslas* (biznis en. business), *katilas* (boileris en. boiler), *lankstinukas (*bukletas en. booklet), *pardavėjas* (dileris en. dealer), *fizinis tinkamumas* (fitnesas en. fitness), *elektroninis paštas* (imeilas en. email), *rinkodara* (*marketingas en. marketing*), but loanwords prevail in students' *spoken language*. New borrowings is a problematic phenomenon, as the usage of Lithuanian equivalents is not always valid, standardised. A. Paulauskienė has stated, that „in such cases when a borrowed word excludes own word, it is necessary to declare, that it is inapplicable, a barbarism and has to be strictly replaced e.g. baksas (en. buck) into doleris (dollar), hotelis (en. hotel) into viešbutis, ofisas (en. office) into biuras and other. If the loanword is a term of science or any other area, it is necessary to look for its appropriate equivalent, create new words (neologisms), which would enter common use and would comply with the language regulations e.g. dileris (en. dealer) – prekybos agentas, taimeris (en. timer) – laikmatis, brauzeris (en. browser) – naršyklė and other. If there is a difficulty in finding one word equivalents, there is no need to avoid two-word terms" (http: //www.adgloriam. lt/lt/main/s/K/barb). It becomes more and more difficult to withstand the impact of the English language. Not to avoid new language phenomenon, but evaluate and continue the investigation of the reasons of their predominance, consequences, establish a more flexible attitude towards the borrowings to be replaced, form the strategies of new loanword standardisation – such is the present objective of linguists and all language users.

Conclusions

1. Loanwords penetrate into mass media not only singly, but in entire thematic groups. A number of unadapted i.e. morphologically not formalized/illegalized English origin words has been increasing. The analysis of the usage of loanwords in mass media revealed that they prevail on the Internet webpages and in students spoken language.
2. The survey results allow to state, that Lithuanian equivalents of loanwords are slightly more popular than Anglicisms.
3. Majority of new loanwords possess Lithuanian equivalents, recorded in written usage, and are familiar to the students.
4. Mass media, information technologies, students' English language skills, partially, communication environment can have impact on language usage adoption.

References

1. Celiešienė, V., (2003). Techninio profilio universitetų kalbinės veiklos savitumas. *Filologija*. Nr. 10. P. 10–20. Vilnius: Technika.
2. Girčienė, J., (2004). *Naujųjų skolinių ir jų atitikmenų konkurencija sakytinėje vartosenoje: Skoliniai ir bendrinė lietuvių kalba*. Vilnius.
3. Girčienė, J. (1997). Naujosios svetimybės spaudoje. *Kalbos kultūra*. Nr. 69.
4. Paulauskienė, A. (2001). *Lietuvių kalbos kultūra*. Kaunas: Kauno technologijos universitetas.
5. Paulauskienė, A. (2004). *Teisininkų kalba*. Vilnius.
6. Ryklienė, A. (2001). Elektroninis diskursas: kalbos ypatybės ir stilius. *Daktaro disertacija*. Lietuvių kalbos institutas.
7. Rudaitienė, V., Vitkauskas, V. (1998). *Vakarų kalbų naujieji skoliniai.* Vilnius.
8. *Tarptautinių žodžių žodynas* (2005), Vilnius: Alma littera, 4-as papildytas ir pataisytas leidimas.
9. Vaicekauskienė, L. (2007). *Naujieji lietuvių kalbos svetimžodžiai.* Lietuvių kalbos institutas.
10. Vaitkevičiūtė, V. (2004). *Tarptautinių žodžių žodynas.* Vilnius.
11. Lietuvių kalba ir literatūros istorija. Retrieved from http:// ualgiman.dtiltas.lt/ leksikologija.html.
12. *Skoliniai*. Retrieved from http://www.vlkk.lt.

Received: 23 March 2017
Accepted: 11 October 2017

THE USE OF MARKETING COMMUNICATIONS MIX IN THE ORGANIZATIONS IN THE MARKET OF INFORMAL EDUCATION IN LATVIA

Tatyana Golubkova
Baltic International Academy

Maxim Rapoport
Riga, Latvia

Annotation

The use of marketing communications by the enterprises in different fields, for today, is incontestable fact. But, the research of their use in a complex in enterprises is particularly relevant. To identify the effective use of tools of marketing communications mix in the paper the place of informal education is defined and the concept is given to it. The objects of the research are identified and characterized, in the commercial and non –commercial fields, in the market of informal education, the results of the carried out survey of recognition of selected objects of the research in commercial field are represented and the assessment of use of marketing communications mix is given.

Key words: *informal education, commercial and non-commercial field, marketing communications mix, tools of marketing communications.*

In recent years, simultaneously with the increase of role of marketing, the role of marketing communications has increased. It is not enough to have good products and services – to increase the volumes of their sales and profit taking, it is necessary to bring home to the consumers benefits from their use. Marketing communications allow carrying out the transfer of messages to consumers for the purpose to make products and services of companies attractive to target audience. Indeed, the effectiveness of marketing communications with customers has become a key factor of success of any organization, including the organizations, carrying out their activity in the field of informal education. The study of the development of the field of informal education in Latvia is of the utmost interest and the study of use of marketing communications in this field is very **relevant.** In this regard, we will define **the goal** of this paper, as: ***The use of marketing communications mix in the organizations in the market of informal education in Latvia.*** For the implementation of the stated objective, we will fulfill the following tasks: - 1) we will represent the definition of informal education; - 2) we will define the object of the research of informal education in Latvia and characterize them; 3) – we will represent the results of research of use of marketing communications in the objects of research; - we will provide the assessment of use of marketing communications by the objects of research and – 4) we will outline the suggestions for the use of marketing communications mix for the effective activity of the enterprises and in the market of informal education.

1. Informal education in Latvia

Informal education in Latvia, along with the formal one is regulated by the Law on education. Formal education it is a system which includes the levels of basic, secondary and higher education, acquisition of the programme which approves and recognizes the state or a document on professional qualification.

The term "informal education" it is an organized outside the formal education, on interests and on demands of the corresponding educational activity [1]. In other words, informal education it is the subsequent education which first of all follows the basic one. The selection of direction of informal education depends on need, demand, priority and desire of each individual [3].

The analysis of informal education in Latvia has allowed dividing the enterprises, operating in this field into commercial and non –commercial. To non – commercial organizations in the field of informal education refer so –called state organizations. Along with variety of offered courses, especially popular and in demand with the Latvian consumers are the enterprises, offering car driving trainings. This circumstance has allowed distinguishing: a) industry direction of research – training of driving of vehicles, as a service; b) Non –commercial organizations, providing service – driving training of motor vehicle; c) commercial enterprises, as which act driving schools.

According to the statistical data, in Latvia there are 309 enterprises – driving schools and driving courses [4], i.e., 309 commercial organizations of informal education, providing a service to the Latvian consumer – car driving training.

At the same time, along with the commercial enterprises in the market of informal education the similar service offers noncommercial organization – Labor exchange, NVA.

Thus, for carrying out the research from the total number of enterprises was chosen four sites, these are three commercial enterprises, driving schools in Riga: CREDO/AUTOPRIEKS, Real Proff, Fortūna and noncommercial organization NVA/Labor exchange.

The characteristics of the objects of the research. Commercial and noncommercial organizations in informal education.

For the first object of the research was chosen the labor exchange in Latvia. NVA – as an “agency” is noncommercial, state organization. It provides and implements the policy of reduction of unemployment in Latvia. The “agency” provides the various opportunities for unemployment people, including, it offers a free opportunity of obtaining a driving license. This program occurs within the framework of informal education and during the training process, the trainee/unemployment person each month draws benefit in the amount of 99.60 EUR [5]. According to the statistics, in Riga, in 2015 on the accounting of unemployed people were 2906 people of whom only 354 of unemployed people participated in this program for training of vehicles [6].

As it was mentioned above, among the commercial organizations were chosen three driving schools. We will provide their characteristics.

Autoprieks/Credo. In order to provide the best training, two largest driving schools of Latvia, CREDO and AUTOPRIEKS have been united and since 11.01. 2015 work in new office. In 14 years of operation of driving school, more than 25 000 trainees took the training courses. In the staff of the driving school works more than 100 employees. The branches of driving school are not only in Latvia, but also in Balozi, Jurmala, Liepaja, Jelgava, Ventspils and Daugavpils. The average percentage of passing state exam among trainees is 88%. The driving school bears the social responsibility and takes part in various events, supporting good initiatives [9].

The following organizations cooperate with driving school “Credo”: The state agency of employment, “Riga” airport, Policy College, National armed forces, Riga Samaritan Society and other state and commercial organizations trust professionalism of the driving school.

Real Proff. LLC “Real Proff” was established in 2010 on the basis of professional training center of Riga. Traditions put in this educational institution are closely intertwisted with the modern innovations, embodied in qualitative and available training. Driving school actively use discounts for students [7].

Fortūna. The driving school “Fortuna” was founded in 1994 and is one of the leading driving schools of Latvia. In the driving school are working the experienced teachers, instructors and team of managers of training courses. In Riga and Latvia are 12 branches, including in Liepaja, Daugavpils, Jurmala, Bauska and Valka [8]. Instructors of “Fortuna” are the masters of their profession. “Fortuna” offers the following categories: A1, A, B, C1, D1, C1E, C, D, CE, DE, professional category, preparation of drivers of water, tractor transport, car and electro car. Courses of extreme driving. Many drivers have come to study to get higher qualification and supplement forgotten knowledge.

Thus, the general characteristic of the objects of the research has allowed highlighting the objects of the research of informal education in commercial and noncommercial field.

Among the commercial enterprises of informal education, in the market of offers, services of mastering skills of car driving and other transport vehicles were outlined three main competitors. Nevertheless, from the above mentioned characteristics, i.e., a variety and attractiveness of provided services by the above mentioned enterprises, it is possible to suggest that for the consumer the selection of object for the satisfaction of his/her needs is quite complex process. In such conditions, namely the marketing communications and its complex, used by enterprises help the consumer in choosing of future consumption of service.

On the other hand, the participation in the research of noncommercial organization, such as “Agency” will allow looking more widely at the use of marketing communications mix in the market of informal education.

It should be noted that the motives of consumption of service and material security of consumers are different. However, they are united by one thing that for the implementation of desired will contribute the information on the possibility of choice of consumption of service, obtained by the means of marketing communications. In such case, the important is the research of use of marketing communications in the complex of promotion of service of organization in the informal education.

The assessment of use of marketing communications by the objects of the research

For obtaining the objective information on the use of communications by the organizations in the informal education, was carried out the marketing research, using desk and field method by the means of observation and by the means of survey. The sample of the research for the survey made 181 people.

1.1 The carried out research of use of marketing communications by noncommercial organization in informal education – Labor exchange (NVA) has shown that it actively use the home page on Internet as a whole and in particular as a means of advertising. The website is made quite conveniently, functionally; it has all the necessary information for the customer, as well as current news.

Periodically, news portals publish various articles about the activity of the labor exchange, as well as statistics that publish exchange on the website (for example, the level of unemployment in the country). At the same time, on television it is very seldom you can see any information, regarding the labor exchange. At the same time, the public relations, NVA are used quite actively, cooperating with the large number of enterprises, with the social European funds, various ministries in Latvia. The use of the above mentioned communications is settled by the organizational and legal form of activity of this organization, i.e., organization is noncommercial, state. From the point of view of competition, monopolist, consequently, communications bear other and different from field, content. From the perspective of analysis of use of traditional marketing communications mix which include: advertising, PR, personal/direct sales, sales promotion [2.106], the last two tools are not used by NVA for this reason. But nobody doesn't cancelled communications as a whole, from the perspective of their use in the complex, visually is represented their use in the table 1. 1.

Table 1

The use of marketing communications

	Labor exchange (NVA)
Advertising	X
Personal/direct salesпрямые продажи	-
Sales promotion	-
Public relations	X

Thus, the availability of information on Internet and full recognition of the organization as a whole is clarified – labor exchange in Latvia. But to get the information about the availability of provided service – training of driving will help the carrying out the survey.

The results of the survey have shown that the great majority of respondents (72.08%) have heard nothing that the labor exchange (NVA) provides free training and obtaining of the driving licenses for unemployment people. In its turn, only 27.2% of surveyed respondents stated that they are aware of such possibility.

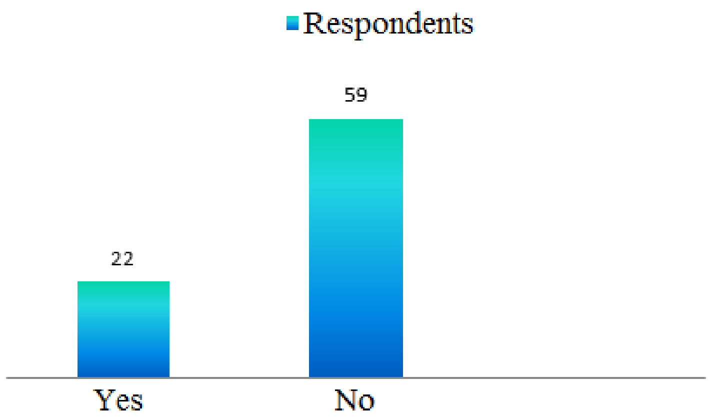


Fig. 1. The awareness of respondents, regarding the provision of free training for obtaining the driving license for unemployment people by the labor exchange (NVA) [made by the author].

As 59 of the surveyed respondents had never heard about such services of the labor exchange, their votes are expressed in the form of the answer "I don't possess the information". Votes of the other respondents were divided in the following way: 10 respondents get information from the Internet, 7 – from friends and acquaintances and the rest 5 – from TV advertising.

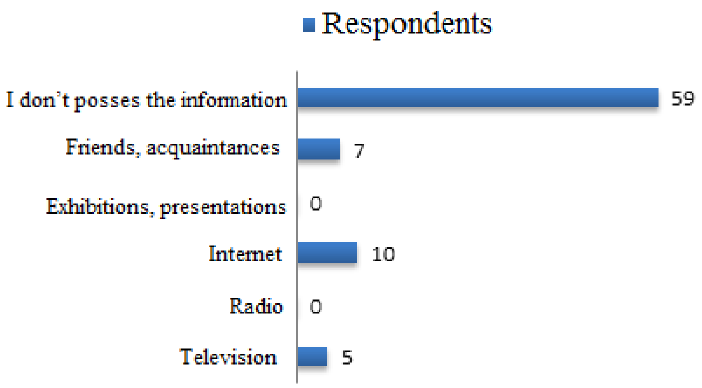


Fig. 2. Sources of obtaining information by the respondents about the provision of free training for obtaining driving license for unemployment people by the labor exchange [made by the author].

The great majority of respondents (60.5%) has evaluated the efficiency of public relations of labor exchange is extremely satisfactory that testifies about the insufficiency intensive work in this direction. About 30% of surveyed respondents consider that the labor exchange carries out the effective public relations and only the remaining 13.6% evaluates the public relations negatively.

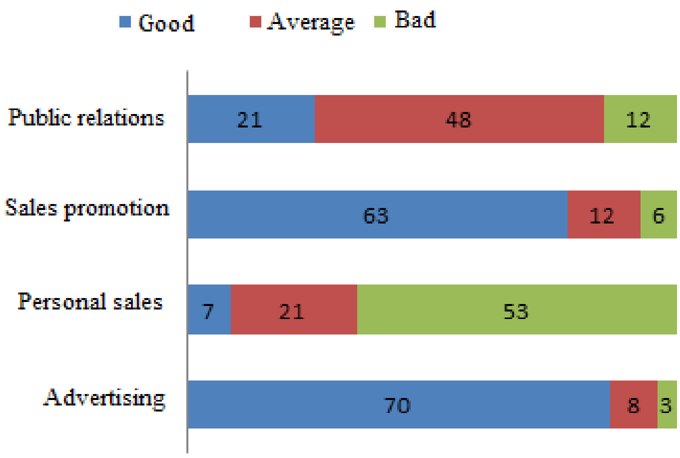


Fig. 3. The assessment by the respondents the methods of promotion of services and opportunities of labor exchange [made by the author]

As the obtained results by the means of observation, the results of the survey has also confirmed that the labor exchange practically doesn't hold any sales promotional events, i.e., to the potential customers (i.e., employers), the additional bonuses are not offered; besides the standard offers about an opportunity to find an employee. This circumstance has become the fundamental in the distribution of voices of respondents: 69% estimate events for sales promotion of the labor exchange – badly, 26% - so –so and only 5% - good.

Personal sales are ineffective in this field. It is determined by the fact that this organization is noncommercial. Therefore, the labor exchange often resorts to services of advertising, oriented on extensive target audience, rather than to individual tools. Consequently, the distribution of votes of respondents is quite predictable: the great majority (81.5%) negatively evaluates the effectiveness of personal sales, 16% give an average score and only 2% of respondents evaluate these events positively.

Positively, advertising of services of labor exchange have evaluated only 20% of all surveyed respondents, while negatively only 11%. Thus, the effectiveness of advertising events of labor exchange, the great majority of respondents (69%) evaluate quite satisfactory that against the background of the other tools of communications testifies about the necessity of additional elaboration of this direction on the part of management of labor exchange.

3.2. The results of the carried out research of use of marketing communications have shown that only CREDO/AUTOPRIEKS, uses four main tools of marketing communications mix, namely: advertising, direct sales, sales promotion and PR [2.106] what allows saying that this enterprise uses traditional marketing communications mix. The final results of use of main tool of marketing communications are represented in the table 1.1.

Table 2

The use of marketing communications

	Autoprieks/Credo	Real Proff	Fortūna
Advertising	X	-	-
Direct sales	X	-	-
Sales promotion	X	X	X
Public relations	X	X	X

To determine the effectiveness of use of tools of marketing communications was carried out the survey of consumers which has shown the expected results. The greatest recognition among the respondents uses the driving school Autoprieks/Credo for it has voted almost 94% of all surveyed. On the second place, according the recognition is the driving school Fortūna with 58% of votes. The least recognizable driving school among three offered options, to respondents seem the driving school Real Prof, for it has voted only 15% of respondents.

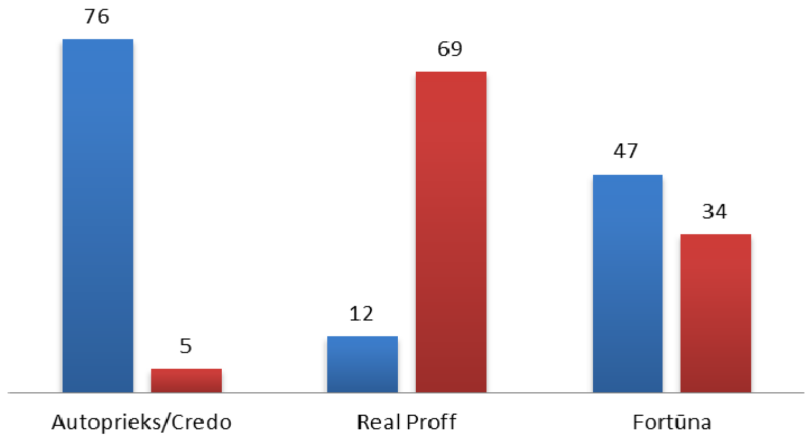


Fig. 4. Recognition of driving schools among respondents [made by the author]

The great majority of respondents have pointed out that they have learned about the driving school Autoprieks/Credo from the Internet (44%), as well as from their friends and acquaintances (30%). The similar situation can be traced in the case of the driving school Fortūna – on the Internet about it has known 26% of respondents and from friends, a little less – 18%.

Evaluating the methods of promotion of services of the driving school Autoprieks/Credo in Latvia, the highest scores were assigned by respondents to the effectiveness of events on sales promotion (78%) and advertising (86%). The high estimate to the public relations assigned only 26% of respondents and the lowest score got the effectiveness of personal sales (8%).

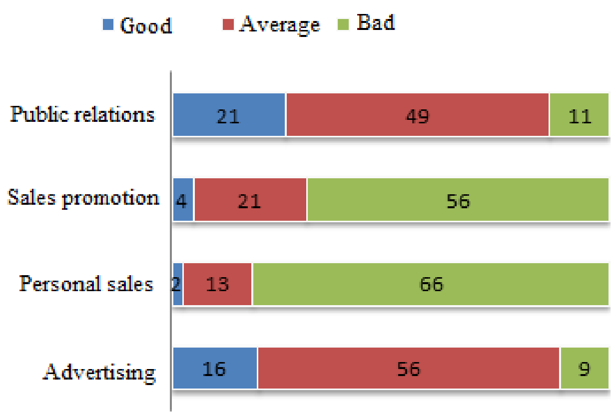


Fig. 5. The assessment of effectiveness of promotion methods of services by the driving school Autoprieks/Credo [made by the authors]

All without the exception tools of marketing communications mix of the driving school Real Proff, the respondents estimated whether satisfactory or bad. The greatest attention the management of the driving school, according to the opinion of respondents should be paid to the issues of effective sales.

The driving school Real Proff to the great majority of respondents (85%) – is not familiar at all. Nevertheless, the respondents get to know about it also mainly from Internet (6%) and from acquaintances (8%).

Evaluating the methods of promotion of services of the driving school Autoprieks/Credo in Latvia, the highest scores were assigned by respondents to the effectiveness of events on sales promotion (78%) and advertising (86%). The high estimate to the public relations assigned only 26% of respondents and the lowest score got the effectiveness of personal sales (8%).

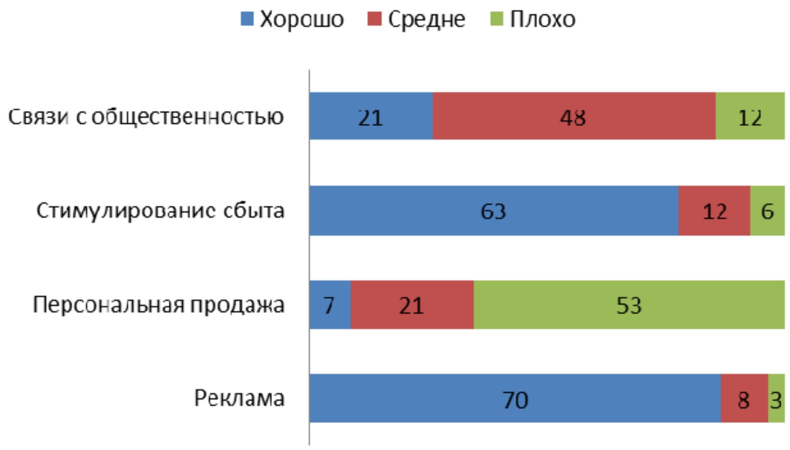


Fig. 6. The assessment of effectiveness of use of marketing communications for the promotion of services Autoprieks/Credo [made by authors]

All without the exception tools of marketing communications mix of the driving school Real Proff, the respondents estimated whether satisfactory or bad. The greatest attention the management of the driving school, according to the opinion of respondents should be paid to the issues of effective sales.

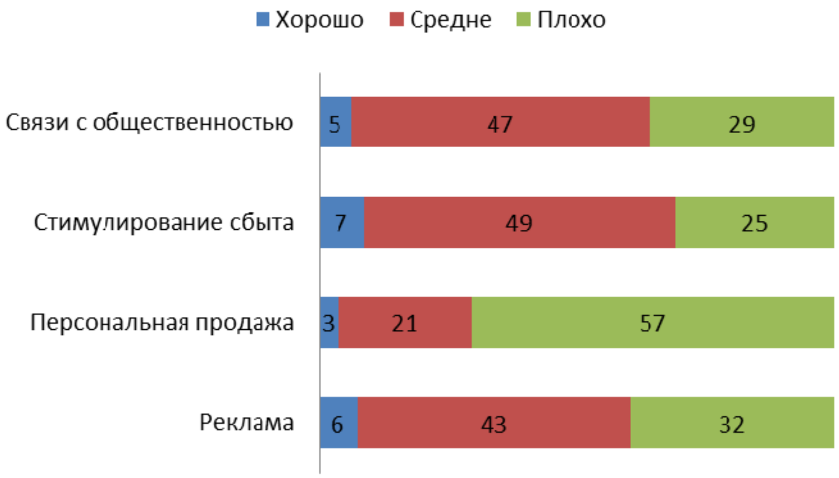


Fig. 7. The assessment of effectiveness of use of marketing communications for the promotion of services Real Proff [made by authors]

In the case of driving school Fortūna the situation looks more optimistic, rather than in the case of Real Proff. For example, the effectiveness of work with the public relations estimated approximately 30% of all surveyed. In the case of events on sales promotion, this indicator was higher – 32%. The effectiveness of advertising recognized also 30% of surveyed. However, as in the case of the previously examined driving schools, Fortūna, according to the opinion of respondents has a low efficiency of effective sales.

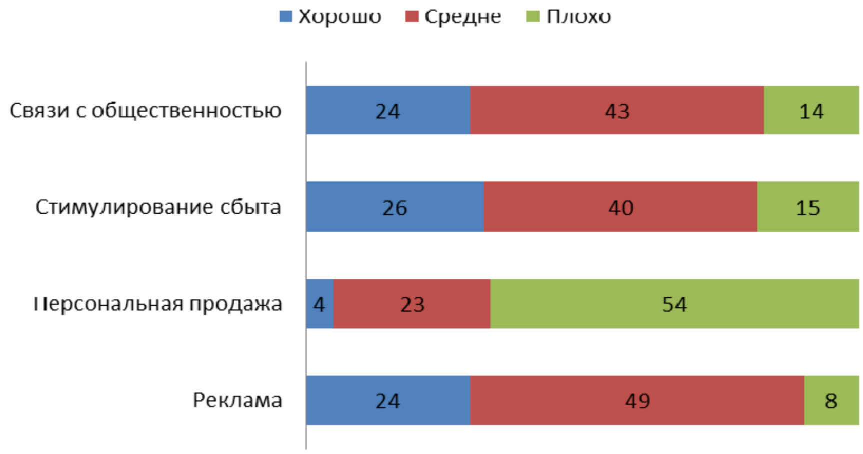


Fig. 8. The assessment of effectiveness of use of marketing communications for the promotion of services Fortūna [made by authors]

The carried out analysis has shown the effectiveness of use of tools of marketing communications mix, allowing promoting their service in the market of informal education. In the result, the carried out survey has revealed a leader in recognition of consumer among the commercial enterprises – driving schools in the market of informal education, it is Autoprieks/Credo.

Conclusions

The carried out research has shown that the informal education is defined as the formal education and organized in accordance with the interests and demands. The most interesting and popular with consumers in Latvia is the offer for the training of driving cars and other transport vehicles. Among the commercial organizations, offering a similar service in Latvia is more than 309 enterprises that is an impressive figure for the country.

For the assessment of availability and use of marketing communications were chosen four objects of the research, including noncommercial, state organization – labor exchange organizations, driving schools.

The analysis of use of marketing communications in noncommercial, state organization has shown that the “agency” uses only two of four tools of traditional marketing mix. Being a monopolist in noncommercial field of education can allow not using all marketing communications mix. However, for the commercial field, in the conditions of severe competition, the similar thing is not allowed. The results of the carried out research only have confirmed this fact. The analysis of use of marketing communications has shown that only Autoprieks/Credo out of three commercial objects uses the all mix of popular tools PR). The use of so –called traditional marketing communications mix as the results of the carried out survey have shown, has a positive influence on the brand awareness Autoprieks/Credo. This, in its turn proves that the use of marketing communications mix only for commercial enterprises in the market of informal education plays a significant role in the attraction of large number of consumers.

References

1. Education Law (adopted on 29.10.1998., Entered into force on 01.06.1999.) // Latvian Journal No. 343/344 (1404/1405) 17.11.1998., With amendments until 07.16.2015. // Latvian Journal No. 127 (5445), 07.02.2015.
2. Romanov, A. A, Panko A. V. (2006). *Marketing Communications*. M .: Eksmo, S.432.
3. "Non-formal education" in the framework of the 55th week (25 / 09-01 / 10/06) UNESCO Retrieved from www.unesco.org/bpi/pdf/memobpi55_NFE_ru.pdf
4. Information Portal 1188. Driving schools and driver courses. Retrieved from http://www.1188.lv
5. Home Labour Exchange (NVA). Retrieved from http://nva.gov.lv/index.php?cid=433
6. Home Labour Exchange (NVA). Getting non-formal education with a coupon. Retrieved from http://nva.gov.lv/index.php?cid=433&mid=311&txt=2903
7. Homepage *Autoprieks / Credo*. Retrieved from http://www.credo.lv/ru/?gclid=CMT567nMtcoCFWXecgod_0wGWQ
8. The driving schools Homepage *Real Proff*. Retrieved from http://www.realproff.lv/
9. Home page Fortūna driving school. Retrieved from http://fortuna.lv/ru/aboutus

Received: 29 March 2016
Accepted: 11 October 2017

EMPLOYEE'S ORGANIZATIONAL COMMITMENT MEASUREMENT BASED ON METASTUDY

Žaneta Kavaliauskienė
Šiauliai State College, Lithuania

Annotation
Scientific problem: unfounded expected factors of an employee's commitment to an organization. The aim of the research: to differentiate factors based on metastudy that promote an employee's commitment to an organization. The general scientific research methods have been utilized for the study – the scientific literature analysis and synthesis, comparison and chronology. The article gives an overview of metastudy, based on which the conceptual employee's commitment model to an organization was constructed and later verified as well as further analysis of this specificity which will be useful for expansion of the interactions of the above-mentioned model interactions.
Key words: *human resources management, an employee's commitment to an organization.*

Introduction
Topic novelty and relevance. Western scientific management literature is abundant with an employee's organizational commitment measurement examples. Seeking for an empirical national employee's organizational commitment dimensions and feasibility of factors influencing them as well as intending to carry out a more comprehensive research covering latter years, it makes sense to review the most significant results of relevant in this aspect research that was carried out in different countries of the world.

Problematics of the topic Lithuanian and foreign researchers basically are only interested in individual employee's organizational commitment factors. Studies delve more into the dimensionality of employee's commitment to an organization concept instead of the verification of factors' multiplicity which is promoting the aforementioned phenomenon.

The aim of the research: to differentiate factors based on metastudy that promote an employee's commitment to an organization.

The research methodology: the general scientific research methods have been utilized for the study – the scientific literature analysis and synthesis, comparison and chronology.

Research objectives:

1. To distinguish the former employee's organizational commitment studies results, which influenced the creation of the conceptual employee's commitment to an organization model.
2. To compare the latter employee commitment to an organization research that define and thus expand an employee's commitment to organization research possibilities in the future.

Earlier employee's organizational commitment measurement experience

Human resources studies in Lithuania have been gaining popularity only in the nineties of the twentieth century, realizing that thanks to them the feedback is being promoted – not only relationship of staff and management is being improved, but also the individual / group / team work, as well as work environment, which is important for improving the organization's effectiveness and seeking its further development.

Organizational commitment represents a positive disposition for organization and its values. Thus, measurement of employee's commitment to an organization is assessment of an individual's personal and organizational values and beliefs (Boles et al., 2007).

Western management literature is incomparably richer with examples of employee's organization commitment measurement, the results of which were used for empirical distinction and substantiation of national employee's organizational commitment dimensions and their influencing factors. All this should be reviewed in the chronological order.

Jauch et al. (1978) studied relationship of organizational loyalty, professional commitment and scientific productivity of a large central state university scientists (N = 84). The data of this study showed that the most professionally committed scientists had a higher scientific productivity.

Bruning and Synder (1983) analyzed organizations providing social services employees (N = 583) correlation of sex and responsibilities on their organizational commitment.

Bateman and Strasser (1984) scientific study was based on the permanent nursing department employees (N = 129) study data, analysis of which showed that organizational commitment is the job satisfaction factor.

Al-Qattan (1987) analyzed the relationship between organizational commitment and personal characteristics. It was a comparative field study conducted following example of westerners working in Asian, Arabic, Saudi Arab and Saudi institutions (N = 270). The study showed a stronger organizational commitment compared typical Arabs and Asians comparing with Westerners and Saudi Arabians.

Romzek (1989) studied the impact of employee's commitment for employee's personal and professional satisfaction. The results of the study showed that employee commitment to an organization should be considered as a psychological attachment to the employing organization, providing a personal benefit to the committed person.

Alpander (1990) studied the synergy of commitment, organizational goals and job satisfaction. It was discovered that job satisfaction significantly and positively correlated with organizational commitment.

Reed et al. (1994) conducted a study of accounting professionals in order to find out the relationship of job satisfaction and organizational commitment of the accounting professionals' working in public accounting companies and private sector.

Schwepker (2001) analyzed sellers of 26 organizations in the US southern region (N = 152) interaction of job satisfaction, organizational ethical climate, organizational commitment and their possible change. Although it is believed that the sellers physically, psychologically and socially are excluded from the organization, but based on the results, organization's ethical climate also affects them. It was found that employees understanding of positive ethical climate positively correlates with their job satisfaction and organizational commitment.

Petkevičiūtė and Kalinina (2004) presented analysis of an *organizational commitment* concept and carried out practical pilot study (n = 105) to identify specific factors of this phenomenon. Data analysis showed that the main factors positively affecting the organizational commitment of employees surveyed are: organizational and personal values congruence, knowledge of organizational goals, good relationship with the manager and trust in him/her, a pleasant working environment and organizational policy towards subordinates. The connection with the listed factors is not always straightforward, but the weakening trend of decreasing level of organizational commitment is evident. Organizational commitment survey results showed that the most committed employees have a high level of loyalty to an organization, are proud of an organization, feel a strong sense of solidarity in moments of crisis, oppose to the idea that staying for a long time in their employing organization is useless, despite the fact that most of these employees are not satisfied with the salary. Here again there was observed practical linear relationship with decreasing level of organizational commitment. Thus, employees of the organization are linked not by material benefits, but by organizational characteristics and emotional comfort which is provided by working at this organization.

Stallworth (2004) surveyed employees of the US public accounting (auditing and tax administration) organizations (N = 110) in order to evaluate an universality of multi-dimensional concept of an organizational commitment and to check the factors influencing the dimensions of organizational commitment as well as consequences of the intention to leave an organization. The study confirmed an adequacy of multi-dimensional concept of an organizational commitment of public accounting organizations employees and existence of different factors promoting expression of organizational commitment dimensions. In order to convey the specificity of work environment of the public accounting organizations, the additional staff organizational commitment factors were measured (ten for affective type global commitment dimension and two for dimension normative type commitment). Seven factors were identified from them (understanding of inevitable overtime, constant consultation with colleagues in higher position, equality among the same social status people, possibility of promotion, the existence of the role distribution model) having influence for dimension of affective type commitment. In addition, it was also identified that affective type commitment is the only factor determining the determination to leave the organization.

The objective of Chen et al. (2006) study was to find out whether there are differences in organizational communication, work stress and organizational commitment levels of accounting specialists in the two cultures namely the US and Taiwan. The study defined professional status in the field of accounting qualifications and full-time financiers / accountants were compared to those in managerial positions for whom accounting was only a peripheral part of the work. Results of the study show that after the assessment of the organizational commitment and work stress there was identified slight intercultural differences. The higher the degree of organisational communication in both countries has led to a stronger organizational commitment and more productive work. But the US specialists were characterized by having a stronger organizational commitment and job performance relation, which is contrary to the claim by Hofstede (2003), that the high culture of individualism, such as the US is more focused on the individual than the organization. By the way, the only measurement that showed the difference between people in managing positions and full-time accounting specialists for whom accounting is not only a peripheral part of the work was stronger for accounting professionals.

Erdheim et al. (2006) explained the five components of the personality model as well as cohesion of Meyer and Allen's (1991) model of organizational commitment. The US auto manufacturers participated in the study (N = 183). It was found that a significant component of *extraversion* is associated with affective / emotional nature and normative dimensions of employee's commitment to the organization. According to the survey results, affective commitment reflects a personal positive emotional reaction to his/her employing organization, and stronger commitment of this type is characterized by those who are more prone to *extraversion*. Because extroverts tend to receive more social interactions than they expect, so they naturally see more opportunities in the organization than the introverts. There was identified a significant relationship of neuroticism, honesty and openness to experience components with continuous / permanent commitment. Fear and negativity makes *neurotics* anxious because of the changes in the work environment, which can lead to even more unpleasant experiences, thus this personality characteristic positively influences continuous / permanent commitment. After receiving formal (e.g. salary, promotion) or informal (e.g. recognition, respect) evaluation *honest* employees become more committed to the organization in continuous / permanent aspect, because otherwise its abandonment costs would heavily increase. There was identified a significant interaction of the *acceptability* component and normative / formal commitment. Theoretically, results of this study suggest that the personality plays an important role for organizational commitment and the *Great Five-component* structure explains explains its personological basis. From a practical perspective, the study results are valuable for organizational selection procedures.

Aube et al. (2007), interviewed Canadian prison employees (N = 249) aiming to deepen the concept of tri-dimensional interaction and organizational commitment as well as to investigate position control and work autonomy as intermediate factors. It was found that organizational support positively and significantly correlated with affective and normative commitments. Intermediate position control and work autonomy role in organizational support and affective type of commitment interaction was identified. In other words, the more strongly internal position control is expressed, the weaker is the organizational support relationship with affective commitment. Similarly, the greater autonomy employees have at work, the less organizational support influences affective commitment.

Vendors were interviewed (N = 152) in Boles, et al. (2007) study to find out the relationship of different aspects of job satisfaction with affective type of organization commitment. The results showed that all the constituent parts of the job satisfaction, satisfaction with the organization's policy and work tasks were important for all employees (regardless of gender) and they mostly affected their affective organizational commitment. Out of seven job satisfaction aspects three, namely the satisfaction of promotion, salary and colleagues, were influenced by the gender. According to the survey, satisfaction with promotion was much more associated with affective commitment in the men' responses. This only emphasizes the notion that satisfaction with promotion is associated with "the status of manifestation" or instrumental achievement of the objectives. Satisfaction with salary, according to the study also strengthened affective commitment of male workers, who had expressed competitiveness. Finally, satisfaction aspect with colleagues influenced more organizational commitment of women (because of their more active communication).

Labatmedienė et al. (2007) examined the tri-dimensional model of employees' organizational commitment in the nation wide, and analyzed employees' organization commitment dependence on certain individual factors and found a connection between organizational commitment and employees' intention to leave the organization. The study included employees of organizations in Lithuania (N = 105, of which – 41 men and 64 women). Results of the study showed that the tri-dimensional employee organizational commitment is a valid measure in Lithuanian case. Contrary to expectations, there was not detected a statistically significant relationship between employee's organizational commitment and their personal qualities, although a statistically significant link between employees' organizational commitment and the intention to leave the organization as well as organizational commitment and their age, level of education was demonstrated.

Moss et al. (2007) conducted a study to examine interim work characteristics, such as access to resources and the role of transformational leadership for *openness to experience* (as a personality trait) and organizational commitment interaction. The study involved employees' working in remote areas of Melbourne Centre in Australia. In the first study employees (N = 205) replied to the questionnaires, measuring their *openness to experience*, organizational commitment and the possibility of access to the resources in the organization in which they worked. It was identified that access to resources was positively linked to the affective commitment and interaction of *openness to experience* and normative commitment was moderated by access to resources. In the second study, employees (N = 312) replied to similar questionnaire, assessing their superiors' leadership style. The results showed that the transformational leadership strengthens relationship between the positive *openness to experience* and organizational commitment. Finally, it was discovered that the *open to experience* employees tend to demonstrate a stronger organizational commitment in cases when access to resources is granted and expression of their personality traits are promoted (such as creativity, diversity and individuality).

In Martin et al. (2008) study were interviewed employees of various organisations (N = 285). There were analyzed the most important dimensions and factors of employees' organizational commitment. It was discovered that the most effective way to bring up the norminal commitment and to retain employee in the same organization is imposing an afective commitment. Based on the study the employee organization commitment is influenced by employee's gender, education, number of offspring, the size of the organization as well as the membership of a group.

To identify the different generations (generational) groups and determine their impact on organizational commitment Patalano (2008) conducted an empirical study in a large Internet service / telecommunications organization. Based on previous studies, which identified that each generation of employees is different in their values, ethical standards, attitudes to work and worldview (Smola, Sutton, 2002), expectations of this study were associated with the degree of organizational commitment that was measured, i.e. as the attitude to work, in the hope that it will be different for both analyzed generations.

Yang and Pandey (2008) analyzed the nature of normative / formal type of commitment and its factors, including the managers awareness of political environment and administrative reforms. The study revealed that norminal / formal commitment is positively affected by clarity of goals and negatively by bureaucratic structure.

Han et al. (2009) defined and compared conferred powers, employees' job satisfaction and organizational commitment of permanent (N = 254) and non-permanent (N = 162) nurses in nineteen Korean hospitals. Results of the study showed that the permanent employees had greater powers and showcased a stronger job satisfaction. Permanent nurses in comparison with their non-permanent counterparts were more committed to the organization in a general sense. Significant differences between the groups of *organizational commitment scale* affective / emotional nature and continuous / permanent commitment subscales were not discovered. However, permanent nurses' scores in normative / formal commitment subscales were significantly higher compared to the non-permanent nurses. This result can be explained in terms of different work attitudes of nurses based on their current employment status. As non-permanent employment contracts of nurses are drawn for a short period of time, thus negative attitude associated to their job status and limited possibilities to extend the employment in the same organization may hinder these employees' organizational commitment.

Jain et al. (2009) examined the interim work control situational role for employee's well-being and the interaction of organizational commitment. The study included four middle-level managers (N = 250) of the North Indian private sector industrial organizations. It was found that the external work control position has a positive impact on employee's well-being and the interaction of organizational commitment and employees' welfare is positively associated with affective / emotional organizational commitment. That would explain a favorable employee's belief in organization social responsibility standards, long-term relationships and loyalty, which are not weakening even when cultures homogenize as the result of globalization. Favorable people look at things positively, which leads towards affective / emotional type of commitment.

Joolideh and Yeshodhara (2009) studied Indian and Iranian higher educational institutions teachers (N = 721) and their work specifics (taught subject) influence on teachers' organizational commitment. According to the survey results, India's teachers had stronger affective and norminative commitment, while Iranian teachers could be characterized by a stronger expression of continuous commitment, but statistically significant age of the employees and work specifics (taught subject) relationship with their organizational commitment was not noticed in the studied cultures.

Karakus and Aslan (2009) studied public and private higher educational institutions teachers' (N = 1017) organizational commitment. Study results showed that employees' commitment trend, type and level depends on such personal characteristics such as gender, marital status and seniority. Although women were more committed to the profession in affective and normative types, but they showed weak normative commitment for the work group and a weak continuous commitment for the organization in which they work. Married employees in affective and normative aspects were less committed to their profession than single employees. But the level of continuous commitment of married employees to their profession and organization in which they worked was higher. It turned out that with the increasing number of work years in an organization, increased the efforts put into organization's operations and thus employees' continuous commitment to an organization has increased. Although by the highest degree of normative commitment to their profession showed employees with 1-5 years of work experience, but this category was the least committed in affective / emotional as well as in normative aspect for their work group.

Sezgin (2009) studied Turkey (Ankara) primary school teachers' (N = 405) demographic variables (gender, age, work experience) and psychological endurance (individual nature reduction of the negative effects of stress) influence on their organizational commitment. It turned out that the psychological endurance is an important factor for employee's organizational commitment, which is positively associated with identification with an organization and organizational and individual values overlap dimensions (distinguished by H.C. Kelman (1958)); a statistically significant gender and work experience factors were noticed on identification with an organization as well as organizational and individual valuesoverlapping dimensions. This study presents a different approach to organizational commitment, analyzing employee's commitment dimensions – mutual agreement, identification with the organization as well as organizational and individual values coincidence.

Iqbal (2010) studied the Pakistani industrial organizations employees' organizational commitment and interaction of certain factors (age, tenure, education). The study results revealed a statistically significant effect on the time of the position held by employees on their organizational commitment. It turned out that the managers of studied organizations are more committed than the employees, and to encourage a stronger commitment there needs to be increased employee's job satisfaction by adequate compensation, proper organization's policy, training / learning opportunities and favorable working conditions.

Malik, et al. (2010) analyzed employees of two public sector universities in the Pakistan (N = 331) job satisfaction influence on their organizational commitment. It was identified a statistically positive satisfaction (work, quality of leadership and salary) relationship with organizational commitment.

Aube and Rousseau (2010) surveyed Canadian health care organizations employees (N = 215) to find out a manager and a coworker cooperation support relation with affective commitment and to analyze interim access to resources and physical environment conditions' influence on those relations. Regression analysis showed that a manager and a coworker's support is directly related to affective commitment. Hierarchical regression analysis showed that a manager and a coworker support is strongly related with affective commitment when excellent possibilities for access to resources is created. Physical environmental conditions enhance the impact of a manager support for affective commitment. However, the study did not confirm the interim physical environment conditions influence in coworker support and affective type of commitment relationship. This could be explained by the fact that members of a certain organization may encounter the same environmental conditions, while the environmental conditions of employees and managers often differ fundamentally.

Based on the above analyzed meta study results there was designed a principal conceptual model-classification of employee's organizational commitment which was based empirically (N = 1804) – Lithuanian case (Kavaliauskienė: 2016.; 2012 a, 2012 b).

