

# Policies, Legislation and Regulatory Compliance Governance Impact on Strategic Management of Higher Education and Research Institutions in Latvia

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## ABSTRACT

Higher education and research institutions (HERI) are facing new challenges due to substantial changes in the business environment, as well as increasing regulatory impact by local and European Union (EU) legislation. Accordingly, strategic management process is becoming more complex. Regulatory compliance governance (RCG) as a holistic element of strategic management function is a relatively new phenomenon. It is even less discussed in research area of higher education and research management. The aim of the study and paper is to reveal how RCG functions are managed in HERI in Latvia and evaluate the role of RCG in strategic management of these institutions.

The research is developed by applying the triangulation method. The theoretical background is formed on state of the art literature review. The authors perform field research on the impact of local and EU legislation, as well as higher education institutions strategic management paying particular attention to one part of it - regulatory compliance management.

The results of research exposed the tools and extent to which local and EU legislation impacts HEI in Latvia. Further research can be performed to synthesize the most successful strategic management models that involve dedicated RCG resource on strategic decision level and strengthen competitive capabilities of HERI.

**Keywords:** Regulatory Compliance Governance; Higher Education and Research Institutions; Strategic Management.

## 1. INTRODUCTION

The nature and spectrum of regulatory compliance is getting broader due to impact of globalization and to expanding compliance expectations. It influences the content and structure of strategic management. Regulatory compliance governance (thereafter - RCG) is becoming a new emerging discipline that copes with the challenges of organizations to follow all the rapid changes of regulatory requirements.

Nowadays in European Union (thereafter - EU) RCG often is understood as a tool for companies which are operating in heavily regulated sectors. Higher education and research institutions (thereafter - HERI) management is facing new challenges due to substantial changes in the business environment, as well as increasing regulatory impact on the industry. Accordingly, strategic management process is becoming more complex. Nowadays proactive strategy toward regulatory compliance becomes a part of strategic management in almost all industries, higher education and science included. This research is investigating the tools and extent to which local and EU legislation impact higher education and research institutions and whether HERI use RCG as a tool to deal with this impact on strategic decision-making level.

RCG as an academic area is mostly addressed in information technology research. This research approaches RCG from the organization's management perspective by focusing on higher