In this model-classification of employee's organizational commitment affective / emotional nature of the commitment dimension is influenced by the following essential *personal characteristics* factors category components: gender (Boles et al., 2007; Labatmedienė et al., 2007), marital status (Karakus, Aslan, 2009) and personality traits, i.e. extroversion, which is the essence of positive emotionality (Erdheim et al., 2006; Karakus, Aslan, 2009) and personality traits, i.e. extroversion, which is the essence of positive emotionality (Erdheim et al., 2006).

The *work characteristics* category, influencing affective commitment dimension includes: organizational support (Aube et al., 2007), covering the employee's well-being (Jain et al., 2009), with emphasis on the manager's support (Rousseau, Aube, 2010) and coworker's support (Rousseau, Aube, 2010). Work characteristics also include: access to resources (Moss et al., 2007), a favorable physical environment conditions (Rousseau, Aube, 2010), with emphasis on resource adequacy (Rousseau, Aube, 2010). Although *interrelationships* are considered as one of the favorable organizational climate factors, but Martin (2008) in a study singled out an individual category of factors which include: interrelationships norms (Martin, 2008), trust (Martin, 2008) and satisfaction (Martin, 2008). Interrelationship norms are basically defined by the existence of role model distribution, the status equality between peers and feedback from managers (Stallworth, 2004). Attention must be paid to the benefits of a decentralized organizational structure, mainly perceived through giving autonomy to the employees (Aube et al., 2007; Stallworth, 2004) and leading employees by seeking the approval of everybody (Stallworth, 2004), etc.

Affective commitment to *engagement in work* factors category include: work experience in an organization (Stallworth, 2004), promotion possibilities (Stallworth, 2004), organizations attractiveness for the individual (Yang, Pandey, 2008), which according to Stallworth (2004), includes the organization's credibility, the expected work challenges organization and possible overtime acceptance.

The main factors of continuous / permanent commitment, according to Meyer and Herscovitch (2001) are related to stability, financial security and the bet parties are making. According to Allen and Meyer (1990), it is difficult to identify these factors, because losses attributable to the legacy of an organization are not adequate for everyone, so they are not easily generalized (Stallworth, 2004).

Considering detailed analysis of the continuous commitment dimension factors, there would be appropriate to include age (Labatmedienė, et al., 2007) and personality traits, according to Erdheim, (2006) such as openness to experience, neurotism and honesty etc. to the personal characteristics factors.

Continuous commitment influencing *interrelationships* factors category consists mainly of interrelationship norms, e.g. the bet parties are making (Karakus, Aslan, 2009), including the personal contribution of the employee, i.e. efforts, time and energy (Karakus, Aslan, 2009), coincidence of values and satisfaction (Martin, 2008).

Category of *job involvement* of continuous commitment factors include: work experience in an organization (Karakus, Aslan, 2009), support of relatives (spouse, parents, friends not working in the organization) and already mentioned financial security and stability.

It is believed that two mechanisms play the main role for a norminative / formal commitment i.e. socialization and exchanges. Thus, this type of commitment is developing because of normative beliefs (formed before the involvement e.g. family and cultural, and after the involvement, e.g. organizational and socialization process). According to the principle of the second mechanism, normative commitment develops benefit is received from the organization which promotes the need to morally commit to the organization.

Detailed examination of normative commitment dimension factors allowed to assign the following to the category of *personal characteristics* factors: marital status (Karakus, Aslan, 2009) and personality traits, such as extraversion and acceptance (according Erdheim et al. (2006)).

The following belongs to the factors of *work characteristics* category which influences normative commitment: organizational support (Aube et al., 2007; Karakus, Aslan, 2009), especially in terms of employee performance evaluation and salary aspect, access to resources (Moss et al., 2007), transformational leadership (Moss et al., 2007), when the personal insight and energy of a manager inspires followers and has a significant impact on organizations and clarity of organizational goals.

Norminative commitment influencing *interrelationships* factors category consists of interrelationship norms (Martin, 2008) and satisfaction (Martin, 2008). Interrelationship norms include psychological organization-individual relation (Joolideh, Yeshodhara, 2009), coincidence of values and open and honest communication network.

The following factors belongs to category of norminative commitment of *job involvement*: work experience in the organization, opportunities for further education and employment form / work status (Han et al., 2009).

Further study of employee' organizational commitment should not be limited by already prevalent conceptual and empirical experience and scientific intuition, but rather to draw attention to the recent years original and timely results of these specifics studies which are compared below.

Kell and Motowid (2012) study tried to determine whether the cognitive aspect of organizational commitment measurement could explain the behavioral influence in more detail than Allen and Meyer (1990) instrument, which was designed to measure the component of emotional commitment. This cognitive component was measured by strength of belief index. Undergraduates (N = 110) took a test which measured all the variables. The results show that students who express different suitability of behavior are more likely to support their own university and have pride in it. This effect occurs even when controlling personality and demographic variables. According to the survey results, extroversion and approval explains the divergence of opinions in affective commitment aspect and awareness explains the differences in cognitive commitment aspect.

Different human-environment friendly dimensions are studied in the article by Giauque, Resentera and Siggen (2014) to measure their impact on job satisfaction, job commitment and work stress. The study results show that human-environment friendly dimensions have a different impact on the dependent variables. The study complements many important academic debates. The first relates the studied model covering many human-environment friendly dimensions. The second contribution to the science is the assumption that the human-environment friendly dimensions is the result of some job implications. The third contribution is – distinguishing and measuring a new human-environment dimension – personal reforms.

Kim and Park (2015) examined general employees' emotional exhaustion, transactional leadership and manager-employee exchange impact on affective commitment and role performance. The was constructed a comprehensive system which includes affective commitment factors and consequences and allows to analyze how employees' affective commitment and emotional exhaustion coexist and influence their role performance. Utilizing stimulation theory, the vulnerability-stress theory and the necessary resources for a job model there were tested hypothesis on independent and variables factors influence of threefold interaction. There were studied South Korean company's employees (N = 332). Results of the study show that the role is poorly performed when emotionally exhausted workers work with a manager who believes in transactional leadership and especially when this belief is strongly expressed.

U-senyang, Trichanhara and Rithaisong (2017) study presents a structured model describing causal relationships of organizational commitment, organizational justice, transformational leadership and organizational health. The study was conducted in the local administrative organizations. The results of the study revealed that organizational commitment is directly linked to organizational health; organizational justice directly affects the health of the organization and indirectly (through organizational commitment) organizational health. Transformational leadership directly affects the health of the organization and indirectly (through organizational justice) organizational health.

Therefore, seeking for good organizational health in the local administrative organizations, the attention should be drawn to the development of personnel justice, including decision-making, interpersonal relationships, communication, understanding, and transformational leadership development, integrating the ideological impact, inspiration, intellectual stimulation and individuality (U-senyang, Trichanhara, Rithaisong, 2017).

The earlier contrasted recent years studies of employee's organizational commitment reveal newest concrete concept study trends, thus their results in timely manner would benefit the development of this type of research in the national level.

Conclusions

Based on early employee's organizational commitment meta study results and treating this phenomenon as personal individual and organizational values and beliefs assessment, there was developed a principal conceptual employee's organizational commitment model-classifier, which identified on scientific basis following empirically verified employee's organizational commitment factors: in personal characteristics category – age, gender, marital status and personality traits; in operational features category factors – organizational support, access to resources, a favorable physical environment conditions, transformational leadership, decentralized organizational structure; in interrelationship category – coincidence of interrelationship norms and values, satisfaction, open and honest communication; in the job involvement category factors – work experience in an organization and promotion possibilities, possibilities of further education, attractiveness of organization for an individual, support of family, financial stability and security as well as employment form.

Considering the fact that the results of the organization's performance are dependent on personnel's work, competencies, values, needs, it is advisable to monitor job environment changes in an organization over time by regularly conducting employee's organizational commitment studies. Therefore, employee's organizational commitment further studies should not be limited by already prevalent conceptual and empirical experience and scientific intuition, but should be developed following recent years studies findings in this field, i.e. expanding the principal conceptual employee's organizational commitment model-classifier with the perception of this phenomenon, human-environment friendly dimensions (especially personal reforms), emotional exhaustion, transactional leadership, manager-employee exchange factors while seeking to identify the root causes of employee organization commitment, organizational justice, transformational leadership and organizational health relationships.

References

1. Al-Qattan, A.R. (1987). The relationship between organizational commitment and personal characteristics and job performance. *Arab Journal for Administrative Sciences*, 11 (2). 5-31.

2. Alpander, G.G. (1990). Relationship between commitment to hospital goals and job satisfaction: a case study of a nursing department. *Health Care Management Review*, 15 (4). 51-62.

3. Aube, C., Rousseau, V., Morin, E.M. (2007) Perceived organizational support and organizational commitment: The moderating effect of locus of control and work autonomy. *Journal of Managerial Psychology*, 22 (5). 479-495.

4. Bateman, T.S., Strasser, S. (1984). A longitudinal analysis of the antecedents of organizational commitment. *Academy of Management Journal*, 27 (4). 95-112.

5. Boles, J., Madupalli, R., Rutherford, B., Wood, J.A. (2007). The relationship of facets of salesperson job satisfaction with affective organizational commitment. *Journal of Business & Industrial Marketing*, 22 (5). 311-321.

6. Bruning, N.S., Synder, R.A. (1983). Sex and position as predictors of organizational commitment. *Academy of Management Journal*, 26 (3). 485-491.

7. Chen, J., Silverthorne, C., Hung, J. (2006). Organization communication, job stress, organizational commitment, and job performance of accounting professionals in Taiwan and America. *Leadership & Organization Development Journal*, 27 (4). 242-249.

8. Erdheim, J. Wang, M., Zickar, M.J. (2006). Linking the Big Five Personality Constructs to Organizational Commitment. *Personality and Individual Differences*, 41 (5). 959-970.

9. Giauque, D. Resenterva, F, Siggen, M. (2014) Antecedents of Job Satisfaction, Organizational Commitment, and Stress in a Public Hospital: a P-E Fit Perspective. *Public Organiz Rev*, 14. 201-228.

10. Han, S., Moon, S.J., Yun, E.K. (2009). Empowerment, job satisfaction, and organizational commitment: comparison of permanent and temporary nurses in Korea. *Applied Nursing Research*, 22. 15-20.

11. Jain, A.K., Giga, S.I., Cooper, C.L. (2009). Employee wellbeing, control and organizational commitment. *Leadership & Organization Development Journal*, 30 (3). 256-273.

12. Jauch, L.R., Glueck, W.F., Osborn, R.N. (1978). Organizational loyalty, professional commitment, and academic research productivity. *Academy of Management Journal*, 21 (1). 84-92.

13. Joolideh, F., Yeshodhara, K. (2009). Organizational commitment among high school teachers of India and Iran. *Journal of Educational Administration*, 47 (1). 127-136.

14. Karakus, M., Aslan, B. (2009). Teachers' commitment focuses: a three-dimensioned view. *Journal of Management Development*, 28 (5). 425-438.

15. Kavaliauskienė, Ž. (2016). Darbuotojo tęstinį įsipareigojimą organizacijai skatinantys veiksniai. *Mokslo taikomieji tyrimai Lietuvos kolegijose*, 12. 137-144.

16. Kavaliauskienė, Ž. (2012 a). Darbuotojo norminio įsipareigojimo organizacijai veiksnių sąveikos. *Tiltai*, 1 (58). 91-104.

17. Kavaliauskienė, Ž. (2012 b). Darbuotojo afekcinio įsipareigojimo organizacijai veiksniai ir sąsajos. *Organizacijų vadyba: sisteminiai tyrimai*, 61. 43-54.

18. Kell, H. J. Motowidlo, S. J. (2012). Deconstructing Organizational Commitment: Associations among Its Affective and Cognitive Components, Personality Antecedents, and Behavioural Outcomes. *Journal of Applied Social Psychology*, 42 (1). 213-251.

19. Kim, C. I., Park, W. Emotionally Exhausted Employees' Affective Commitment: Testing Moderating Effects Using Three-way Interactions. *Social behavior and Personality*, 13 (10). 1699-1714.

20. Labatmedienė, L., Endriulaitienė, A., Gustainienė, L. (2007). Individual correlates of organizational commitment and intention to leave the organization. *Baltic Journal of Management*, 2 (2). 196-212.

21. Malik, M.E., Nawab, S., Naeem, B., Danish, R.Q. (2010). Job Satisfaction and Organizational Commitment of University Teachers in Public Sector of Pakistan. *International Journal of Business and Management*, 5 (6). 17-26.

22. Martin, C.L., Bennett, N. (1996). The role of justice judgments in explaining the relationship between job satisfaction and organization commitment. *Group & Organization Management*, 21 (1). 84-105.

23. Moss, S.A., McFarland, J., Ngu, S., Kijowska, A. (2007). Maintaining an open mind to closed individuals: The effect of resource availability and leadership style on the association between openness to experience and organizational commitment. *Journal of Research in Personality*, 41. 259-275.

24. Petkevičiūtė, N., Kalinina, I. (2004). Veiksniai, didinantys darbuotojų organizacinį įsipareigojimą. *Organizacijų vadyba: sisteminiai tyrimai*, 31. 179-193.

25. Reed, S.A., Kratchman, S.H., Strawser, R.H. (1994). Job satisfaction, organizational commitment and turnover intentions of United States accountants: the impact of locus of control and gender. *Accounting, Auditing & Accountability Journal*, 7 (1). 31-58.

26. Romzek, B.S. (1989). Personal consequences of employee commitment. *Academy of Management Journal*, 32 (3). 649-661.

27. Rousseau, V., Aube, C. (2010). Social Support at Work and Affective Commitment to the Organization: The Moderating Effect of Job Resource Adequacy and Ambient Conditions. *The Journal of social Psychology*, 150 (4). 321-340.

28. Schwepker, C.H. (2001). Ethical climate's relationship to job satisfaction, organizational commitment, and turnover intentions in the salesforce. *Journal of Business Research*, 54. 39-52.

29. Sezgin, F. (2009). Relationships between teacher organizational commitment, psychological hardiness and some demographic variables in Turkish primary schools. *Journal of Educational Administration*, 47 (5). 630-651.

30. Stallworth, H.L. (2004). Antecedents and consequences of organizational commitment to accounting organizations. *Managerial Auditing Journal*, 19 (7). 945-955.

31. U-senyang, S., Frichandhara, K., Rinthaisaong, I. (2017). Antecedents of Organizational Health in Southern Thailand. *International Journal of Behavioural Science*, 12 (1). 79-94.

32. Yang, K., Pandey, S.K. (2008). How Do Perceived Political Environment and Administrative Reform Affect Employee Commitment? *Journal of Public Administration Research and Theory*, February. 335-360.

Received: 21 August 2017
Accepted: 11 October 2017

THEORICAL INSIGHTS OF SUMMARY INNOVATION INDEX AND RELATED FACTORS

Jūratė Kuklytė
Vytautas Magnus University, Lithuania

Annotation

When Lithuania has been a part of the European Union, it has one of the most important objectives of the EU - to invest in the growth of the scientific potential to promote sustainable economic growth, social welfare and the realization of new markets in the global environment. Promoting innovation and deployment in the country, it is focused on the rapid and potentially broader technological modernization, ensuring high productivity and growth of all economic units of production quality improvement rates. For these reasons, the innovation index and its determinants assessment is essential to effective management decisions of state and business.

It is important for global markets realized innovation and deployment strategy to balance and maintain the government, business and higher education sectors. Related factors of innovations that contribute to sustainable economic growth and technological potential in different fields and sectors, there is a neccessity to identify the related factors of innovations and evaluate its the impact for the application and development of innovation. This analysis can identify the economic and technological progress of incentives.

The purpose of this paper is analyze the related factors of Summary Innovation Index. This paper provides the theorical insights of innovation conception, innovation infleuencing factors and related economic indicators which have impact for Summary Innovation index. Also it is reviewed Global Innovation Index, Innovation Capacity Index, Technology Achievement Index and Knowledge Economy Index. Achieving this purpose it is used a literature review and synthesis to conceptualize the field of innovations.

Key words: *innovation, summary innovation index, economic indicators.*

1. The conception of innovations

In order to properly investigate the significance of innovation and impact on economic development, it is necessary to identify the innovation definition, overview of academic research and to carry out the synthesis. To review the methods evaluated innovation development, to assess the positive and problematic aspects. Analyze what the macro and micro-economic indicators have a direct and indirect impact on the development of innovation and implementation. Defining correlation and linear regression models analysis methodology and problematic aspects.

The essential characteristics of innovation. According to Schumpeter (1996) innovation is related with the changes which create new products, production resources, markets and the emergence of circulation. Also innovation associated with industrial forms of implementation and economic development. Schumpeter define this concept by five phenomena that are important for the economic development (Figure 1).

1) The application of new resources.
2) Creation of new production with new features.
3) Installation of new technologies.
4) Reorganization of production.

→

5) The emergence of new markets.

Fig. 1. Five phenomena that are important for the economic development.
Note: adapted by the author according to Schumpeter (1996) and Rogers (1998).

Schumpeter (1996) highlighted the emergence of new markets in the process, arguing that innovation has a greater impact than price competition based by economic development theory. Despite the market skepticism of the innovation, the successful development and application of innovation, market regulation mechanism is activated and eliminates the organizations that use the old technologies (Fig. 1). This provision has denied Neoclassicism theory which formed the view that the value is dependent on supply and demand. Neoclassicism treated the importance of mechanisms, which promoted the rapid development of production and led to the lowest price in the market (Čiegis, 2006). It is obvious that J. A. Schumpeterpolemics statements was revolutionary for the production and economic evolution levels, as emphasized innovation, knowledge and technological progress influence for the competitiveness of enterprises. The analysis of conception of innovation showed that it is identified quite differently. According to Filipescu et al. (2013), Anišic et al. (2013), Perdomo-Ortiz et al. (2009), Godin (2008), Melnik et al. (2000), scientific insights of innovation, all characterized it as an effective commercial application of new technologies, ideas and methods which related with developing new products or improving long egzisting resources or processes in the market. Often innovation compared to inventions that are interpreted as a new idea of a product or a process development and practical implementation, but these concepts are not identical. It is considered that innovation can be interpreted in two ways. However, Swan (2009) innovation linked to the invention of commercial introduction in the market and separated the concepts of innovation and invention. Such a provision gives a polemic view by Drucker (2004) that innovation given the ability to notice the change and use it effectively in the process of business and that it does not require generation of new ideas or special talent. Jakubavičius et al. (2003) emphasized entrepreneurial origins of innovation, that it can only be defined as an improvement. The analysis of the scientific literature shown that innovation is an effective innovation project that creates a new service, product, or process of the monitoring. On the other hand, the result of the project can be an existing idea, service or product improvement, given by the rapid technology deployment and project resulted into the commercial applications, which would be linked to the profits, productivity and increase of a competitiveness. It is necessary to respond quickly to market changes and adapt, innovation management processes in a globalized economy with rapid technological progress.

Theoretical classification of innovation in the scientific literature is analyzed by innovation content. Jakubavičius et al. (2003), Staskevicius (2004) argued that innovation occured as the existing service or product improvements, it would be appropriate to classify the innovation in scientific and economic fields as well as efficiency. Ališauskas et al. (2005) distinguished between two types of innovative processes: modificated and radical innovations. The authors believed that the radical innovation due to the fundamental changes in organizations and modificated innovation related with an effective improvement of existing products and services. Valentinavičus (2006) analyzed the innovation grading methods and the fact that the priority of this methodology the author has chosen the Oslo Manual (Eng. Oslo Manual), the classification for targeted scientific and methodological innovation activities and evaluation. Using statistical indicators of innovation, innovation differentiated according to three indicators: production, education and services.

The Oslo Manual (1997) methodology and the importance are focused on the application of technological innovations in a production field (Fig. 2). Product innovations can be related to an external and an internal product improvements or changes in the properties.

Innovation schematic classification of the Organization for Economic Cooperation and Development (hereinafter - OECD) methodology analyzed the processes focusing not only on products and processes, but also focusing on innovation activities for better understanding the essence of business activities and operations (Fig. 2).

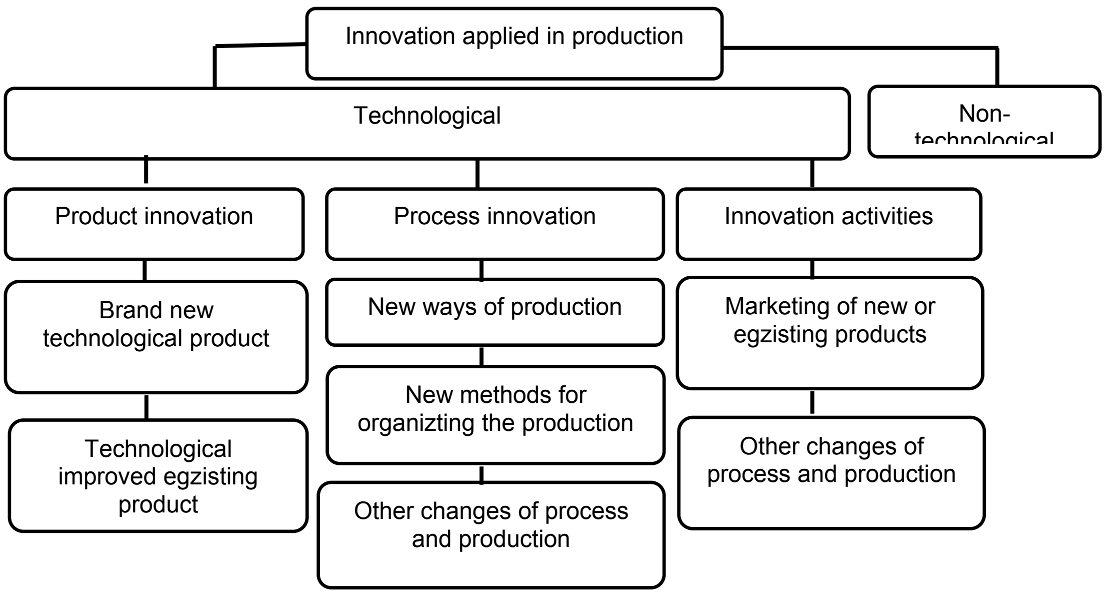


Fig. 2. Classification of innovation applied in production by EBPO methodology
Source: „Oslo Manual“ (1997).

Valentinavičius (2006) considered that this methodology is most often applied in the developed countries of the OECD innovation activities in the economic analysis. According to Jakubavičius et al. (2003), innovation is characterized by complexity, which helps to identify the target of innovative activities and to identify business niches content. The professor of Nottingham University in England, Swan (2009) scientific publications provided a linear model of innovation process involving such components like research, invention, design, innovation and market. It was described the direct fundamental and applied research and creative impact of the innovation process. Efficient use of inventions and designs or audiovisual work of professionals, it is possible to create a viable commercial innovation to realize the objectives. These innovations are first tested practically in the working environment and are potencially sold as a new or improved egzisting product with more attractive price, creating additional value not only for developers but also for companies and the society (broader analyzed by Kuklytė and Vveinhardt, 2016). Swan (2009) highlighted that innovation and inventions are a very important in the process of ideas generation. Inventions are generated new ideas for the processes of research and creativity and when the ideas reach the market, its turn into the innovation. It can be assumed that the inventions become an innovation only in the realization of the finished product or service reaching the market.

The scientific literature review shown that different types of innovations in business going to be targeted for specific reasons: reduction in production costs, increasing the market share, growth of output and productivity. Innovation classification forms given new approach to innovation as a system that has a composite nature. This suggests that innovation is complex phenomenon because it includes innovation in the creation, distribution and sales processes and integrates scientific work to entrepreneurship and other areas.

2. The influencing factors of innovation

Innovation development, rapid scientific and technological progress are main aspects creating economic stability in many countries'. It is important to identify what factors have an impact on innovation because innovation influence may be one of the major state policies and pillars. Lithuania has acceded to the European Union, the Alliance of trying to encourage innovation, but there is a limited support for reasearch and development (R & D) and innovation centers (Keršys, 2008). According to Glor (2003), Europe has the advantage in creation of research and innovation, but innovative projects are not realized effectively or there is a lack on the continuity like the complicated mechanism of innovative activities administration; imperfect funding mechanism; political interference environment and undeveloped innovation level of protection. Thus, Europe does not benefit from the accumulated knowledge and innovation, competition for the external environment interference. Assuming the facts, it is necessary to identify the factors that may influence innovations. The scientific literature analysis, factors having a direct or indirect impact on innovation activities. Innovation is influenced by internal and external factors, the effects of which related to the innovation life purpose. External environmental factors include economic, political, legal and social environment and the internal environment – macro-economic indicators and the business sphere related factors.

Melnikas et al. (2000) argued that innovation life cycles are different. The main innovation in the life-cycle phases: rapid growth, maturity stage, market saturation and finish. Promoting innovation in the development and application of business, attention should be paid to the innovation life cycle, macroeconomic indicators, the laws that govern the development of innovation strategy. It is appropriate to carry out an environmental review which analyzes selected countries in order to identify innovation and deployment scale and its related factors.

To identify the economic environment, it is necessary to analyze the macroeconomic indicators – gross domestic product (hereinafter - GDP), unemployment, inflation and indicators related to the functioning of organizations which can be defined as (Snieška et al., 2005): natural resources belonging to the geographical environment; intellectual capital, which is based on employees and their experience of adaptation; capital resources to assist in the production sphere creating a good quality of services and goods. The ability to effectively use the available natural resources, the development and innovation, has the impact on country's competitive advantage creating sustainable development. Strategy 2020 of European Commission give the priority for ecological innovation because it should replace obsolete or current processes and activities. Eco-innovation is important for social responsibility and environmental development of new markets for overcome the technological challenges reaching the sustainable design.

One of the most important economic factor is the intellectual capital, in the scientific literature often identified as human resources and is interpreted as the human physical and psychological characteristics which are associated with the qualification, education and socio-cultural level. According to Saner et al. (2009), human resources has a direct impact on the development and innovation in organizations, because working people acquire certain knowledge and skills. Hence, the proper management of intellectual capital can gain a competitive advantage at an organizational level. Effective human resource management is human brainpower and expertise for the purpose of organizational goals (Išoraitė, 2011). According to foreign academics Bohlander and Snell (2007), Kotler and Keller (2007), Jewell (2002), human resources management identified as an ability to promote the company's innovative activities and gain increasing competitiveness through workers' knowledge and scientific potential. Swan (2009) emphasized potential of scientific innovation as opportunities and conditions as the state of being complete, which promotes scientific innovation activities – creating innovative products and adapting it to commercialization for using existing scientific performance changes or improvements. Melnikas et al. (2000) identified the scientific potential of innovation as a multi-level system of which cornerstone is the foundation of human resources. Summarizing the author claims, intellectual capital is directly related to innovative activities. In this case, it is appropriate to invest in human resources, since formed an organizational advantage and greater receptivity to innovation.

Capital resources are essential for creating the innovations. Constantly changing environment of human resources to adapt to technological progress and to be able to use the equipment to effectively pursued by the organizational objectives and the development of high value added. The intellectual capital and technical resources has a direct impact on the development of innovative activities, because the company has a lot of capital resources to invest in scientific potential. Innovative activities and development funding sources are associated with high risk, resulting in credit problems without sufficient capital. Organizations need to look for other sources of funding: Access to public assistance or the European Union structural funds and seek informal or corporate investors who are named "business angels" – people who have a lot of capital resources, generating high income and are able to take high risks. Indirect investors financing risky activities realize the experience and seeks direct control, which may become the company's shareholders. In 2007, European Investment Fund initiated the establishment of the Business Angels‘ Fund, which provides financial resources for the continuity of operations until 2015. Business angels fund allow for companies to obtain external sources of funding from the European Union structural funds, thus promoting small and medium enterprises. Lithuania focused on businesses with an annual turnover of 4 344 300 EUR. This fund could cover part of the investment, but it is necessary to have an organization of investment (for example, a shareholder or manager). The investment in the company's capital is no more than 45% of the general fund and invests at least 55% of private investment, of which at least 5% must invest the intermediary itself, while the rest of the "business angel". The maximum size of the investment in the company is 400 thousand. Euro statistical average business angel investment 5 - 57 thousands EUR (Business Lithuania, 2015). Other external financing alternative is to venture capital funds that focus on high-yield transactions with a turnover in excess of 72 thousands euros. In addition to proportionality of the funding depends on many factors: the innovative project development stage, innovative organization size, the necessary funding sources and the amount of capital held. Innovative organizations projects attract wealthy investors focus on the development of high value added and perspectives to generate a large profit in a long term period.

The rapid progress of science and technology has a direct impact on the development of innovation. According to Valentinavičius (2006), a geometric progression increasing information flows effectively evaluate new technological factors as slow response to technological change processes which may have a negative impact on organizational structures. This means that the technological changes mainly influenced by the company in connection with the production, operation and productivity. The research achievements and technological innovation is one of the most important conditions that ensure a competitive edge in the global environment. Each part funded R & D in order to create a favorable business environment for the development of innovative ideas and applications, as well as attract more foreign direct investments (hereinafter - FDI). Business climate depends on internal and external organizations, factors that contribute to the achievement of the objectives and the promotion of innovative activities. Melnikas et al. (2000) stated that each company must provide courses of action realization of innovative ideas: innovation friendly environment – adapting to the legal and administrative environment, innovation financing mechanism for adaptation; promoting a culture of innovation – an advanced business management and organization methods and the improvement for promotion of innovation in the public sector; science-oriented innovation – the research and application of modern strategies in public institutions (high schools, business incubators) and innovative business cooperation for the development of small and medium business which promote investment in new technologies (Raipa, Giedraitytė, 2014). Detailed company's internal and external assessment of the factors important in decision-making, in order to effectively carry out innovative activities. Increased business competitiveness achieved by encouraging the application of innovation. In this process, participating in the basic organizational structure – innovation suppliers, companies and educational institutions. Taking a consideration of innovation related factors can be identified innovative project risks and performance, it is appropriate to measure innovation performance.

Innovative performance measured macroeconomic and microeconomic indicators. In practice, the innovation counted evaluating indices which are calculated differently depending on scientific and technological progress in various aspects and indicators. It carried out a number of studies aimed at identifying the macro-economic and micro-economic factors on the development of innovative activities. Nissan, Niroomand (2012), Keršys (2008) emphasized the micro-economic indicators measuring problematic that it is not always possible to measure the impact of innovation factors, using Likert cumulative assessment scale from 1 to 5. In order to optimally assess microeconomic factors surveys involving corporate executives and employees. However, for employees of optimism and incorrect answers, the results can be distorted and inadequate. Innovation index calculation evaluates the level of innovation in different countries to match it.

Summary Innovation Index (hereinafter - SII) – most commonly used in the European Union (hereinafter - EU) countries to assess the level of innovation in qualitative and quantitative terms. This started to run in 2000, the publication of the European Innovation Scoreboard. The period 2000-2015 index is calculated on the basis of 25 indicators, which are divided by the entrance to the innovation market indicators and indicators directly related to innovative performance. The main factors used to calculate the index: the role of business in early patent applications per 1000 population and scientific and technological achievements of results, which are measured on the basis of a qualified labor force and the knowledge economy's approach. From 2006 to the present Summary Innovation Index is calculated using 29 indicators. According to Archibugio et al. (2009), by the year 2008, SII was calculated with Japan and the United States of America statistics, however, that the calculation methodology is no longer applicable. The European Commission published data, the main factors affecting the index of total innovation: innovation factors – a lifelong learning process, the use of interactive applications; innovation and business integration - IT costs, costs of innovation development; intellectual property; knowledge of the future: the costs of R & D. Summary innovation index results in Europe ranges from 0 to 1 in value at a rate closer to 0 - the country has the lowest degree of innovation, if the index is close to 1 - achieved the highest innovation and application level.

The Global Innovation Index (hereinafter - GII) was used for analysis and published in 2007. GII aims to capture the multi-dimensional facets of innovation and provide the tools that can assist in tailoring policies to promote long-term output growth, improved productivity, and job growth. The GII helps to create an environment in which innovation factors are continually evaluated. It provides a key tool and a rich database of detailed metrics for economies from *15 indicators* (McCann, Ortega-Agiles, 2012**)**. It evaluated five input pillars capture elements of the national economy that enable innovative activities: Institutions, human capital and research, infrastructure, market sophistication, and business sophistication. Two output pillars capture actual evidence of innovation outputs: knowledge and technology outputs and creative outputs. GII gathers data from more than 30 sources, covering a large spectrum of innovation drivers and results; privileging hard data over qualitative assessments

Innovation Capacity Index (hereinafter - ICI) created to identify how the economic, political and institutional actions create a favorable environment for economic growth and encourage the development of new technologies. Index started using for evaluation in 131 countries in 2009. The reliability of the index is not high because of the different countries submitted and based by inaccurate data of statistics departments. ICI is calculated on the basis of 60 indicators that affect innovation. Index based on 5 factors (Lopez-Claros, Mata, 2010): institutional environment, human resources, legal and business framework, research and experimental development, information and communication.

Technology Achievement Index (hereinafter - TAI) evaluate the technological progress of the countries and the possibility of creating technological alliances. TAI was first published in vard University Competitiveness Report, in 2000. Index created for identification of existing technological achievements. Lopez-Claros and Mata (2010) highlighted that it is impossible to investigate expected technological advances or the measures to achieve the causal relations between the variables which are not accurately identified.

Knowledge Economy Index (hereinafter - KEI) assess the overall level of development in the country, according to the knowledge economy weighted criteria. According to Morkvėnas (2010), it identifying how the environment allows the effective use of knowledge. It is often confused KEI with the Knowledge Index (hereinafter - KI). While these indices are calculated on the basis of similar characteristics, but only the KEI evaluate the economic incentive and institutional regime. Since 2001, knowledge of the index data published in the World Bank's statistical database.

The calculation of the different innovation indices are based on a variety of scientific and technological progress in aspects of microeconomic and macroeconomic indicators. The examination of the significance of innovation is necessary to evaluate the different aspects – innovation influencing factors and their assessment. Correct identification of the determinants of innovation enable to choose the appropriate methods for more precise calculation of the results. One of the most accurate and globally recognized indices are Summary Innovation Index and Global Innovation Index.

Conclusions

1. J. A. Shumpeter wasd the first who first formulated innovation concept in Economic theory, highligthing the importance of related events and differences: *innovation* – new ideas for an effective commercial realization, *innovation* – a new phenomenon, the method, *the invention* - the generation of new ideas. The study of innovation interpreted as a process of creating a new product or service or discovered improvement of already egzisting product or service and adapted to the market needs. The innovation theory of fusion analysis found that innovation is one of the most important factors to ensure international competitiveness and new markets and product realization in them.

2. In order to investigate the significance of innovation, identify innovation influencing factors which was divided into external and internal, directly or indirectly affecting the country's innovation development. The main factors – political, economic, social and general innovation factors (technological progress, foreign direct investment, information and communication infrastructure, business, generating innovation and deployment, market processes).

3. The macroeconomic and microeconomic indicators which affecting the development of innovation and application are used for the innovation quantification. The most reliable and best innovation reflective indices –Summary Innovation Index and Global Innovation Index.

References

1. Ališauskas, K., Karparavičius, H., Šeputienė, J. (2005). *Inovacijos ir projektai*. Mokomoji knyga. Šiauliai: ŠU leidykla.
2. Anišic, Z., Koldžin, D., Freund, R. (2013). How To Support Open Innovation Through Public Policies? *International Journal of Engineering*, Vol. 11, 241-247.
3. Archibugi, D., Denni, M., Filippetti, A. (2009). The global innovation scoreboard 2008: the dynamics of the innovative performances of countries. *Innometrics*. Retrieved from http://www.danielearchibugi.org/downloads/papers/scoreboard.pdf
4. Bohlander, G., Snell, S. (2007). *Human Resource Management*. USA: South – Eastern College, Publishing Thompson Learning.
5. Chlivickas, E., Papšienė, P., Papšys, A. (2009). Žmogiškieji ištekliai: strateginio valdymo aspektai. *Verslas, vadyba, studijos*. Vilnius: VGTU, 51-65.
6. Čiegis, R. (2006). Ekonominių teorijų istorija. Vilnius: Vilniaus universiteto leidykla.
7. Drucker, P. F. (2004). *Valdymo iššūkiai XXI amžiuje*. Vilnius: *UAB Rgrupė*.
8. European Commission (2014). *Innovation Union Scoreboard*. Retrieved from http://ec.europa.eu/enterprise/policies/innovation/files/ius/ius-2014-summary_en.pdf
9. Filipescu, D. A., Prashantham, S., Rialp, A., Rialp, J. (2013). Technological Innovation and Exports: Unpacking Their Reciprocal Causality. *Journal of International Marketing*, Vol. 21(1), 23-38, http://dx.doi.org/10.1509/jim.12.0099
10. Glor, E. D. (2003). Innovation Traps: Risks and Challenges in Thinking About Innovation. *The Innovation Journal*, Vol. 8(2), 1-18.
11. Godin, B. (2008). *Innovation: the History of a Category*. Retrieved from http://www.csiic.ca/PDF/IntellectualNo2.pdf
12. Išoraitė, M. (2011). Žmogiškieji ištekliai – svarbiausias konkurencinio pranašumo šaltinis strategiškai valdant organizaciją. *Socialinių mokslų studijos*, Vol. 3(1), 31-58.
13. Jakubavičius, A., Strazdas, R., Gečas, K. (2003). *Inovacijos. Procesai, valdymo modeliai, galimybės*. Vilnius: Lietuvos inovacijų centras.
14. Jewell, B. R. (2002). *Integruotos verslo studijos*. Vilnius: The Baltic press.
15. Keršys, M. (2008). *Ekonominių veiksnių įtaka inovacijoms versle: Lietuvos atvejis*. Daktaro disertacija. Kaunas: Vytauto Didžiojo universitetas.
16. Kotler, P., Keller, K. L. (2007). *Marketingo valdymo pagrindai*. Klaipėda: Logitema.
17. Kuklytė, J., Vveinhardt, J. (2016). Suminio inovacijų indekso ir jį lemiančių veiksnių analizė Lietuvoje. *Taikomoji ekonomika: sisteminiai tyrimai*, T. 10, Nr. 2, 171-186 (spaudoje).

18. López-Claros, A., Mata, Y. N. (2010). The Innovation Capacity Index: Factors, Policies, and Institutions Driving Country Innovation. *The Innovation for Development Report 2009–2010*, Part 1, 3-65. doi: 10.1057/9780230285477_1

19. McCann, P., Ortega-Agiles, R. (2012). Modern Regional Innovation Policy. Cambridge Journal of Regions, Economy and Society, Vol. 6(2), 187-216, doi: 10.1093/cjres/rst007

20. Melnikas, B., Jakubavičius, A., Strazdas, R. (2000). *Inovacijų vadyba*. Mokomoji knyga. Vilnius: Technika.

21. Morkvėnas, R. (2010). *Organizacijos žinių potencialo vertinimas*. Daktaro disertacija. Vilnius: Technika.

22. Nissan E., Niroomand, F. (2012). Technology diffusion indexes across countries. *Journal of Economic Studies*, Vol. 39, Iss. 1, 31-43, http://dx.doi.org/10.1108/01443581211192099

23. Oslo Manual (1997). Retrieved from https://www.oecd.org/sti/inno/2367580.pdf

24. Perdomo-Ortiz, J., Gonzalez-Benito, J., Galende, J. (2009). The intervening effect of business innovation capability on the relationship between Total Quality Management and technological innovation. *International Journal of Production Research*, Vol. 47(18), 5087-5107.

25. Raipa, A., Giedraitytė, V. (2014). Innovation Process Barriers in Public Sector: A Comparative Analysis in Lithuania and the European Union. *International Journal of Business and Management*, Vol. 9, No. 10, 10-20.

26. Rogers, M. (1998). *The Definitions and Measurement of Innovations*. Melbourne Institute Working Paper No.10/98.

27. Schumpeter, J. A. (1996). *History of Economic Analysis*. Oxford University Press.

28. Snieška, V., Baumilienė, V., Bernatonytė, D., Čiburienė, J., Dumčiuvienė, D, Juozapavičienė, A., Keršienė, R., Kavaliauskienė, V., Markauskienė, A., Mrazauskienė, B., Startienė, G., Pukelienė, V., Urbonas, J. (2005). *Makroekonomika*. Kaunas: Technologija.

29. Staškevičius, J. A. (2004). *Inovatika*. Monografija. Vilnius: Technika.

30. Swan, G. M. P. (2009). The Economics of Innovation: an Introduction. Cheltenham: Edward Elgar Publishing, Inc.

31. Valentinavičius, S. (2006). Inovacinio verslo plėtra: problemos ir galimybės. *Ekonomika*, Nr. 74, 108-128.

32. Versli Lietuva (2015). *Verslo angelai.* Retrieved from http://www.verslilietuva.lt/lt/verslo-pradzia/finansavimas/verslo-angelai/.

Received: 31 August 2016
Accepted: 11 October 2017

ASPECTS OF DEPENDENCY OF LITHUANIAN FOUR-COMPONENT DIFFERENT TERMS AND THEIR LATIN EQUIVALENTS

Nijolė Litevkienė
Šiauliai State College, Lithuania

Annotation

According to scholars any scientific-technical term must be precise, short and easy to form other terms. But sometimes very long anatomical terms occur. Latin keeping unalterable word forms is suitable for terms. Consequently new spheres of science use Latin to form their terminology. Therefore scholars using a Latin word as a term may be sure that the word will not gain new meanings and will not cause ambiguity of the usage. In scholars' opinion Latin composite terms in medical terminology make a particular part. Their productivity is determined by their suitability economically denote, when the equivalent in the mother-tongue is expressed by periphrases.

Key words: *four-component terms, dependency, different terms, anatomical terms.*

Introduction

The field of anatomy, one of the most ancient sciences, first evolved in Egypt. From the Early Dynastic Period (3100 BC) until the time of Galen at the end of the 2nd century AD, Egypt was the center of anatomical knowledge, including neuroanatomy. Knowledge of neuroanatomy first became important so that sacred rituals could be performed by ancient Egyptian embalmers during mummification procedures. Later, neuroanatomy became a science to be studied by wise men at the ancient temple of Memphis. As religious conflicts developed, the study of the human body became restricted. Myths started to replace scientific research, squelching further exploration of the human body until Alexander the Great founded the city of Alexandria. This period witnessed a revolution in the study of anatomy and functional anatomy. Herophilus[1] of Chalcedon, Erasistratus[2] of Chios, Rufus[3] of Ephesus, and Galen of Pergamon were prominent physicians who studied at the medical school of Alexandria and contributed greatly to knowledge about the anatomy of the skull base (Dickson, 2001).

In this article, the research problem is unfolded through two problem questions:

1. To review the peculiarities of the four-component Latin and their Lithuanian equivalent anatomical terms?

2. To review the aspects of coincidence and differentiation of Latin and Lithuanian four-component anatomical terms?

The research subject: coincidence and difference of the dependency of four-component Latin and Lithuanian anatomical terms.

Objectives of the research:

1) to review the peculiarities of dependency of four-component Latin and Lithuanian anatomical terms;

2) to compare the dependency of four-component Latin and Lithuanian anatomical terms;

3) to highlight the differences between the dependency of four-component Latin and Lithuanian anatomical terms;

4) to highlight the identity of between the dependency of four-component Latin and Lithuanian anatomical terms.

The history of anatomy extends from the earliest examinations of sacrificial victims to the sophisticated analyses of the body performed by modern scientists. It has been characterized, over time, by a continually developing understanding of the functions of organs and structures in the body. Human anatomy was the most prominent of the biological sciences of the 19 th and early 20th centuries. In 1543, Andreas Vesalius[4], a professor of anatomy at the University of

---

[1] Herophilus (born **c.** 335 bc, Chalcedon, Bithynia—died **c.** 280), Alexandrian physician who was an early performer of public dissections on human cadavers; and often called the father of anatomy. Editors of Encyclopedia Britannica. (1768-2010). *Herophilus, Greek Physician.* Encyclopedia Britannica, Inc. Retrieved from http://www.britannica.com/biography/Herophilus.

[2] Erasistratus Of Ceos, (flourished **c.** 250 bc), Greek anatomist and physician in Alexandria, regarded by some as the founder of physiology. Known especially for his studies of the circulatory and nervous systems, Erasistratus noted the difference between sensory and motor nerves. Editors of Encyclopedia Britannica. (1768-2010). *Erasistratus of Ceos.* Encyclopedia Britannica, Inc. Retrieved from http://www.britannica.com/biography/Erasistratus-of-Ceos.

[3] The basis of Rufus's medicine can be briefly stated in his own words: "we are not naturally all the same; we differ very greatly from one another". Hence follows the need to discover the individuality of each patient by every possible means. A patient's illness could be deduced simply from its external manifestations, but this should be a mere preliminary, for true therapy consists in fitting the remedy exactly to the patient. Encyclopedia.com. (2008). Charlers Scriber's Sons. *Complete Dictionary of Scientific* Biography. Retrieved from http://www.encyclopedia.com/topic/Rufus_of_Ephesus.aspx.

[4] Vesalius was a Flemish-born anatomist whose dissections of the human body helped to correct misconceptions dating from ancient times. Andreas Vesalius was born on 31 December 1514 in Brussels, Belgium, then

Padua wrote in the book **De Humani Corporis Fabrica Libri Septem**, in which he urged his colleagues to free themselves from erroneous medical theories about the human body and to restore the study of anatomy to its rightful place in the curriculum. His book marked a decisive step forward in medical education and in empirical science based on direct observation, detailed description, and shared knowledge.

Anatomical nomenclature is the vocabulary of anatomists that is used to describe the structure of the human body. The oldest written sources of Western medicine are the Hippocratic writings from the 5th and 4th centuries B.C., which cover all aspects of medicine at that time and contain numerous medical terms. The national medical languages had much in common since most of the medical terms were derived from medical Latin, but there were systematic differences.

Though one-word terms are often considered to be better and more comfortable for usage, in scientific, technical and other specific areas, in order to name more complicated concepts, compound terms are used. In anatomical nomenclature *Nomina Anatomica* axial names of a human body are one-component. Totalizing all two-word terms of the type, where subordinate components of Lithuanian and English terms are adjectives, and subordinate components of Latin two-word terms are comparatives, it can be stated that differences between Lithuanian, English and Latin binomial terms with comparatives are not casual. K. Gaivenis (1963, 1964, 1965, 1967, 1969, 1973, 1975, 1977, 1982, 1994, 1997, 2002), St. Keinys (1973, 1979, 1992, 1997, 1998, 2001), V. Skujiņa (1979, 1993, 1997, 1999), V. Danilenko (1967, 1977, 1979, 1986), T. Kandelaki (1970, 1977), J. Klimavičius (1975) analyzed the conception of a term, the system of terms, requirements for terms. J. Jablonskis was the first who singled out composite terms as a separate type of terms in 1913 reviewing K. Jaunius „Lietuvių kalbos gramatika". Terms consisting of some words he called *compound terms* (Gaivenis, 1975, p. 59).

The investigative object consists of 2524 Lithuanian anatomical composite terms and 2506 Latin anatomical composite terms (total 5030 terms). Composite terms have been selected from various resources. A. M. Rassinoux has analyzed 5500 French medical terms and deduced that the majority of these terms are composite (Rassinoux, 1999, pp. 168-182). According to A. M. Rassinoux, P. Ruch and other scholars composite medical terms are varying (Baud, Rassinoux, 1999, pp. 22-26). Foreign scholars discuss clinical terms mostly. English surgical terms have been analyzed by P. Ruch, R. H. Baud, C. Lovis and others. In their view composite and compound terms make the majority. Though one-component terms are considered to be better and more convenient in usage, however in various spheres of science, technique and other special fields of human activities in order to name more complex concepts composite terms are used, which "make the major part of terms" (Zemlevičiūtė, 2002, pp. 336-337). The most frequent composite terms are formed of two or three words. Multiword terms (four-component – eight-component) are rare.

The investigative object consists of 2524 Lithuanian anatomical composite terms and 2506 Latin anatomical composite terms (total 5030 terms).

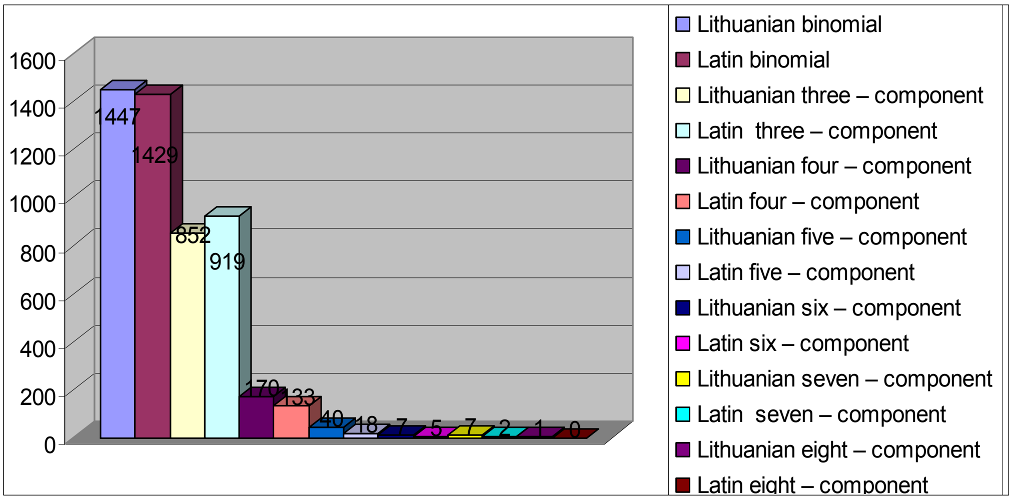


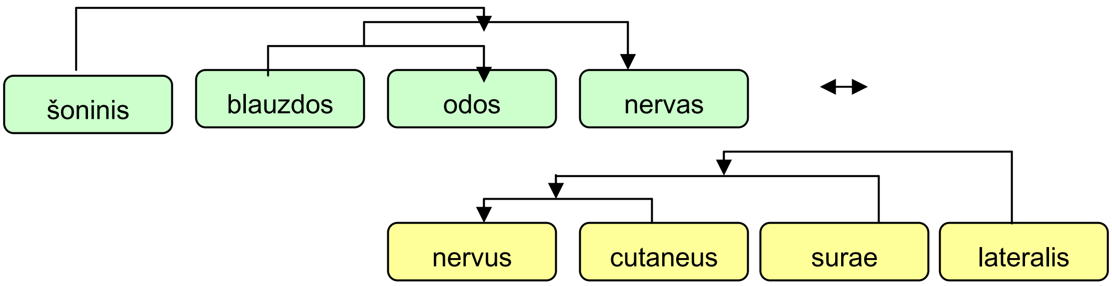
Fig. 1. The structure of Lithuanian and Latin composite terms

part of the Holy Roman Empire. He came from a family of physicians and both his father and grandfather had served the holy Roman emperor. Vesalius studied medicine in Paris but was forced to leave before completing his degree when the Holy Roman Empire declared war on France. He then studied at the University of Louvain, and then moved to Padua to study for his doctorate. Upon completion in 1537 he was immediately offered the chair of surgery and anatomy. (Nephron, Am.J. (1997). *The Flemish Anatomist Andreas Vesalius (1514-1564) and the Kidney*. Department of Nephrology, University of Antwerpen, Belgium).

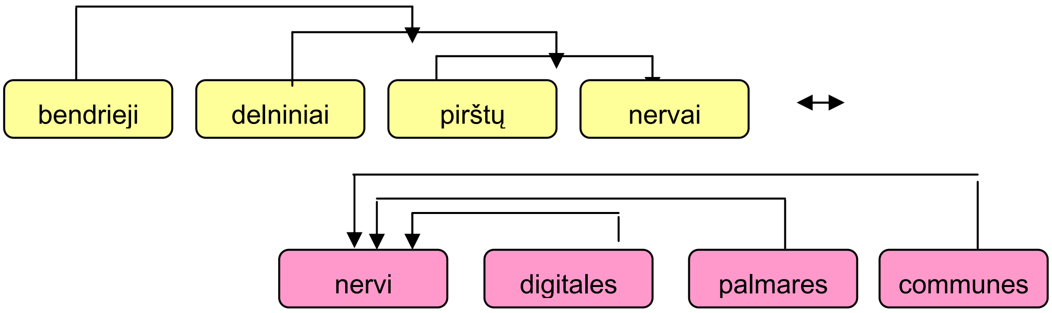
Dependency of Lithuanian four-component different terms

The dependency of components of Lithuanian and Latin four-component terms (*Lithuanian four-component* ↔ *Latin four-component*) can be diagrammed like so and the following structural groups can be distinguished.

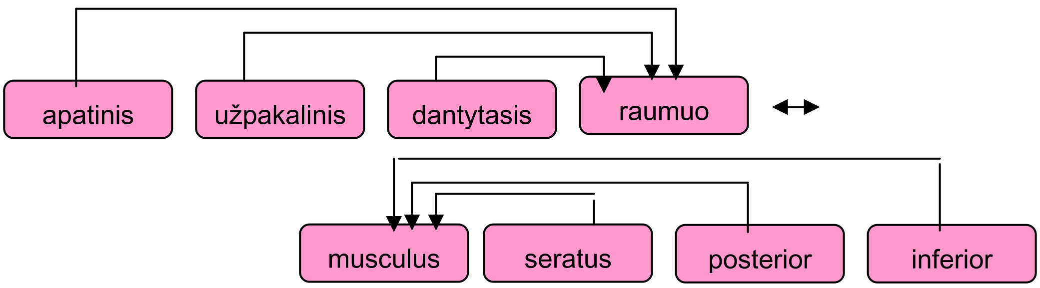
To the first structural group belong composite terms of the first, twenty seventh configurations:



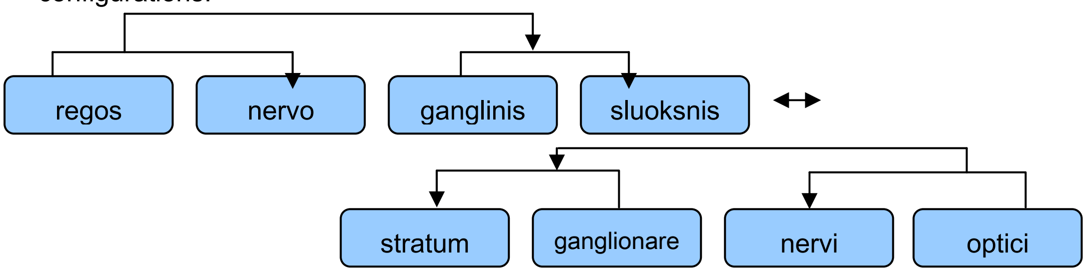
To the second structural group belong composite terms of the second, seventh, etghth, nineth, twelveth, thirteenth configurations:



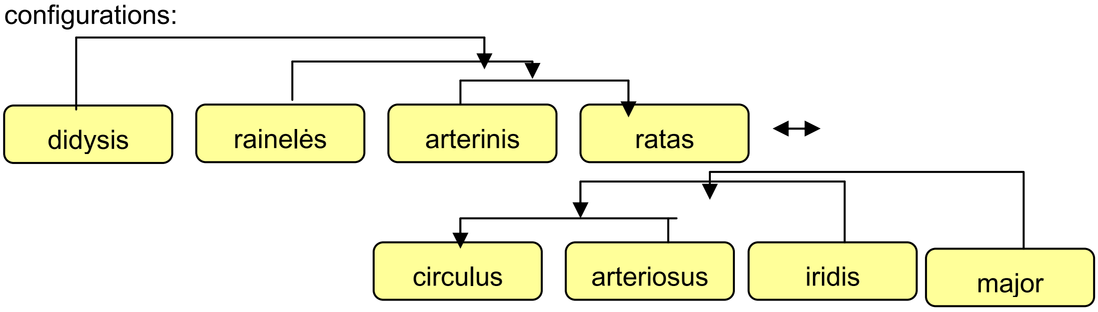
To the third structural group belong composite terms of the third configuration:



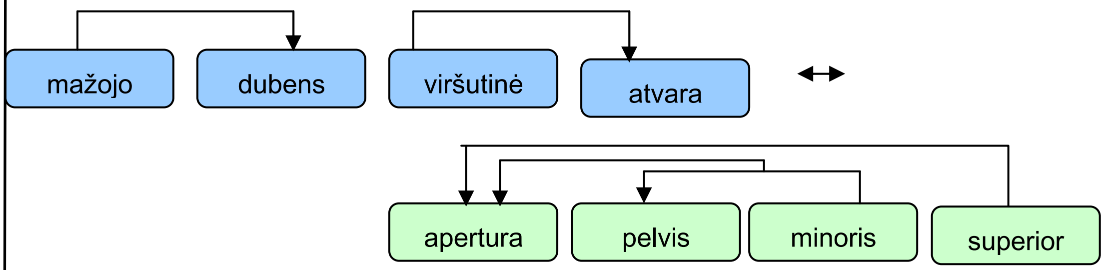
To the fourth structural group belong composite terms of the fourth, twentieth, twenty first configurations:



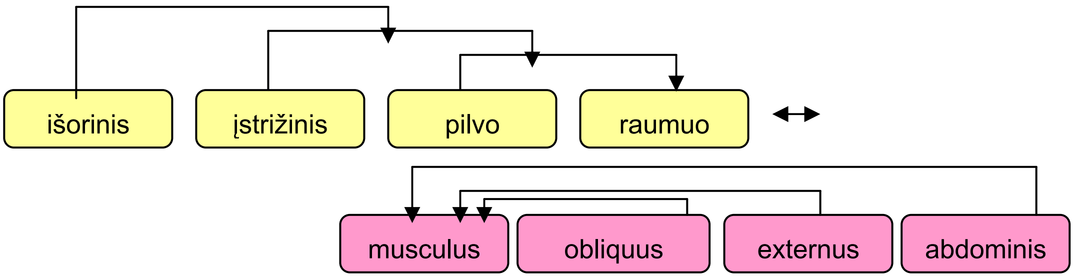
To the fifth structural group belong composite terms of the fifth, fourteenth, fifteenth configurations:



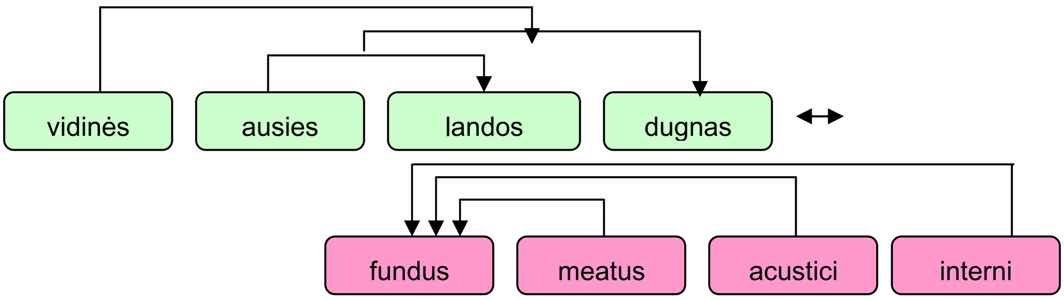
To the sixth structural group belong composite terms of the sixth configuration:



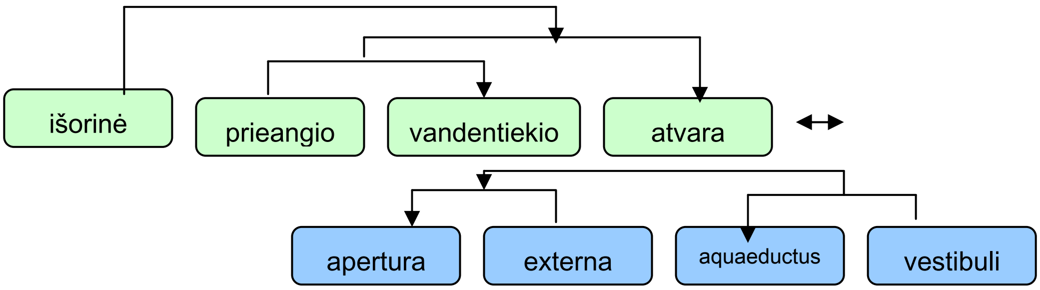
To the seventh structural group belong composite terms of the tenth, eleventh, twenty sixth, twenty eighth, thirtieth, thirty first configurations:



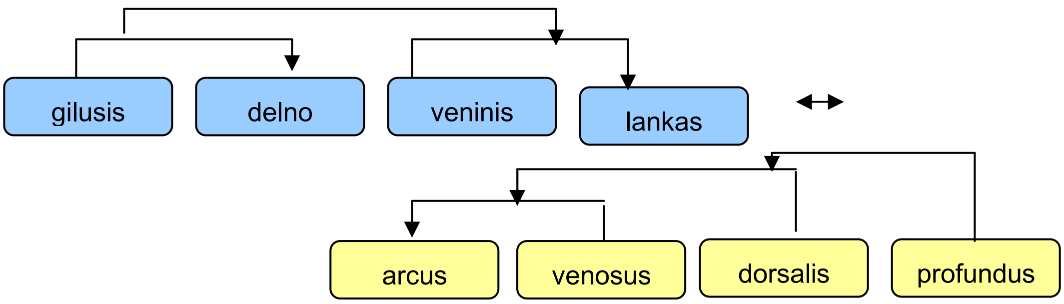
To the eighth structural group belong composite terms of the sixteenth configuration:



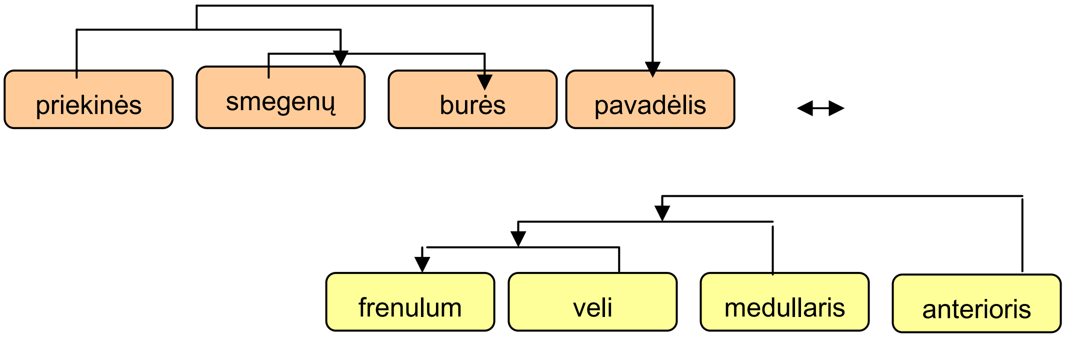
To the ninth structural group belong composite terms of the seventeenth, nineteenth, twenty fifth, twenty ninth, thirty second, thirty third configurations:



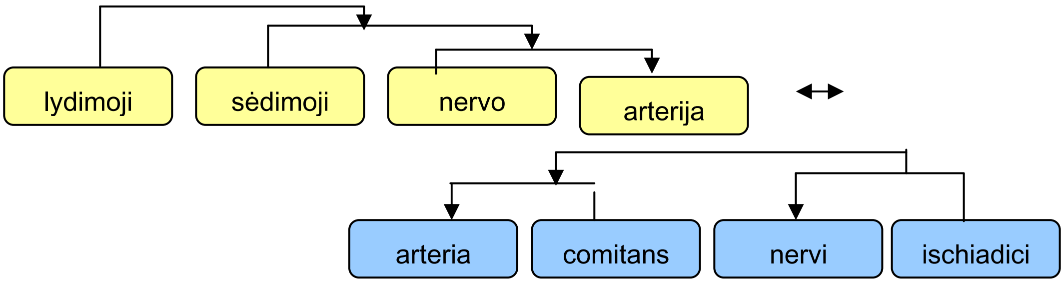
To the tenth structural group belong composite terms of the eighteenth configuration:



To the eleventh structural group belong composite terms of the twenty second, twenty third configurations:

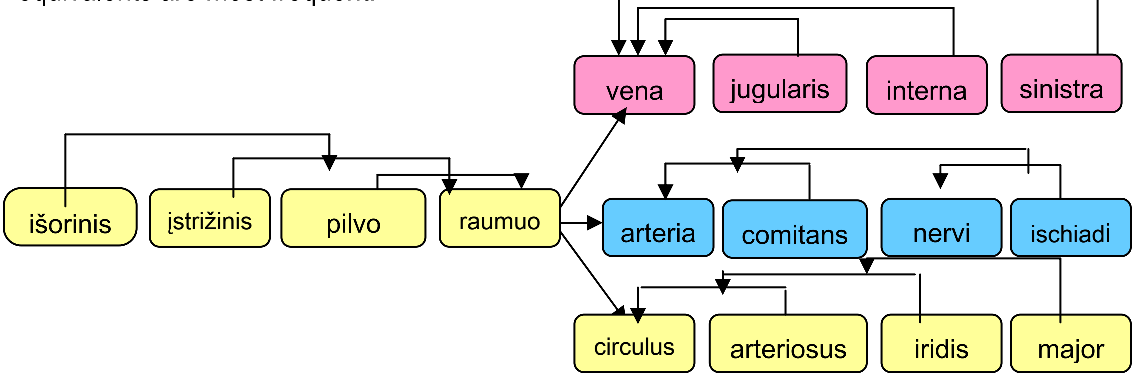


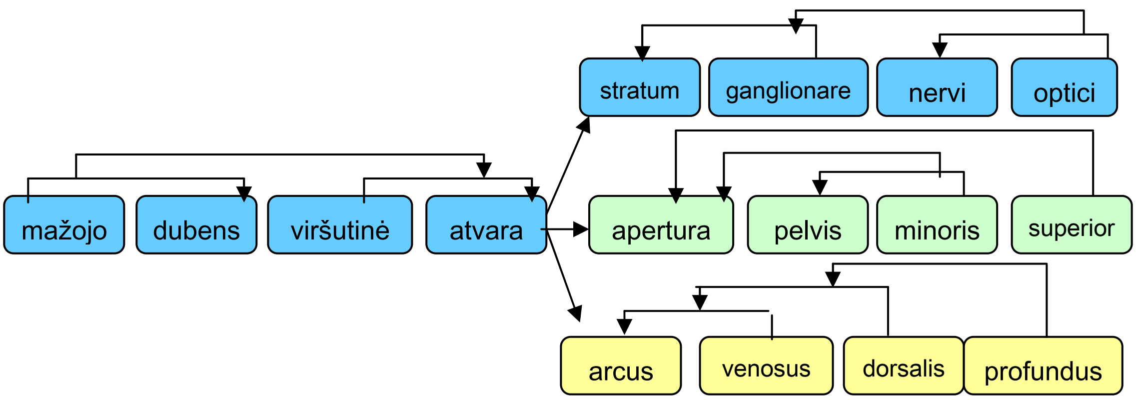
To the twelfth structural group belong composite terms of the twenty fourth configuration:

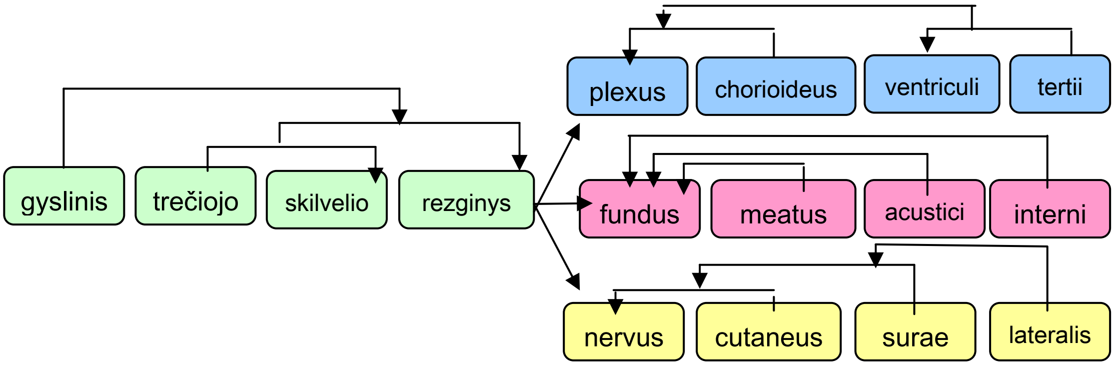


The schemes of dependency of Lithuanian and Latin four-component show that more frequent are four-component terms, made in the mode of inclusion, when to the collocation of a modifier and an attribute other attributes are subordinated. They make 64.06% of all found Lithuanian four-component terms of the type. Lithuanian four-component terms, made the collocation of the second and first subordinate components denote the basic component, the third subordinate component the whole collocation, make 14.06%. to the second structural group belong composite terms which are made of two connected independent collocations. It is less typical – it makes 9.38% of all found Lithuanian four-component terms. Terms made of a modifier and three independent attributes are not typical of Lithuanian anatomical terminology (only 6.25%).

With reference to the analysis of the discussed structures, it can be summarized, that the following structural groups of Lithuanian four-component terms and their Latin equivalents are most frequent:







From the point of view of structure Latin terms are of four main groups of structure. To first structural group belong collocations made of a modifier and three independent attributes. It makes 53.13% of all the amount of four-component terms. The second structural group is rather typical of Latin four-component terms. 29.69% of all terms belong to it. Terms of this group , made in the mode of inclusion, when to the collocation of a modifier and an attribute other attributes are subordinated. The third structural group is frequent on the average – 14.06% of four-component terms belong to it. To this group belong composite terms, made of two connected independent collocations. The fourth structural group is not typical of Latin four-component terms, only 3.12% of Latin composite terms belong to it. Terms of this structural group the collocation of the second and first subordinate components denote the basic component, the third subordinate component the whole collocation.

There is no recognized discipline called medical linguistics, but perhaps there ought to be one. The language of medicine offers intriguing challenges both to medical historians and to linguists. Classical scholars have analysed the contents and language of the most ancient medical records in great detail, but the later development of medical terminology has received much less attention.

References

1. Astrauskas, V. et al. (1980). *Medicinos terminų žodynas*. Vilnius: Mokslas.
2. Dickson, C. (2011). *Early Modern Anatomy*. Retrieved from http://www.folger.edu/html/folger_institute/ experience/mechanical_dickson.htm
3. Gaivenis, K. (1975). Dvižodžiai sudėtiniai terminai dabartinėje lietuvių kalboje. *Lietuvių kalbotyros klausimai*, 16, 57-89.
4. Litevkienė, N. (2006). *Sudėtiniai lietuviški ir lotyniški anatomijos terminai: daktaro disertacija* (rankraštis) (*Composite Lithuanian and Latin Anatomical Terms*: *doctoral dissertation, manuscript*). Vytautas Magnus University, Kaunas.
5. Pavilonis, S. et al. (1984). *Žmogaus anatomija.* Vilnius: Mokslas.
6. Rassinoux, A.-M., et al. (1999). Model-driven Medical Language Understanding: An Application for Mediating between Language Expressiveness and Formal Definition of Surgical Procedures. *Medical informatics Division, Hospital of Genewa* , p.p.168-182.
7. Rassinoux, A.M., Ruch, P. et al. (2000). Semantic Handling of Medical Compound Words through Sound Analysis and Generation Processes. Proc. AMIA Symp. *Medical informatics Division, Hospital of Genewa*, p.p. 675-679.
8. Si-Yang, B., Boon-Huat, B. (2010). Greek Anatonist Herophilus: the Father of Anatomy. *Anat. Cell Biol*., USA. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3026179/.
9. Smith, W.D. (2014). Hyppocrates-Greek Physician. *Encyclopedia Britannica.* Great Britain. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3026179/.
10. Vestonas, T. (1997). *Anatomijos atlasas.* Vilnius: Gamta.
11. Zemlevičiūtė, P. (2002). Daktaras Jonas Basanavičius ir jo „Medega musu tautiszkai vaistininkystai“. *Terminologija,* 9, p.p. 336-337.

Received: 8 June 2016
Accepted: 11 October 2017

THE SPECIFICITY OF PROFESSIONAL FOREIGN LANGUAGE OF THE MULTILINGUAL PERSONALITY: THE SITUATION IN LITHUANIA

Nijolė Merkienė
Šiauliai State College, Lithuania

Annotation

The article deals with the language of the students of a non-linguistic institution of higher education – a micro-social community, a socio-communicative system, consisting of a few functionally unequal languages: the native language (in most cases Lithuanian), a West-European language (mainly English), and Russian. Such multilingual personality experiences an interaction of linguistic systems, which most often manifests itself in cases of interference. Long-time observation of linguistic activities of the students in a foreign language and the analysis of mistakes caused by interference allows stating the existence of communicatively irrelevant interlingual interference in the language of Lithuanian students speaking Russian. The aim of the paper is to present the most frequent cases of the impact of the system of the native language on the learned language. The article focuses on the problems of acquiring professional communicative skills.

Key words: *micro-social community, a socio-communicative system, multilingual environment, multilingual personality, communicatively irrelevant interference.*

Introduction

The issues of foreign language producing skills among academic youth remain in the focus of attention of researchers in various fields of science: linguistics, psycho-linguistics, sociolinguistics, teaching methodology, intercultural communication and others. The most famous researchers in the mentioned sphere are V.Avrorin, V.Alimov, W.Bright, U.Weinreich, E.Vereshchagin, D.Cepelyte, A.Jacikevicius, etc. The sphere of higher education is an important research area from the point of view of various functioning languages that are in the relationship of functionally supplementing one another and perform a different volume of functions. The following might be enumerated as the main ones: a) language as a means of instruction; b) language as a teaching subject; c) language for international communication; d) language as a means of mastering a profession. The sphere of functioning of languages is learning and research as well as social activities of a few micro-social communities (further MSC), organised in a particular way: it is academic staff and students. The focus of our attention is essentially on the specificity of producing written and oral speech in Russian by Lithuanian students, while the main problem is the development of professional communicative competences.

The aim of the present research is to examine the specificity of the non-native language of the students studying on non-linguistic study programmes and to single out the most often cases of deviation due to the influence of the native language, lack of certain knowledge, skills and abilities in producing speech in Russian, due to narrowing of the spheres of usage of Russian, etc.

Research materials are examples of written and oral texts of non-native students of Russian at Šiauliai State College, studying Russian for specific purposes.

The above-mentioned multilingual situation, i.e. the functioning of a few languages, requires paying attention to the development of communicative competences of the prospective professionals. Communicative skills are one of the main aims of teaching foreign languages in a multilingual environment. The statement is echoing the thoughts of Z.I.Kirnoze (Кирнозе 2002: 232) about the fact that anthropocentric orientation has substituted the “era of monologue”, i.e., the focus has been shifted from language as a means of communication onto the personality. Such communicative success in foreign languages is necessarily two-sided (the addresser and the addressee). In our case, the speed of code switching plays a major role. That is why the paradigmatic problems in the theory of bilingualism come to the fore; this, in our opinion, is also quite applicable to the theory of multilingualism. Having in mind that any type of bilingualism and multilingualism presupposes interference, while a person, learning a foreign language, is rarely able to avoid interference, we think it necessary to further research and describe the manifestation of mistakes caused by interference in the speech of students on non-linguistic study programmes.

Interference is studied by a complex of related sciences, that is why the background of its classification can consist of different features (the source, the sphere of functioning, the level of paying attention to differential features of the native language by the multilingual speaker, forms of manifestation of interference, its communicative effect, etc.) (Мечковская 1983: 368).

Research literature differentiates between various types of interference; some of these are going to be presented here. The analysis of deviations, which are characterised by interference, allows stating that there is an interlingual **communicatively irrelevant** interference in the language of Lithuanian students speaking Russian, i.e. the violation of the orphoepic norms of modern Russian does not cause problems in oral communication. The most frequent deviations were noticed at the following levels:

а) **phonetic, orthographic and graphic level**. Most difficulties are caused by the following: the articulation of the phonemes [o] and [e], the absence or the insufficiency of qualitative changes in pronouncing the reduced vowels o, e: *п**о**нимаю* [o instead of ъ]; *занятия пр**о**ходят* [o instead of short a]; *с эт**о**й* [o instead of ъ] *специальн**о**стью* [o instead of ъ]; *преп**о**дают* [o instead of short a]; *пр**о**х**о**дили* [o instead of ъ, short o] *тему*; *т**е**матика* [e instead of и] *курсовых работ; пр**е**дметы* [e instead of и] *общ**е**го* [e instead of ъ] ***о**браз**о**вания* [o instead of short a]; *п**е**р**е**ходный п**е**риод* [e instead of ь, и]; *пр**о**в**е**ряла* [o instead of ъ; e instead of и] *задания.* The system of articulation of the mother tongue makes an influence on the orthography and graphics of Russian words and collocations, especially in conveying Lithuanian names and surnames, also names of certain subjects. For instance, *а**е**родром* [je instead of э]; *Дубявич**ьу**те* [instead of *Дубявичюте*]; ***Кя**льм**э*** [instead of *Кяльме*]; *Луко**w**айтите, Паму**w**ис* [English w instead of ш]; ***Ри**дите* [и instead of у]; *Ш**э**уляйский* [э instead of я] *университет*; *ка**в**инет* [в instead of б]; *колекция* [л instead of лл]; *ули**с**а* [с instead of ц], etc.,

б) **lexico-semantic level.** In this case, the impact of the native language is mainly due to the differences in the spread of semantic fields, the specificity of some meanings, lexical compatibility of words, also differences in the expressive and stylistic meanings. For instance, ***висит шкаф*** [instead of *висят полки*] *с книгами; домашнее* ***указание*** [instead of *задание*]; ***мотивированное*** [instead of *мотивационное*] *письмо;* ***Шяуляйская государственная коллегия*** **[**instead of *Шяуляйский государственный колледж*]; ***школа профессий*** [instead of *профтехучилище*]; *работает переводчиком в бюро* ***путешественников*** [instead of *путешествий*]; *после* ***студий*** [instead of *окончания учебы*]; *техникум* ***переназван*** [instead of *переименован*]; ***устроение на работу*** [instead of *трудоустройство*]; *поговорить с* ***господином*** [instead of *руководителем, начальником*]; *представляю* ***рабочее место*** [instead of *предприятие*]; *поставить* ***подписку*** [instead of *подпись*]. Cases of **mistakes in paronyms** were recorded, e.g., *адресат-адресант; желательно-с желанием; кампания-компания; понятие-понимание*, etc. The students often create new forms and words, for instance: ***дружелюбимость*** [instead of *дружелюбие*]; ***катедра*** *туризма* или ***катедра*** *святых Пятра и Повиласа* [instead of *кафедра; кафедральный собор*]; *получила* ***квит*** [instead of *квитанцию*]. A negative phenomenon or a “fashionable” trend in the speech of academic youth is inserting certain English or Russian words: *короче* = in short*; вот* = thus; *OK* = fine*; super* = wonderful, great*; greitoji* = an ambulance. **Barbarisms not to be used:** *čipsai, bantas, parankos,britva, hospisas, hostelis, knopkė, kurtkė, leiblas, menedžeris, štuka, tyneidžeris, tomatai, ukolas, vykendas, žulikas, zelionkė, etc.* (Lietuvių 1998: 433-436) and words with the wrong meaning: *atkrauti, atredaguoti, atremontuoti*; *įnešti pasiūlymą*, etc. (Lietuvių 1998: 439-446),

в) ***grammatical level.*** This level is a definite indicator of the manifestation of an interlingual interference. The following examples can be given to illustrate this: **a)** the wrong usage of the forms of gender: *фабрика* ***моей*** [instead of *моего*] *дяди;* ***моя*** [instead of *мой*] *папа – экономист;* ***два*** [instead of *две*] *тысячи;* **б)** mistakes in using case forms: ***фасады коттеджов*** [instead of *коттеджей*]; ***высший*** [instead of *высшее*] *образование; начинает лекцию* ***с обзором*** [instead of *с обзора*] *литературы;* **c)** mistakes in verb government: *готовится* ***занятиям*** [instead of *к занятиям*]; *заботится* ***о мы*** [instead of *о нас*]; *от косметолога* ***ждут умение*** [instead of *умения*] *выслушать; руководить* ***отделу*** [instead of *отделом*]; *ответить* ***вопросы*** [instead of *на вопросы*].

Usage of prepositions also points to the influence of the native language system: *работает* ***на*** [instead of *в*] *туристическом агентстве*; ***первыми месяцами*** [instead of *в первые месяцы*] *было трудно*; *сдал* ***экзамен математики*** [instead of *по математике*]; ***следующий*** [instead of *в следующий*] *семестр буду писать курсовую работу,* etc.

At the level of **syntax**, the interlingual impact is characterised by the fact that deviations from the syntactic norm of modern Russian are closely linked with morphological categories of the native language and the language the student is learning, because syntax is a particular sphere of realisation of morphological categories. The more typical areas affected by the influence of the native language and resulting in interference mistakes in a foreign language are described above.

One of the main tasks for prospective professionals is mastering various types of scientific/scholarly discourse (summaries, course and diploma papers, projects and their presentation, delivering papers at student and other conferences, etc.). Linguistic analysis of oral and written texts produced in a foreign language and presented above allowed concluding that the same type of interlingual interference is manifested: the character of digressions caused by interference essentially remains the same, independent of the differences in style of linguistic material, which points to the insufficient level of mastering a language. In the process of mastering the scientific sub-style, an interlingual communicatively irrelevant interference can be stated. Besides, “terminological competence” (Kvašytė 2005: 77) remains an important issue, which means the necessity to study terms of various types and ways of making them in the systems of different languages in contact: terminology transfer, word-building synonymy, joining synonyms, using figurative meanings, abbreviations, etc. (Kvašytė 2005: 16-89). The general tendency of vocabulary modernization cannot be forgotten in the present context, too (Словарь 2006: 133).

Thus teaching a foreign language for specific purposes in a non-linguistic institution of higher education under present conditions, according to Kaplina, “is an essential component in professional training, the task of which is to contribute to the quality professional training of specialists, to support students in mastering their future profession”(Каплина 2006: 42).

Conclusions

1. Frequent cases of manifestation of the impact of the native language described in this article represent communicatively irrelevant interlingual interference. Divergences from the norm of modern Russian are not considered serious obstacles for professional communication.

2. Further development of teaching methodology, new teaching materials, collaboration with students and their independent work as well as motivation can contribute to the development of knowledge and communicative competences in a foreign language (Russian).

References

1. Каплина, Л. Ю. (2006). Профессионально-направленное обучение иностранным языкам студентов неязыковых вузов с применением гипертекстовых технологий. – Вестник СамГУ. No 10/3(50), p. 42-49.

2. Kvašytė, R. (2005). *Mokomasis terminologijos žodynėlis*. Šiauliai: Šiaulių universiteto leidykla.

3. Кирнозе, З. И. (2002). Россия и Франция: диалог культур. *Статьи разных лет: Сборник научных трудов*. Н.Новгород: Изд-во НГЛУ им. Н.А.Добролюбова, 272 с.

4. Kniūkšta, P. (ed.) (1998). Lietuvių kalbos žinynas. Vilnius: Šviesa

5. Мечковская, Н. Б. (1983). *Языковой контакт. Общее языкознание*. Минск.

Received: 16 June 2017
Accepted: 11 October 2017

THE DEVELOPMENT OF THE EVALUATION SYSTEM OF FACTORS, INFLUENCING ON THE ORGANIZATION FOR THE PREVENTION OF RISKS OF ITS ACTIVITY IN THE MARKET IN ANY FIELD OF ACTIVITY, USING PEST – ANALYSIS

Veronika Silinevicha, Kristine Kalinina
Baltic International Academy, Latvia

Annotation

In the context of the global changes in the world community, occurs the transformation of the entire world community in various areas of activity as a whole and in the development of the business in particular. Threats and risks, which accompany the business process throughout the entire activity of enterprises that makes enterprise to focus on the prevention of risks, using a variety of analytical methods. One of such methods is the evaluation of the influence of factors of the external environment and it is: political, economic, social and technological factors, using PEST matrix. For the successful activity of the enterprise and its prospective development in the market, the carrying out of PEST –analysis should become a constant action and the relevance of the topic of this research is determined by this.

The article presents the different configurations of the system of evaluation factors, by priority and importance, as well as examples of factors with a detailed description of their content are provided, which are used in this research.

The article has the theoretical and practical values. The uniqueness of the represented method lies in the fact that it can be used not only in the field of the research object, mentioned as an example, but for any object, implementing its activity in any field of activity. The evaluation of the external factors that have the greatest impact on the object, occurs in several stages, including expert evaluation that determines the objectivity of obtained results of the analysis, an intermediate stage of the mathematical calculations – is finding of the arithmetic mean value, which is reflected in the summary table in the grouping criteria: the influence of each of the factor of the matrix – PEST. The novelty of the paper lies in the provision of the final results in the visual form, in the form of radar diagram.

Key words: *PEST – analysis, external environment, marketing, political, economic, social and technological factors, matrix.*

Introduction

At the present stage, the entrepreneurship uses different marketing and analytical mechanisms for the evaluation of the activity of its enterprise. The most popular method is the evaluation of factors that have a special influence on the enterprise outside. Such factors are: the factors of the external environment, including: political, economic, social, technological factors. The content of each factor includes different criteria of evaluation in the areas of the external environment, thus, highlighting the most actively acting and which have the most serious impact on the business environment of the enterprise. In addition, the criteria of evaluation, obtained, as a result of the analysis, represented in the form of the PEST matrix and in the form of a diagram that allows visually evaluating the picture as a whole, to develop the mechanisms of the prospective development and measures for smoothing and preventing risks in the future. The construction of a model, which can be used in any field of activity and any enterprise, are the solutions of the problem by estimating the influence the external factors.

The goal of the article is to suggest the system of evaluation of factors, which have an influence on the organization for the prevention of risks of its activity in the market in any field of activity.

The analysis of researches and publications

This topic in the form of scientific papers is not properly represented according to their number. Researchers prefer different forms of PEST – analysis, for example, PESTLE. In its turn, scientific figures, analytical departments and other departments, which are engaged in analytics, carry out the analysis of the factors of the external environment within the frameworks of PESTLE analysis. For example, in the database EBSCOhost the reports of the obtained results of PESTLE analysis are represented by such countries as: UK (PESTLE Analysis of the US, UK, and EU 2016 - Research and Markets, Research and Markets, Business Wire (English). 10/11/2016), US (Country Report, Argentina Country Profile, PESTLE ANALYSIS, Jan2015, p13-32. 20p.), Argentina (Country Report, Sweden Country Profile, PESTLE ANALYSIS, Dec2014, p14-45. 32p.), Sweden (Country Report, South Africa Country Profile, PESTLE ANALYSIS, Dec2014, p14-31. 18p), South Africa (Country Report, Singapore Country Profile, PESTLE ANALYSIS, Jan2015, p13-28. 16p.), Singapore (PESTLE Analysis of the UAE 2015 - Research and Markets, Research and Markets, Regional Business News), UAE (PESTLE Analysis of Canada 2016, Newspaper Source, M2PressWIRE. 07/27/2016.), Canada (PESTLE Analysis of Saudi Arabia 2016, Newspaper Source, M2PressWIRE. 07/25/2016), Saudi Arabia (PESTLE Analysis of the Philippines 2016, Newspaper Source, M2PressWIRE. 07/25/2016), Phillipines (PESTLE ANALYSIS, Brazil Country Profile, Country Report 2012, p13-35. 23p.), Brazil (PESTLE ANALYSIS, Turkey Country Profile. 2008, p12-26. 15p. 6 Charts, 1 Graph), Turkey and others. But, in the database Scopus represents the scientific paper of T. Golubkova on a topic of use of the assessment of impact of factors of PESTLE in the field of culture (Golubkova T., Influence of macro-environment factors on the marketing mix development in the field of culture of the Baltic region, Экономический Часопис – XXI, ISSN: 1728-6220, 3-4(1), 2014). In its turn, Athanasios Kolios and George Read note the importance of the use of the PESTLE model in the analysis of the external factors of the country, based on a particular field of entrepreneurial activity (Athanasios Kolios and George Read, A Political, Economic, Social, Technology, Legal and Environmental (PESTLE) Approach for Risk Identification of the Tidal Industry in the United Kingdom, Energies (19961073). Oct2013, Vol. 6 Issue 10, p5023-5045. 23p.).

The carried out analysis of the available sources showed the relevance of the research of this topic and the development the effective method of evaluation of factors, which have the influence on the organizations, suitable for all enterprises and different fields.

Material and methods

PEST analysis brief

The earliest know reference to tools and techniques for ‘Scanning the Business Environment’ appears to be by Francis J. Aguilar (1967) who discusses ‘ETPS’ – a mnemonic for the four sectors of his taxonomy of the environment: Economic, Technical, Political, and Social. Some time after its publication, Arnold Brown for the Institute of Life Insurance (in the US) reorganized it as ‘STEP’ (Strategic Trend Evaluation Process) as a way to organise the results of his environmental scanning.

Thereafter, this ‘macro external environment analysis’, or ‘environmental scanning for change’, was modified yet again to become a so-called STEPE analysis (the Social, Technical, Economic, Political, and Ecological taxonomies).

In the 1980s, several other authors including Fahey, Narayanan, Morrison, Renfro, Boucher, Mecca and Porter included variations of the taxonomy classifications in a variety of orders: PEST, PESTLE, STEEPLE etc. Why the slightly negative connotations of PEST have proven to be more popular than STEP is not known. There is no implied order or priority in any of the formats.

Some purists claim that STEP or PEST still contain headings which are appropriate for all situations, other claim that the additional breakdown of some factors to help individuals and teams undertaking an environmental scan (Frederic P Miller, Agnes F Vandome, John McBrewster, (2011). Pest Analysis, VDM Publishing, URL: http://www.free-management-ebooks.com/dldebk-pdf/fme-pestle-analysis.pdf).

Quite who and when added what elements to the mnemonic is a mystery, but what we do know is that the actual order and words contained are common to certain parts of the world and streams of academic study. The term **PESTLE** is particularly popular on HR and introductory marketing courses in the UK. Others favour PEST, STEP, STEEPLE or others (see pic.1).

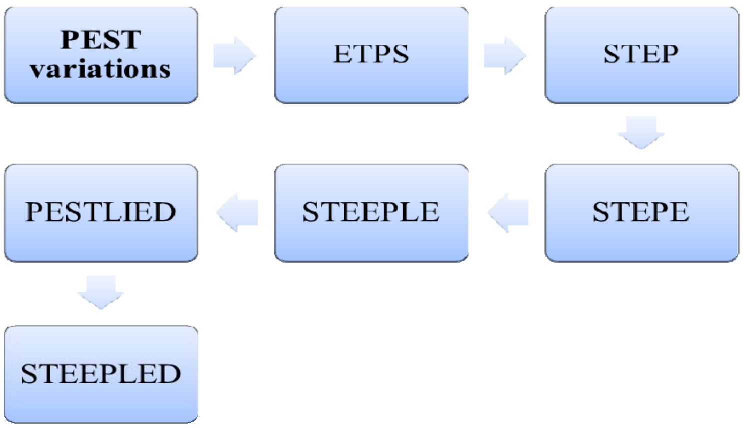


Fig. 1 PEST variations (the development of the authors)

PEST – Political, Economic, Social and Technological
ETPS – Economic, Technical, Political and Social
STEP – Strategic Trend Evaluation Process
STEPE – Social, Technological, Economic, Political and Ecological
STEEPLE – Social, Technological, Economic, Ethical, Political, Legal and Environmental
PESTLIED – Political, Economic, Social, Technological, Legal, International, Environmental and Demographic.[5]

Let's give examples of the content of the factors, which are considered during the analysis.

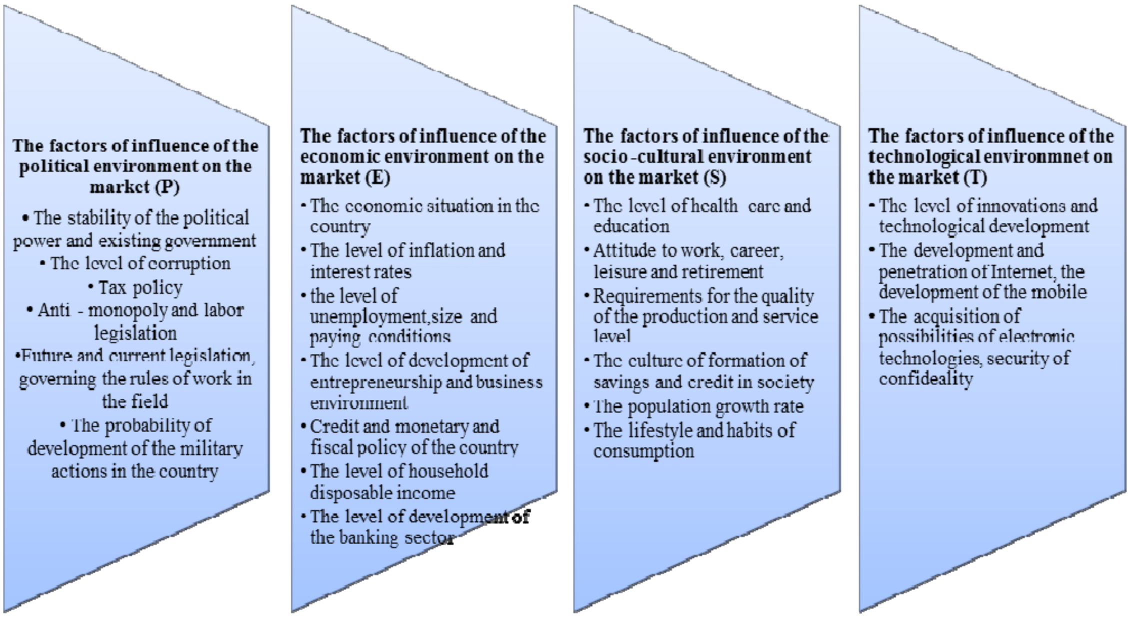


Fig. 2. The examples of factors, which are usually considered during the analysis (the development of the authors).

The represented theoretical aspects of carrying out the PEST – analysis in general, was developed on the basis of the carried out a theoretical analysis of the theoretical aspects of the PEST analysis earlier, as well as has allowed proceeding to the practical part of the paper and show the use of the analysis, using a specific example. The object of the research was the commercial organization: student complex, the location of which is in Riga city, the Republic of Latvia.

The mission of the student complex is the improvement of the integration of foreign students, studying in the country, as a result of the international academic mobility.

Results and discussion

The practical use of the PEST analysis

Having determined the key factors of influence on the organization – the student complex on the scheme of PEST, the estimation of the degree of influence of each factor on the activity and development of the organization on 3 – point scale has been given. The three – dimensional scale is represented in the table 1.

Table 1

The scale of assessment of the degree of influence of factors on the activity of the organization (The development of the authors)

Evaluation/Scores	The assessment of the influence of the factors
1	*- the influence of the factor is small, any change of the factor practically has no influence on the activity of the mix;*
2	*- only significant change of the factor influences on the activity of the mix;*
3	*- the influence of the factor is high,any fluctuations cause the significant changes in the activity of the mix*

The degree of influence on the three – dimensional scale is replaced by carrying out of probability of change of each factor individually, a group of experts, who has a direct relationship to the competence of the politics, economics, and sociology. At that, the mandatory condition is the fact that to the expert review are involved both specialists – practitioners, working in the field of research and the representatives of the science.

The estimation of the probability of change of the factors and probability of fluctuations is evaluated on a 5 – point scale, where 1 means the minimum probability of change of the factor of the external environment, but 5 – the maximum probability. But, the intermediate points of the scale of the admissibility of probability close to the highest and lowest scores, respectively.

The real significance of each factor separately has allowed evaluating to what extent the mix should pay attention and control the factor of change of the external environment. The calculation was made, as the probability of change of the factor, weighted on the power of influence of this factor on the activity of the mix.

After deriving the estimates by the expert group from their total amount, the average simple arithmetic value is calculated and the estimate on each row of factor, adjusted for the weight in the last group of the homogenous criterion is given (See. Table 2).

It should be noted that the higher is the real importance of the factor of criterion "The evaluation adjusted for weight", the more attention and efforts should be given to the organization to reduce the degree of risk and negative influence of the factor on the business. The results of the described calculation are visually represented in the table 2.

Table 2

The estimation of the real significance of the PEST factors
(The development of the authors)

The description of the factor	The influence of the factor	Expert evaluation					The average estimate	**The evaluation adjusted for weight**
		I	II	III	IV	V		
POLITICAL FACTORS (P)								
The stability of the political power and existing government	2	5	5	4	5	4	4.6	**0.11**
The level of corruption	2	4	3	5	4	5	4.2	**0.10**
Tax policy	3	2	1	3	1	2	1.8	**0.06**
Anti – monopoly and labor legislation	2	2	1	3	2	3	2.2	**0.05**
Future and current legislation, governing the rules of work in the field	3	4	5	3	3	4	3.8	**0.14**
The probability of development of the military actions in the country	2	5	4	5	5	4	4.6	**0.11**
ECONOMIC FACTORS (E)								
The economic situation in the country	3	5	4	5	5	4	4.6	**0.16**
The level of inflation and interest rates	1	5	4	4	3	4	4.0	**0.05**
The level of unemployment, size and paying conditions	2	4	3	4	5	3	3.8	**0.09**
The level of development of the entrepreneurship and business environment	2	5	4	4	5	5	4.6	**0.11**
The credit and monetary and fiscal policy of the	1	5	4	5	5	5	4.8	**0.06**
The level of household disposable income	2	5	4	5	4	5	4.6	**0.11**
The level of development of the banking sector	1	3	4	3	4	4	3.6	**0.04**
SOCIO – CULTURAL FACTORS (S)								
The level of health care and education	1	3	2	3	2	2	2.4	**0.03**
Attitude to work, career, leisure and retirement	1	4	3	5	4	4	4.0	**0.05**
Requirements for the quality of the production and service level	3	5	5	5	5	4	4.8	**0.17**
The culture of formation of savings and credit in society	2	5	4	4	5	5	4.6	**0.11**
The population growth rate	2	4	3	4	4	3	3.6	**0.09**
The lifestyle and habits of consumption	1	4	3	4	3	3	3.4	**0.04**
TECHNOLOGICAL FACTORS (T)								

The description of the factor	The influence of the factor	Expert evaluation					The average estimate	**The evaluation adjusted for weight**
		I	II	III	IV	V		
The level of innovations and technological development	1	2	1	3	1	2	1.8	**0.02**
The development and penetration of Internet, the development of the mobile devices	1	4	5	5	4	5	4.6	**0.05**
The acquisition of possibilities of electronic technologies, security of confidentiality	2	3	4	5	4	4	4.0	**0.09**
TOTAL							84.4	

Further, the obtained results are reflected in the summary table in the form of a matrix (See. Table 3).

Table 3

The summary table of the PEST – analysis
(The development of the authors)

POLITICAL		ECONOMICAL	
Factor	*Weight*	*Factor*	*Weight*
Future and current legislation, governing the rules of work in the field	0.14	The economic situation in the country	0.16
The stability of the political power and existing government	0.11	The level of development of the entrepreneurship and business environment	0.11
The probability of development of the military actions in the country	0.11	The level of household disposable income	0.11
The level of corruption	0.10	The level of unemployment, size and paying conditions	0.09
Tax policy	0.06	Credit and monetary and fiscal policy of the country	0.06
Anti – monopoly and labor legislation	0.05	The level of influence and interest rates	0.05
		The level of development of the banking sector	0.04
SOCIO - CULTURAL		TECHNOLOGICAL	
Factor	*Weight*	*Factor*	*Weight*
Requirements for the quality of the production and service level	0.17	The acquisition of possibilities of electronic technologies, security of confidentiality	0.09
The culture of formation of savings and credit in society	0.11	The development and penetration of Internet, the development of the mobile devices	0.05
The population growth rate	0.09	The level of innovations and technological development	0.02
Attitude to work, career, leisure and retirement	0.05		
Lifestyle and habits of consumption	0.04		
The level of health care and education	0.03		

After carrying out the PEST – analysis, the factors of the external environment have been revealed, which have the greatest influence on the student complex. Analyzing the visually represented results, it was noted that the taxation policy in Latvia doesn't contribute to the improvement of the business processes and the development of the business as a whole (See, the political factor in the matrix, table 3). In addition, the ongoing discussion in the Latvian mass media on the topic of increase of tax rates, strengthens the degree of risk of entrepreneurial activity in particular. Explaining the fears, it may be noted that the increase of the existing taxes and introduction of new ones won't contribute to the development of the financially intensive activities, requiring the investment of funds in the prospective development. Besides that the change of the interest rate in the direction of increase will lead to the increase of the cost of the product, offered by the object of the research that will lead to the tightening of the competitive struggle in the market and the expansion of the measures, including the financial ones, on the conquer of the target consumer, who is able to consume the product at the new – high price.

Along with this, the confidence in the prospect of development of the entrepreneurial activity as a whole, doesn't also give the fact that between the political parties, operating in Latvia an intense competition is observed, but this, in its turn, provokes to make unpopular decisions and increases the degree of risk of conducting business. Therefore, the obtained results of the carrying out PEST - analysis allow evaluating all risks, which may face organization, as in our case, in the introduced example. In addition, the PEST – analysis allows evaluating the degree of the possible influence on the reduction of own risks in the created conditions, but not on the negative changes in the external environment, determined by any factor.

In conclusion, the result of the carried out PEST – analysis, for the most visual perception was made the radar chart (See. Figure 3).

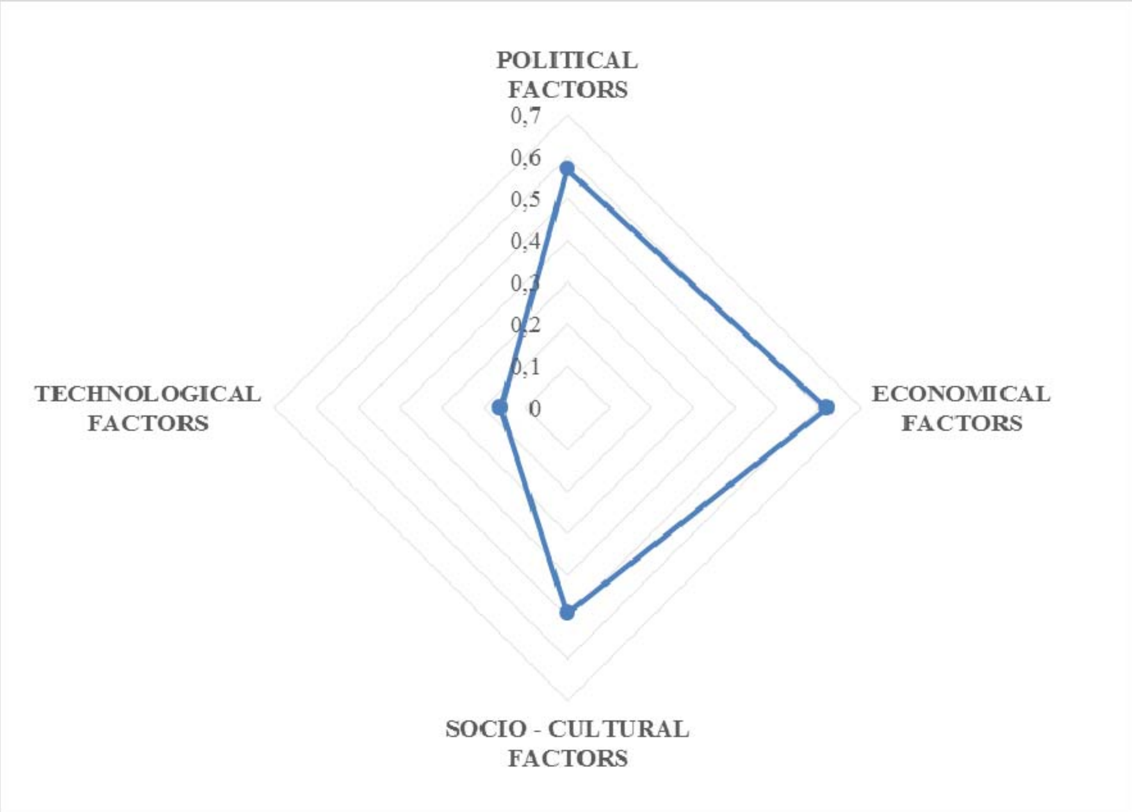


Fig. 3. The results of the PEST – analysis (the development of the authors)

From the represented figure, the especially bright, in the form of influence is represented the already marked political and economic factors and only technological factor, which in its nature and content doesn't represent a specific interest for the object of the research, but can be relevant for the analysis, another organization in another field. Therefore, summarizing, it may be noted that the principle of carrying out of the PEST – analysis, by analogy with the introduced example, or on its basis, can be used in other fields and for other organizations.

Conclusions

- The analysis of the methodological and theoretical basis allowed determining the method of assessment of the influence of the external factors – PEST – analysis;
- The analysis of the used in the theory variations of configuration of factors of external environment (political, economic, social, technological) allowed representing the content of the system of its evaluation on the priorities and evaluation of degree of importance;
- The represented system of evaluation of priority and importance allowed giving examples of factors with a detailed description of their content and to mark out the configuration of use of the system of PEST, required for carrying out the research, using a specific example;
- The commercial organization – the student complex, which is in Riga city, in the Republic of Latvia has become an object of the research and example of carrying out the assessment of the impact of the factors on the activity and prospects of its development, on the basis of PEST – analysis;
- The evaluation of factors of influence was carried out on the stage principle, including: a) the evaluation of the influence of factors – the finding of the weight of influence on the three –

dimensional scale; b) the creation of the expert group of specialists, evaluating the factors of influencing on a 5 – point system and their evaluation; c) The calculation of the arithmetical average of the simple value of the total overall estimate given by experts; d) The estimates, adjusted for the weight of finding. The similar approach with the observance of the principle of stage will allow easily adapting the introduced example in another field and in another enterprise;

- The final results of the estimate, represented in the form of a matrix – PEST give the objective information, concerning the degree of dependence of the organization on external factors, but the representation of the results, made in the form of a radar diagram allows evaluating this degree of dependence, visually.

References

1. Golubkova, T. (2014). Influence of macro-environment factors on the marketing mix development in the field of culture of the Baltic region. *Экономический Часопис*, XXI, 3-4(1).
2. Kolios, A., Read, G. (2013). A Political, Economic, Social, Technology, Legal and Environmental (PESTLE) Approach for Risk Identification of the Tidal Industry in the United Kingdom. *Energies* Vol. 6 Issue 10, p. 5023-5045.
3. PESTLE Analysis of the US, UK, and EU 2016 - Research and Markets, Research and Markets, Business Wire (English). 10/11/2016.
4. Country Report, Argentina Country Profile, PESTLE ANALYSIS, Jan 2015, p. 13-32.
5. Country Report, Sweden Country Profile, PESTLE ANALYSIS, Dec 2014, p. 14-45.
6. Country Report, South Africa Country Profile, PESTLE ANALYSIS, Dec 2014, p14-31.
7. Country Report, Singapore Country Profile, PESTLE ANALYSIS, Jan 2015, p. 13-28.
8. PESTLE Analysis of the UAE 2015 - Research and Markets, Research and Markets, Regional Business News
9. PESTLE Analysis of Canada 2016, Newspaper Source, M2PressWIRE. 07/27/2016.
10. PESTLE Analysis of Saudi Arabia 2016, Newspaper Source, M2PressWIRE. 07/25/2016.
11. PESTLE Analysis of the Philippines 2016, Newspaper Source, M2PressWIRE. 07/25/2016.
12. PESTLE ANALYSIS, Brazil Country Profile, Country Report 2012, p. 13-35.
13. PESTLE ANALYSIS, Turkey Country Profile. 2008, p. 12-26. 6 Charts, 1 Graph.

Received: 3 January 2017
Accepted: 11 October 2017

THE LINKS BETWEEN TEAMWORK AND SUSTAINABLE DEVELOPMENT CONCEPTS TO INCREASE THE COMPETITIVENESS OF THE ORGANISATION

Ligita Šalkauskienė
Šiauliai State College, Lithuania

Annotation

The article analyses teamwork and sustainable development as main factors of increasing competitiveness in long-term development of an organisation. It is being emphasized that the competence of human capital, civic responsibility, cooperation motivates organisations to comply with environmental, social and economic requirements of sustainable development. It has been noticed that one of the ways to understand the importance of competitive advantage is thinking about development as a social process which enables organisations to obtain experience of sustainable development, to apply it for problem-solving and creation of their own future. On the organisational level, applying the principles of teamwork, employees' intellectual knowledge is being transformed into competitive advantage of the organisation.

Key words: *teamwork, sustainable development, principles of sustainable development, competitiveness, sustainable organisation.*

Introduction

Radical changes of modern world are becoming an important factor determining the possibilities and perspectives of teamwork development. The perspectives of organisation's development will depend on how we are going to use the vast opportunities of organisation's management. Considering the fact that the organisation's environment is constantly changing which creates new requirements for its activity, it is obvious that the same is to be said about teamwork in the organisation. In order to overcome the challenges of today's business environment, more and more organisations change the old model systems with the new ones (when knowledge is not an invariable element and for its progress and development of application opportunities it is necessary to realise the process of sustainable development based on the culture of employees' mutual cooperation), when the main element of organisation's culture is teamwork. The integrated methods of teamwork and sustainable development do not aspire to be the only and the most successful management methods. However, the theme is relevant and interesting and worth investigating, whereas the principles of teamwork being developed in the context of sustainable development may help to achieve and sustain competitive advantage.

Research problem. Recently the implementation of teamwork and sustainable development principles is becoming one of the most popular and ambitious ideologies for business. Combining social, economic and environmental initiatives in the organisation is a complex process leading to a completely new business formulation. However, a sustainable organisation is not a spontaneous phenomenon. It is necessary to create appropriate conditions: to identify a management system within the organisation encouraging and supporting the initiative of sustainability. The importance of human capital, lifelong learning, cooperation, corporate spirit are the factors determining sustainable development of the organisation, but the attitude towards teamwork as a management system uniting all mentioned factors is not completely formulated. The factors of organisation's increasing competitiveness in the context of sustainable development and teamwork have not been analysed together in the theoretical works of researchers. The interrelation between the teamwork and sustainable development has also not been defined.

The object of the research – conceptual links between teamwork and sustainable development.

The aim of the research – to reveal the connection, links between teamwork and sustainable development seeking to increase the organization's competitiveness.

The objectives of the research:

1. To define the relevance of teamwork and sustainable development to the organisation's activity.

2. To provide links between the concepts of teamwork and sustainable development.

Research methods: the article is prepared using the methods of literature sources' analysis, logical analysis, abstraction, analogy and generalisation.

Research methodology

The rationale and procedures of research implementation. The research is based on the analysis of theoretical discourse. The teamwork and sustainable development are being analysed using the method of inductive reasoning as described by Lithuanian authors (Merkys, 1995; Kardelis, 2007; Žydžiūnaitė et al, 2010).

Research results

Teamwork – a means of competitive advantage of an organisation.

Today it is already not discussable that traditional workplace where it is being concentrated on inner competition and personalities, is undergoing a transformation. The management experts and researchers (Stewart, 2001; Hendrix, 2002; Žydžiūnaitė, 2005; Baker, Day, Salas, 2006; Dromantas, 2008; Altpeter, Luckhardt, Lewis 2007; Paige, Aaron, Yang, 2008; Seilius, Šimanskienė, 2009; Šalkauskienė, Vveinhardt, 2007, 2008; Šalkauskienė, 2011; Gražulis, 2014; Sukackaitė, Atkočiūnienė, 2016 and others) claim that a successful organisation is being characterised by effective teamwork and leadership and not a traditional management. The importance of *teamwork*has emerged in the changing philosophy of human resources management when *teamwork* has spread as a mechanism of performing, implementing tasks and goals, solving problems.

It is already not necessary to prove that teamwork is one of the methods inducing effectiveness in the organisation's activity. A team is not simply a sum of its members' abilities, intelligence and inner power. In order for a team to work, a special organisational culture basedon teamwork philosophy that determines a smooth operation of the team, has be in place.

Today's tense competition, rapid development and constant changes are the reality of most organizations. Therefore, a strong team of employees is useful for both – the organisation and employee himself / herself. It is obvious that the activity, performance of the team under the conditions of changes gains new features and a different shade. The main precondition of positive teamwork is the fact that the whole is better than the sum of separate parts that manifests as a cooperation, coordination, sincerity. A positive role of teamwork which determines a successful, favourable activity of the organisation is that in a fast-changing external environment where technologies, speed and flexibility are being valued, it combines individual work efforts which is a key to success, innovations and creativity (Smith, 2006). A successful activity of big organisations (where usually it is difficult to make rapid changes because of a complex management structure) is possible by creating teams aiming at a quick and effective response to changing environment and consumers' needs. According to M. Dromantas (2008), a positive teamwork encompasses four dimensions: potency (competence, construct of personal effectiveness); meaningfulness (understanding the meaningfulness of the team); autonomy (an extent to which members of the team experience and understand freedom and independence of their actions at work); influence (members of the team seek, share and understand feedback received from other members of the organisation). A common goal is a strong impetus for the team (Masiulis, Sudnickas, 2007). Authors summarized aspects positive teamwork: the scene is set to the rapid development of the organisation, it is enabled to create and provide more economic and better quality products; organisation is learning more effectively and retains what has been learnt; organisation saves time because the activity which would be performed by separate employees in turn (one after another) at the same time now is being performed by the whole team; team members may provide and implement more ideas conditioning the search for and implementation of innovations; employees working in a team may integrate and relate information in a way that an individual employee would not be able to implement by himself / herself. A lot of scientists define teamwork as an aggressive and safe path towards organisation's success. In addition to this, a synergy effect is being created because individual traits of separate employees complement each other. When a team is diverse and composed of different people then it is possible to use the strengths of separate team members.

In a contemporary organisation, a team is understood in the following way: not less than two people who rely on the same values, ideals, have the same attitudes in life and at work, voluntarily take responsibility for their work results, influence each other on the grounds of mutual trust and cooperation, pursue the goal, believe in the meaningful and useful activity, constantly search for new ways and methods to improve themselves and their common work (Šalkauskienė, 2011). Teamwork (being ready for a constant gain of new skills, continuous learning from the experience of others, creativity, innovative thinking) is one of the most important development possibilities for a contemporary organisation. Namely teamwork could become a powerful leverage for effective activity in many organisations without more significant financial investments.

Analysing the development of organisation (and team at the same time), it is necessary to emphasize the concept of a sustainable team which is defined by the scientists as a set of components of personal behaviour style which are as follows: action (defines the activeness, achievements, search for solutions and development of the team), structure (organisation, methods, process, strategy, tactics and discipline), people (communication, motivation, empathy, social contact) and ideas (creativity, ideas). All of these factors are important for the organisation's change and its activity results. Thus, for the formulation of an effective team and achievement of good teamwork relations, effective work and feedback are necessary as well as constructive problem solving. It takes only one step to find a solution, but it is crucial.

Considering the tendencies of the change in organisation's activity and the pursuit of effectiveness it is important that the members of team would automatically perform activities, mechanically collect specialised knowledge, develop structural thinking and understanding. This implies that the competence of team members is an essential component of teamwork and a crucial assumption of this activity. An effective team feels the need to change, checks and updates its work methods and consults an expert upon the need.

The performed analysis of scientific works enables to claim that in order for an organisation to reach a higher level, the learning of the whole organisation has to be present and the pursuit of its higher culture which is influenced by many factors (management, leadership, decision making, change of roles, how the organisation's behavioural models interact with each other, non-formal structures, etc.) in the variety of which it is possible to find certain generality. To sum up the generalisations of some researchers, it is possible to distinguish the most relevant characteristics of teamwork: pursuing the goal, autonomy, empowerment, membership and group, leadership, effectiveness, cooperation, mutual help as well as the balance between homogeneity and versatility, timeliness, creativity, accuracy, thoroughness, intelligence, responsibility, sharing roles, competence, norms in the team, number of team members, structure, skills, traits of personality. According to R. Sukackaitė and Z. O. Atkočiūnienė (2016), the researches of modern leadership emphasizes the influence on the success of organization through team structures involving leadership, increasing empowerment of individuals and the allocation of leadership among members of an organization. All these factors and analysis of literature show that contemporary organisations are starting to change their attitude towards management. It is possible to pay attention to Japanese attitude which claims that the basis of long-term survival is to maximise the intellect and ingenuity of each person every day. Only if all employees' intellectual power is collected, organisation may expect to perform its activity successfully.

Sustainable development concept in the organisation's context

The theme of organisation's sustainability is very often discussed in the scientific literature and this term is used as a synonym of sustainable development or organisation's social responsibility – organisation's sustainability is based on economic, environmental and social responsibility aspects (Bagdonienė and others, 2009). It should be emphasized that contemporary business cannot ignore environmental and social problems (Šimanskienė, Petrulis, 2014). Since business is a part of these problems, it also has to become a part of their solution (Simanavičienė, Kovaliov, Šubonytė, 2011). For an organisation to become competitive in a dynamic business environment it has to be able to quickly and systematically adapt to changes. For its business to thrive, the organisation has to stick to new standards and implement them appropriately.

Many of Lithuanian and foreign authors, when examining the coherence of the organization, usually associate it with the implementation of the principles of sustainable development in the organization. (Gruževskis, Vasiljevienė, Moskvina, Kleinaitė, 2006; Meyer, 2007; Sbarcea, 2007; Čiegis, Grunda, 2007; Persson, 2008; Grundey, 2008; Juščius, 2009; McGehee and others, 2009; Lovins, 2009; Česynienė, Diskienė, Česynaitė, 2011; Bagdonienė, Paulavičienė, 2010; Simanavičienė, Kovaliov, Šubonytė, 2011; Česynienė, R., Diskienė, Česynaitė, 2011; Atkočiūnienė, Radiunaitė, 2011; Šimanskienė, Župerkienė, 2013; Raišienė and others 2014; Šimanskienė, Paužuolienė, 2010, 2011, 2015 and others).

A sustainable organisation is becoming one of the most popular and ambitious concepts because environment and organisation are closely related and its long-term success depends from the fact how it is able to integrate itself into the environment (Seivwright, A.N., Unsworth, K.L., 2016).

Sustainability in the organisation means more than implementation of one or another principle; it is the transformation of attitudes and behaviour. According to R. Čiegis (2007), the organisation has to understand that business and environment have to help each other and not to limit each other or interfere and that it is profitable to participate in sustainable development. Sustainability may be understood as a concept of responsible business which is creating a constant added value to the organisation. Only those organisations which list sustainability as their strategic goal, i.e. rethink their business models, products, technologies and processes, will eventually gain advantage (Nidumolu et al, 2009). A sustainable organisation – it is the sustainability through organisation's relations with the availability and use of resources creating a concept of responsible business (Šimanskienė and Paužolienė, 2011). The model of sustainable organisation emphasizes the following necessary conditions for developing the culture of sustainable organisation: to continue the organisation's history, i.e. to keep and improve the idea and vision of the founders, to create main values and norms; to create the feeling of integrity; the greater the number of members of organisation who identify themselves with organisation's values, standards and stick to them, the stronger is the feeling of the unity and identity of its members; to encourage to participate in organisation's activity. A lot of authors point out that employees' participation in sharing ideas and decision-making is very important since it is a necessary condition for team compatibility. Upon the interaction among organisation members, new ideas are being initiated and encouraged – consequently this induces innovative processes. It has been noticed that teamwork includes the same aspects. Sharing knowledge is at the same time a goal, impetus, because the main aim of the team is to encourage people to communicate. Since sustainable development is not a part of organisation's management system, thus the management system which integrates the elements of sustainable development into all levels of organisation and processes is necessary. In order for the organisation to become a sustainable business, the ideas of sustainable development have to become a part of organisation's culture and include each and every – not only employees and clients, but also suppliers, partners and investors. The creation of sustainable business model requires to implement a completely new attitude, thinking, but the benefit might be worth the efforts (Rader and McKenzie Peterson, 2009).

Recently the strategies of organisations are changing – from defensive to offensive when trying to achieve the balance between economic, social and environmental initiatives. The offensive strategy of a sustainable organisation encompasses communication and cooperation throughout the supply chain and this enables to better adjust to systemic changes in the organisation; it also includes a goal to move towards optimal perfection in the context of sustainable organisation through management and leadership, through sharing necessary and timely information and knowledge; implementing sustainability as a goal in organisation's culture which has a lot of importance not only for employees, but also clients, shareholders; tries to reduce expenses with ecological productivity and sustainable innovations. This strategy makes a greater impact on consumers, develops a sustainable interaction between shareholders and suppliers and optimises competitive advantage with the help of ideas, creativity and innovations.

Effectively operating team has an impact on organisation and its members' ability to adapt to changing situations, create a clear cooperation network. The essential aim of organisation's management is to turn employees' intellectual knowledge into a sustainable competitive advantage. Good leaders who have long-term vision and clearly defined sustainable goals, who include and motivate all members of the organisation to reach for the defined goals are very important not only for making the organisation effective but also to implement ideas of sustainable development. The individual commitment of each member of the organisation for its culture and sustainability is compulsory because only motivated employees who are willing to share the experience possessed and supporting initiatives of sustainable development are leading organisation towards positive changes. By nature people are against changes, therefore, it is necessary to embed knowledge culture in the organisation with not only effective lifelong learning of employees but also wish and need to gain new knowledge, share it and develop competences that are present.

According to scientists, organisation when seeking that its members would become involved into economic, social and environmental sustainability initiatives has not only encourage clear cooperation, transparent communication, following good examples of leaders and managers, but also to support creativity and innovations. The innovative activity of organisation is one of the essential factors for sustainable development. Teams based on innovations – it is generation, development, interchange and application of new ideas for marketable products and goods, business success and at the same time for economic vitality and the progress of society. Organisation by constantly creating new and better services, products and processes, and creatively breaking the rules of competitive games and by finding new ways to compete, can completely differently define its business significance and push even the biggest competitors. The sustainability integrated into organisation's aims encourages creativity, innovations, competitive advantage, reduces expenses, includes and motivates both employees and clients. The commitment of organisation's members to seek for sustainable development aims and their understanding has to be embedded in all factors of sustainable development so that sustainable economic, social and environmental initiatives would become a part of organisational culture. To sum it up, it is possible to distinguish the following factors of sustainable organisation: human resources, management and leadership, culture, technologies, processes and infrastructure.

Changes in global environment inevitably determine sustainability and responsibility, therefore, management concepts change and overlap, complement each other with the problems analysed (Bagdonienė, Paulavičienė, 2010). In recent years, it can be noticed that the attention to teamwork and sustainability concepts is increasing. It is obvious that the role of teamwork in the implementation of ideas of sustainable development is undisputed and it may become as an advantage contributing to organisation's development.

Conclusions

The results of research enabled to achieve the set aims and formulate the following main aspects:

- Nowadays, if an organisation wants to become a competitive one and to implement the harmony between economic, social and environmental aims has to understand that it is only possible by effectively managing the knowledge of human capital (teamwork) and the following factors of sustainable development in the organisation – management and leadership, culture, intellectual capital, processes, technologies and infrastructure. The most effective means is the improvement, development of organisation's teamwork and reaching for the highest levels of maturity. Teamwork not only conditions the possibilities for the organisation to create a competitive advantage, but also to gain new competences corresponding to the economic changes.
- Summarizing the ideas of many authors it is possible to claim that the concept of sustainable development cannot be separated from the concept of teamwork, because the concept of sustainability itself implies the ability of the organisation to adapt to changes of organisation's environment, apply best practices and achieve as well as sustain competitive advantage. The importance of teamwork when initiating changes within the organisation is innovative as well as flexible thinking, creativity, effective information management, ability to communicate and manage conflicts, creating conditions for constant improvement, achieving goals, ability to take responsibility and trust each other.
- By combining the factors of teamwork (management, leadership, decision-making, role change, coherence of organisation's behavioural models, etc.) and sustainable organisation (management and leadership, culture and intellectual capital, etc.) it is clear that the role of teamwork while implementing the ideas of sustainable development within the organisation is obvious. However, the practice of sustainable activity also benefits organisation – it might be as a competitive advantage hiring and keeping employees, attracting investors.

References

1. Atkočiūnienė, Z. O., Radiunaitė, R. (2011). Žinių vadybos įtaka darnaus vystymosi reikšmėms įgyvendinti organizacijoje. *Informacijos mokslai*. Vilnius: VU.
2. Altpeter, T., Luckhardt, K., Lewis, J. N. et al (2007). Expanded surgical time out: a key to real-time data collection and quality improvement. *J Am Coll Surg* 204:527–532.
3. Bagdonienė, D., Paulavičienė, E. (2010). Socialinės atsakomybės ir organizacijos vadybos sistemos integravimas. *Ekonomika ir vadyba*, Nr. 15, Šiauliai: ŠU.
4. Bagdonienė, D.; Galbuogienė, A.; Paulavičienė, E. (2009). Darnios organizacijos koncepcijos formavimas visuotinės kokybės vadybos pagrindu. In *Ekonomika ir vadyba* 14

5. Baker, D., Day, R., Salas, E. (2006). Teamwork as an Essential Component of High-Reliability Organizations. *Health Services Research* 41 (4p2).

6. Česynienė, R., Diskienė, D., Česynaitė, E. (2011). Socialinė atsakomybė darbuotojų atžvilgiu: lyginamoji viešojo ir verslo sektorių analizė. *Viešasis administravimas*, Nr. 29, Kaunas.

7. Čiegis, R.; Grunda, R. (2007). Įmonės transformavimo į darnią įmonę procesas. *Organizacijų vadyba: sisteminiai tyrimai* 44. Retrieved from http://grunda.files.wordpress.com/2010/12/2007-ciegis-grunda.pdf.

8. Dromantas, M. (2008). *Komandinis darbas Lietuvos organizacijose: diagnostinis aspektas*. Daktaro disertacija. Kaunas: VDU.

9. Gražulis, V. (2014). *Komandinis darbas organizacijose. Mokslo studija*. Mykolo Romerio universitetas.

10. Grundey, D. (2008). Applying sustainability principles in the economy. *Technological and Economic Development of Economy*, Vol. 14(2), Vilnius: MRU.

11. Gruževskis, B., Vasiljevienė, N., Moskvina, J., Kleinaitė, I. (2006). *Įmonių socialinė atsakomybė. Aktualūs socialinės politikos klausimai*. Vilnius: Darbo ir socialinių tyrimų institutas.

12. Hendrix, G. (2002). The importance of goals to the Success of Work Teams. CSWR Papers. University of North Texas: Center for the Study of Work Teams. Retrieved from http://www.workteams.unt.edu/reports/ghedrix.htm.

13. Juščius, V. (2009). Įmonių socialinė atsakomybė ir organizacijų tapatumas šiuolaikinės ekonominės krizės kontekste. *Ekonomika ir vadyba*. Nr. 14, Šiauliai: ŠU.

14. Kovaliov, R., Snieška, V., Simanavičius, A. (2009). Lietuvos autoverslo įmonių požiūrio į ĮSA vertinimas. *Ekonomika ir vadyba*. Nr. 14, p. 294–300. Šiauliai: Šiaulių universiteto leidykla.

15. Kardelis, K. (2007). *Mokslinių tyrimų metodologija ir metodai*. Šiauliai: Lucilijus.

16. Lovins, A. (2009). What Executives Don't Get About Sustainability (And Other Notes on the Profit Motive). In *MitSloan Management Review* [interaktyvus]. Retrieved from <http://sloanreview.mit.edu/the-magazine/2009-fall/51111/what-executives-don%e2%80%99t-get-about-sustainability-and-further-notes-on-the-profit-motive/>.

17. Nidumolu, R.; Prahalad, C. K.; Rangaswami, M. R. (2009). Why Sustainability Is Now the Key Driver of Innovation. *In Harvard Business Review.* Harvard Business School Publishing. Retrieved from <http://hbr.org/2009/09/why-sustainability-is-now-the-key-driver-of-innovation/ar/1>.

18. Masiulis, K., Sudnickas, T. (2007). *Elitas ir lyderystė*. Vilnius.

19. McGehee, N. G., Wattanakamolchai, S., Perdue R. R., Calvert E. O. (2009). Corporate Social Responsibility within the U.S. Lodging Industry: An Exploratory Study. *Journal of Hospitality & Tourism Research*, Vol. 33, No. 3, p. 417–437. Retrieved from http://jht.sagepub.com/cgi/content/abstract/33/3/417.

20. Merkys, G. (1995). *Pedagoginio tyrimo metodologijos pradmenys*. Šiauliai: ŠU.

21. Meyer, W. (2007). Evaluation of Sustainable Development: A Social Science Approach. In *Sustainable Development in Europe: Concepts, Evaluation and Applications*. Cornwall: Cheltenham.

22. Persson, H. T. R. (2008). Social Capital and Social Responsibility in Denmark. *International Review for The Sociology of Sport*, No. 43/1, p. 35–51.

23. Paige, J. T., Aaron, D. L., Yang, T. et al (2008). Implementation of a preoperative briefing protocol improve accuracy of eamwork assessment in the operating room. *Am Surg* 74:817–823.

24. Raišienė, a. G. et al. (2014). *Veiksmingos vadybos gairės: teorinės įžvalgos ir Lietuvos organizacijų atvejai*. Mokslo studija. Vilnius: Mykolo Romerio universitetas.

25. Rader, B., Mckenzie Peterson, J. (2010). Building a Sustainable Organization. In Psychologically Healthy Workplace Program. APA Practice Organization, 4(4). Retrieved from http:// www.phwa.org/resources/goodcompany/newsletter/ article/182.

26. Sbarcea, K. (2007). *Corporate Sustainability and the Role of Knowledge Management: Preliminary Exploration*. Retrieved from http://thinkingshift.files.wordpress.com/2007/02/km-sustainability.doc.

27. Seivwright, A. N., Unsworth, K. L. (2016). Making Sense of Corporate Social Responsibility and Work. *Frontiers in Psychology. 7 (443).*

28. Sukackaitė, R., Atkočiūnienė, Z. O. (2016). *Inovacinės organizacijos kultūros ir lyderystės sąsajos Lietuvos įmonėse*. P. 38-49.

29. Stewart, J. (2001). *Managing Change through Training and Development*. London: Kogan Page.

30. Simanavičienė, Ž., Kovaliov, R., Šubonytė, J. (2011). Įmonių socialinės atsakomybės skatinimo politikos Lietuvoje SSGG analizė. *Ekonomika ir vadyba*, Nr. 16, Šiauliai: ŠU.

31. Smith, G.P. (2006). *United We Stand. Divided We Fall*. Retrieved from http://chartcourse. blogspot.com.

32. Šalkauskienė, L., Vveinhardt, J. (2007). Komandinio darbo specifika šiuolaikinėje organizacijoje. *Lietuvos ūkio vystymas ES erdvėje: procesai ir tendencijos. Dešimtoji Respublikinė doktorantų ir magistrantų mokslinė konferencija*. Kaunas: VDU.

33. Šalkauskienė, L., Vveinhardt, J. (2008). Komandinio darbo ypatumai skirtingo tipo Lietuvos organizacijose. *Organizacijų vadyba: sisteminiai tyrimai*. Kaunas: VDU.

34. Šalkauskienė, L. (2011). *Komandinio darbo tobulinimas Lietuvos organizacijų pavyzdžiu*. Daktaro disertacija. Kaunas: VDU.

35. Šimanskienė, L., Seilius, A. (2009). *Komandos: samprata, kūrimas, vadovavimas*. Monografija. Klaipėda: KU.

36. Šimanskienė, L., Paužuolienė, J. (2010). Įmonių socialinės atsakomybės svarba Lietuvos organizacijoms. *Management theory and studies for rural business and infrastructure development*, 20 (1), p. 1–11.

37. Žydžiūnaitė, V. (2005). *Komandinio darbo kompetencijos ir jų tyrimo metodologija (slaugytojų veiklos požiūriu)*. Monografija.

38. Žydžiūnaitė, V. et al. (2010). *Kokybinių tyrimų metodologija*. Socialinių mokslų kolegija.

Received: 2 May 2017
Accepted: 11 October 2017

THE STUDY ON THE DEMAND FOR PRODUCTION AND LOGISTICS SPECIALISTS: THE CASE OF SIAULIAI REGION

Ligita Šalkauskienė, Rasa Pocevičienė, Jurgita Radzevičienė
Šiauliai State College, Lithuania

Annotation

Labour market forecasting and the goals set for it have transformed along with social and economic challenges. Due to rapid technological changes in the markets, restructuring of economy and transformation of the requirements for the labour market the standard human resources planning model is no longer sufficient. The issue of compatibility between the labour market demand and supply in the qualitative aspect of the content of qualifications becomes particularly important. It is very important to analyze and project what qualification (competence, knowledge and skills) will ensure specialists' successful participation in the labour market. This dimension of research and forecasting is one of the constituents ensuring quality of education and vocational training. Quality is ensured by formulating appropriate training and study programmes and teaching methods that comply with current and future labour market challenges. Considering the projected labour market demand, training and study programmes can have specialisations. The article presents the study on the demand for production and logistics specialists presenting the example of Siauliai region.

Key words: *production, logistics, specialist, the demand for specialists, the study on the demand.*

Introduction

Labour market analysis is aimed at the assessment of the current situation and forecasting of the possible future scenario. This enhances the policy of planning human resources, enables a more efficient use of the labour market assessment systems, and creates preconditions for better compatibility between the demand and supply of the labour market. The results of the specialists' demand analysis also contribute to reduction of the mismatch of information in education and labour market sectors. Spontaneous distribution of labour resources in the labour market has many drawbacks. The multifaceted nature of the labour market and predetermined rigidity factors may lead to large-scale long-term mismatch both in the demand and supply of the labour market (i.e. the mismatch between what employers need and what the labour market offers). Such situation is described by high unemployment level of persons with certain education, and on the other hand, difficulties faced by companies looking for employees with necessary qualifications.

The research problem. In order to survive in the market, enterprises constantly have to keep track of the market, continuously search for improvement opportunities and improve staff competence, because highly skilled specialists determine the image of the enterprise, its financial situation, increasing competitiveness of the enterprise, and most importantly, the future of the enterprise. Qualified staff who meets the needs of today's market is the key to longevity of the enterprise. It should also be noted that there is a lack of research on the demand for different types of specialists and specificity of their identification in various types of enterprises. For this reason, the *problem* analysed in the article is related to the insufficient analysis of the need for specialists in enterprises and to the endeavour to improve it.

The research subject: the demand for production and logistics specialists in Siauliai region.

The research aim: to identify the demand for production and logistics specialists and knowledge, abilities and competencies, required for production and logistics specialists.

Research objectives:

1. To identify the demand for production and logistics specialists;
2. To analyze competencies required for the production and logistics specialist.

Research Methodology

A rationale for the study and implementation procedures. The demand for production and logistics specialists is grounded on the theoretical and practical discourse analysis: the analysis of supply and demand, forecast and trends of Lithuanian labour market, the analysis of strategic documents of the Republic of Lithuania and Siauliai region, the analysis of employment possibilities in Lithuanian and the EU market, etc.

The research instruments. The content analysis of documents. This analysis has allowed to distinguish the key priorities of production business development in Siauliai region; to identify the key activity areas of production management specialists, functions as well as knowledge, abilities and competencies what are necessary to carry them out.

Research methods. The analysis of scientific literature sources; document analysis, data processing. The data are analyzed on the basis of the criteria of words, context, frequency and extensity, intensity of comments, accuracy of answers.

Research Results

Summarising the study data on the demand for production and logistics specialists, it can be stated that as to the competencies that are relevant for the production and logistics specialist in today's market conditions, it is important that such specialist understands production and production logistics processes (i.e., *has knowledge and abilities of both production management and production logistics*) as well as the interrelationship between these two processes (i.e., production and logistics). As stated by the majority of cases, the latter ability often determines not only the manager's successful activities but also success of the very business in the broad sense. According to experts (Zinkeviciute, Vasiliauskas, 2013), specialists working in a modern production enterprise must be responsible not only for the very production process within the enterprise but also for other aspects that are important for its activities: supply of basic and auxiliary materials, raw materials, semi-finished products, spare parts, direction of semi-finished and finished products to outlet stores, distribution of finished products, etc. Although traditionally these activities are attributed to logistics, achievement of effective solutions, successful and profitable production and meeting the customers' needs require to closely coordinate both production activities and storage, packaging, transportation, information and inventory management (i.e., traditionally attributed to logistics) activities. Therefore, enterprises increasingly need specialists who know and able to manage not only production but also production logistics processes. In addition, according to the heads of enterprises, knowledge and abilities of logistics are highly required in order to ensure the production of large, complex products within the very enterprise too (The Forecast of the Labour Market 2017).

The demand for production and logistics specialists is grounded on the analysis of the data provided by Lithuanian Labour Exchange. Based on the said analysis, it can be stated that the demand for specialists in industry, transport and storage economic activities has remained relatively high for several years. Among ten most marketable specialities in 2016, transport (logistics) managers took the second place after information technology specialists, while in the first half of 2016, storage service employees had the best employment prospects. As of 1 January, 2017, the third place among the most marketable professions is occupied by production managers (The Forecast of the Labour Market 2017).

According to the data of Lithuanian Labour Exchange, analyzing the forecasts of the demand for manpower in Lithuania in 2017, it is predicted that employers will register 3-4 percent more job offers than in 2016. In the industrial sector it is planned to register 19 percent vacancies, mostly in the enterprises engaged in the production of mattresses, furniture, meat, cheese and poultry products, dairy operations, outerwear sewing. Because it is expected that skilled workforce will be allocated 75 percent of all job offers; i.e., by 1 percent more than in 2016, it is likely that the industry sector will need a larger number of both skilled workers and specialists (the production manager and production logistics specialist would be attributed to the latter).

The survey of Lithuanian Labour Exchange demonstrates that as much as 60 percent of enterprises operating in the industrial sector lack skilled manpower. The demand for specialists is particularly felt in the sectors of textile, furniture production, wood and metal processing and food processing industries.

The forecast of employment prospects provided by Lithuanian Labour Exchange for year 2017 (see Table 1) shows the potential demand for specialists in Siauliai region and the Republic of Lithuania (The Forecast of the Labour Market 2017).

Table 1

The Forecasts of the Barometer on Employment Possibilities of Lithuanian Labour Exchange for year 2017

Locality	Big employment possibilities	Average employment possibilities
In Siauliai region	Production foremen and team leaders Heads of production enterprises Storage service employees	Wood specialists Transport employees
In Lithuania	Storage service employees	Wood specialists Production foremen and team leaders Management and organization analysts Transport employees

According to the data of the Barometer of Lithuanian Labour Exchange, the demand for production foremen, storage service employees in Siauliai region is high.

In addition, in “The Profession Map” production foremen are among the groups of the most marketable professions in Siauliai region (there is a considerable lack of production foremen in the municipalities of Kelme district, Siauliai city and district, the lack of production foremen is also felt in all other districts of Siauliai region); the situation with storage service employees is also similar (there is a considerable demand for such employees in Akmene, Joniskis, Radviliskis, Siauliai districts; Kelme, Pakruojis district municipalities also lack such employees).

The demand for production and logistics specialists is also grounded on the forecast of the labour market in Siauliai region in 2017, which is prepared on the basis of the analysis of manpower supply and demand indicators, employers’ answers to questions about business activity prospects, job creation and liquidation in enterprises, and on relevant information about projected changes in the labour market, which is available in public space. For example, analysing job possibilities for year 2017, in October-November 2016, using a stratified random sampling method, Siauliai Territorial Labour Exchange conducted *The Employers Survey,* attended by 606 employers of Siauliai region who employ over 42,9 thousand employees in their enterprises. The survey was attended by 75 employers in Akmene district municipality, 79 in Joniskis district, 78 in Kelme district, 76 in Pakruojis district, 88 in Radviliškis district, and 210 in Siauliai city and district. All companies that employ more than 100 employees were surveyed. Among the respondents, 55,4 percent were enterprises representing the services sector; 21 percent, industry; 15,7 percent, agriculture; and 7,9 percent, construction sector. The majority (94,5 percent) of surveyed enterprises represented small and medium businesses. The conducted employers’ survey demonstrated that the majority of respondents quite positively assessed the prospects of the activities of enterprises. Every fifth enterprise planned the increase in the number of employees. The most considerable increase of employees is foreseen in transport and storage, manufacturing production, wholesale and retail trade, human health care and social work, agriculture, construction, real estate, water supply, wastewater treatment, waste management and remediation enterprises. Production managers, production foremen and team leaders also fall into the list of jobs the number of which is projected to be the largest in Siauliai region (https://www.ldb.lt/Informacija).

Production and logistics specialists will be able to work in enterprises differing in size and legal status, in institutions engaged in production, storage and transportation, wholesale and retail trade, etc. The statistics of this kind of enterprises and institutions operating in Siauliai region as well as the statistics of the demand for prospective specialists is presented in Table 2 (www.ldb.lt/Informacija)

Table 2

Number of Enterprises, Institutions in Siauliai Region

Type of activity	Municipal enterprises	Private limited liability companies (UAB)	Public limited liability companies (AB)	Sole proprietorships
Manufacturing production	0	426	12	157
Transport and storage	1	345	1	161
Wholesale and retail trade	1	978	1	587
In total:	**2**	**1749**	**14**	**2654**

Having evaluated the results of the employers’ survey and labour market trends, it is predicted that in 2017, the situation in Siauliai region will be improving: it is expected to register 24,7 thousand new job offers. The demand for the manpower will be rising by 2 percent. More than half of job offers will be in the services sector; every fifth vacancy, in industry; about 7 percent, in construction and agriculture.

The importance of manufacturing production for the region is also supported by the results of the study conducted by “Mosta” (Research and Higher Education Monitoring and Analysis Centre): manufacturing production attracts most of foreign investments in Siauliai region (in 2015, 98 million Euros, 55 percent of total investments).

The validity and necessity of the demand for production and logistics specialists for the labour market are also disclosed by the conducted analysis of recruitment advertisements (www.ldb.lt, www.cv.lt, www.cvmarket.lt, www.cvonline.lt, www.cvbankas.lt, www.pvsistemos.lt, www.Dirbu.laikas.lt, www.Dirba.lt, www.ldb.lt/TDB/Siauliai, etc.). It is found that at present there is a lack of production and logistics professionals (manufacturers, forwarding agents, managers, storage service specialists) in Lithuania, who are able to manage production and logistics processes, foresee threats and opportunities, in a timely manner and qualitatively organize the production of a product, its movement from a producer to a customer, etc. It is emphasized that these specialists' work is agile and responsible; they have to solve a lot of organizational matters, constantly collaborate with carriers, suppliers and customers, which in turn justifies the demand for special managerial knowledge and abilities necessary for management of these processes.

In a certain sense, the demand for the specialists being analysed is also confirmed by the analysis of strategic documents of the Republic of Lithuania, which clearly name the need to develop deeper entrepreneurial skills (in production and logistics activities), developing business in national and international markets. For example, VI priority "Smart Economy" defined in the National Progress Strategy "Lithuania 2030" emphasises "economy that is flexible and able to compete globally [openness], generating high added value, based on knowledge, innovations, entrepreneurship [creativity] and social responsibility as well as "green" growth [responsibility]".

The strategic aim of the strategic activity plan of The Ministry of Economy of the Republic of Lithuania 2016-2018 is to promote the development of Lithuanian economy and increase competitiveness. For example, describing one of the priorities "I. Improvement of Business and Investment Environment" (direction 1.1 "The Increase of Competitiveness of Lithuanian Economy, Ensuring a High Level of Investment"; direction 1.3 "The Increase of Employment, the Reduction of Poverty and Social Exclusion, etc. of I priority "Sustainable Economic Growth"), the focus is on the need of promoting social entrepreneurship and youth employment, the increase of Lithuania's integration into the global market, the development of creative and innovative society, the development of multiple innovations and implementation of a systematic approach to them; smooth integration into the EU market; the increase of cost-effectiveness of business enterprises and their ability to adapt to the domestic and foreign market conditions[6].

Strategic development plans of Siauliai region municipalities 2014-2020 indicate development trends related to the development of economic activities or businesses. For example, priority 2 of the strategic plan of Siauliai District "Development of Business Environment and Entrepreneurship", priority 1 of the strategic development plan of Siauliai City "Competitive Business Environment" emphasize the importance of innovative engineering industry and logistics services generating high added value and attracting local and foreign investments.

It should be noted that development of industry and logistics services is foreseen in the development plan of Siauliai region 2014-2020 (see Table 1). The Parliament of the Republic of Lithuania adopted laws on the basis of which Akmene and Siauliai Free Economic Zones were established in Siauliai region, aiming to increase industrial attractiveness of Akmene and Siauliai and create more favourable conditions for attraction of investments, high-technology development and creation of new jobs. In addition, the number of operating economic entities tends to increase in the region: compared to 2008, it increased by 1,8 percent. The activities of industrial, transport, commercial and services enterprises, generating the highest gross added value, have also intensified in the region. In addition, most of the foreign investments in Siauliai region are attracted by manufacturing production (in 2013, the amount of direct foreign investments in Siauliai region was 79,1 million Euros; in 2014, 87,1 million Euros; and in 2015, 98,1 million Euros) (www.esinvesticijos.lt/lt/dokumentai/siauliu-regiono-2014-2020-metu-pletros-planas-nauja-redakcija-2015-10-15). These factors will enable the establishment of new businesses and creation of new jobs for production managers and logistics specialists because in Siauliai region the majority of business sector employees work in industry (about 30 percent) (The analysis of the current state of Siauliai city. The report of stage II).

Conclusions

The conducted research leads to the assumption that production and logistics specialists will be in demand in the labour market. The empirical research results enabled to reach the research aim and formulate the following key aspects of the demand for production and logistics specialists:

- the key priorities of the development of production business in Siauliai region were distinguished (set out in random order): *development of the number of employees with appropriate qualifications and competencies; development of leaders' competencies; implementation of information technologies; improvement of work with customers and communication; development of new products using new technologies*;
- the key production management specialists' activity areas, functions as well as knowledge, abilities and competencies in order to carry them out were identified (for example, *orientation to make changes; creativity; endeavour for excellence; the ability to ensure*

teamwork; to speak more than one foreign language; to be good at working with various business management software; to solve problems; etc.)

References

1. Darbo rinkos prognozė. (2017). Retrieved from: https://www.ldb.lt/Informacija/DarboRinka/Documents/Prognoze2017.pdf
2. Darbo rinkos prognozė: kokios tendencijos vyraus 2017 metais? (2017). Retrieved from: https://www.ldb.lt/TDB/Siauliai/Apie/Naujienos/UserDisplayForm.aspx?ID=1050
3. Lietuvos Respublikos Seimo „Dėl Lietuvos pažangos strategijos „Lietuva 2030““ 2012 m. gegužės 15 d. nutarimas Nr. XI-2015 (Žin. 2012, Nr. 61-3050)
4. Lietuvos Respublikos ūkio ministro valdymo sričių 2017-2019 metų strateginis veiklos planas. (2017). Retrieved from: https://ukmin.lrv.lt/lt/administracine-informacija/planavimo-dokumentai/strateginiai-veiklos-planai/ukio-ministerijos-2016-2018-metu-strateginis-veiklos-planas>
5. Profesijų žemėlapis. (2017). Retrieved from: https://www.ldb.lt/Informacija/DarboRinka/Puslapiai/Profesiju_zemelapis.aspx
6. Profesinio mokymo, studijų ir mokslo būklės apžvalga Šiaulių regione. (2017). Retrieved from: http://www.mosta.lt/images/Profesinio_mokymo_studijų_ir_mokslo_būklės_apžvalga_Šiaulių_regione.pdf
7. Prognozės. (2017). Retrieved from: <http://www.ldb.lt/TDB/Siauliai/DarboRinka/Puslapiai/Prognozes.aspx
8. Šiaulių miesto esamos būklės analizė. II etapo ataskaita. (2015). Retrieved from: https://www.ekt.lt/wp-content/uploads/2016/08/Ataskaita_Esama-situacija_Galutine.pdf
9. Šiaulių regiono 2014-2020 metų plėtros planas (nauja redakcija). (2015). Retrieved from: http://www.esinvesticijos.lt/lt/dokumentai/siauliu-regiono-2014-2020-metu-pletros-planas-nauja-redakcija-2015-10-15
10. Ūkio ministerijos 2016-2018 metų strateginis veiklos planas. (2015). Retrieved from: https://ukmin.lrv.lt/lt/administracine-informacija/planavimo-dokumentai/strateginiai-veiklos-planai/ukio-ministerijos-2016-2018-metu-strateginis-veiklos-planas
11. Ūkio subjektai. (2017). Retrieved from: https://osp.stat.gov.lt/documents/10180/3329771/Ukio_subjektai.pdf
12. Zinkevičiūtė V., Vasiliauskas A.V. (2013). *Gamybos logistika. Gamybos vadyba*. Klaipėda: VšĮ Socialinių mokslų kolegija. Retrieved from: http://www.marko.lt/wp-content/uploads/2016/09/2013_Gamybos_logistika_Gamybos_vadyba.pdf

Received: 28 March 2017
Accepted: 11 October 2017

INTELLECTUAL ORGANISATION AS A STAGE OF THE DEVELOPMENT OF THE LEARNING ORGANISATION

Natalija Šedžiuvienė
Šiauliai State College, Lithuania

Annotation
The article analyzes preconditions of learning organization transformation into intellectual organization, based on the learning society and learning organization concepts, revealing the need to share knowledge and help others learn, encouraging people's responsibility and enhancing their motivation, concepts that treat education is as a fundamental factor of a successful career of an individual, survival of the organization and national prosperity.
Key words: *learning organization, intelligent organization, motivation, strategy.*

Introduction

Contemporary education and management literature is rich in ideas about the *Learning Organisation* – the actual phenomenon for both educators and managers (Fullan, 1998; Stoll, Fink, 1998; Targamadzė, 1998; Dalin, Rolff, Kleekamp, 1999; Hargreaves, 1999; Jarvis, 2001; Simonaitienė, 2001; Garalis, 2003; Jucevičienė, 2004). However, the process of transformation of the *Learning Organisation* to the *Intellectual Organisation* and the stages of the process of formation of the *Intellectual Organisation* are not analysed enough. The analysis of the tendencies of formation of the *Intellectual Organisation* is relevant, it will encourage a new perception and adequate actions helping to reveal new opportunities for individuals and organisations. But mastering the actions of thinking does not mean that it will automatically create the necessary conditions for the *Intellectual Organisation* to originate. In order to create an intelligent organisation, good intentions alone are not sufficient. The following issues still are to be addressed:

- the unexplained methods of improvement, in order to release the potential of a separate individual and the whole organisation;
- the undetermined stages and features of the process of transformation of the *Learning Organisation* to the *Intellectual Organisation*.

Research problem: what are the conditions of the formation of the *Intellectual Organisation* and how can they be justified theoretically?

Research object: the process of transformation of the *Learning Organisation* to the *Intellectual Organisation.*

Goal: to reveal the conditions of the formation of the *Intellectual Organisation* theoretically.

The concept and meaning of the Learning Organisation. About thirty years ago the concept of adult education was strongly associated with the concepts of permanent education, lifelong learning and feedback. Today's lexicon appears to be a bit different. Now the compulsory terms are lifelong learning, *Learning Organisation* and *Learning Society.* The essential learning became the main point for discussions. Focusing on learning rather than on education or training, the main attention goes to a learner as an individual who assumes responsibility for learning and the choice of what, where and how to learn (Raggatt et al., 2015).

Today it is considered that the *Learning Organisation* is the right model of organisation, which ensures the organisation's ability to respond to environmental changes flexibly and efficiently and educate the individuals able to participate in the process of life-long learning.

The importance of the strategy of the Learning Organisation and the necessity to invest in human resources have been discussed for a long time. Continuous and rapid changes in the labour market require not only the conceptual development of this theory, but also the concrete means that could help implement the idea of the process of transformation of the *Learning Organisation* to the *Intellectual Organisation.*

The term *Learning Organisation* is used in both spheres: in scientific literature and in real organisational practice. Lithuanian and foreign scientists analyse the concept of the *Learning Organisation* in their works, but it is not clearly identified and there is no universally accepted meaning of this term. Each author defines the *Learning Organisation* in a different way and focuses on different aspects.

The following aspects are generally stressed in the concepts of the *Learning Organisation*: the type of activity of the *Learning Organisation*, the incentives for the members to learn in the organisation and the process of learning as a general value.

However, a newly emerged idea of continually *Learning Organisation* is becoming outdated because it does not fully correspond the latest challenges and needs of these days. Moreover, the most progressive organisations of the third millennium have not been created yet, and it is not necessary to create them. They may result from the process of restructuring of the existing organisations and become new organisations because the *Learning Organisation* leads to the development of the *Intellectual Organisation*. In order to achieve changes in thinking, which are so important for today's organisations, it is necessary to create a new culture, which not only allows but also actively encourages the development of such modern culture or environment, in which everyone can constantly ask questions and help each other learn the most effective actions and thinking skills that could be applied in practical activities (Лапу Ф., 2017). It is very important and relevant because today a lot of people are passive. Organisation leaders must encourage and teach them how to use their own thoughts and resources to benefit themselves and the organisation.

The features of the *Learning Organisation* which is trying to become the *Intellectual Organisation*

The analysis of scientific literature can provide us various features of the *Learning Organisation* which aims at becoming the *Intellectual Organisation*. The researchers of the *Learning Organisation* – Pedler, Burgoyne, Boydell (2010) identified the following features of the *Learning Organisation* which seeks to become the *Intellectual Organisation*:

1. *Global Learning Strategy* – the executive decisions of organisation leaders are experimental rather than definitive rules, directed towards the formation of organisational policy and strategy improvement.
2. *Participation of members in policy formation process* – the *Learning Organisation* not only takes various proposals, but also encourages their creation, and every member is included into the policy formation process.
3. *Information and communication* – information is freely available and quickly spread to every member to evaluate it from their own positions. Information technologies are used.
4. *Control* – an accounting system is set not to control, but to help workers get the access to the existing results and be able to plan the further development stages.
5. *Internal exchange* – the staff shares and exchanges the information, experience, knowledge, acquired during the work in the organisation.
6. *Flexible salaries* – the salary for the activities in the organisation must be very flexible: it is a very important not only financial, but also moral consideration.
7. *Opportunities* – individuals must be able to act individually in the organisation.
8. *External monitoring of the situation* – the staff works with clients, explores the external environment, in which the organisation exists, organises future opportunities and predicts the possible boundaries.
9. *Inter-institutional (cross-functional) learning through various forms of cooperation* – exchanges in duties, different learning courses, different researches, development programmes help individuals and organisation to develop.
10. *Educational climate* – staff members help each other and learn from each other without any fear of making mistakes.
11. *Opportunity for self-education* – all members have the opportunity for self-improvement and self-education. It is considered not only as a right but as an obligation, too.

Senge (2012) represented the following features of the *Learning Organisation,* which seeks to become the *Intellectual Organisation*:

1. *Team learning* – people learn how to learn together.
2. *Intercrossing vision* – all members of the organisation make the future vision.
3. *Mental Models* – the members learn how to think in a constructive way and how to create the positive perception of the world.
4. *Personal mastery* – the aspiration of all members' mastery (the idea of permanent education telling that there are no limits for development).
5. *Systematic thinking* – the ability of the organisation staff to see not only the linear cause-effect chain but also to notice the links among all elements in the system (interaction).

Hale (1996) indicated the following features of the *Learning Organisation* which seeks to become the *Intellectual Organisation*: concentration on problem identification and its solution, open and constructive communication, organizational values are well-known for all members and they do not intercross with the beliefs of the employees, the individual assessment of work is carried out in cooperation with all colleagues, but not only with organisation leaders, the authority is given as a tool of the development of human potential, striving for productive behaviour, the work place is also the place of learning, the employees are constantly learning how to learn together.

Following the analysis of the characteristics of the *Learning Organisation,* which aims at becoming the *Intellectual Organisation,* the following common aspects can be distinguished:

- All activities and work in the *Learning Organisation* can be treated as a learning process;
- Cooperation, the ability to work and to learn at the same time;
- Focusing on problem identification and solution;
- Open and constructive communication and productive behaviour;
- Unconditional acceptance of all possible differences;
- Work with information;
- The unique approach to the learning process of all members in the organisation.

Transformation of the *Learning Organisation* to *Intellectual Organisation*

We can state that the most progressive *Intellectual Organisations* of the third millennium do not exist. And there is no necessity for them to appear, because they can be converted from the existing companies. Old organisations can become the new ones if the staff will perceive the obstacles that are necessary to overcome.

Organisations often use a fashionable term *„intellectual capital".* However, in order to ensure that capital to bring real profits the same active work as with financial capital must be done.

Therefore, to pretend to the *Intellectual Organisation* in the twenty-first century means to implement the potential of human mentality, because now it is used in a very low rate (about 20 per cent). If we succeed in creating the environment or organisational culture that would use at least 30 per cent of employees' mentality potential, it would increase the total efficiency of all workers' activity by 50 per cent (Origin, 1985).

Mastering the correct actions of thinking and perception does not mean that it will automatically involve the creation of the *Intellectual Organisation*. The main catalysts of the activities of the *Intellectual Organisation* are not so much the actions of perception and various techniques or methodologies used to educate the staff, but the continual learning combined with the values (criteria) of the organisation. At first these values may be called "Essential Rules". The rules may include the policy of the organisation and replace many obsolete organisational values: loyalty, respect, etc. Even outwardly they seem necessary and useful, but practically they do not fulfill their true functions. Therefore, the essential rules become related to the constant improvement of individual relations and the development of all organisational processes; the organisation itself is viewed as personal property and the personal responsibility for its activity, success and the use of economical recourses. The formation of proper understanding can be defined by the ability to listen to each other and to understand, to work effectively, to help each other with sincerity, honesty and respect, by the accessibility which is ensured by the access to information technology, responding to the demands of the employees and the consumers; by the professionalism, which is determined by excellent theoretical knowledge and practical skills to focus on personal and organisational tasks, priorities, etc.

These important rules help create the necessary environment or culture for the *Intellectual Organisation* to flourish. Therefore, the background of the system of the *Intellectual Organisation* is based on the system, which is subdued to the formation of the necessary culture and education and which encourages the emergence of the *Intellectual Organisation*, and its prosperity. Thinking and perception techniques are very important, but their influence is reduced considerably if they are analysed in isolation from the necessary cultural (environmental) background. If the thinking technique is mastered in the correct cultural background based on essential rules approach, it will be considered as the necessary norm and will be undoubtedly effective (Garalis, 2004). But it is not enough to create essential common rules, the more important thing is to control and analyse their implementation regularly, as it ensures the real success of the rules and eliminates their possibility to become the tool for organisation leaders to hold another traditional control campaign. The conception of regular monitoring of the results of the activity could be an excellent approach if it is performed benevolently and creatively.

It is necessary to create such a structure of daily work environment, where mutually constructive relationships are possible. It is possible that only the essential rules form such structures. These rules are designed for the relations with the leaders of organisation or the relations among the staff members and provide the opportunity to implement the constructive dialogue, which may be called periodic checking of the essential rules.

This type of control differs a lot from our common regular ways of control, as the control should develop mutual relations, but it is not intended to check the aims and tasks. This is not to say that the goals and tasks do not need any attention. However, if the organisation does not develop appropriate inner relations, it will never achieve good results. After finding out these relations all the rest would be solved easier. In addition, it is necessary to individualise control, because firstly only a part of the relationship between the employees and organisation leaders is assessed. Secondly, it will be possible to respond to any changes in mutual relationships caused by various factors and work change quite flexibly and dynamically. This approach will allow to reperceive the nature of any relations and to maintain general control of the culture of inner relations, emphasising that they must be implemented only on the basis of the essential rules.

The problems or obstacles of creation of the *Intellectual Organisation*

Organisations are created to improve human rationality. In order to increase the accuracy and rationality of the management, activities of the organisation should be more similar to the activities of such "pure" sciences like physics or chemistry. As the individual human mind ability is insufficient to develop and solve complex problems compared to the complex problems of real life, the focus is on groups or organisations. To act rationally, it is necessary to apply the approach based on philosophical, logical positivism perspective to the management. However, the problem of the role of the values arises because a lot of **subjectivism** occurs when there are attempts to involve people with all their feelings, interests and concerns in the system. moreover, managers rarely come close to full rationality, as they often cannot fully rely on comprehensive information about various complicated situations and the consequences of their decisions.

The effectiveness of the management of the organisation based on complete rationalised approach brings serious consequences to an individual and the society because then the meaning of an individual is reduced to an ordinary employee who just has his/her own working place, i. e. he/she is valued due to the position he occupies in the hierarchy of the organisation. According to this mechanical scheme of organisation management based on instrumental or technical rationality, the staff becomes merely performers who are managed by a market mentality. Therefore, such rationalised organisation leaves little space for self-expression, because the cases of active self-expression disagree with the general order based on rationality. It is logical that this process leads to psychological insecurity, worsening life quality, as such model of management focuses on the means rather than on goals and distracts the attention from the goals themselves. Therefore, focusing only on effectiveness, we can perceive insufficiently and participate in making decisions, that are not important for an individual personally. Behaving in such a way, we will contribute little to the expression of social values of the state because it will be tried to achieve the goals set by the manager on the lowest possible costs seeking for the organisation leader's favour and easier adaptation. Even if we act effectively, it may happen that we will seek for the goals that do not correspond with the most significant values of us and our society. Therefore, in developing the *Intellectual Organisation* and creating its culture we must pay attention to this dichotomy in order to avoid the negative consequences related with discrepancy in mind and emotions, feelings and values. In order to reduce the discrepancy of this dichotomy, it is necessary to seek communication and constructive participation, to dominate in decision-making processes, planning special responsibility for motivating and implementing democratisation. It has been noticed that people who learn in cooperation like each other and show their friendliness to each other (Slavin, 1990). During the assessment of the effectiveness of cooperation in continuous learning process, the positive change in learners' self-value, sociometric status and psychological state was found (Beresnevičienė, Gedvilienė, 1999).

Because of these and other reasons, the followers of logical rational management style should understand that the objective of absolute rationality in management is limited if we do not consider the "human factor", socio-psychological factors and organisational culture. It should be taken into consideration when creating the *Intellectual Organisation* of the future and developing its culture.

Conclusions

It should be stressed that globalisation of the labour market, the challenges of the information and economical knowledge society, constantly posing rapid responses and quality improvement requirements, make us constantly look for the new ways of making the organisational activities more effective.

It is believed that learning organization in particular is the organization model, which enables to ensure the organization's ability to flexibly and effectively respond to changes in the environment and to educate individuals capable to be consistently involved in the process of continuous learning.

Cutting-edge organizations of the third millennium may appear by transforming the existing organizations that could become new, because constantly learning organization promotes development of an intellectual organization.

The ultimate aim of creating the *Intellectual Organisation* is to make the organisation ready for rational self-management.

Modern and new *Intellectual Organisation* having well-developed organisational culture may become the most progressive form of management and education in the twenty-first century.

References

1. Beresnevičienė, D., Gedvilienė, G. (1999). Effectiveness of cooperative learning. *VI European Congress of Psychology* (p. 64). July 4th-9th, 1999 Rome, Italy. Abstracts.
2. Dalin, P., Rolf, H.G., Kleekamp, B. (1999). *Mokyklos kultūros kaita*. Vilnius: Tyto Alba.
3. Fullan, M. (1998). *Pokyčių jėgos: Skverbimasis į ugdymo reformos gelmes*. Vilnius: Tyto Alba.
4. Garalis, A. (2004). Intelektuali organizacija: nauji iššūkiai ir modernios valdymo kultūros ugdymas. *Ugdymo psichologija* (11-12). Mokslo darbai. Vilnius: VPU, p. 248-254.
5. Hale, M. M. (1996). Learning Organizations and Mentoring. *Public Productivity & Management Review*. SAGE Periodical Press. No. 4, p. 422-433.
6. Hargreaves, A. (1999). *Keičiasi mokytojai, keičiasi laikai*. Vilnius: Tyto Alba.
7. Jarvis, P. (2001). *Mokymosi paradoksai*. Kaunas.
8. Jucevičienė, P., Simonaitienė, B. (2004). *Miesto piliečių ir organizacijų aktyvinimas dalyvauti besimokančio miesto kūrime. Konferencijos medžiaga*. Kaunas: KTU.
9. Kilmann, R. H. (1985). Corporate culture. *Psichology Today*. April. p. 62-68.
10. Pedler, M., Burgoyne, J., Boydell, T. (2010). *The Learning company*. New York: McGraw – Hill Book company.
11. Raggatt, Edwards, R. & Small, N. (2015). *The Learning Society. Challenges and Trends*. London and New York: Routledge.
12. Senge, P. (2012). *The Fifth Discipline*. New York: Doubleday.
13. Simonaitienė, B. (2001). *Besimokančios organizacijos veiklos bruožų raiška gimnazijoje*. Daktaro disertacija. Kaunas: KTU.
14. Slavin, R.E. (2016). *Cooperative learning theory: research and practice*. Englewood Cliffs. NY: Prentice Hall.
15. Stoll, L., Fink D. (1998). *Keičiame mokyklą*. Vilnius: Margi raštai.
16. Targamadzė, V. (1998). Lietuvos bendrojo lavinimo mokyklos išjudinimo į besimokančią organizaciją sąlygos. *Socialiniai mokslai. Edukologija*. Nr. 2 (15), p. 69-74.
17. Лалу, Ф. (2017). *Открывая организации будущего*. Москва: Манн, Иванов и Фербер.

Received: 6 June 2017
Accepted: 11 October 2017

THE DISSECTION OF AFFIXES ON THE WORDS

İrfan Tosuncuoğlu
Karabuk University, Turkey

Annotation

This study shows forth the importance of morphological awareness which enables learners to acquire literacy competence. Concerning with this the knowledge of affixes is important for English Language learners, because affixes enable learners to predict the meaning of the words which they firstly encounter through the meanings of words' first or last part.

Key words: *Affixes, vocabulary, word formation.*

Introduction

People are human beings who are not able to stand by themselves, they should need to communicate with each other. Language is a means for communicating with another person. Communication should be created in any language. Language is considered as a system of sound units and morphemes that are used to match sounds to meanings. As a speaker of a language, it is clear that arbitrary meanings are given to words in order to express ideas. Moreover, the language consists of components and units arranged according to some certain patterns. Linguistics is the science of language knowledge or only the study of language, there are many definitions. As known by everyone, Linguistics is divided into several sub-branches including morphology, syntax, semantics, and phonology.

Problem

Achieving language skills, basically literacy skills of the language, is one of the problems learners generally face during the process of achieving literacy skills. And vocabulary enrichment problem is very actual theme. There exists a great deal of learners who want to obtain vocabulary skills. The knowledge of the affixes helps the students enlarge their vocabulary. The only requirement is to conceive and understand the structures of the words in order to have an extended Word stock. In order to reach the target, teacher's role is very vital for the students, that is to say that teacher's ability is an important factor too.

What is vocabulary?

Let's begin with vocabulary. Vocabulary is crucial for English Language learner students (EELs). Students usually have troubles in building and generating Word stocks by means of affixes (prefixes, affixes). Basically, affix is one of the difficulties students face while learning English. They can wrongly add affixes, and they cannot generate their word stock by adding affixes. They also may not use them right. For example, learners in general may not add suffix (**-s**) at the end of the verbs with third personal singulars when the sentence is in simple present tense.

Ellis (1986) supports the idea that the most economic way of comprehending a language is to know a word list firstly. Monson (1968:5) defines that any learner become aware of many aspects of English Language when he/she takes a vocabulary lesson, because it provides students a great number of approaches to learn new vocabulary. Carter also (1987: 145) states that for years vocabulary has been the weak relation of language learning and teaching. It is neglected when we make a linguistic research on phonology and syntax. Sometimes it may have been fostered an atmosphere where words were regarded to be a less important factor while learning a second language. On the other hand, according to Coady and Huckin (1997:1), second language vocabulary acquisition has become a charming topic for researchers, lecturers and teachers. English word formation shows how essential to have competence of prefixes and suffixes in teaching/ learning a language. It provides first of all a strong background information about thesaurus, word formation, prefixes and suffixes, as well as other related subjects in language morphology.

Word Formation

Word formation (WF) is a study that appears as a puzzle, or stumbling block and where prefixes and suffixes are in area course of Word formation. By far there is not any commitment for the definition of WF. To give an example for this uncompromising subject: although the scientist-linguist Crystal (1989) says that the term refers to the processes of morphological variation, when we constitute the words, the two main divisions of inflection (grammatical relationships) and derivation are also included. As for understanding, word formation means the second processes, these are classified into types of "compositional" or "compound" (e.g. "greyhound" from the two free elements "grey + hound"), and "derivational" (e.g., "decide", "decision", .etc). From the addition of the bound items "-sion", but another language scientist Marchand (1969:2) denotes WF as "Word-Formation and says that it is a branch of the science of language which investigates the patterns and units, i.e. vocabulary. And Nunan (1991:121) says "The ability to recognize component parts of words, word families, and so on is probably the single most important vocabulary skill a student of reading in English as a Foreign Language can have. It substantially reduces the number of completely new words he will encounter and increases his control of the English lexicon"

Although vocabulary is very important to get the competence of literary skills, affix is also a major part of the thesaurus. It can be seen that the learners studying at the department of English Language encounter some problems even though they have to be aware of the morphology to acquire the competence language skills; even so, almost all of the ELLs (English Language students) does not seem to have the knowledge of affixes. Especially, students have had trouble in building and generating words through affixes till now. Affixes are one of the major difficulties students encounter in recognizing them in learning English. They make a mistake when using affixes, they cannot generate new words by adding prefixes or suffixes. They also cannot use them correctly and effectively. They, for example, are unable to add suffix (**-s**) at the end of the verb when forming the sentence in simple present tense created with a subject of he, she or it.

The knowledge of affixes is important for ELLs, too; because affixes enable learners to guess the meaning of the words which they first encounter through the meanings of words' first or last part. Nouns can be derived from simple verbs through affixes. Affixes are divided into different sections according to their formation: *prefixes, suffixes, infixes, and circumfixes*. This paper shows the importance of morphological awareness which enables learners to acquire literacy competence.

Affixes bring difficulties for students. McCarthy (1990:4) states that morphemes are not easily recognized especially when morphemes are disguised with words, sound changes and spelling changes since they become less obvious for incompetent students in affixes. He states "when we separate the words into the morphemes that compose them, we can consider what problems of analysis, or recognition, or of relating them to other forms of the same word a learner might have with them". Kruse (1979) points out that the only important skill is to be competent in recognizing component parts of the words for a student in the department of English Language. Students with deficiencies are usually more disappointing than competent students. This is just because affixes are generally neglected by teachers, as a result of this, it can be said that vocabulary seems to be trivial problem in the curriculum because of teachers' attitude towards morphology, and because they give priority only to the structures of sentences in teaching language. Tickoo (2003:1989) clarifies that educationists in English are unable to attach importance to vocabulary for more than two centuries. The reason why this belief is widespread among linguistics is that using a language effectively needs to be competent in using its sounds and structures.

Morphemes

The most basic grammatical unit in a language is morpheme. Morphemes are the minimal units of grammatical forms. Morphemes are divided into two: *roots* and *affixes*. Roots are the starting part in word analysis, because there is not any part of a word for further analysis. To give an example for root, in the word `**un**touch**ables**' `**-un**', `**-able**', `**-s**' are additives while the part `touch' is the root.

According to Nunan (1991:121), to be able to recognize component parts in the word is certainly the most important competence for learning language. It provides substantial ability to reduce the number of new words any learner will encounter and helps the learners control English lexicon. According to Matthews (1991) "Affixation is the processes of adding an affix. An affix is any element in the morphological structure of a word other than a root. For example, the word "**un**kind**er**" consists of the root "kind" plus the affixes "**un-**"and "**-er**". Affixes are divided into prefixes, which come before the form to which they are joined, e.g. "**un-**"; and suffixes, which come after the form to which they are joined, e.g. "**-er**".

An affix is a bound morpheme linked to roots and bases. For example, "**un-**"must always take place before the main meaningful part of the word, whereas "**-ity**" must take place after the root and base. The bound morpheme "**un-**"is called a prefix, but "**-ity**" is called as a suffix. When a person knows a language well, s/he automatically knows how to derive words from roots or a person who is learning a language such as a student, s/he has to know how to derive words from roots to become a speaker in that language. Word formation rules are an indispensible part of linguistic knowledge. For example, in English, word formation is achieved by prefixes and suffixes.

Prefixes are affixes which precede the words to add them a meaning or function. For example, "un" in "unhappy" is a prefix and it cannot be used alone as "un" in a sentence. Therefore, it is a bound morpheme and a prefix. *Suffixes* are the affixes, which follow the words to add them a meaning or function. For example, "ness" in "happiness" is a suffix. *Infixes* are added only to the middle part of the word, but there are not infixes in English. Although *circumfixes* like *suffixes* are added to the end of the root, they are also added to the beginning of the root. The difference among affixes; circumfixes are added both to the beginning of the root and to the end of the root.

Conclusions

Consequently, to understand the meaning of any long word, learners can divide the word into parts. For example, considering the word 'unjustifiable' meaning not having the ability to give a good reason, it is better to understand its meaning by dividing into parts. After dividing the words in a meaningful way, for example, 'un' means not, 'justify' is a verb meaning to give a good reason and 'able' means 'to have the ability'; it is better to find prefixes and suffixes in a word formation. To know these conditions helps learners guess the meaning of many words. To sum up, word formation can only be concerned with compounding and adding, that are analyzable grammatically and semantically. It is exactly concluded from the two definitions of word formation according to two different linguistic that there is still disagreement upon the exact definition of the Word Formation.

Knowledge of a language helps people connect and combine words to form phrases, and phrases to form good sentences, This article shows forth the importance of morphological awareness which enables learners to gain a literacy competence. First, the knowledge of affixes is important for English Language learners, because affixes enable learners to predict the meaning of the words which they firstly encounter through the meanings of words' first or last part. Nouns can be derived from simple verbs through affixes. Affixes are divided into different sections according to their formation: *prefixes, suffixes, infixes, and circumfixes*. To gain language skills, especially literacy skills, is one of the problems learners usually encounter during the process of literacy skills acquisition.

References

1. Carter, R. A. (1987). *Vocabulary: Applied Linguistic Perspective.* London: Allen and Unwin Ltd.
2. Coady, J. & Huckin, T. (1997). *Second Language Vocabulary Acquisition.* Cambridge: Cambridge University Press.
3. Cheng, H.F. & Dörnyei, Z. (2007). The use of motivational strategies in language instruction: The case of EFL teaching in Taiwan. Innovation in Language Learning and Teaching.
4. The case of EFL teaching in Taiwan. Innovation in Language Learning and Teaching.
5. Dörnyei, Z. (2003). *Attitudes, orientations, and motivations in language learning*. Malden, Mass: Blackwell Publishing.
6. Crystal, D. (1989). *A Dictionary of Linguistics and Phonetics.* London: Page Bross Ltd.
7. Hoff, E. (2008). *Language Development*. Wadsworth: Cengage Learning.
8. Kruse, A. (1979). Vocabulary in Context**.** *ELT Journal*. 33 (3): 207-13.
9. Marchand, H. (1969). *The Categories and Types of Present Day English Word-Formation.* Munchen: C. H. Beck.
10. Matthews, P. H. (1991). *Morphology: An Introduction to the Theory of Word-Structure.* Cambridge: Cambridge University Press.
11. McCarthy, M. J. (1990). *Vocabulary.* Oxford: Oxford University Press.
12. Monson, S. C. (1968). *Word Building.* New York: The Macmillan Company.
13. Nunan, D. (1991). *Language Teaching Methodology: A Textbook for Teachers.* London: Prentice Hall.
14. Tickoo, M. L. (2003). *Teaching and Learning English: A Sourcebook for Teachers and Teacher – Trainers.* New Delhi: Orient Longman.

Received: 11 January 2017
Accepted: 11 October 2017

USE OF COMMUNICATIVE METHODS TO ENHANCE PROFESSIONAL LANGUAGE LEARNING

Svetlana Toropoviene
Vilnius College of Technologies and Design, Lithuania

Annotation

Graduates of engineering field require an ever-increasing range of skills to maintain relevance with nowadays global market. Communication skills are recognised as vital by academic society and business world. English for specific purposes focuses on the learner's attention on the specific terminology and communication skills required in the international professional field. The article deals with the development of communicative graduates' skills with examples given of different methods of teaching. The use of advantages and disadvantages of communicative approach are reviewed. The aim of this article is to explore the students' attitudes toward the use of various communicative methods in professional English learning / teaching process. The data was collected by means of a questionnaire. The results of the study provide general idea about how to manage teaching and learning activities for the successful implementation of the communicative approach and development of learners' communicative competence.

Key words: *professional language teaching, communication skills, CLT, advantages and disadvantages of communicative approach*.

Introduction

Communication skills are essential for the students of technical field who aspire to carry out their professional practice in the global arena (M. J. Riemer, 2002). The graduate of the college or university should not only be a great expert in his field, but also has general knowledge and skills, and speak a foreign language fluently at appropriate level.

Professional orientation training includes the assimilation of training material and at the same time the formation of practical language skills. Today, the future specialist shouldn't just read and translate professional or technical texts, but the communication in professional context is taken as a priority: communicating with colleagues, taking part in various discussions, preparing presentations and reports, handling all types of business correspondence. In this age of globalisation, the number of international projects is increasing, cross-cultural communication and collaboration is on the rise; this is particularly so for the now international practice of technical field specialists (M. J. Riemer, 2002). Employers insist that their employees have good English language skills, and fluency in English is a prerequisite for success and advancement in many fields of employment in today's world.(J. Richards, 2006).

This is reinforced in N. Grunwald's study of competencies required by the engineer of tomorrow, which includes hard skills like good foreign language skills. He goes even further to claim cross-disciplinary language skills are not sufficiently taught (N. Grunvald, 1999). This indicates a lack of a direct fit between learner's skills and those required by industry.

English often serves as a global language between two people from two different cultures. For example, collaboration at Airbus industries between English, French, German and Spanish companies utilised English as the communication medium between workers. One more example comes from the Swedish transport manufacturer Volvo, which has made the language for managers at its new plant in South Korea, with English lessons being taken by some employees during production breaks. Some multinational corporations in Europe use English as the prime form of communication in the office. In this case, multinational firms influence the educational policies for language learning. Therefore, nowadays the communicative approach to language learning is the most popular in the modern world and the international labour market.

Theoretical Background

Communicative Language Teaching (CLT) is a cover term for a number of approaches that developed in the 1970s in critical reaction to audio-lingual teaching methods and their unsatisfactory results. They all criticize the mechanistic nature of audio-lingual pattern drills which fail to prepare learners for a productive use of the target language in the many different communicative situations of every day life. (M. Koosha, 2013). Communicative language teaching rose as a result of many desperate developments in both Europe and the United States (S. Savignon, 2000). First, there was an increased demand for language learning, particularly in Europe. This increased demand put pressure on educators to change their teaching methods from grammar translation to learning through social process. Chomsky had shown that the structural theories of language prevalent at the time could not explain the creativity and variety evident in real communication (J. Richards, 2001; T. Rodgers, 2001). In addition, British linguists such as Christopher Candlin and Henry Widdowson began to see that a focus on structure was also not helping in language learning. They saw a need for students to develop communicative skill and functional competence in addition to mastering language structures (J. Richards, 2001; T. Rodgers, 2001).

In the United States, the linguist and anthropologist Dell Hymes developed the concept of communicative competence. This was a reaction to Chomsky's concept of the linguistic competence of an ideal native speaker (S. Savignon, 2000). Communicative competence redefined what it meant to "know" a language; in addition to speakers having mastery over the structural elements of language, according to communicative competence they must also be able to use those structural elements appropriately in different social situations (S. Savignon, 2000). This is neatly summed up by Hymes's statement, "There are rules of use without which the rules of grammar would be useless." (M.Rosamond, 1994). Hymes did not make a concrete formulation of communicative competence, but subsequent authors have tied the concept to language teaching, notably Michael Canale (M.Rosamond, 1994).

An influential development in the history of communicative language teaching was the work of the Council of Europe in creating new language syllabi. Education was a high priority for the Council of Europe, and they set out to provide syllabi that would meet the needs of European immigrants (J. Richards, 2001; T. Rodgers, 2001). Among the studies used by the council when designing the course was one by the British linguist, D. A. Wilkins, that defined language using "notions" and "functions", rather than more traditional categories of grammar and vocabulary. Notional categories include concepts such as time, location, frequency, and quantity, and functional categories include communicative acts such as offers, complaints, denials, and requests. These syllabi were widely used (J. Richards, 2001; T. Rodgers, 2001).

In the mid of 1990 it was focused on communicative approach to language teaching through real conversations about the real subjects so that communication became the engine of learning. This type of communication would lead to explanation, and that would lead to further communication (L. Meddings, 2004).

The application of communicative language teaching (CLT) to English as a foreign language context has recently been debated extensively. Although the CLT approach attempts to involve learners in more authentic and interactive learning tasks that promote both comprehensible input and learners‘ language output, teachers still find it difficult and challenging to adopt the approach and maximize the learning.

Other research has also shown that it is not so much easy for the teachers to utilize CLT as an asset to reach the final goal of language teaching in their context with their students. Based on a study that assessed the attitudes of Hong Kong educators toward using CLT in the local context, Chau and Chung (1987) reported that teachers used CLT only sparingly because it required too much preparation time. However, the communicative approach to language learning is still the most popular in professional language teaching / learning process all over the world.

Issues in engineering education

A recent report from Melbourne, Australia, stated that employers now seek graduates with skills beyond the standard paper degree; this includes an excellent level of skills in:

* Communication;
* Decision-making;
* Teamwork

Three sources of weakness that can significantly impact on an engineer's communication skills education were identified as:

* Students' attitudes to communication.
* Insufficient course content.
* Deficient or inappropriate teaching methods (J.D. Roulston and R.W. Black, 1992)

Another significant element included the lack of opportunity for students of technical specialities to be able to practise communication skills, particularly the oral component. (J.D. Roulston and R.W. Black, 1992). Ineffective communication skills only reinforce negative stereotypes of the engineer. Thus, oral communication skills were considered very important in the graduates' new work environments, but this was in the face of the low level of oral communication skills imparted during their studies. (M. J. Riemer, 2002). There is a clear necessity for effective English communication skills for students of technical field in the current globalized environment.

Research Aim is to explore the students' attitude towards the use of various communicative methods in the professional English learning/ teaching process.

Research Object - effectiveness of study programmes in light of the results of the students' attitude questionnaire.

Research focuses on the following aspects:

1. Students' attitudes towards the variety of communicative methods used in professional language teaching / learning process.
2. Advantages and disadvantages of use of communicative methods;

Research methodology. At the end of the semester an attitude questionnaire was administered to 80 first and second year students of technical specialities of Šiauliai State College. The research was conducted with full and part-time students. The analysis was done quantitatively and descriptively.

Methods - literature, internet sources analysis; data collection – questioning survey, consisting of two parts; data analysis – descriptive statistics (percents).

Communication skills development, methods and teaching material

Teaching foreign language for students of technical specialities at Šiauliai State College has a clear professional orientation. Šiauliai State College prepares specialists in various technical areas, such as Car Electronics, Automobile Technical Exploitation, Transport Logistics, Automation, etc. The training content of the study program is different, which helps students to deepen their professional knowledge.

The development of professional language skills is aimed at solving the following issues of learning a foreign language:

1. To develop skills of learning a foreign language (speaking, listening, reading and writing). Successful mastery of conversational speech is determined by the ability to engage in dialogue and exchange all kinds of information on various topics in professional activities. Monologue implies the ability of the student to prepare a report for the conference or a business meeting. Listening shows the student's ability to hear and understand the information transmitted by other people. Reading skills allow students to read specialized technical literature, such as the magazine 'Top Gear', technical documents and instructions, UK Traffic Code ',' Manual Honda '. Writing skills help students make annotations, prepare reports, translations of technical texts in writing, make business letters such as orders, invitations, brochures, contracts / barter agreements, and so on.

2. To master certain linguistic phenomena (phonetics, grammar, word formation, vocabulary). Such knowledge is gained during the entire training period, as each proposed topic or task contains a particular linguistic phenomenon and is due to its assimilation.

3. To establish socio-cultural knowledge that reveals the traditions and culture of the other native speakers. In this case, the importance of comparison of differences in two cultures becomes essential. The students work with authentic texts in the field of modern technologies, such as: car driving and traffic rules in the UK. The educational material is focused on:

3.1. Phonetics. You should keep in mind, if the text is written in British or American English, then the pronunciation differences should be stressed respectively.

3.2. Vocabulary. When translating the words, terms in the native language, students should understand the realities of other countries. And if the students know well such realities as the BBC, Big Ben, Tower, Pub then the realities in the field of technology may be completely new and unknown for them. For example: Hard shoulder (shoulder, exit the main road), state-of-the-art equipment / devices (new, innovative, the latest equipment). Very often, the teacher chooses a definition (description of event / reality) and then translates the term into their native language. Students often encounter difficulties of translation of terms and phrases such as: shoe brake (foot brake), contact breaker (switch contact), valve train (number of pistons), major road (the main road), etc.

3.3. Grammar. Students have particular difficulties with words derivatives. For example, to convert the verb to the noun: Conceive - Concept (car); Assemble - assembly; Validate - validation / validity, etc.

4. To master the technical terms. Engineering students have to learn a great number of terms and concepts relevant to their future profession, but it's hard to do because only one semester is given for learning professional English language. (6 credits in a modular training system). In such a situation it is important that students are able to work with technical dictionaries, glossaries. Also, the terms are well remembered when using them in speaking and writing (exercises, assignments).

The training material is selected according to the relevance of the proposed topics for the students. For example, for the students of technical exploitation of automobiles the following topics are selected:

- The construction and design of vehicles;

- The technical specifications of vehicles;
- Equipment, tools. Safety rules at the workplace.
- Security and safety systems in the car;
- Innovations in the automotive industry.

Topics must meet certain requirements:

1. The text corresponds to the professional category. Text assumes reading, analysis and interpretation. Also it should constitute a mini glossary of technical terms, for example: students of Logistics become familiar with the terminology: loads and their types, labelling and transportation, etc. Various tasks /assignments are done orally and in writing.
2. The text is relevant, modern, authentic and interesting to students. The texts are available from the British and American periodical publications, books, magazines, the Internet. Before text is proposed to students, it should be adapted.
3. The text motivates students to more in-depth study of the material. Learning motivation increases if analyzed texts match the speciality and expectations of the students.
4. The proposed information is useful and can be used by students while studying other subjects in their speciality, because interdisciplinary connections play an important role in-depth study of the subject. For example the topic Materials and their properties (characteristics) is studied in the discipline of the Doctrine of the Materials; Smart Cars / Future Cars is offered in the studied discipline Intelligent Machines; Electronic devices / Active and Passive Safety restrains is taught in the discipline of the Security / Safety System.

While working with the text, different teaching methods are used: text analysis, monologue, questions, text translation, equivalents matching, synonyms and antonyms, (True / False) statements. Analysis of the proposed texts in the textbooks helps students to read technical documentation, instructions for equipment use, technical books and manuals. Memorizing technical terms succeeds, if the terms are often repeated in the text. For example the frequency of use of these terms is very high: engine, internal combustion, car parts / units, tools, equipment, interior / exterior, etc. In order to strengthen the gained knowledge and test it, the following methods are applied: word dictation, test, examination, monologue, dialogue, oral and written translation, presentation / report (for example: My Dream Car / Concept Car).

Modern information technology helps students learn not only effectively, but also to deepen the knowledge necessary for their future career. Computer Science pursue such didactic problems as increasing the motivation of foreign language use, expanding the active and passive vocabulary, activating logical thinking, using visual material. So when studying the topic 'Car Safety Systems', students are encouraged to use the materials from site www.howstuffworks.com Internet and prepare a PowerPoint presentation. At the proposed site, students can find suitable material. Tables and video materials help students to deepen their professional knowledge and practical skills. Students can choose any topic from the given list, for example: ESP - electronic stability system, Airbags, Seat belts, Xenon headlights, Rigid Roof, ABS, etc. and prepare the PowerPoint presentations. Presentation and discussion lasts for 7-10 minutes.

The site offers a variety of information, motivating students to learn more about their future profession. Information is divided into the following sections:

Table 1

Material proposed on the site www.howstuffworks.com

Section		Information / material
1.	Auto Basics	Various articles on automobiles. (introduction to technical terms). Interesting facts about cars are revealed, as for example: how washing car stations work, the origin / history of the given car names / titles, etc.
2.	Tech&Transport	Articles: Smart technologies used in your home and automobile
3.	Auto Parts&Systems	Articles: The main parts and the principles of their operation Cooperation and collaboration of drivers and car mechanics.
4.	Auto Racing	Articles: Racing, the style of driving, safety.
5.	Buying&Selling	Articles: Purchasing and selling the cars, warrantee. American database on all the registered automobiles, crashes made, identification codes.
6.	Car Models	Articles: The most popular and modern cars on the international Market.
7.	Driving&Safety	Articles: Safety on the road, experts' advice. Online tests.
8.	Fuel Efficiency	Articles: Fuels, pricing. Minimizing the negative effect of fuels on environment.
9.	Motorcycles	Articles: Motorcycle construction, modifications. .
10.	Trucks	Articles: Types and specifications of trucks / lorries.
11.	Under the Hood	Articles: All automobile systems and their repair / overhaul.

Such technical information can not always be found in the library, so the Internet is undeniably important and useful tool in professional language learning and teaching process.

Students are trained to prepare subject specific presentations and deliver them successfully paying attention to the content (specific vocabulary, technical terms), visual aids, language accuracy (grammatical structures, sequence of tenses, pronunciation) and body language (unnecessary mimes or gestures), interaction with listeners (keeping an eye contact, giving feedback). (S.Toropovienė, 2011: 40). Students have a real life challenge; they are interested in the subject because it is related to their future profession and are motivated to invest time and great efforts into the quality of their English assignment. As the students plan, prepare, practise, deliver and finally reflect upon a presentation, they are engaged in a very active learning process which can promote critical and analytical thinking and the selection, evaluation and use of appropriate arguments (Burns, Sinfield 2004: 123). The lectures of foreign language motivate students to deepen their professional knowledge and communicate in it during the entire learning course.

There are some advantages and disadvantages of using communicative methods in language learning / teaching process

Advantages of use of communicative methods are the following:

1. The study process is student-oriented. Student and teacher cooperate actively. The study process is interactive.
2. Students' cognitive skills are developed and it enable students think in a logical way and thus express their own opinion to others.
3. The interest and students' motivation increases.
4. Grammatical structures and phrases are used in different content.
5. Real situations and students' experience are analyzed.

Disadvantages of use of communicative methods are the following:

1. Less attention is paid to grammar and pronunciation mistakes. CLT does not focus on error correction. Attention is paid mostly on getting and comprehending information whether correct use of language.
2. The methods are not suitable for the learners-beginners or for short-term courses, because repetition of communicative models and development of constant language skills are necessary.
3. Control and feedback should be provided efficiently and in time.
4. Student may not see the value in learning English through group work, games, and activities (A. R. Pramodhawardhani, 2011).

Results and analysis

At the end of the spring semester the study was administered to 90 students of technical specialities (Transport Logistics Technologies, The Technical Exploitation of Automobiles, Motor Transport Electronics, Automatics, Electrical Energetics) in order to improve the educational process, and find out their attitude toward the communicative methods applied in professional English learning / teaching process. The research was conducted with full and part-time students. The analysis was done quantitively and descriptively. The questionnaire revealed how students evaluated the application of such communicative methods as a monologue, dialogue, creative tasks, PowerPoint presentation, analysis and translation of technical texts. Questionnaire findings are shown in a table below:

Table 2

Students' attitude toward communicative methods use

	Statement	Agree	Disagree
1.	Use of communicative methods was motivating	95%	5%
2.	Monologue helped me develop the essential topic	88%	12%
3.	Monologue helped me memorize technical terms better	90%	10%
4.	Dialogue was effective method of communication and helped me improve my verbal skills	98%	2%
5.	It was difficult to control the accuracy of speech while talking	70%	30%
6.	Interent was a useful tool for English improvement (creative tasks and presentations)	100%	-
7.	Internet made it easy to integrate many ideas from different resources while preparing for creative tasks and presentations.	86%	14%
8.	The use of Powerpoint was interesting, useful for my future	98%	2%
9.	I had enough skills working with PowerPoint software	60%	40%
10.	It was easy translate technical texts from English to Lithuanian	95%	5%
11.	It was easy translate technical texts from Lithuanian to English	12%	88%
12.	I was able to use online dictionary for technical texts translation	100%	-
13.	Memorization of technical words and word combinations was useful for the development of Professional language competence.	85%	15%

The results show that the majority of students felt that 'Monologue on the selected technical topics helped them to develop the essential topic and better memorise the technical terms'.

Since the training is aimed to communication and cooperation, next question was related to the improvement of dialogue speech. 98% of respondents agreed that dialogue was an effective method of communication. Context-specific role-play can focus the student's attention on the different types of communication required with various groups in potential future work situations. By engaging the students directly in active learning, they learn *by doing.* However, almost two thirds of respondents emphasized that it was difficult to control the accuracy of speech (grammatical structures, verbal clichés) while communicating in a foreign language.

Modern technology helps and facilitates learning a foreign language. Each student uses a computer. All respondents indicated that they enjoyed searching for more information in a foreign language to perform creative tasks and presentations. Students agree that this method is useful for their future profession and for the development of their communicative and social skills, because nowadays these skills are seen as essential ones. Unfortunately, almost half of the students (40%) surveyed remarked that they did not have enough skills to work with the PowerPoint program. Students noted that they would like to have even a separate course, how to work with presentations. The majority (95%) of respondents admitted that they found it easier to translate the technical text from foreign language to native one than vice versa. Therefore, we can conclude that the majority of the students cope with text translation quite successfully.

It is obvious, that oral communication and presentation skills are considered one of the best *career enhancers* and to be the *single biggest factor in determining a student's career success or failure* (J. A., Polack-Wahl, 2000).

Their relevance was emphasised recently with the statement that:

*Skills such as problem solving, communications, interpersonal skills and critical and independent thinking should be fostered in engineering education, not just because they are qualities that employers look for but because they should be part of any tertiary education (*S. Beder, 2000*).*

Since students need to know a lot of technical terms, they are offered a variety of tasks to consolidate the material. The effectiveness of suggested tasks for knowledge consolidation is analyzed in a table below:

Table 3

Students' attitude on use of different tasks for knowledge consolidation

	Tasks	The most useful	The most motivating	The most difficult
1.	Use of synonyms	√		
2.	Use of Antonyms	√		
3.	Word Search		√	
4.	Matching definitions	√		
5.	Filling the gaps			√
6.	Games		√	
7.	Word formation			√
8.	Creating sentences with given words or word combinations	√		√
9.	Puzzles		√	
10.	Multiple word choice	√		
11.	Mind-mapping		√	
12.	Term Translation	√		
13.	Tests / Colloquy			√

The most useful exercises had been recognized as following: synonyms and antonyms, matching the definitions, creating sentences, multiple word choice and terms translation (87%). The most interesting and motivating exercises had been recognized as following: games / crossword / word search and mind-mapping (94%), causing difficulties: filling the gaps, word formation, creating sentences in professional content, multiple word choice (75%). Summarizing the results of the survey, it can be clearly stated that students understand and recognize the importance of the use of communicative methods in professional foreign language learning / teaching process. The students' interest and motivation to learn increases if the acquired knowledge and skills raise their chances of success in their future careers.

Conclusions

This study was administered to find out students' attitude toward the use of communicative methods in Professional English language learning / teaching process. It was found that students of our college were satisfied with variety of used communicative methods. Almost all of the respondents were highly motivated because teaching of foreign language has a clear professional orientation and raises their chances for better career promotion. The use of communicative methods in teaching professional foreign language for ŠSC students is appropriate and relevant in terms of competitiveness of today's labour market.

On the basis of the results of students' survey, it can be assumed that some methods need a specific approach and study, especially those that cause the greatest difficulties, such as: word formation, multiple word choice, use of grammatical structures and speech clichés in dialogue and written speech. To fill the gap, more practical tasks or self-study assignments should be included into the study programme.

The use of PowerPoint presentation supports learner-centred approach and makes each student an active part of the studying process. However, the results of the questionnaire show that some students are lack of theoretical knowledge and skills on how to make a good presentation. The findings suggest that some training or theoretical lectures on the technical aspects of Power point use should be included in the Professional English language learning / teaching course or the description of self-study assessment.

The success of the learning outcomes of professional foreign language depends on the students' motivation, interest, relevance of the proposed educational material and teacher's competence in using communicative methods. Teaching professional English to students of technical field is a delicate and demanding matter in terms of content, methods and techniques, and deciding which are appropriate for this particular area of engineering and English. That is the aim in such interdisciplinary course to develop and master relevant communication and professional skills, using English as a means and a kind of mediator in shaping future engineers.

To achieve this goal, ESP teachers have to plan the course they teach and provide the materials for it. The role of ESP teachers thus involves choosing appropriate materials from different, valid sources, adapting them if necessary, and even writing new materials if nothing suitable exists.

References

1. Beder, S. (2000). Valuable skills learned from 'basket waving'. *Engineers Australia*, March, 46

2. Burns, T., Sinfield, S. (2004). *Teaching, Learning and Study Skills. A Guide for Tutors*. SAGE Publications.

3. Grunwald, N., Quo vadis German engineering education. Proc. 2nd Asia-Pacific Forumo in Engineering Technology Education, Sydney, Australia, 371-374 (1999).

4. Koosha, M., Problems Associated with the Use of communicative Language Teaching in EFL Contexts and Possible Solutions. (2013). Retrieved from 2016-03-04 http://jfl.iaun.ac.ir/article_4185_0.html

5. Meddings, L. (2004-03-26). "Throw away your textbooks". The Guardian. Retrieved from http://www.guardian.co.uk/education/2004/mar/26/tefl.lukemeddings.

6. Mitchell, R. (1994). The communicative approach to language teaching. In Swarbick, Ann. *Teaching Modern Languages*. New York: Routledge. pp. 33–42.

7. Polack_wahl, J. A., It is time to stand up and communicate. *Proc. 30th ASEE / IEEE Frontiers in Educ*. Conf., Kansas City, USA, FIG-16-F1G-21 (2000).

8. Pramodhawardhani, A. R. (2011). Communicative learning teaching. in *The More You Give, The More You Get.* Retrieved from http://justdowhatyouwannado.blogspot.lt/2011/11/communicative-language-teaching.html

9. Richards, J., Rodgers, T. (2001). *Approaches and Methods in Language Teaching* (2nd ed.). Cambridge, New York: Cambridge University Press.

10. Richards, J. (2006). *Communicative Language Teaching Today*. Cambridge University Press.

11. Riemer, M. English and Communication Skills for the Global Engineer. *Global J. Of Engng Educ.*, Vol. 6, No.1, Australia, 2002.

12. Roulston, J. D. and Black, R.W., Educating engineers: what's happening to communication? *Proc. 4th annual Convention and Conf. Australasian Assoc. For Engng Educ*., Brisbane, Australia, 190-193 (1992).

13. Savignon, S. (2000). Communicative language teaching. In Byram, Michael. *Routledge Encyclopedia of Language Teaching and Learning*. London: Routledge. pp. 125–129.

14. Toropovienė, S. (2011). Use of Power Point presentations to enhance language learning. *Professional Studies: Theory and Practice*. Šiauliai: Šiaulių valstybinė kolegija

Received: 23 March 2017
Accepted: 11 October 2017

FUNCTIONS OF SPEECH AND THEIR CHANGE IN THE DIALOGUE (ANALYSIS OF ONE DIALOGUE)

Danutė Valentienė
Šiauliai State College, Lithuania

Annotation
The article analyses a dialogue between a man and a woman, focusing on its semantic structure and functioning of the speech functions in the communication process. Dialogue is dominated by alternating referential, expressive, phatic and poetic functions The dialogue begins with a referential function which is usually responded by a phatic function. At the end of the dialogue the situation is resulted by a poetic function after which following replies are based on a referential function allowing to successfully complete the communication.
Key words: *dialogue, dialogue semantics, speech functions in a dialogue*

Introduction

The aim of the research is to establish key semantic strategies of a dialogue, reflected in replies of a man / woman and resulted by strengthening or fading of individual speech features.

Research material: recorded and decrypted dialogue between a man and a woman. It has been noted for a long time that the most interesting for research are dialogues not among men or women and but between a man and a woman. These dialogues contain more interesting and importantly - more diverse constructions (especially, bearing in mind the very limited length of the replies, see: Bitinienė 2001: 18). Naturally, any dialogue has or at least must have a gamification component which is always very prominent when analyzing conversations[7] between men and women, (Goroshko 1999, in particular p. 5-26; Кирилина 2004, in particular 114-223). Therefore, the most important ***method*** in for studying dialogues is the semantic analysis, which instrument becomes the change of speech functions in the communication process.

Problem of the research - semantic expression of strategies of a dialogue between a man and a woman.

Essence of a dialogue

Versatility of a dialogue. When studying the expression of information and communication in the information society, particular focus falls on a dialogue. Dialogue has always been an object not only and not so much of the speech science but more the subject of philosophy (cfr. big comprehensive work: Gutauskas, 2010, especially the chapter on the origin of the dialogue p. 164-272). Since antiquity, the dialogue was seen as an instrument of knowledge: all the works of knowledge were written in dialogue form, for example works of Plato. They have striking similarity with the works of drama: all of them contain many acting and impersonation elements, such as when one of the participants of the conversation suddenly begins to present ideas controversial to the statements he/she just presented. These features of the dialogue found in Plato's works (eg. “Cratylus”) are reflected in the material analyzed in this article. This shows that the dialogue in its essence is a universal and a form of commination that changed a little thought out the history[8].

From philosophy - to linguistics. Dialogue in communication aspect is an exchange of socially relevant information. But this simple definition contains a broad linguistic space: there are plenty of dialogue definitions, their structure is examined by a wide range of linguistic fields that often focus on different dominants, thus even in fundamental works on this topic it is emphasized that even a careful researcher touches only some aspects of this complex phenomenon (Демьянков 1992). One of these aspects are related to I-YOU roles. There are two main roles of the dialogue: (1) one who gives, and (2) one who requests (demands). The dialogue intertwines spaces of two pronouns ***I-YOU***: these spaces are characterized by the fact that no participant in the dialogue can be in one of the spaces for a very long time (cfr.

[7] Dialogues in fictional texts, particularly paying attention to the differences between men and women replies were also analyzed in the works of the author of this article: Valentienė D., 2010, *Replikų nutraukimai dialoguose.* Vārds un tā pētīšanas aspekti, Liepājas Universitate, Nr. 14 (2), P. 332–339. Valentienė D., 2012, *Pakartojimų funkcijos dialoguose.* Profesinės studijos: teorija ir praktika, ŠVK Leidybos centras, Nr.10, P. 19–24.
[8] The drama in dialogue was also emphasized by famous philosopher Martin Buber (II, 91-99), alluding to the two types of conversation partners: the first is called by the Latin word *amicus* “friend” and the second - *hostis* “enemy, foreigner” or “adversary, rival”.

observations by Buber I 70, paragraph 1.3.), because otherwise there is a risk that the dialogue as a text phenomenon will disappear overall.

Traditional dialogue analysis parameters. The article analyzes following characteristics of the dialogues: (1) response relationship with the question, (2) participants knowledge of the subject, (3) initiatives ratio of requester and responder, (4) speaker's emotional expression, (5) speakers' expression of the status in the dialogue when one of the speakers clearly has a higher status, (6) dispute strategy, denial or ways of persuasion (7) reminder of the general purpose of the conversation when one speaker tries to end the conversation or change the subject, (8) ratification or rejection of approaches, (9) change of subject when a *more* relevant topic is suggested and / or reminded.

Text of the dialogue[9]

Participants: husband and wife
Wife: Su kuo tu norėtum važiuot atostogaut?
Husband: Nežinau, dar nieko... nesugalvojau...
<...> Pause
Wife: kam galima pasiūlyti?
Husband says something indistinctly while jawing, woman gets annoyed.
Wife: ką?!
Husband: paatostogaut nors kiek nuvažiuosim, nors porai dienų, žinai
Wife: pora dienų?
Husband: gal ilgiau.
<Pause>
Wife; aš tai norėčiau į tą Latviją. Tik kad va vaikui paso reikia. O kaip ten tiksliai vadinasi, tu žinai?
Husband: palei jūrą važiuoji ir viskas, kempingai (pikta intonacija).
Wife: papasakok ką nors
Husband: o ką aš tau papasakosiu.
Wife: bet ten nėra ten specialaus, nekaip Šventoji, pavyzdžiui
Husband: ką aš žinau (husband does not let to finish the thought, he is bored)
Wife: faina žinai dar būtų nuvažiuoti į Rundalės pilį. Ten sakė labai gražiai, matai, važiuoja tenai visokios krikštynos, visokios vestuvės.
<Pause>
Wife: eini jau?
<Attention is disrupted by the child>
Husband: brrr, paklausk, ką mama turi.
Wife: Mama neturi kišenių (happily).
Husband: Man atostogos... tada nuo liepos dešimtos ar aštuntos (husband)
Wife: Šventojoj kaip užpernai? (evident question)
Husband: Paklausiu darbe... (indistinctly)

Semantic strategy of the dialogue

Note concerning scope. Why there has been only one dialogue chosen? The aim of the article is to examine in detail the dialogue in which speech functions change each other in a very short time: analysis of several dialogues would only diversify the material, but would not change the essence.

Speakers' expression of the initiative and status in the dialogue. Often one of the participants in the conversation has a higher status. Although at first glance none of the speakers has a higher status in the quoted dialogue, but deeper analysis of the text shows that a higher status is expressed implicitly - by the initiative of one of the conversation participants: it can be clearly distinguished which of the participants is *spiritus movens*, i.e. who initiates the conversation and who initiates it end. Conversation initiative is on the wife's side. The very beginning of the conversation shows that the conversation will be complicated. Therefore the wife emphasizes a general topic - having vacation in case one of the variants being unsuccessful (at the beginning there was a question not where to go but with whom). This is how immediate surrounding is being emphasized. Woman in a brief dialogue, suggests for the man three (or even three) vacation options: The first (the most abstract) - to go on vacation in general. Woman's question is pretty complicated, because it begins with the phrase *with whom*? Instead of *where*? *when*? Thus, it is suggested, that more than one family will go. The second

[9] The conversation has been recorded with the hidden microphone without the participants' knowledge. Both participants are about 30 years old.

part of the dialogue only confirms that some kind of friends are being assumed (*kam galima pasiūlyti?*). In both cases, woman does not receive a clear answer and gets annoyed. Failing to steer the conversation towards *with whom*?, woman initiates a next holiday theme - direction. Man in this case is more pliable and starts a *seaside* theme, but woman clearly does not support this direction. Her suggested direction - Rundale - is no longer an object of a vacation - it is a sightseeing tour.

Dispute strategy, denial or ways of persuasion. Woman tries to convince the man by mentioning locations and activities in those places. If locations for the woman herself are not clear, then things are happening in her "feminine" world: wedding and christening. Sequence is interesting: christening is mentioned first and only then - the wedding. The latter themes, as we see from the context, are no longer relevant for her, while the mentioning of christening celebration is resulted by a child who is in the room (it is not clear whether the child is baptized or not).

The reminder of the general purpose of the conversation when one speaker tries to end the conversation or change the theme. The overall aim is reminded using the same semantics, but its expression is different. Since the conversation theme ("vacation") starts with very "feminine" syntax: (1) *su kuo tu norėtum* <...>, (2) *aš tai norėčiau į tą Latviją* (in both cases the subjunctive is mood used, allowing "expression" for the second participant in the conversation - her husband; in both cases, a subjunctive mood person is clear - the first time it is almost requested that the man would want and in the second wife's desire is shown, (3) in both cases, with the failure of dialogue's partner to "seduce", a third possible component of the subjective mood is activated - the third person: *faina žinai dar būtų*. However, the woman still continues to reach her husband by using the present tense verb *žinai.*

Functions of speech and dialogue

Speech functions. Their essence and operation in the speech was first described in detail by Roman Jakobson in 1960 (Lithuanian translation Jakobson 2004), they never are completely "pure" (Labanauskaitė 2013, 75, etc.), and they are more or less always intertwined and it is most noticeable in verbal (not written) dialogue (cfr. detailed theoretical analysis of speech functions by Karaliūnas 2008, 117-182).

The reference (information) speech function. The essence of this function is to report (summarize) past, current or anticipated events. This function is prominent in the analyzed dialogue in future vacation discussion and in the question with whom to spend summer holidays, when mentioning locations and remembering where the vacation was spent previous year, etc. Meanwhile, presence of other functions is much more interesting and covers a much larger part of the action.

Expressive *(often called - emotional) speech feature* is aimed to convey emotions and feelings are most closely related to the speaker and external communication system in which the speaker "comes alive" (Labanauskaitė, ibid). Expressive function is usually not aimed towards informativeness. This function was precisely defined by phonologist Aleksas Girdenis (2003: 36-38): "When speaking we usually not only convey a purely substantive content, but also consciously or unconsciously assess it and our interlocutor, show one or another our attitude towards them" (p. 36). This function can emphasize the speaker as a representative of a certain social group, for example whether it is a man or a woman. In essence expressive function inhibits the reference function. Pauses play a very important role in this dialogue, figuratively speaking, they "tear" the dialogue and its players become obliged to start it again. So-called "non-perspective" words perform this function e.g., pronouns and phrases with no clear semantics (the man saying *o ką aš tau pasakosiu...*).

Appellative (addressing) function. As it is emphasized by Girdenis (2003: 38, a large number of literature on the subject is provided there as well), "by appellative means speaker tries to influence the listener directly: in one way or another to encourage to act him/her as well as to stimulate certain parts of their emotions and moods, not necessarily incurring them himself/herself. Sometimes this function goes under another name - *control*. "The more the interlocutor is trying to convince or change the opinion of the his/her interlocutor, the more actively latter responds to the objections or requirements, thus the stronger will be the speech control function (Labanauskaitė, 79). Persuasion carries out drama function in the speech. Eg. one partner's desire to go on vacation is very prominent in the analyzed dialogue. Ways of persuasion, that there is the need of going on vacation, change when trying to mitigate the desire *not to go on vacation at all*. Appellative function is dominated in woman's phrases: *su kuo tu norėtum; nors kiek nuvažiuosim; papasakok ką nors*.

Phatic *function is designed to maintain contact.* Eg., this function includes conversations about the weather and so on. G. Labanauskaitė on the basis of M. Pfister's works on speech of the drama, indicates one important objective of this function - "phatic function becomes especially important when after of a successful but disturbed communication, initially it is need to establish or re-establish a contact and then the ability to "keep" the conversation becomes essential or the sole purpose of dialogue communication" (p.82). Analyzed dialogue structure shows that after several unsuccessful attempts to discuss the upcoming vacation the dialogue goes to a standstill. Conversation is rescued by two phrases that are provoked by the child. We see an interesting progression: after inserting replies as some kind of phatic element, the communicative function of following phrases strengthen, allowing efficient completion of the problem discussion. Some researchers, based on the abundant literature, indicate that one of the main objectives of the phatic function is creation of comfort and calming of the interlocutor (Karaliūnas 2008: 165-167). Discussed function is closely intertwined with the poetic function. The assumption can be made that the conflict in the dialogue is eliminated by these two functions becoming intertwined. "Representative" of phatic function in the dialogue is the husband. His speech is actually *only* aimed at maintaining a minimal communication: *nežinau, dar nieko...nesugalvojau; o ką aš tau papasakosiu; ką aš žinau.*

Poetic *function* messages are focused on *themselves*, i.e. the focus is not on what *is* reported, but *how* it is reported. When conflict comes to a standstill, a kind of *deus ex machina* (child) is activated and then two phrases become reminiscent of one of the small folklore genres - *minkles*. It seems that the question *Ko mama neturi*? belongs to the same category as well. (answer – *kišenių*). Phatic function is intertwined with poetic function and enables successful completion of communication:

– *Man atostogos... tada nuo liepos dešimtos ar aštuntos* (man)
– *Šventojoj kaip užpernai* (woman)
– *Paklausiu darbe* (man)

Change of speech function and topic when a more relevant theme is suggested and / or reminded. Theme gets replaced almost by a consensus since several variations of the main theme proved to be unsuccessful, and a new theme arises spontaneously: a game with the child, asking him/her questions, which he/she does not have to answer. It looks like a mirrored reflection of husband and wife's conversation when participants of conversation (or performance) exchange roles. In this particular case, the opponents - husband and wife become united and in uniform manner try to postpone the discussed theme, understanding that the child plays only a fatic function. However, there is one element related to earlier quite polemic conversation in this phatic communication. Confrontation between *ką mama turi* (man's words) // *ko mama neturi* (woman's words) is (though the question is whether they can be considered) the reflection of an earlier dispute. However, prior to this change of the theme which is initiated by the husband, there is a clear topic change initiated by the wife. That is the question following a pause (it is possible that it also plays a phatic function) *eini jau?* This basic phrase is actually very interesting from a syntax point of view. Present tense form of the verb *eini*, unlike the other verbs in the conversation, expressed in a neutral or subjunctive mood form is used in a second person. From the lexical perspective it is also unexpected, because no "*movement*" was mentioned. *Jau* can be seen as an encouragement, though not as *the incentive to go right away,* but as an encouragement to change the subject, i.e. we observe a kind of a small drama being played[10].

Conclusions

1. Dialogue is a complex text, which combines two things: semantic expression and its regulating speech functions.

2. The crucial role in the semantic expression of a dialogue has a dispute strategy and participants knowledge of the theme as well as clearly expressed initiative by one of the participants, giving him/her a higher status, is reflected both in vocabulary (diverse nouns, names of places) and syntax (longer and more informative sentences).

[10] Expression *ką aš žinau* does not mean the knowledge itself but reluctance to speak on the subject in general. Analyzed dialogue is rich in peculiar noise elements, the role of the small child can also be considered as the noise. All of these features of a dialogue become particularly evident in the literary text (Klioštoraitytė 2006), where deeper analysis of a dialogue shows that it is a monologue dressed up as a dialogue (p. 92; emphasis in bold by Klioštoraitytė).

3. Speech functions form the dialogue as a small work of drama, lasting just a few minutes: the change of functions used by the participants allows the dialogue either to continue or revive if it comes to standstill.

References

1. Bitinienė, A. (2001). Grožinio stiliaus prozos tekstų tiesioginės kalbos sakinių ilgis ir struktūra. Kalbotyra, L(1), 17-28.
2. Buber, M. (1998). *Dialogo principas I: AŠ ir TU*. Vilnius: Katalikų pasaulis.
3. Buber, M. (2001). Dialogo principas II: Dialogue. Klausimas pavieniui; Tarpžmogiškumo pradai. Vilnius: Katalikų pasaulis.
4. Girdenis, A. (2003). *Teoriniai lietuvių fonologijos pagrindai*. Vilnius: Mokslo ir enciklopedijų leidybos institutas.
5. Gutauskas, M. (2010). Dialogo erdvė. Fenomenologinis požiūris. Vilnius: Vilniaus universiteto leidykla.
6. Goroshko, O. (1999). *Differentiation of Male and Female Speech Styles*. Praha: Open Society Institute, 1999. Cited in: http://rss.archives.ceu.hu/archive/00001011/01/12.pdf
7. Jakobson, R. (2004). Lingvistika ir poetika. Vilnius: Baltos lankos, 18/19, p. 5-49.
8. Karaliūnas, S. (2008). *Kalbos vartojimas ir socialinis kontekstas*. Vilnius: Lietuvių kalbos institutas, 2008.
9. Klioštoraitytė, R. (2006). Monologų tipai Piero Paolo Pasolinio romane „Teorema“. *Literatūra*, 48(4), 92-100.
10. Labanauskaitė, G. (2013). *Naratyvo konstravimo principai šiuolaikinėje dramaturgijoje*. PhD thesis. Vilnius: Lietuvos muzikos ir teatro akademija.
11. Демьянков, В. З. (1992). Тайна диалога (Введение). *Диалог. Теоретические проблемы и методы исследования*. Москва: ИНИОН, 10-44. Cited in: http://www.infolex.ru/Taj.html
12. Кирилина, А. В. (2004). *Гендерные исследования в лингвистике и теории коммуникации*. Москва: ARCHIVE.

Received: 8 May 2017
Accepted: 11 October 2017

MANAGERIAL SOLUTIONS TO REDUCE SOCIAL LOAFING IN GROUP ACTIVITIES OF COMPANIES

Jolita Vveinhardt, Justina Banikonytė
Vytautas Magnus University, Lithuania

Annotation
The article provides the managerial solutions, offered to eliminate the causes of social loafing identified in Lithuanian companies. The structure of classification of the problem areas is designed, showing the relationship between the problem areas identified by the scales of the instrument and possible alternative solutions to reduce the identified problems.
Key words: *social loafing, group work, organization, managerial solutions.*

Introduction

Relevance of the research and the level of problem exploration

Social loafing is a multifaceted problem, which attracts interest of both social psychologists and organizational management professionals, who are looking for ways to increase the efficiency of group activity. Various studies show that a person's social loafing is a natural phenomenon occurring in the areas where some kind of social activity takes place, and which requires concentrated efforts of the members of the group [33, 43]. More than a century ago it was noticed and described that as the size of a group increases the individual efforts of members of the group decrease [5]. This is also called the *Ringelmann Effect* which was later confirmed by many experiments [16, 25]. That is, a member of the group, while contributing less, aims to get more personal benefit from this activity [11, 6]. As Liden et al. (2004) [29] note, an increased interdependence of tasks at an individual level and a reduced visibility of the task and fairness of distribution are related to a greater social loafing. In addition, the fact that a larger size of the group and the reduced social cohesion are associated with the increased social loafing is highlighted at the level of the group. And while the first experiments carried out investigated physical contribution of a person to the activities of the group, subsequent studies have shown that social loafing is not less relevant in intellectual, creative activities of persons [20].

The prevalence of the phenomenon, regardless of age [e.g. 43, 39, 10] shows that this behaviour can be developed when acquiring new, more sophisticated skills, and/or area of human activity [13, 14, 35, 40, 5] and emphasizes the scale and significance of the problem, as it hinders the achievement of better results in activities of groups [28]. Therefore, the question of how to reduce the damage of social loafing to organizations, how this phenomenon can be controlled has been raised for more than a decade.

Results of researches show that social loafing in the organization does not have any single fundamental reason, but it is a complex consequence of individual psychological, value-related and organizational factors. Several groups of such factors, which highlight the problems of the organization to be solved, can be distinguished: the size of the work group [23]; employees' individual motivation [44, 30], ensuring the equality of employees in the assessment of the contribution of all employees [13, 14, 15], internal communication [27], the development of social relations of various nature [24, 35, 40, etc.], employees' social competence [32], quality of management and tasks [26, 28, etc.]. In addition, attention is drawn to the norms of the group, social and task cohesion, which shows a decreasing trend of social loafing [13, 14]. Another study, carried out with the students, showed that knowledge of team activities, understanding of the influence of personal behaviour on team activities significantly reduces both social loafing and conflict behaviour [37].

All of this shows the extremely wide range of factors, which must be considered in the organization in order to minimize the risk of social loafing and the resulting harm. For these reasons, the elimination of factors affecting social loafing, the reduction of a negative influence of the phenomenon on the performance of the individual and the whole group in the organization become a difficult management task. Although the problem of social loafing is relevant to representatives of different cultures, it cannot be denied that distinctive cultural traditions and management culture that influence both individual and group work are characteristic of organizations of distinct populations [8]. A number of studies of empirical and theoretical nature, which examined the problem of social loafing were carried out in Lithuania in recent years [17, 47, 48, 45]. However, research is not abundant and covers quite narrow separate areas, and this only emphasizes the relevance of the problem. Therefore, the **problem** of the research is raised by the question: what are the managerial decisions to reduce social loafing in groups of companies?

Purpose of the research: to develop managerial solutions to eliminate the identified problem areas of social loafing found in groups of companies.

Objectives of the research: (1) to classify the problem areas, which have an influence on social loafing in the organization; (2) to propose managerial solutions to eliminate the causes of social loafing.

Methods of the research. Methods of analysis of academic literature, logical comparative analysis and analogy were applied during the research. The method of systemic analysis allowed the synthesis of approaches of various authors, assessments and interpretations of social loafing issues based on a logical abstraction with a view to develop managerial solutions to eliminate problem areas.

Solutions to eliminate the causes of social loafing in work groups

Solution of the problem of social loafing consists of two stages. At the first stage, on the basis of the analysis of academic literature, the problem areas of organizational activities, which encourage social loafing, are distinguished and classified. At the second stage, on the basis of results of empirical research, managerial solutions are offered. The managerial solutions presented in this article are based on the research, which was carried out in 2017 and surveyed the departments of 8 manufacturing companies, when departments were equal to groups. The groups that participate in the research consist of from 4 (min) to 11 (max) persons (i.e., two groups that consist of 4 employees; two groups of 5 employees; two groups of 6 employees and two groups of 11 employees [see more about the results of the research: [46].

Table 1

Classification of problem areas in respect of the scales and subscales of the research instrument

Scales	Subscales	Code of the problem	Problem	Code of the solution
Reputation, image, aims	Individual aspirations	A3.1.	Loafing of individuals because of the disposition to personal aims.	B3.1.1.
	Personal image, reputation	A3.2.	Loafing due to the inability to distinguish own personality from the group and unsatisfied need of personal image formation.	B3.2.1.
				B3.2.2.
Social loafing	Activities not related to work	A1	Social loafing in conditions of group work.	B1.1.
	Perceived social loafing	A2	It is understood that there are some loafers among colleagues.	B2.1.
				B2.2.
				B2.3.
	Identification of loafing	A3	Disposition to loafing.	B3.1.
Fairness	Role of the manager/leader	A3.3.	Loafing determined by an unclear role of the manager in the group.	B3.3.1.
	Fairness of the interaction (interaction with the supervisor/manager)	A3.4.	Loafing because of inappropriate behaviour of the manager (leader of the group).	B3.4.1
				B3.4.2.
	Satisfaction with authority and governance	A3.5.	Negative approach towards the manager(s) and decisions the manager(s) make.	B3.5.1.
Commitment	Commitment to the organization	A3.6.	Low employee commitment to the organization.	B3.6.1.
	Commitment to colleagues	A1.1.	Low employee commitment to colleagues.	B1.1.1.
Group support	Atmosphere of the group	A2.1.	Low employees' trust in colleagues.	B2.1.1.
	Cohesion of the group	A2.2.	Distrust in colleagues.	B2.2.1.
Group coherence	Group links	A1.2.	Relationships between colleagues do not exist.	B1.2.1.
	Group cooperation	A1.3.	The employees are not likely to help each other to achieve a common goal.	B1.3.1.
	Relationships within the group	A1.4.	Inconsistent relationships between members of the group.	B1.4.1.
Group results	Satisfaction with the work process	A1.5.	Satisfaction with the work process is not felt in the group, and there is no tendency to strive for great results.	B1.5.1.

Scales	Subscales	Code of the problem	Problem	Code of the solution
	Satisfaction with the result of work	A1.6.	There is no satisfaction with the results in the group.	B1.6.1.
Competition vs. cooperation	Cooperation, collaboration	A2.3.	Members of the group are indisposed to cooperate and help one another.	B2.3.1.
	Orientation to achievement	A2.4.	Individuals are unwilling to achieve the best results.	B2.4.1.
				B2.4.2.

Source: prepared on the basis of: Karau, Williams (1991) [19], George (1992) [9], Karau, Williams (1993) [21], Karau, Williams (1997) [22], Chen, Bachrach (2003) [4], Ferrante *et al.* (2006) [7], Høigaard *et al.* (2006a, 2006b) [13, 14], Stark *et al.* (2007) [41], Suleiman, Watson (2008) [42], Bluhm (2009) [2], Hung *et al.* (2009) [15], Omar *et al.* (2010) [34], Barnes *et al.* (2011) [1], Woodman *et al.* (2011) [49], Luo *et al.* (2013) [31], Rubino *et al.* (2014) [36], Seitchik, Harkins (2014) [38], Chen *et al.* (2014) [3], Jones *et al.* (2014) [18], Lee *et al.* (2015) [28], Czyz *et al.* (2016) [5], Perry *et al.* (2016) [35], etc.

After identification of certain problem areas in groups of companies with the help of the items constituting the scales and subscales of the research instrument and following the prepared classification of solutions, a specific plan to eliminate identified problems can be drawn up.

Since 5 main problem areas have been identified in the research, in accordance with the summary of classification of problem areas presented in Table 1 (the detailed classification is given in Table 2), the action plan for the elimination of each problem area in the company is prepared.

Social loafing conditioned by perceived loafing. Respondents think that there are some loafers among their colleagues, so the perception of loafing through the “sucker effect” may encourage the remaining employees to engage in social loafing activities or to provoke the motives of revenge, directed both to colleagues and to the organization. In order to avoid (reduce) the impact of perceived social loafing on employees it is purposeful:

– To reduce the possibilities of loafing, emphasizing the significance of their work and goals to the employees [15];

– It is advisable to make the results of the contribution public and apply sanctions against the loafers [4]. The departments of the organization, which are characterized by a clear perceived social loafing, should increase visibility of the tasks by presenting the results of the groups for public comparison;

– The formation of the team, which emphasizes different aspects of the relationship combined with the rules of activities [14].

Strong influence of the role of the manager on the extent of social loafing in a company. In a company, the role of the manager for social loafing and the employees' efforts has the strongest effect through the interaction with managers and the attitudes conditioned by the role of managers (i.e., the loafing can be determined by misbehaviour of the manager and under the influence of the unclear role of the manager in the group). In order to avoid (reduce) the impact of social loafing on employees of a company, it is purposeful:

– To identify the existing views and approaches of the managers of the company towards organization of work in work groups and motivation of employees;

– Identification of the managers' attitudes (towards the current organization of work in groups), introduction of key problem areas of the organization that have been found;

– Training for the managers (especially at the middle management level) to improve relationships between employees, organizational climate and the relationship with subordinates.

– If the goals are not clear, the structure is not strict, if there is a lack of coordination and the employees don't know how to complete the tasks, to oblige the managers of the groups to provide clear instructions, i.e. a directive leadership improving the employees' satisfaction and performance [28];

– To foster cooperation of the managers and members of the group by committing the managers to form groups based on the coherence [7].

Weak employees' emotional commitment to the organization. The commitment of employees to the company is not strong (especially among the young employees, and those who work for the company for a short time). Organizational commitment reduces the extent of social loafing in organizations, thus, in order to reduce social loafing it is purposeful:

– To identify the reasons that determine the low level of employee commitment to the organization and to develop guidelines for preventive actions to increase the emotional commitment;

– To observe the employees' behaviours and identify the first signs of an intention to leave the organization on time (i.e. to increase the responsibilities of immediate superiors related to employee motivation, involvement and monitoring of these factors);

– To oblige the managers to seek to actively identify employees' intentions of turnover and reduce them by increasing the satisfaction with fairness and emotional commitment [31]. This means that the employees' trust in immediate superiors allowing to identify the employees' problems, provide possible alternative solutions to the problems before an employee makes the final decision to leave the organization must be strengthened.

Weak interrelationship of the staff and relationships that influence the reduction of group support and coherence. The tendency that employees maintain good relationships limited by the work environment has been revealed. During the research carried out it was found that the relationships between colleagues in the company are of moderate strength, and the employees are unwilling to establish friendships with co-workers. In accordance with the summary of classification presented in the table, the main solutions, which may strengthen the coherence of the employees and relationships within an organization, include the following:

– To organize team sports events, competitions, teambuilding trainings for employees of the organization. Previous team sports (and their code) experience of individuals affects the reduced social loafing, as the success achieved by the team is also the individual success of each member of the team [5];

– To foster strong social links in the organization, taking into account the interests of employees and the similarities between them. Social identity theory argues that the similarities encourage confidence, communication and mutuality between similar individuals, which results in strong social links (i.e. the relationship), positive attitudes and mutual support [35];

– To observe relationships between employees, responding accordingly to the situations determined by employees' relationships (i.e., to watch whether the employees' coherence does not reach the extreme level, when the employees are involved in other activities not related to work).

Weak employees' orientation to achievement in the departments creating the greatest added value to the company. It was found that the respondents are characterized by quite a strong disposition to cooperation, but striving for the best results is not typical. During the research it was often emphasised that the competitive situations do not motivate employees, but most employees like the feeling induced by achievement. In accordance with the classification presented in the table, the key solutions which may increase employees' willingness to achieve the very best results include the following:

– In organizations, it is important create the conditions for the groups to compete at the same level of capacity [12], i.e. to select and form equal groups. Competition between groups of the different level of capacity can lead to the reduced employees' efforts, based on the pessimistic forecasts when the employees accept the possible loss in advance, i.e. the employees do not see any point to compete with stronger rivals. Since not all members of the employees' work groups increase the efforts knowing that other colleagues are doing better, a detailed assessment of the situation and the conditions for comparison of results in respect of equal groups are necessary;

– The selection of employees to the groups, in which the important teamwork should take into account the employees' disposition to work in groups, and paying attention to whether the employee is characterised by orientation to achievement [41]. This is particularly relevant for the groups of employees whose performance results are the most important indicator of the activities of the organization (e.g., sales, production, etc.). It is advisable to evaluate the profiles of employees in the groups by applying various tests for the identification of the team roles, personal traits (e.g., Belbin Team Roles test, Myers Briggs Personality testing, etc.), and to (re)design the groups of employees on the basis of the results.

When drawing up an action programme to reduce (eliminate) the extent of social loafing in a company, these design solutions must be combined with design solutions of other problem areas.

Table 2

Classification of problem areas

Subscales	Code of the problem	Problem	Source	Code of the solution	Solution
Activities not related to work	A1	Social loafing in conditions of group work	[2]	B1.1.	Solution: to monitor whether the conserved resources (energy stock) are transferred to the work activities.
			[9]	B1.2.	In the cases when the visibility of the task is low, employers are recommended to maintain a high level of involvement of employees. This can be done by redesigning tasks, communicating the importance of the tasks carried out for the success of the group and the entire organization to the employees. Also it should be noted that some of the work (tasks) can be very tedious, boring, but too simple to be worth redesigning them. In such cases, it is necessary to monitor the outcomes, to increase the visibility of the task, to form as small groups as possible, and to highlight the employees' responsibility for the tasks performed.
Perceived social loafing	A2	It is understood that there are some loafers among colleagues.	[15]	B2.1.	The perceived loafing of colleagues causes revenge motives. Researchers suggested reducing the loafing opportunities for loafers by emphasising the significance of their work and objectives.
			[4]	B2.2.	Since the knowledge of members of the group about the loafers can affect their productivity (productivity of those who compensate), it is recommended to make the results of the contribution public and apply sanctions to the loafers.
			[14]	B2.3.	The research has confirmed that both the perceived productivity norms and perceived social support norms suppress the perception of social loafing. Productivity norms are related to the task-oriented motivation directed to performance and a high level of effort. Solution: teambuilding, which emphasizes different aspects of the relationship combined with activity norms.
Identification of loafing	A3	Disposition to loafing.	[9]	B3.1.	In the cases when the visibility of the task is low, employers are recommended to maintain a high level of involvement of employees. This can be done by redesigning tasks, communicating the importance of the tasks carried out for the success of the group and the entire organization to the employees. Also it should be noted that some of the work (tasks) can be very tedious, boring, but too simple to be worth redesigning them. In such cases, it is necessary to monitor the outcomes, to increase the visibility of the task, to form as small groups as possible, and to highlight the employees' responsibility for the tasks performed.
Individual aspirations	A3.1.	Loafing of individuals because of the disposition to personal aims.	Prepared based on [49]	B3.1.1.	Solution: to increase the visibility of tasks and individual contribution of the groups, in which there are persons who are inclined to highlight their ego and individuality, by providing feedback for all groups; to introduce the system of incentives based on the possibility to form the desired image (the team of the month, the team leader of the month, etc.).
Personal image, reputation	A3.2.	Loafing because of unsatisfied need of personal image formation.	[36]	B3.2.1.	To create the environment where high performers should be mentors of "loafers" in the teams, which are characterized by a variety of activities.
			[42]	B3.2.2.	Feedback from all members of the group is necessary. Feedback may create the possibility of social comparison for all, and reduce loafing.
Role of the manager (leader)	A3.3.	Loafing determined by an unclear role of the manager in the group.	[28]	B3.3.1.	If the goals are not clear, the structure is not strict, there is a lack of coordination and the employees don't know how to complete the tasks, the leader should provide clear instructions, in this case a directive leadership will improve the employees' satisfaction and performance.
Fairness of the interaction (interaction with the supervisor / manager)	A3.4.	Loafing because of inappropriate behaviour of the manager (leader of the group).	[20]	B3.4.1	To increase the coherence, cohesion between the employees and the degree to which the members of the group identify themselves with this group.
			[7]	B3.4.2.	The leaders, who treat team members with respect and take into account the proposals of the team members are more likely to face a better performance of their group members than the leaders who are rude with their group members and do not take into account the efforts of the group. Solution: to encourage cooperation of the leaders and members of the group by obliging the group leaders to form the groups based on coherence.
Satisfaction with authority and governance	A3.5.	Negative approach towards the manager(s) and decisions the manager(s) make.	[1]	B3.5.1.	Managers must understand what kind of behaviour they want to foster in each specific team task and apply the appropriate system of incentives. In the cases where precision and help to colleagues are less important than the speed and focus on individual contribution, mixed or individual reward system may be used. In the cases where precision and help to colleagues are crucial, a mixed reward system can cause the opposite effect than expected.

Subscales	Code of the problem	Problem	Source	Code of the solution	Solution
Commitment to the organization	A3.6.	Low employee commitment to the organization.	[31]	B3.6.1.	Organizational commitment reduces social loafing. Managers should seek to actively identify employees' intentions of turnover and reduce them by increasing the satisfaction with fairness and effective commitment.
Commitment to colleagues	A1.1.	Low employee commitment to colleagues.	[5]	B1.1.1.	Previous team sports (and their code) experience of individuals affects the reduced social loafing, as the success achieved by the team is also the individual success of each member of the team. Solution: to organize team sports events, competitions, teambuilding for employees of the organization.
Atmosphere of the group	A2.1.	Low employees' trust in colleagues.	[5]	B2.1.1.	Previous team sports (and their code) experience of individuals affects the reduced social loafing, as the success achieved by the team is also the individual success of each member of the team. Solution: to organize team sports events, competitions, teambuilding for employees of the organization.
Cohesion of the group	A2.2.	Distrust in colleagues.	[34]	B2.2.1.	Dehumanization is a significant predecessor of social loafing, as individuals who do not realize that interaction should be personalized and human generated fewer ideas than individuals with lower levels of dehumanization during the research. Solution: to weigh the costs related to the relocation of employees (in respect of distance) and losses because of decreased employees' productivity. When the distance between the employees is unavoidable, employers have to ensure that understanding of humanization would be maintained in groups (i.e., that the colleagues would understand about feelings, emotions, etc. of remote colleagues). To seek that the employees would know one another.
Group links	A1.2.	Relationships between colleagues do not exist.	[35]	B1.2.1.	Social identity theory argues that similarities encourage trust, communication and mutuality between similar individuals, which results in strong social links (i.e. the relationship), positive attitudes and mutual support. Solution: to encourage as much face-to-face employees' work as possible in order to form a strong social connections.
Group cooperation	A1.3.	The employees are not likely to help each other to achieve a common goal.	[41]	B1.3.1.	Selection of employees to the groups, in which teamwork is important, should be based on the employees' disposition to work in groups, and paying attention to whether the employee is characterised by orientation to achievement.
Relationships in the group	A1.4.	Inconsistent relationships between members of the group.	[35]	B1.4.1.	Social identity theory argues that similarities encourage trust, communication and mutuality between similar individuals, which results in strong social links (i.e. the relationship), positive attitudes and mutual support. Solution: to encourage as much face-to-face employees' work as possible in order to form a strong social connections.
Satisfaction with the work process	A1.5.	Satisfaction with the work process is not felt in the group, and there is no tendency to strive for great results.	[18]	B1.5.1.	Leader (acting as a coach) Solution: to enable members of the group to make more decisions; communicate with team members on a regular basis in order to avoid the formation of subgroups and identify problems at an early stage. To transfer responsibility for the maintenance of certain standards and requirements to the members of the group. To create opportunities for the group to improve focussing on improvement of colleagues' skills as well as on their own ones (team development tasks). To create opportunities to develop the team's coherence and interrelationship. To create a competitive environment (within the limits of common sense) that encourages the members of the group to get involved and feel satisfaction with work outcomes.
Satisfaction with the result of work	A1.6.	There is no satisfaction with the results in the group.	Prepared based on [3, 38]	B1.6.1.	Understanding of individuals that their tasks are important and unique is important. This is confirmed by the fact that the results of participants, who are given a complex aim, surpass those who are simply asked to do the job as good as they can. Solution: to communicate to the members of the group about the importance and meaning of the tasks carried out.
Cooperation, collaboration	A2.3.	Members of the group are indisposed to cooperate and help one another.	[5]	B2.3.1.	Previous team sports (and their code) experience of individuals affects the reduced social loafing, as the success achieved by the team is also the individual success of each member of the team. Solution: to organize team sports events, competitions, teambuilding for employees of the organization.
Orientation to achievement	A2.4.	Individuals are unwilling to achieve the best results.	Prepared based on [12]	B2.4.1.	Solution: create the conditions for the groups to compete at the same level of capacity, i.e. to select and form equal groups.
			[41]	B2.4.2.	Selection of employees to the groups, in which teamwork is important, should be based on the employees' disposition to work in groups, and paying attention to whether the employee is characterised by orientation to achievement.

Conclusions

This article contributes to the development of knowledge about the causes of social loafing in work organizations and the ways to overcome the problem by applying management interventions. Three main problem areas that create conditions for social loafing to thrive in groups of the organization have been distinguished: the individual employees' disposition to social loafing, the quality of managing people and the quality of relationships between the employees (social cohesion). These problem areas overlap in group activities, and the main responsibility falls on the management, the task of whom is to highlight the expedience of work tasks and individual achievements, at the same time applying sanctions to social loafers. The research has shown that managers often lack competence in dealing with the issues of motivation, organizational climate, employees' social cohesion, employees' commitment to the organization, and other issues that can be addressed by providing for training programs to the management staff. In addition, the closer relationship of the management and employees is necessary in order to identify employees' behaviors that present risk, as well as to ensure greater confidence in the development of the organizational justice. The other two essential directions of change should be focused on the strengthening of the relationship between the employees by organising joint activities and improving internal communication, as well as the strengthening of employees' orientation to achievements, accompanied by redesigning of groups, taking into account individual characteristics. This means that the management systems should be improved taking into account the impact on the internal dynamics of the group, and changes should become a permanent feature, which has a preventive effect on social loafing.

References

1. Barnes, C.M., Hollenbec,k J.R., Jundt, D.K., DeRue, S.D., Harmo,n S.J. (2011). Mixing individual incentives and group incentives: best of both worlds or social dilemma? *Journal of Management*, 34(6):1611–1635. doi: 10.1177/0149206309360845.
2. Bluhm, D.J. (2009). Adaptive consequences of social loafing. *Academy of Management Journal*, 1:1–6. doi: 10.5465/AMBPP.2009.44256422.
3. Chen, F., Zhang, L., Latimer, J. (2014). How Much Has My Co-worker Contributed? The impact of anonymity and feedback on social loafing in asynchronous virtual collaboration. *International Journal of Information Management*, 34(5):652–659. doi: 10.1016/j.ijinfomgt.2014.05.001.
4. Chen, X.P., Bachrach, D.G. (2003). Tolerance of free-riding: the effects of defection size, defection pattern, and social orientation in a repeated public goods dilemma. *Organizational Behavior and Human Decision Processes*, 90(1):139–147. doi: 10.1016/S0749-5978(02)00511-3.
5. Czyz, S.H., Szmajke, A., Kruger, A., Kübler, M. (2016). Participation in team sports can eliminate the effect of social loafing. *Perceptual and Motor Skills*,123(3):754–768. doi: 10.1177/0031512516664938.
6. Dommeyer, C.J. (2012). A new strategy for dealing with social loafers on the group project: the segment manager method. *Journal of Marketing Education*, 34(2):113–127. doi: 10.1177/0273475312450384
7. Ferrante, C.J, Green, S.G., Forster, W.R. (2006). Getting more out of team projects: incentivizing leadership to enhance performance. *Journal of Management Education*, 30(6):788–797. doi: 10.1177/1052562906287968.
8. Gabrenya, W.K, Wang, Y.-E., Latane, B. (1985). Social loafing on an optimizing task cross-cultural differences among Chinese and Americans. *Journal of Cross-Cultural Psychology*, 16(2):223–242. doi: 10.1177/0022002185016002006
9. George, J.M. (1992). Extrinsic and intrinsic origins of perceived social loafing in organizations. *Academy of Management Journal*, 35(1):191–202. doi: 10.2307/256478.
10. Harding, L.M. (2017). Students of a feather "flocked" together: a group assignment method for reducing free-riding and improving group and individual learning outcomes. *Journal of Marketing Education*. doi: 10.1177/0273475317708588
11. Harkins, S.G. (1980). Social loafing: allocating effort or taking it easy? *Journal of Experimental Social Psychology*,16(5):457–465. doi: 10.1016/0022-1031(80)90051-7.
12. Heuzé, J.P., Brunel, P.C. (2011). Social loafing in a competitive context. *International Journal of Sport and Exercise Psychology*, 1(3):246–263. http://dx.doi.org/10.1080/1612197X.2003.9671717.
13. Høigaard R., Säfvenbom, R., Tønnessen, F.E. (2006). The relationship between group cohesion, group norms, and perceived social loafing in soccer teams. *Small Group Research*, 37(3):217–232. doi: 10.1177/1046496406287311.
14. Høigaard, R., Tofteland, I., Ommundsen, Y. (2006). The effect of team cohesion on social loafing in relay teams. *International Journal of Applied Sports Sciences*, 18(1):59–73.

15. Hung, T.K, Chi, N.W., Lu, W.L. (2009). Exploring the relationships between perceived coworker loafing and counterproductive work behaviors: the mediating role of a revenge motive. J*ournal of Business and Psychology*, 24:257–270. doi: 10.1007/s10869-009-9104-6.

16. Ingham, A.G. (1974). The Ringelmann effect: studies of group size and group performance. *Journal of Experimental Social Psychology*, 10(4):371-384. doi: 10.1016/0022-1031(74)90033-X.

17. Jezerskytė E., Žydžiūnaitė, V. (2005). Comparing teamwork competencies of the school administration and educators: the aspects of groupthink (avoidance) and social loafing. *Social Sciences*, 49(3):87–95.

18. Jones, G.W, Høigaard, R., Peters, D.M. (2014). "Just going through the motions..":a qualitative exploration of athlete perceptions of social loafing in training and competition contexts – implications for team sport coaches. *International Journal of Sports Science & Coaching*, 9(5):1067–1082. doi: 10.1260/1747-9541.9.5.1067.

19. Karau, S.J., Williams, D.K. (1991). Social loafing and social compensation: the effects of expectations of co-worker performance. *Journal of Personality and Social Psychology*, 61(4):570–581. http://dx.doi.org/10.1037/0022-3514.61.4.570.

20. Karau, S.J., Williams D.K. (1995). Social loafing: research findings, implications, and future directions. *Current Directions in Psychological Science*, 4(5):134–140. doi: 10.1111/1467-8721.ep10772570.

21. Karau, S.J., Williams D.K. (1993). Social loafng: a meta-analytic review and theoretical intergration. *Journal of Personality and Social Psychology*, 65(4):681–706. doi: 10.1037/0022-3514.65.4.681.

22. Karau, S.J., Williams, D.K. (1997). The effects of group cohesiveness on social loafing and social compensation. *Group Dynamics Theory Research and Practice*, 1(2):156-168. doi: 10.1037//1089-2699.1.2.156.

23. Kerr, N.L. (1989). Illusions of efficacy: the effects of group size on perceived efficacy in social dilemas. *Journal of Experimental Social Psychology*, 25(4):287–313. doi: 10.1016/0022-1031(89)90024-3

24. Klug, M., Bagrow, J.P. (2016). Understanding the group dynamics and success of teams. *Royal Society Open Science*, 3(4):1–11. doi: 10.1098/rsos.160007

25. Kravitz, D.A., Martin, B. (1986). Ringelmann rediscovered: the original article. *Journal of Personality and Social Psychology*, 50(5):936–941. doi: 10.1037/0022-3514.50.5.936

26. Lam, Ch. (2015). The role of communication and cohesion in reducing social loafing in group projects. *Business and Professional Communication Quarterly*, 78(4): 454-475. doi: 10.1177/2329490615596417

27. Lam, Ch. (2016). Can slack curb slacking?: examining the importance of team communication in reducing social loafing. *IEEE International Professional Communication Conference (IPCC)*. Austin, TX Date: OCT 02-05, 2016.

28. Lee, P.C., Chen, C.M., Liou, K.T. (2015). Using citizens' leadership behaviors to enhance worker motivation: reducing perceived social loafing in a coproductive tax service program. *Public Performance & Management Review*, 39(1):172–197. doi: 10.1080/15309576.2016.1071172

29. Liden, R.C., Wayne, S.J., Jaworski, R.A., Bennett, N. (2004). Social loafing: a field investigation. *Journal of Management*, 30(2):285–304. doi: 10.1016/j.jm.2003.02.002

30. Lount, R.B., Wilk, S.L. (2014). Working Harder or Hardly Working? Posting performance eliminates social loafing and promotes social laboring in workgroups. *Management Science*, 60(5):1098–1106. doi: 10.1287/mnsc.2013.1820

31. Luo, Z., Qu, H., Marnburg, E. (2013). Justice perceptions and drives of hotel employee social loafing behavior. *International Journal of Hospitality Management*, 33:456–464. http://dx.doi.org/10.1016/j.ijhm.2012.11.005

32. Meyer, B., Schermuly, C.C., Kauffeld, S. (2016). That's not my place: the interacting effects of faultlines, subgroup size, and social competence on social loafing behaviour in work groups. *European Journal of Work and Organizational Psychology*, 25(1):31–49. doi: 10.1080/1359432X.2014.996554

33. Murphy, S.M., Wayne, S.J., Liden, R.C., Erdogan, B. (2003). Understanding social loafing: the role of justice perceptions and exchange relationships. *Human Relations*, 56(1):61–84. https://doi.org/10.1177/0018726703056001450

34. Omar, A.A., Lionel, P.R., Likoebe M.M. (2010). Team size, dispersion, and social loafing in technology-supported teams: a perspective on the theory of moral disengagement. *Journal of Management Information Systems*, 27(1):203–230. doi: 10.2753/MIS0742-1222270109.

35. Perry, S.J., Lorinkova, N.M., Hunter, E.M., Hubbard, A., McMahon, J.T. (2016). When does virtuality really "work"? Examining the role of work-family and virtuality in social loafing. *Journal of Management*, 42(2), pp. 449–479. doi: 10.1177/0149206313475814

36. Rubino, Ch., Avery, D.R., Volpone, S.D, Ford, L. (2014). Does teaming obscure low performance? Exploring the temporal effects of team performance diversity. *Human Performance*, 27(5):416–434. doi: 10.1080/08959285.2014.956175.

37. Scott-Ladd, B., Chan, Ch. C. A. (2008). Using action research to teach students to manage team learning and improve teamwork satisfaction. *Active Learning in Higher Education*, 9(3):231–248. doi: 10.1177/1469787408095848

38. Seitchik, A. E., Harkins, S.G. (2014). The effects of nonconscious and conscious goals on performance. basic and Applied Social Psychology, 36(2):90–110. http://dx.doi.org/10.1080/01973533.2013.856785.

39. Seltzer, J. (2016). Teaching about social loafing: the accounting team exercise. *Management Teaching Review*, 1(1):34–42. doi: 10.1177/2379298115621889

40. Shih, C.H., Wang, Y.H. (2016). Can workplace friendship reduce social loafing? Edited by: Barolli, L; Xhafa, F; Uchida, N. Conference: 10th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS) Location: Fukuoka Inst Technol, Fukuoka, Japan. *10th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS)*, 522–526. doi: 10.1109/IMIS.2016.144

41. Stark, E. M., Shaw, J. D., Duffy, M. K. (2007). Preference for group work, winning orientation, and social loafing behavior in groups. *Group & Organization Management*, 32(6):699–723. doi: 10.1177/1059601106291130.

42. Suleiman, J., Watson, R. T. (2008). Social loafing in technology-supported teams. *Computer Supported Cooperative Work*, 17(4):291–309. doi: 10.1007/s10606-008-9075-6.

43. Thompson, R.B., Thornton, B. (2014). Gender and theory of mind in preschoolers' group effort: evidence for timing differences behind children's earliest social loafing. *Journal of Social Psychology*, 154(6):475-479. doi: 10.1080/00224545.2014.933763

44. van Dick R., Tissington, P.A., Hertel, A. (2009). Do many hands make light work? How to over come social loafing and gain motivation in workteams. *European Business Review*, 21(3):233–245. doi: 10.1108/09555340910956621

45. Vveinhardt, J., Banikonytė, J. (2017). Socialinės grupės darnos vystymo perspektyvos mažinant socialinį dykinėjimą- Development Perspectives of the Social Group Cohesion in Reducing Social Loafing. *Organizacijų vadyba: sisteminiai tyrimai. Management of Organizations: Systematic Research*, 77(1):185–202. http://dx.doi.org/10.1515/mosr-2017-0011 [in Lithuanian].

46. Vveinhardt, J., Banikonytė, J., Ahmed, R. (2017). Social loafing in group activities of manufacturing companies. *30th IBIMA Conference*, 8-9 November 2017, Madrid, Spain. (Accepted).

47. Vveinhardt, J. (2017). Social loafing in working groups of organizations: what the executives do not know? *International Scientific Conference «The modern economic model: objectives, challenges and prospects»*, 6-7 April 2017 (Nizhyn, Ukraine), 255–257.

48. Vveinhardt, J. (2017). Social loafing: why motivation does not encourage seeking a higher income at work? *International Scientific Conference «Імперативи та інноваційні механізми забезпечення гідної праці в умовах становлення нової економіки»*, 25-26 April 2017 (Kyiv, Ukraine), 172–175.

49. Woodman, T., Roberts, R., Hardy, L., Callow, N., Rogers, C.H. (2011). There is an “I” in team: narcissism and social loafing. *Research Quarterly for Exercise and Sport,* 82(2):285–290. http://dx.doi.org/10.1080/02701367.2011.10599756.

Received: 22 August 2017
Accepted: 11 October 2017

REPORTS

CONTROLING AND INSURANCE IN ECONOMIC SECURITY OF TRANSPORT COMPANIES

Nadiia Bohomolova
State Economy and Technology University of Transport, Ukraine

Jana Hrynchiy
Kyiv College of Architecture and Design, Ukraine

Olena Ozerova
Kyiv College of Architecture and Design, Ukraine

Annotation
The article reveals the essence and content of the system of economic security of transport companies. Particular attention is paid to its components such as controlling and insurance. The features of the application of these instruments to counter the threats and risks in the operation of transport companies of Ukraine are analyzed. Promising areas of security and controlling in the current economic conditions are proved.
Key words: *economic security, risk, controlling, insurance, transport.*

Transport enterprises perform important functions for the organization and execution of the transportation process, meet the requirements of people and cargo owners in quality transportation and logistics support. Meanwhile, the current economic environment (both internal and external) is characterized by numerous risks associated with the unstable political and economic situation in Ukraine, the companies' activity in the financial crisis, and so on. In these circumstances, it is necessary to resist risks and take steps to minimize their impact on the economic activity of transport companies. The above is based on creation of an effective economic security system of transport companies.

Economic security is the basis of the company as characterizes the state to protect the economic interests and relations, all kinds of productive resources and results of the company and creates the opportunity to systematically counter the threats and risks that accompany them. Such protection is based on adaptation to external changes and contributes to the objectives of strategic development, which leads to increased competitiveness on the market. In general, the system of economic security of transport companies is a coherent set of elements, relationship, interaction and mutual impacts which allows to neutralize or minimize the impact of the threats to the economic activity of the company. Goals, tasks, factors, principles, function, technology, management instruments, economic security and others are often distinguish among these elements.

The purpose of this article is to study the nature and content of controlling and insurance as important elements of economic security of transport companies, affecting its level. The systematic approach methods, comparison, abstraction, logic synthesis were used during the study.

For the effective functioning of the economic security system all the elements, their cooperation and coordination are important, however, within this article we consider the role and importance of controlling and insurance as elements that are key to achieving the objectives of the economic security system of transport companies, thus requiring priority attention by the management of transport companies. This analysis of economic security system of companies indicates that despite the common goal of using these instruments to minimize risk exposure, their action is directed primarily to the internal environment (for controlling) or the environment (for insurance) (Fig 1).

Process of controlling and insurance is covering the whole production and economic cycle of transport company, from development of transport service to its implementation and provide conditions for effective work of the company on the transport market to achieve its goals through timely detection and minimizing the impact of varied dangers and threats. Let's consider the features of controlling and insurance in case of transport companies.

Economic security of transport companies in the economic management undergoes a large number of threats that arise both in the internal and external environment of the subject. Thus, all productive resources require protection used during economic activity, and it is in this regard an effective controlling system is of particular relevance. Controlling acts as an additional instrument that is a part of the system of management of transport companies activity and aimed at the orientation of the system to ensure economic security (Ilashchuk, 2016).

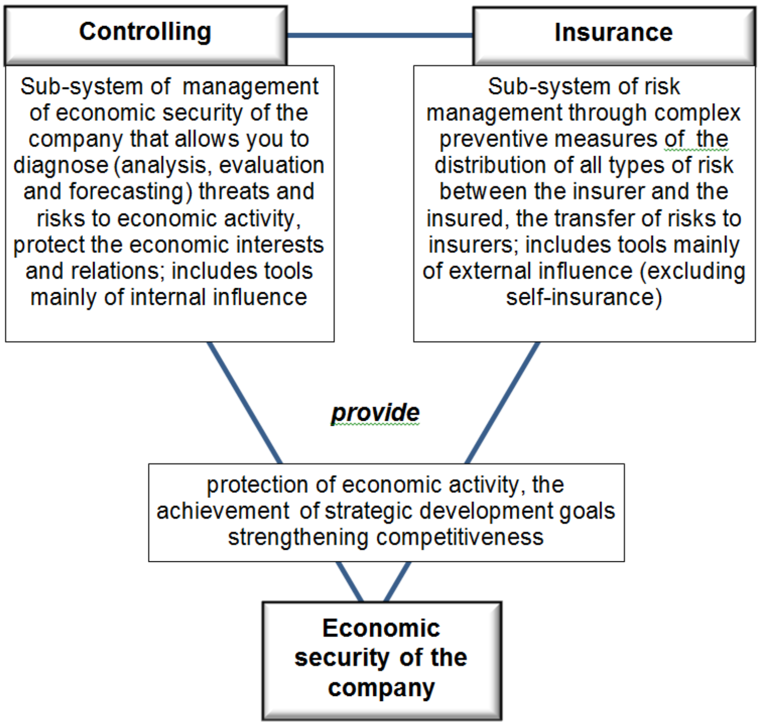


Fig. 1. The relationship of the individual elements of the system of economic security

Thus, the main purpose of controlling system functioning in the context of raising the level of economic security of transport companies is to increase the ability of management (through its managers) to make better strategic and tactical management decisions (Ilashchuk, 2016). Creating a system of controlling depends on the model of the company. Thus, transport companies are characterized by financial and economic model, the efficiency of which is estimated ratio of revenues and cost of resources used, that is an indicator of income, which acts as an indicator of economic security of business entity.

In terms of economic security of companies, controlling has number of characteristics:

1) Subsystem of controlling is able to prevent threats that arise in the internal and external environment as well as identify the opportunities to the company during the economic activities;

2) Controlling uses analytical instruments that can be applied to the process of ensuring economic security;

3) Controlling is implemented with the emergence of risks to the operation of the business and contributes to solving tasks assigned to the system to ensure economic security;

4) Controlling is an effective coordination system to ensure the economic security of transport company;

5) A single information system is formed by the introduction of controlling, whose data are used to ensure the economic security of the company;

6) A variety of threats to economic security of transport companies require forming system that would form and provide the leadership necessary information about the company, which is possible due to the system of controlling;

7) Controlling is able to provide planning and forecasting key indicators of economic security of business entity.

8) Controlling is able to provide an assessment of the impact of innovation on the level of economic security of transport company.

Therefore, carefully constructed controlling subsystem is able to provide company control and its economic security, based on the choice of the optimal three-component model of system that includes business processes of transport company, controlling functions and controlling mechanism (2 Fig.).

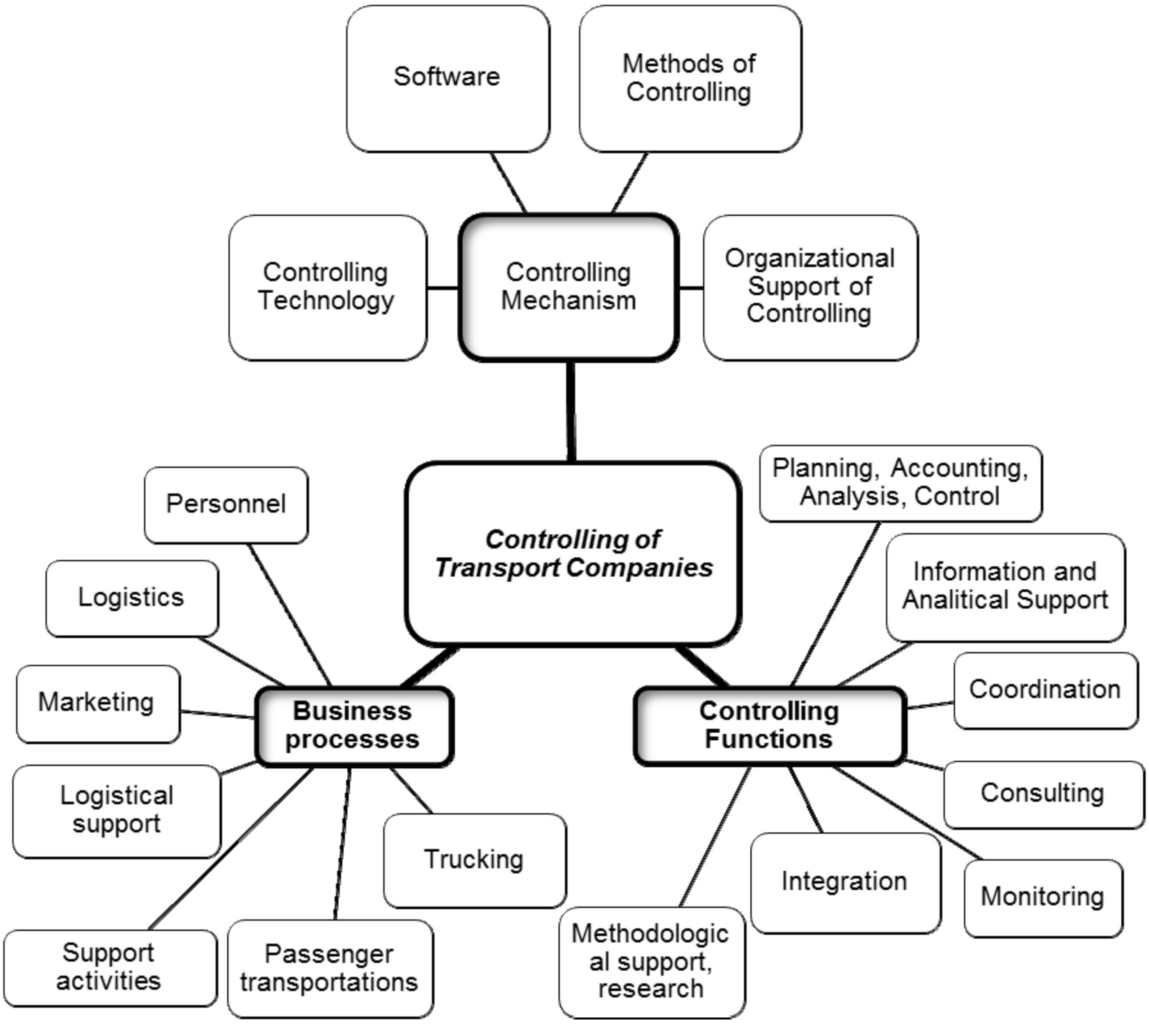


Fig. 2. Three-component model of controlling in the context of economic security of transport companies. Source: Developed by the authors based on (Makarenko, Pyrkov, 2009 and Korezyn, 2010)

To ensure efficiency of controlling in transport companies should_optimize their business processes and make centers of financial responsibility that will cover the main areas of business (cargo and passenger transportation, repair manufacturing, logistics, etc.). The purpose of controlling implementation corresponds its functions, which are related to the most important stages of the management cycle (planning, accounting, analysis, control, etc.). And the most important element of this model is the development, implementation and improvement of the mechanism of controlling that should ensure operability of the system and efficiency of the methodological approaches, regulations, software, metrics that characterize the effectiveness of management technology in the context of economic security of the company.

Implementation of controlling mechanism in the company takes place in several stages. Firstly, the goal setting of controlling that meets the needs of management and the specifics of each company. It should be clearly defined how the results of controlling will affect the final result of the company activity, usually an indicator of income. Secondly, restructuring of the company's accounting policies to the needs of information and analytical support of controlling system, creation of document circulation, the introduction of the initial forms of management reporting, and eventually in the reporting of sustainable development, which is based on the concept of social responsibility. Thirdly, the introduction of management information systems (ERP), which allow you to integrate financial and management accounting within a single information field. Fourthly, the introduction of budgeting procedures, which may predict the development of a balanced indicator taking into account the specifics of the activity of transport company, which can be integrated into the system of budgets. To implement each management goal a set of indicators should be defined, whose analysis, conducted through the system of budgeting, would provide management with relevant information for making decision. Fifthly, the introduction of a mechanism of control and internal audit to determine the causes of deviations from planned indicators. Sixthly, the development of internal consulting mechanism through which the support of making decisions by management of the transport company is realized. The introduction of this mechanism is possible if to create a division or controlling department in the company that would serve as a coordination and structural consulting unit.

It should be noted that the system of controlling is mainly used by companies, including the transport sector, for the implementation of operational tasks to ensure the economic security, that will transform later into profitability. And the system does not guarantee economic security in the long term to create conditions for long-term existence and development of the company. Thus, a more effective mechanism to ensure the economic security of companies are implementing of integrated controlling as a complex system of management process. At present time this concept of controlling is promising and relevant because it allows you to create a system of information and consultation support of all management functions, involve all areas of company activity, including the area of security management. Thus, it can separately identify the concept of controlling, economic security, which mechanism is shown in Table. 1.

Table 1

The functions and tasks of controlling of economic security of transport companies

	Function	Tasks
Controlling of Economic Security	**Information Support**	- The collection and processing of information about the risks, the continuous updating of this information; - Preparation of information for analysis of transport market and internal environment; - Organization of internal and external information communication; - Engineering of management economic security
	Planning	- Analysis and risk assessment of transport companies' activity; - Development of recommendations for risk management in the industry; - Transport insurance program planning; - Planning security management costs; - Top management consulting in the development of strategy of economic security companies; - Coordination planning with other departments of the company; - Methodological support planning
	Monitoring	- Development of monitoring indicators, its methods and ways of getting information; - Revaluation of risk profile; - Regular inspection of responsibility areas for risks; - Evaluation of effectiveness of risk management strategies; - Development of recommendations for correcting strategy and tactics of security management

Source: Developed by the authors based on (Makarenko, Pyrkov, 2009 and Korezin, 2010)

Thus, the creation of the controlling subsystem though directed to diagnose risks both internal and external environment, in most cases, can be implemented in the company on its own, thus based on instruments of internal impact. Unlike the controlling, it is more effective to organize the insurance protection with participation of professional insurers.

Stable and reliable operation of modern transport company, growth and development of its economic potential largely depends on the prediction and advance warning of possible threats and risks. Use of insurance and strengthening its role in the economic security of transport companies is the most effective instrument of protection in case of unpredictable material and financial losses and guarantee compensation.

One of the effective instruments of economic security and reduction of the impact of risk factors in the company is insurance. In accordance with the most known definitions, insurance is characterized as a special kind of economic activity, associated with redistribution of risks to property interests of insurance participants (insured and insurers), which is carried out by specialized organizations (insurers) that ensure the accumulation of premiums (insurance premiums), formation of funds of insurance reserves and implementation of insurance payments (Korchevskoy, Turbinoy. 1996).

The insurance mechanism is based on a study of the risks which are characterized as threats, the risk of adverse effects or events that may occur and as a result give rise to the loss of resources or cause damage. The reasons of risky events - actions or decisions that lead to unwanted development which is adverse for the stable functioning of the company. To assess individual risk factors and making decisions about the adequacy of preventive measures, the risk must be expressed in comparable indicators. If the risk is to be measured in terms of its probability and amount of possible losses, the management of such risks effectively carried out with the use of insurance.

Insurance is a basic and the most versatile way to transfer risk to professional organization, and as a method of risk management, contributes to the protection of property interests, security and stability of functioning of transport companies. Contributing redistribution of risks between economic entities and compensation due to the savings, insurance can eliminate and significantly reduce the negative effects and increase the economic security of transport companies. It should be noted that the insurance does not have well developed classification of risks, which is necessary for its evaluation, analysis and management. However, there is a requirement of actuarial calculations when determining insurance rates, based on a valuation of risks (Zabarna, Conradi, 2011).

Risks on transport due to manufacture and technological complexity of the industry vary by factors such as: the object of forming of risks; sources and their causes, the possibility of impact on risks; possible impact of risks on performance of the company; stage of production cycle and the amount of possible losses; type of transportation, the number of carriers, and more.

Thus, development backgrounds of transport insurance are formed due to the large number of technical and technological risks, organizational, economic and financial nature. It is an insurance mechanism of economic interests protection that form the basis of transport companies development, contributes to the achievement of strategic goals, the reform, social development of companies.

Insurance mechanism provides an entire system of insurance contracts that provide compensation for possible losses at various stages of company activities. Use of insurance mechanism to ensure economic security comes up from its nature, the inner essence. The main blocks of insurance protection instruments aimed at reducing the risk of the company are:

1) transport company property insurance - insurance protection covers property interests related to possession, use and disposal of company property that are caused by the need to preserve it from the possibility of its destruction, flooding, damage, theft in the result of the unpredictable accidents and other negative events;

2) cargo transportation insurance - the purpose of cargo insurance is to create conditions of guaranteed compensation for financial loss during the delivery, in case of destruction or damage due to circumstances independent from the owner; the costs that may arise during the rescue of the cargo must be taken into account and associated with the reduction in the amount of loss;

3) liability insurance - insurance protection may cover the civil liability of insured for the damage caused to health, life or property of third parties; it should be noted that on different types of transport (except automobile) liability insurance is not developed enough;

4) personal insurance of employees - insurance of property interests related to the life, health, ability to work and additional pension of the insured.

It is important to assess risks in insurance that can be done in stages:

- Understanding a risk, study the causes, identify possible threats, financial risk identification, determination of their concentration in the areas of financial activity, monitoring of factors of internal and external environment;

- Risk diagnostics (analysis, evaluation and forecasting) (which is provided by creating a reliable information base, selecting appropriate methods and instruments to calculate probability of risk, identification of possible direct and indirect losses);

- Neutralizing (minimizing) the impact of risks (it is estimated the compliance of risk level to the level of profitability, and taken steps to neutralize the emergency situation, developed a set of warning actions to prevent possible violations of financial stability and solvency of the company) (Vanina, 2015).

Thus, the threat to the security of transport company is the rise and strengthening of risk or possible danger due to adverse changes (events, processes, facts, actions of persons etc.) that occur in the external or internal environment of the company and require monitoring and management from the company. Insurance protection is the most perfect instrument for the full and rapid compensation, that improves the financial performance and active development of transport companies.

In the system of economic security of transport companies insurance play a particular role, such as the protection of property interests of actual and potential sources of danger.

In the current economic environment the development of transport companies insurance requires intensification of scientific research and wider use of insurance protection, according to:

- The need to stimulate innovation and investment activities of transport companies, as this activity is accompanied by numerous risks and characterized by weak investment attractiveness, also as a result of investor insecurity;
- The insurance conditions in Ukraine are approaching to European standards of providing services, the introduction of new insurance products and training systems to improve skill levels of personnel;
- Establishing long-term relationships between suppliers of transport services and insurance companies, developing products that allow to take into account special conditions of transportation (change of risks with increasing speed of movement);
- Improving the system of compulsory insurance and settlement of issues concerning the development of compulsory liability insurance in the system of economic security of railway transport;
- Expanding the ways of implementation of insurance services, including electronic sales, taking into account the specific features of transport services on the different types of transport, taking into account their interactions.

Thus, the economic security of transport companies can be ensured by the integrated use of all events, methods and means of diagnosing risk and providing protection in all phases of the company activity.

Conclusions and recommendations

Ensuring economic security of transport companies is provided by the development and implementation of the management system of economic security that takes into account the specific economic activity in various economic sectors. In particular, the economic security system of transport companies should take into account the specifics of transportation, a lot of risks arising from various objects and participants of the transport process: rolling stock, infrastructure, information systems, resource suppliers, customers, and so on. In such system of economic security a prominent place is occupied by such important subsystems as controlling and insurance.

Implementation of controlling concept as an important element of economic security of transport companies is based on the study and implementation of its functions, ensuring of its implementation by individual business processes of transport companies (cargo, passenger transportation, logistics, etc.) as well as improving the controlling mechanism by using new technologies, software and methods of threats diagnosis, dangers and risks of economic activity.

The development of insurance in the system of economic security of transport companies is based on a comprehensive approach to the organization of insurance protection for carriers and consumers of transport services, development of insurance products that take into account the specifics of transport activity, improving insurance legislation regarding the harmonization of national and international law, improving the quality of services in accordance with international standards of insurance activity.

Controlling and insurance in the economic system of transport companies

The article presents the results of a study of the system of economic security of transport company, which is a coherent set of elements, relationship, interaction and mutual impact which allows to neutralize or minimize the impact of the economic threats to the company. Among the elements of the system goals, tasks, factors, principles, functions, technologies, management tools of economic security and others are allocated.

Particular attention is paid to such elements of the economic security as controlling and insurance. The features of the application of these tools to counter the threats and risks in the operation of transport companies of Ukraine are analyzed.

Controlling is a subsystem of management of economic security of the company that allows you to diagnose (analysis, evaluation and forecasting) threats and risks of economic activity, protect the economic interests and relations; includes tools mainly of internal impact. Insurance is considered as a subsystem of risk management through a combination of preventive (prophylactic) measures, the distribution of all types of risk between the insurer and the insured, insurers transfer risks; includes instruments mainly of external influence (excluding self-insurance).

Promising areas of security and controlling in the current economic conditions are proved.

References

1. Abkovitz, M. D. (2002). *Transport Risk Management: A New Paradigm* / Mark D. Abkovitz // Vanderbuilt University. P. 16.

2. Ilaschuk, S.A. (2016). Udoskonalennia systemy kontrolingu yak peredumova do pokrashchennia ekonomichnoi bezpeky [Improvement of controlling as a prerequisite to improve economic security]. *Efectyvna ekonomika*. Retrieved from http://www.economy.nayka.com.ua/?op=1&z=4967.

3. Korchevskoy, L. I., Turbinoy, K. E. (1996). *Strakhovanie ot A do Ya: kniga dlya strakhovatelya [Insurance from A to Z: a book for the insured]*. M.: Infra M.

4. Korezin, A. S. (2010). Kontrolling kak vnutrikorporativnaya servisnaya sistema obespecheniya ekonomicheskoy bezopasnosti [Controlling as a corporate service system of ensuring economic security]. *Zhurnal universiteta vodnykh komunikatsiy*. 3 (7), 195-204.

5. Makarenko, O.G., Pyrkov, S.A. (2009). Kompleksnaya model sistemy kontrollinga predpriyatiy stroitelnogo kompleksa [Integrated model of the system of controlling the construction enterprises]. *Vestnik Samarskogo gosudarstvennogo ekonomicheskogo universiteta*. 10 (60), 54-58.

6. Marsden, E. (2014). *Risk regulation, liability and insurance: Literature review of their influence on safety management*. Toulouse, FonCSI. P. 45

7. Sobkevych, O. V. (2014). Mekhanizmy efektyvnogo vykorystannia ta rozvytku potentsialu transportno-dorozhnogo kompleksu Ukrainy. [Mechanisms for efficient use and development potential of the transport system of Ukraine]. *Analitichna The analytical report*. National Institute for Strategic Studies.60.

8. Vanina, D. A. Metodicheskie osnovy sistemy finansovogo risk-menedzhmenta v strakhovoy organizatsii. [Methodical bases of the financial risk management system in insurance organizations]. *Economics and Finance*. Retrieved from http://conf.at.ua/25.04.2015.pdf

9. Zabarna, E. M., Kondrati, G. T. (2011). Upravlinnia ekonomichnoiu bezpekoiu pidpryiemstva na zasadakh systemy strakhuvannia. [Management of economic security on the basis of the insurance system]. *Herald of Khmelnytsky National University*. №6, 243-245.

Received: 15 February 2017
Accepted: 11 October 2017

POLISH GRADUATES FROM HIGHER EDUCATION INSTITUTIONS IN THE LABOUR MARKET

Eugeniusz Gostomski,
Powiślańska Szkoła Wyższa Kwidzyn, Poland

Tomasz Michałowski,
University of Gdańsk, Poland

Annotation

The beginning of the economic transformation in Poland in 1990 initiated rapid quantitative and qualitative changes in higher education in that country. Previously, the possibility of increasing a number of students in higher education institutions (HEIs) had been limited by the monopoly of public education. The situation in higher education was changed dramatically by the Higher Education Act of 12 September 1990. The Act enabled the creation of private HEIs. Their number increased dramatically over the next years. However, the number of academic teachers did not increase to the same extent.

Key words: *graduates, labour market, Poland, unemployment, emigration.*

While in the 1990/1991 academic year, there was only one non-public higher education institution in Poland, ten years later the number rose to221, and in 2009/2010 to 330. Over the same period, the number of public HEIs increased by only 20% (from 111 to 131). At the same time, the number of students increased rapidly from 404,000 in 1990/1991 to 1,900,000 in 2009/2010. In 2009/2010, 630,000 people (33% of all students) were studying in private institutions. Gross enrolment rate, i.e. total enrolment in a tertiary education, regardless of age, expressed as a percentage of the population in the official age group corresponding to this level of education, rose from 13% in 1991 to 54% in 2010 (GUS, 2015a, pp. 26-27, 30).

In the 2006/2007 academic year, due to demographic reasons, a reversal of the upward trend was observed and since then the number of students has been steadily declining. In the 2014/2015 academic year, there were 434 HEIs in Poland, including 302 non-public institutions with almost 360,000 enrolled students. The total students population was almost 1,470,000. In all Polish HEIs, there were 93,500 academic teachers employed (counted as full-time equivalent).There were 15.2 students per academic teacher (GUS, 2015a, pp. 26, 29-30, 53).

The largest academic centre in Poland is Warsaw, which is a home for 78HEIs with 248,000 students. In addition, in each of the three cities: in Krakow, Wroclaw and Poznan, the number of students exceeds 100,000. In Poland, there are, among others, 19 classical universities more than 20the so-called "adjectival" universities (medical universities, universities of economics, life sciences, fine arts and others) and 25 technical universities (GUS, 2015a, pp. 25, 29, 70-79).

In accordance with the Bologna system, in most fields of study, there are first-cycle (undergraduate) programmes (Bachelor and Bachelor of Applied Science) and second-cycle programmes (Second Degree Master Studies). In private HEIs, programs at the undergraduate level prevail. There are also doctoral and post-graduate programmes. It is possible to study full or part time. In the 2013/2014 academic year, most students attended courses in economics and administration (20.2%), social science(9.8%) and teacher training and education science(9.4%). These were the most popular fields of study also in previous years (GUS, 2015a, p. 32).

In private HEIs, students of economics, management, marketing or finance prevail. This is because the education costs in these fields are the lowest and students consider these fields of study to be much easier than engineering or science programmes.

A comparison of popularity of particular fields of study in the academic years of 2010/2011 and 2013/2014 shows the decreasing interest of candidates in economics and administration, teacher training and education science, humanities and social science. There is an increasing interest in the fields of study classified in the group of “safety and security” and related to architecture and construction, and engineering and engineering trades (GUS, 2015a, p. 32).

Among the reasons for the rapid development of higher education in Poland are the following factors:

- the worth of higher education had increased in a society and a market economy, which was associated with a strong belief that graduates would earn much, advance more quickly in the professional and social hierarchy and, finally, have a better life;
- a growing number of baby boomers completed secondary education in the 1990s awarding the Maturity certificate, which gives a right to study in HEIs;
- as a result of the formation of numerous non-public HEIs young people from small towns and villages received the opportunity to study close to their place of residence, which significantly lowered the costs of education.

The increase in the numbers of HEIs and students in Poland has not gone hand in hand with an increase in the level of education, and even in this area regression has been observed. The number of academic teachers has not increased significantly, although the number of students has risen more than four times. A number of students per one academic teacher is too high especially in the fields of laws and economics, which negatively affects the quality of education. The state expenditure on higher education is also low. In the last two decades, the expenditure per student in public HEIs was 3-4 times lower than in leading European countries and was steadily declining because the increase in expenditure on higher education did not keep up with the increasing number of students (Barwińska-Małajowicz, 2013, pp. 7-76).

The number and structure of graduates from HEIs in Poland

With the growing number of students, the number of graduates from HEIs was increasing. While in the 1990/1991 academic year, there were 56,000 graduates, in 2013/2014their number increased to 424,600.In the 2013/2014academic year,71.1% ofall graduates were graduates from public institutions. As many as 55.3% of all graduates (234,700 people) completed first-cycle programmes: 64,900 with the degree of engineer and 169,800 with a bachelor's degree. At the same time, 22,200 people completed unified master's studies (long-cycle programmes) and 167,700 second-cycle programmes. In the 2013/2014 academic year, most graduates (242,400 people) were graduates of full-time studies. Part-time studies were completed by 182,200students. There were about 5,600 foreigners, mostly from Ukraine and Belarus, among the graduates from Polish HEIs in 2013/2014 (GUS, 2015a, pp. 32, 138-145).

Since the beginning of the transition, the structure of graduates from Polish HEIs has changed significantly. In the 1990/1991 academic year, the largest community were the graduates of technical fields (19,4%), teacher training and education science (17,5%) and health (medical)fields (10,1%) (Piróg, 2013, p. 306). In the following years, graduates of management, finance, banking and social science began to dominate. In the 2013/2014 academic year, in a group of almost 425,000 graduates from HEIs, 23.2% were graduates of economics and administration, 12.8% of teacher training and education science, 10.3% of social science, 8.2% of health, 6.5% of humanities (GUS, 2015a, p. 32). Thus, the labour market is not able to absorb such a number of graduates, which leads to unemployment among people graduating from HEIs.

Unemployment among graduates from HEIs

Sharp increase in the number of graduates from HEIs in Poland was observed in the period of growing unemployment in Poland. At the beginning of the transition period, the unemployment rate was 6.5% (in December 1990), but it began to grow rapidly exceeding 20%in 2002-2004.Then, the unemployment rate began to decline and in 2008 its rate was slightly below 9%.Since then, unemployment had risen again and at the beginning of 2014,itreached almost 14%. However, in the same year, it began to fall and hit single digits in 2015 (Figure 1). As a result of economic recovery and a decline in the number of young people, the unemployment rate among people aged 15-25 has slightly decreased, but in 2014 was still high at 24%, compared to less than 8% in Germany and above 52% in Greece (Figure 2).

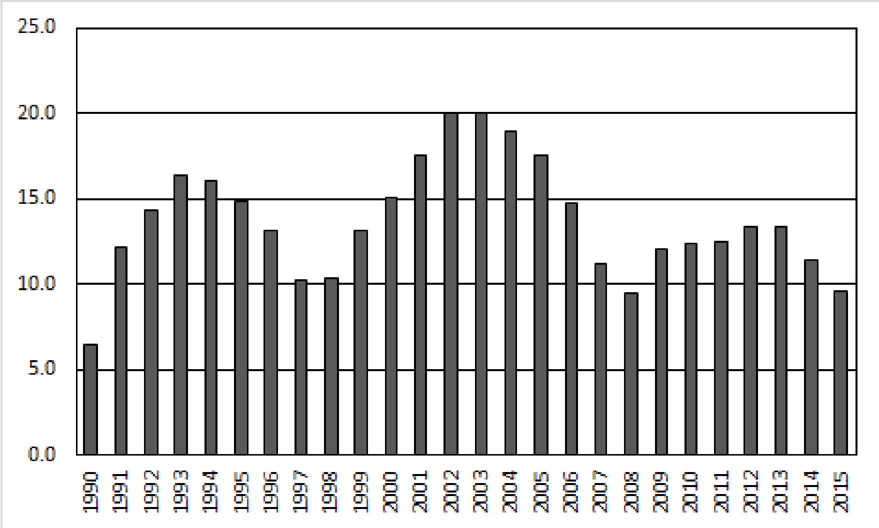


Fig. 1. Unemployment rate in Poland (%), 1990-2015*
*Figures for December each year, 2015 – for October
Source: GUS (2015b).

The number of jobs for high-skilled workers both in the corporate sector as well as the budgetary sphere is limited. This leads to increased competition among graduates looking for a job. Higher education has ceased to be a guarantee of getting a job/employment. More and more graduates, including those with a doctor degree and those who have completed several programmes, havedifficulties in finding a job. For a small number of new or abandonedjobs, employers seek people with professional experience, which HEI graduates usually do not have. The outstanding creative graduates from the best HEIs who are willing to work for low pay have the best chances of finding a job in Poland.

In 2014,225,000 people with a higher education diploma were unemployed in Poland(GUS, 2015b).Results of the survey “Study of Human Capital in Poland” conducted jointly by the Polish Agency for Enterprise Development and the Jagiellonian University (Jelonek, Kasparek &Magierowski, 2015) in 2010-2014 show that among graduates under 30 years old, about 24% ofpeople were without a job (rate of unemployment – 14%, rate of inactivity in the labour market – 10%). However, their position in the labour market is better than people without higher education because the rate of unemployment among people with a bachelor’s or master’s degree is more than one third lower than the rate of unemployment among other people (Jelonek, Kasparek &Magierowski, 2015, p. 20).

Graduates who have only a bachelor's have particular problems with finding a job. According to many employers, a bachelor's degree does not guarantee that a person with such a status is highly qualified, especially if a graduate has no professional experience.

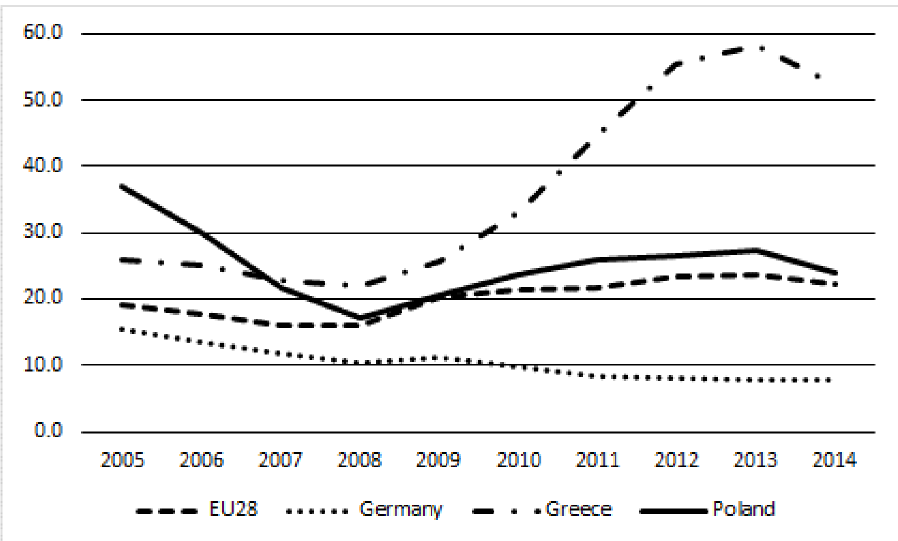


Fig. 2. Unemployment rates among persons aged 15-25 years (%) in Germany, Greece, Poland and EU28, 2005-2014, Source: Eurostat (2015).

According to the results of "Study of Human Capital in Poland" conducted in 2010-2014, in the group of the Poles aged 30 or less, 32% people with a bachelor's degree were without a job, while among people with a master's degree the corresponding figure was about 21%. Among young engineers, a rate of people without a job was at 22%, while in the group of engineers with a master's degree it amounted to 20% (Jelonek, Kasparek & Magierowski, 2015, p. 24).

Among all people who completed their studies during the last five years, the highest employment rate and the lowest unemployment rate were in the group of graduates of health, and engineering and engineering trades. Data on their employment after five years of graduation provide interesting information on the opportunities of HEI graduates in the labour market. In this group, in 2012 the lowest unemployment rate was among graduates of mathematics and statistics (1.2%), physics (1.9%), engineering and engineering trades (4%) and health (4.7%), while the highest unemployment rate was among people who have completed programmes in social sciences, agriculture and teacher training and education science (Jak zwiększyć swoje…, 2013). Graduates from good public or non-public HEIs have better chances of finding a job. Graduation of even most market-oriented programme in a poor school does not give a chance to get a stable job.

Causes of unemployment among graduates

There are many reasons why high unemployment among graduates from HEIs persists in Poland. The first of them is the wrong choice of a field of study. Results from surveys conducted among people who have completed higher education (see for example Haczek &Kłos, 2012, pp. 96-114;Wójtowicz &Tracz2011, pp. 92-96) show that only few graduates took into account the projected labour market demand for workers in the chosen profession when they chose a field of study. Instead, they followed their interests and desire to expand their knowledge in the chosen field. Another motive for choosing a field of study was a desire to continue the family tradition, especially in the case of the legal profession. The proximity of the place of residence of a high education institution was also an important reason. It was not uncommon that the choice of a field of study was influenced by suggestions of family and friends. Young people entering higher education also believed that over time the situation on the labour market will change in favour of their field of study. The ease of studying at a specific institution could also have significance in many cases. The common perception is that requirements for students in the humanities and in all fields in part-time studies, particularly in private HEIs, are smaller than in technical fields and in full-time studies in public HEIs.

The marketization of higher education means that studies are undertaken not only by people with high intellectual abilities, but also by people with average and below average abilities. HEIs have significantly adjusted their educational requirements to the limited perception of students, which has led to the devaluation of a higher education diploma and has eroded the confidence of employers in Polish graduates.

The number of jobs for workers with high qualifications is limited both in the corporate sector as well as in the public sector. It is much smaller than the supply of graduates of economics, teacher training and education science, laws, social sciences and others. Slow economic growth in the last few years and the increase in the retirement age in Poland, which stopped the process of abandoning jobs by older workers, would not have increased the demand for such workers.

Relatively strong demand is for graduates of engineering and professions related to health care and care for the elderly. On the other hand, graduates of political science, Polish philology and foreign philology are in the worst situation in the labour market. In view of the huge surplus of graduates of these courses, employers, if at all, are going to hire someone from this group, they often set unrealistic requirements for candidates for a job and offer at most the minimum wage.

As a result of mismatch between education of graduates and expectations and needs of employers, many graduates face the necessity to take up employment inconsistent with the level and field of their education. This carries undesirable individual and social costs in the form of a lack of return of financial expenditures incurred on education. In addition, working in positions below qualifications breeds frustration among graduates and is not conducive to high productivity. This leads many young Poles to emigrate (see for example Biela, 2007). It does not solve the problem of the lack of work in their profession, but at least it allows them to earn more than it is possible in the home country.

Another adverse consequence of the surplus of graduates with a higher education diploma in the labour market, is crowding out of people with lower education but sufficient abilities to perform tasks in the given position by people with higher education. However, for the latter, it is a waste of their skills and resources. The result is a high percentage of people with "a surplus of education” among workers in Poland – the ratio rose from 7.5% in 1998 to 19.1% in 2008 (Piróg, 2012, pp. 310-311).

Expectations and earnings of graduates from HEIs

The survey "Campus 2011" conducted on a sample of 6,500 people by Millward Brown SMG/KRC for the pracuj.pl shows that one in three graduates would like to work in the public sector, preferably in the office. A job in the public sector is more stable than in the private sector and it allows to combine better work and private life. These are mainly graduates of humanities (47% of all graduates) and economics (40% of graduates) who look for such a job. People with humanistic education also prefer scientific work and in education (31%), working in human resources management (22%) and in the uniformed services (15%). Graduates of economics, as readily as in the budgetary sphere, would work in the financial sector (40%), marketing (28%) and accounting/audit/taxes (24%). Engineers want to work primarily in positions related to material engineering, construction, modern technologies (38%) and computer science (24%) (H&R & Akademia Grupy Pracuj, 2011).

For graduates from HEIs, an ideal employer is one that offers attractive salary and stable employment. However, it is very difficult to find such employers in the market. In Poland, graduates of engineering programmes earn much more than humanities graduates. Engineers earn on average PLN 6,000-8000 and a salary of humanities graduates rarely exceeds PLN 3,000-4,000 (Wynagrodzenia absolwentów…, 2015; GUS, 2014).

Emigration of educated people from Poland

Graduates from HEIs who cannot find a job or do not accept low wages in Poland are increasingly turning to emigration. According to estimates of the Central Statistical Office, in 2011,414,000 people with higher education, representing 7% of all population with higher education, stayed abroad (GUS, 2013). It is very disturbing that, depending on the host country, from 40% to 80% of Polish immigrants with a higher education diploma work abroad below their level of competence. This means great waste of human capital (Kaczmarczyk &Tyrowicz, 2010, p. 7).

There are many reasons why the Poles with a higher education diploma who work abroad occupy secondary job positions:

- lack of proficiency in the host country language and traveling abroad just after graduation before getting any work experience,
- being educated in the field in which there is no demand for specialists abroad,
- the need for rapid work abroad for economic reasons.

Emigration of young and educated people has a very negative impact on current and future demographic structure and the pay-as-you-go (PAYG) pension system in Poland. Sooner or later, it will lead to the lack of specialists in Poland and deterioration of the competitive position of companies pursuing a strategy of low employment costs.

Actions taken to improve the chances of graduates in the labour market

A method of reducing unemployment among graduates, which is much more beneficial than emigration, is setting up their own businesses. It is the action of people who have a business idea. However, the creation of new firms in Poland is difficult because of high costs of doing business and a lack of experience and initial capital among young people. The state is trying to solve these problems by lending to people who start their own business (loans are a subject to redemption when the new company will remain in the market for one year). Another incentive for young entrepreneurs is a preferential social insurance contribution for the first 2 years (40% of the normal premium).

In order to reduce the mismatch between the directions of education in HEIs and the demand of the national economy for educated people, in the period 2008-2013, the government implemented the ordered courses programme. The ordered courses included fields which are vital for the national economy – mostly engineering professions. Students of these courses received a scholarship in the amount of PLN 1,000 per month, and could participate in paid internship and research projects. In 2014, this program was replaced by the Competency Development Programme.

References

1. Barwińska-Małajowicz, A. (2013). Start zawodowy absolwentów szkół wyższych w Polsce i w Niemczech, CeDeWu.pl, Warszawa.
2. Biela, A. (2007). Czy Polskę stać na emigrację absolwentów polskich szkół? Kontekst społeczno-moralny i ekonomiczny bezrobocia, „Annales. Etyka w życiu gospodarczym” 2007, Vol. 10, Nr 2, Katolicki Uniwersytet Lubelski Jana Pawła II, Lublin.

3. Eurostat (2015). Database, http://ec.europa.eu/eurostat/data/database (11.12.2015).
4. GUS (2013). Migracje zagraniczne ludności - NSP 2011, Warszawa.
5. GUS (2014). Struktura wynagrodzeń według zawodów w październiku 2012 r., Warszawa.
6. GUS (2015a). Szkoły wyższe i ich finanse w 2014 r. (Higher Education Institutions and their Finances in 2014), Warszawa.
7. GUS (2015b). Bank Danych Lokalnych, Retrieved from http://stat.gov.pl/bdl/app/strona.html?p_name=indeks (11.12.2015).
8. H&R & Akademia Grupy Pracuj (2011). Rynek pracy weryfikuje potrzeby młodych ludzi, Retrieved from http://www.hrweb.pl/wp-content/uploads/2011/07/HRweb_Rynek-pracy-weryfikuje-potrzeby-mlodych-ludzi.pdf.
9. Haczekm A., Kłos, A. (2012). Znaczenie postaw przedsiębiorczych przy wyborze kierunku studiów i planowaniu kariery zawodowej studentów ochrony środowiska oraz turystyki i rekreacji Uniwersytetu Pedagogicznego w Krakowie, in: Rola przedsiębiorczości w edukacji, eds. Z. Zioło, T. Rachwał, Uniwersytet Pedagogiczny w Krakowie, Warszawa-Kraków.
10. Jak zwiększyć swoje szanse na rynku pracy? (2013). Retrieved from http://kariera.dlastudenta.pl (23.09-2013).
11. Jelonek M., K., Kasparek, Magierowski, M. (2015). Młodzi na rynku pracy – pracownicy, przedsiębiorcy, bezrobotni, Na podstawie analizy kierunków kształcenia zrealizowanej w 2014 roku w ramach V edycji projektu Bilans Kapitału Ludzkiego, Edukacja a rynek pracy – tom IV, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa.
12. Kaczmarczyk, P., Tyrowicz, J. (2010). Migracje osób z wysokimi kwalifikacjami, Biuletyn FISE nr 4/2010.
13. Piróg, D. (2013). Absolwenci szkół wyższych na runku pracy w warunkach kryzysu. Uniwersytet Pedagogiczny w Krakowie, „Przedsiębiorczość – Edukacja", nr 9, Kraków.
14. The Higher Education Act of 12 September 1990, Journal of Law 1990, No 65, item 385.
15. Wójtowicz, B.& Tracz, M. (2011). Popularność geografii jako kierunku studiów, in: Priorytety badawcze i aplikacyjne geografii polskiej, eds Z. Długosz, T. Rachwał, Uniwersytet Pedagogiczny w Krakowie, Kraków.
16. Wynagrodzenia absolwentów kierunków technicznych i humanistycznych w 2014 roku (2015). Retrieved from http://www.bankier.pl (09.08.2015).

Received: 17 December 2015
Accepted: 11 October 2017

BUSINESS RELATIONSHIPS DIVERSITY IN GEORGIA

Manana Maridashvili
Caucasus International University, Georgia

Davit Meparishvili
Ivane Javakhishvili State University, Georgia

Annotation
Many factors influence human behavior in the field of business - geographic, social, natural, economic, religious, and some others, which is then reflected on some of the traditions and of formation habits. These conditions give rise to life, education, work on certain systems. Business traditions in Georgia have devoloped by influance of natural and historical, political and social factors, which led them to the variation and diversity. In addition, religious and cultural diversity of customs, as well in Georgia contributed to the formation of diversity of business relationships.

Key words: *Business relationships, Business cultures, corporate culture, socio-economic development, type of market behavior.*

Business culture means the business norms, values and knowledge of the system that is expressed in the relationship. Many factors influence human behavior in the field of business - geographic, social, natural, economic, religious, and some others, which is then reflected on some of the traditions and of formation habits. These conditions give rise to life, education, work on certain systems. Any characteristics of the economic behavior of any country represent the outcome of some events and the nation the existence conditions fora long period of time. Business traditions in Georgia have devoloped by influance of natural and historical, political and social factors, which led them to the variation and diversity. In addition, religious and cultural diversity of customs, as well in Georgia contributed to the formation of diversity of business relationships.

For many centuries, have been farming the principles that are the basis of human behavior. They were caused by historical, geographical and climatic factors. in the history of the business culture the conventionally can distinguish the following stages: pre-revolutionary, the USSR and modern periods. The first two were very important, and still reflected in the Georgian style [1].

There is not a strong tradition of enterprenership in the history of Georgia which could promote the development of business traditions. So, new business development started in the 20th century, during the independent Republic (1918-1921 years.) Conditions, but after 70 years the business to be illegal, it was enough time to be lost any ability of entrepreneurship and to be erased Georgian entrepreneurial culture and traditions.

Over the past century, the basis economic management was planned system, which was dissolved during the current Georgian reforms period. Disruption of the USSR led to serious transformation ofmanagerial behavior

Before the state was the owner and cared more about control and restrictions, rather than creativity and motivation. At the end, the Soviet economy was known by it's embezzlement, unnecessary production, agricultural and other negative phenomena disproportions. Thus in Georgia existence of a creative approach did not appreciated so much. in addition, the population had learned the signs, such as lack of initiative, and etc.

Driving on the type of market behavior caused a change in government and forcing people to reconsider its old-fashioned principles. In addition, many negative signs of modern business culture including the low level of business ethics, are the main reasons that Georgia does not comply with the principle of institutional development and slow and rapid changes in the value system. First of all, the socialist system that preached collectivism and the lack of individual values, changed the other, individual initiative and responsibility for the market-based system. But radical changes are not accompanied by adequate development of politics, economy, social sphere, which led to the confusion of values and definitions. It was not clear what is right and wrong, ethical or unethical. This applied to both daily life and business etics[2].

The system switching process, the impact of globalization and the World Trade Organization membership demand from management of a certain concept. Many foreign and local researchers tried to make an analysis of the Georgian business, focusing on the strengths and weaknesses of each of the parameters applied to its historical sources. From analysis of their works we are going to conclude that the any sign of Georgian business can be given an explanation acording the modern historical context. For example, the activity of collective forms of work - the peasant communities in agriculture and manufacturing - contributing to the promotion of collective forms, and etc. There is no standard set of definitions of Georgian business, however very often local and foreign researchers agree that they can be made by drawing parallels between concepts.

Among tne foreign researchers of Georgian business culture, we would ike to separate R. Lewis, who in his study notes that Georgian business culture has a long history, in addition, it was greatly influencedby the communist regime for 70 years. Accordin to recearcher the many qualities of Georgian people, can be explained by historical and geographical factors. Attractive geopolitical situation and the foreign invaders permanent eagerness to take over our territory, provoked insecurity complex, which led to collectivism, and for many years the permanent duplicated expansion led maneuvering skills training and reduction initiative. Focus on the negative qualities of the people, such as jealousy, lack of initiative and ease as a result of historical events and regimes.. On the other hand, some of the characteristics, in our opinion, are exaggerated or relates to the development of the earlier period. Isolation, jealousy or some other feature, no doubt, existed in nature, but not of its basic characteristics.While some certain aspects are exaggerated in overall we agree to Lewis conclusions.

Historically, there are two following approaches in the study of the business cultures: “mythological “ polemic, with free admission, is concentrated in the spirit of recognition and scientific, Ethno-sociological, which is based on the measured events (demographic, work, cultural, political and so on.). Unfortunately, for a long time was dominated the first approach, and it was supported by the fact that in the scientific methodology for a long time there was no comparative principle. Most of the publications describe the mentality of the Georgian economy with the help of qualitative features. Georgian mentality economic study use foreign science research, such as Tromperaansi, Lewis, Hofstede, etc. which often rely on the methodologies of business cultures to describe [3].

It should be emphasized that the Georgian ethno-sociology is now focused on the West (US, Western Europe), and not in the East. If the East oriental tradition (for example, the Japanese Institute of Ethnology) is characterized by prevalence of the theory on practice, the Western tradition has marked applied, instrumental character, seek application to use in pracctice.

Conclusions

Thus, the Business relationships diversity specificities conclusions sources are the following:

- generalized data collected by scientists, who systematize the study of business culture;
- local and international practitioners and researchers observations
- Standard scale of the social survey data.

After discussing Business relationships diversity in Georgia we go to the following conclusions:

- Georgian business relationships has a number of features, which can be explained by the greater part of the country's historical and cultural development;
- Market caused significant changes in the management behavior, at the same time in Georgia low development level of institutional field did not correspond to theprincipal change in the value system , which explains some negative sides of the modern Georgian business culture.
- Manager, which operates in Georgia, have to understand these features and use them to improve the management efficiency.

Business relationships In Georgia is characterized by the following features:

1. **Attitude toward wealth.** Attitude of wealth, money, profit of any society is traditionally considered one of the most evident indicator of business relationships. Striving to accumulation is considered one of the essential postulate of capitalist society to build. If the wealth in the West is traditionally considered as a man's work, his/her work capacity, energy and generations of hard work and being transmitted inheritance, in Georgia, rich people are bilieved as dishonest people, that enriched at the expense of others.Georgian culture is less focused on material benefits, that's why there was not a widespread desire for accumulation, to the rich by any means.
2. **Distance Power,** high rate of daily management practice is seen in a high hierarchy, depending on the particular direction.
3. **The advantages of collectivism on individualism.** Even thinkers of the 19th century suggested that it is typical for Georgian culture aspiration toward collectivism and individualism

in Western cultures are profoundly different from the individualism in Georgia.

4. **The high level of uncertainty avoidance.** Georgia is characterized as a country with a high level of uncertainty avoidance, which means that people are worried about their future, to give preference to structured operations, it is important to set rules and regulations. According to GLOBE project in Georgia, uncertainty avoidance index is up 77 points.

5. **Business culture of femininity**. It is believed that masculine cultures manageres are determined to achieve the goal, are ready for a tough competition, run the business aggressively. Georgian business culture is very much a “feminine “, or is expected to focus on whether the achievement of ”life” work, but also to fulfill the task to work on “Living". Feminine cultures are assessed for their constant attention to their staff, good relationships, competition reluctance to support the weak.

6. **Polyactive cultures typical attitude towards the time.** Georgia belongs to number of Polyactive cultures countries which are characterized by multiple work when changing previously established schedules and the intensity of the work is uneven

7. **The contradictions and aspirations towards the extremes.** Duality, sometimes contradictions of Georgian business culture is one distinct characteristic.

References

1. *Deresky, H.* (2002). *Global Management: strategic and interpersonal*. Upper-Saddle River (New Jersey): Prentice Hall.

2. *Hofstede, G.* (1984). *Culture’s consequences*. London: Sage Publications, Inc.

3. *Hori, Sh. (2013).* Fixingjapans white-collar economy: A personal view. *Harvard business review*. Nov.-Dec.

4. Maridashvili M., Meparishvili, D. (2016). Innovation Management Model’s Applications in Georgia. *American Science Review*. 4 (4), p.50-53. Retrieved from http://american-science.com/en/archive/.

5. Maridashvili, M. (2015). The influence of Motivation on Georgian Management Styles. *Scientific Anthology "Global world"*. Volume I (I), pp. 58-62. Retrieved from http://www.igsu.oa.edu.ua/index.php/almanakh-hlobalnyi-svit.

Received: 12 April 2017
Accepted: 11 October 2017

ASPECTS OF THE SUSTAINABLE DEVELOPMENT INDICATORS SYSTEM FORMATION

Nataliia Tymoshyk
Ternopil Ivan Puluj National Technical University, Ukraine

Yevheniia Semchyshyn
Technical College of Ternopil Ivan Puluj National Technical University, Ukraine

Annotation

In the article there are used indices and indicators based on key components of sustainable development – environmental, economic and social. There was made comparison of the competitiveness of Ukraine in the global system. The basic directions of transition of Ukraine to sustainable development were marked.

Key words: *indices, indicators, sustainable development, competitiveness.*

Introduction

Sustainable development of Ukraine is possible only by overcoming certain contradictions between the rational use of natural resources, level of economic growth and improving living standards of population. This requires the use of appropriate indicators and indices, their comprehensive evaluation and further improvement and reasoning.

Research actuality and investigation goal

The study of sustainable development concept was performed at the scientific studies of Bryzhan I.A., Verbitska I.I., Grinevska S.M., Ishchenko O.V., Marynenko V.O., Morozyuk N.V., Smachylo I.I. and other foreign and national authors. In particular, Bryzhan I.A. (2013) analyzes the legal and regulatory aspects of environmental safety. Verbitska I.I. (2013) pays her attention to the balanced, sustainable development of agro-ecosystems. Ishchenko O.V. (2014) focuses on environmental safety in Ukraine, conducts a complete analysis and examines trends of public policy on rating improvement. Smachylo I.I. (2012) covers issues of economic governance, its importance and place in the structure of the sustainable economy development. Grinevska S.M. (2015), and Marynenko V.O. (2014) examine the cause of the irrational result in the methodology by which ecological problems were trying to be solved during the certain period within the limits of rational use of the resources, while economic and social factors remained unaddressed.

The result of the research was reasoning the methodology of sustainable development management, development of appropriate mathematical tools, and determination of socio-economic context of administrative activity under the current globalization conditions.

However, the problem of adapting the concept of sustainable development to the practical needs in the public administration process was left unaddressed.

For this purpose it is necessary to systematize the theoretical base of indicators and indices of the balanced growth, analyse the prerequisites for sustainable development in Ukraine, and make comparative characteristics of sustainable development in other countries.

Research techniques

Sustainable one is development that meets needs of present generation without compromising the future one.

Sustainable development can be described as one in which a person does not cause too much damage with his actions to the natural systems and they regenerate themselves. In other words, it is a development that is not only supported, but also one that supports.

Sustainable development contains the following main aspects:

- environmental – preserving the environment;
- economical – development of high-tech production and productive forces;
- social – constant quality improvement of peoples' life, levelling-off, improvement of social conditions.

This perception of sustainable development is capable to ensure its understanding by all nations. However, it is expedient to note that in this relationship environmental component is the key element. Without quality provision of the environment for human habitation all others are meaningless.

Because of the negative aspects of human activities the nature suffers a lot; it becomes dependent on human and cannot exist without it. That is, at present, not only a person depends on nature and its resources, but also the nature mostly depends on the person. Such an environmental aspect is paramount for sustainable development, but not the only one.

It should be noted that the current relationship between human and nature have a certain feature. Direct human contact with the natural environment may be replaced by indirect one. Clothing, dwelling, food, air (wet, purified), drinking water are used by a person through appropriate intermediaries. Such order of contact with the natural environment helps to solve environmental problems. However, they seemed to be removed little, their acuity is reduced and visual impression of a person safety is formed that complicates the situation.

Another dangerous side of “indirect” contacts between human and nature is that the person becomes stronger than nature. Modern technologies, equipment provide some advantages. The biggest problems occur when modern human did not calculate the negative effects in sufficient level and takes wrong decisions (reclamation, deforestation and construction of homes in the mountains, use of pesticides). This can lead to various types of environmental disasters.

To avoid them energy potential, which is used by a human, and the feasibility of information should be coordinated.

When implementing the concept of sustainable development, a significant problem is determination of the measuring system with the purpose of qualitative and quantitative evaluation of this rather complex process. Here, the main requirements are information completeness and its accuracy. Formation of sustainable development indicators is difficult, complex and quite costly procedure. A large number of indicators, included in this system, causes difficulties to use them not only in Ukraine due to lack of necessary statistical data.

The sustainable development indicator is a quantitative indicator that is able to reflect environmental, social and economic development in a particular region or country and includes characteristics such as sensitivity to changes, ease of interpretation, quantitative certainty and allows time to make forecasts and notice trends in time. Control on achievement of sustainable development, management of the process, decision-making, evaluating the effectiveness of the means use, motivate to develop appropriate criteria and indicators, i.e. sustainable development indicators.

Thus, the main goal of a comprehensive indicators system development is monitoring of the sustainable development of society.

The international community has developed and implemented several options to assess indicators of sustainable development, namely:

1. A System for Integrated Environmental and Economic Accounting (SEEA), which main objective is taking into account environmental factors in state statistics. The system describes the relationship between the state economy and the environment (interdependence is expressed by the UN through the adopted system of respective national accounts, in which environmental factors and natural resources are taken into account). Currently, there are methodological obstacles in SEEA usage, complexity of calculating environmental data in monetary equivalent, lack of information.

2. As a more effective indicator of sustainable development there can be used an indicator of “genuine savings”, which was suggested by the World Bank. This indicator shows the gross domestic savings and contains more specific accounting of consumed natural resources. The content is simple: the prolonged low rates of genuine savings characterize an unstable type of development and ultimately will lead to a deterioration of living standards.

3. Human Development Index (HDI) helps to evaluate the average achievements level of the country by three trends regarding human development:

- longevity, which provides healthy lifestyle and is determined by the degree of life length expectancy of human at birth;
- knowledge, defined by measure of literacy of the whole adult population and gross combined ratio, which was received by primary, secondary and higher educational establishments;
- adequate standard of living, which is measured by gross domestic product per person of the state according to purchasing power parity (PPP) in US dollars.

Such composite index of human potential contributes to the conformity assessment of the current situation and is the benchmark, expressed by certain values of indicators of human development and changes over time.

4. In the world there are active attempts to define the integrated aggregate indices, which are primarily based on environmental indicators and are closely related to the conservation of biodiversity. High biodiversity causes stability and productivity of ecosystems. Different types, penetrating into certain ecological niches, lead to a more complete and efficient use of resources. Fuller use of natural resources is able to counteract biological invasion. Competition for natural resources between different types helps to achieve their more effective use.

This includes aggregated index of “living planet” (LPI) (Living Planet Index), which is used to evaluate the ecosystems of our planet and is calculated within the report of the World Wild Fund each year.

With Living Planet Index there is measured the natural state of forests, marine and aquatic ecosystems and the following indicators are defined as the average value: number of animals in the forests, marine and aquatic ecosystems, where each one reflects changes during the certain period of time.

5. An indicator “The Ecological Footprint” (EF) reflects pressure on the nature and measures extent of consumption of food and supplies by the population in terms of productive land area and sea areas. These areas are needed to produce these resources and to absorb waste. Energy consumption measuring is performed in equivalents of the area, which is necessary to limit CO2 emissions. Use of the EU method helps to compare the actual pressure on the nature by society and the level of available natural reserves. Scientists have calculated that today the actual pressure of the population of the whole planet is 30% larger than its potential opportunities [].

6. Scientists from Columbia and Yale Universities have offered environmental sustainability index (2005 Environmental Sustainability Index). The index is determined by 22 indicators. Each indicator is defined with average value of 2-5 variables of 67 total.

The authors believe that the index allows to:

- conduct performance of environmental policy evaluation results;
- compare the countries by the degree of environmental sustainability;
- provide information about the best results;
- correlate economic growth and nature protection level;
- promptly identify countries with high environmental risk.

7. An indicator “health of population” describes the spread of diseases, caused by ecology. The most expressed is the dependence between the environment, intestinal infections and respiratory diseases. Respiratory diseases affect mostly children, therefore there is provided an indicator of infant mortality, defining mortality according to the standard classifications of diseases on 100 thousand children of 0-14 years old. It should be noted that the mortality rate from various intestinal infections is calculated for the whole population.

8. Using the Genuine Progress Indicators and Index of Sustainable Economic Welfare there is established an adequate measure of the level of economic welfare, improved gross domestic product index on the basis of the external effects (Genuine Progress Indicator).

The aim of the Genuine Progress Indicator is to display those aspects of the economy that is beyond monetary processes. In particular, there was made an attempt to set the value of those functions that contribute to the economy development, but remain outside the monetary flow. Price is formed on costs in case of such function loss. However, quite subjective and controversial is aggregation of relevant functions into a single index.

Determination of international ranking is quite a convenient instrument for establishing the place of any state in the world system. The most important issue is the rating status for the new independent countries, including Ukraine. By assessing the competitiveness of Ukrainian economy there is applied methodology, which is designed to determine the Global Competitiveness Index (GCI).

This index contains 12 constituents of competitiveness, namely infrastructure, institutional environment, health and primary education, macroeconomic stability, higher education and training, level of the financial markets development, labour market efficiency, goods market efficiency, market size, technological readiness, innovations, complexity of business processes.

In order to calculate the GCI there are used statistical data, which are available to everyone, and the results of surveys and questionnaires of business leaders in the country.

Research results and recommendations

According to a study, recently published by the World Economic Forum (WEF), in 2015 Ukraine by the GCI took the 79th place out of 140 countries and lost three more positions during a year (in the previous ranking it took the 76th place) (Figure 1) .

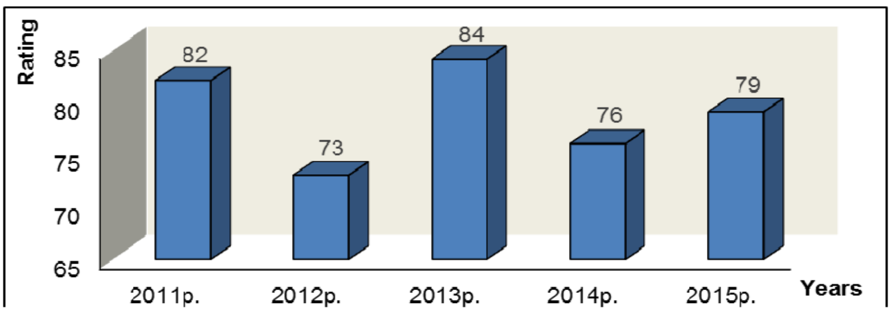


Fig.1. Dynamics of Ukraine’s rating on the GCI in 2011-2015

This situation is explained by the complex social and economic processes of development and imperfect market mechanisms in all fields of national economy.

Based on the research it is advisable to outline the main directions of Ukraine's transition to sustainable development, namely:

- to match the legislative base;
- to strengthen the governance system at the regional level to implement decisions on sustainable development;
- to improve the monitoring system of sustainable development with scientific researches;
- to support innovation and high-tech sectors of economics;
- to ensure efficient production, focused on social needs;
- to carry out reforms in labour relations to resolve the issues of unemployment;
- to improve the level of social infrastructure: public health, culture and education;
- to ensure the functioning of the national economy in terms of greening, ensuring environmental protection;
- to access on global international cooperation.

In addition to the mentioned directions of sustainable development it is necessary to have good governance, public support and corruption liquidation.

Conclusions

Analysis of the indicators of sustainable development of Ukraine reveals the negative trends in key dimensions: ecological, economic and social. This situation leads to the necessity of development of new programs to overcome development challenges. In the process of sustainable development goals, objectives and indicators relevant for the future one must take into account global targets, principles of development, as well as public opinion. Especially, it is necessary to focus on intensification of work within the global partnership for economic growth.

References

1. Crouhy, M., Galai D., Mark R. (2012). *Risk Management*. New York: McGraw-Hill.
2. Dale, A., Newman, L. (2010). Social capital: a necessary and sufficient condition for sustainable community development? *Community Development Journal* Vol. 45, No 1. Oxford: Oxford University Press.
3. Arndt, Y. W. (1984). Economic Dewelopment: a semantic history. *Economic Dewelopment and Cultural Change*. Vol.29, No 3, pp. 457-466.
4. *Аналіз сталого розвитку регіонів України*. Світовий центр даних з геоінформатики та сталого розвитку. Retrieved from: http://wdc.org.ua/uk/services.
5. Брижань, І. А. (2013). Умови та чинники переходу України до моделі сталого розвитку. *Вісник Полтавської державної аграрної академії* 1, p. 128-133.
6. Вербіцька, І. І. (2013). Ризик-менеджмент як сучасна система управління ризиками підприємницьких структур. *Сталий розвиток економіки* 5, p. 282-291.
7. Гріневська, С. М. (2015). Перспективи сталого розвитку регіону. *Економіка промисловості* 4, p. 288 – 296.
8. Іщенко, О. В. (2014). Особливості країн-лідерів рейтингів сталого розвитку. *Вісник економічної науки України* 2, p. 27 – 31.
9. Мариненко, В. О. (2014). Вплив природних ресурсів України на сталий розвиток. *Науковий вісник Академії муніципального управління*. Серія: Управління. 3, p. 101-108.
10. Смачило, І. І. (2012). Методи управління сталим розвитком підприємства. *Економіка розвитку* 2, p. 115-120.

Received: 12 April 2017
Accepted: 11 October 2017

ISSN 2424-5321

PROFESSIONAL STUDIES:
Theory and Practice

2017 / 3 (18)

Proofreading is the sole responsibility of the author

Issued by Šiauliai State College
Aušros av. 40, LT-76241 Šiauliai, Lithuania
www.svako.lt
E-mail mokslas@svako.lt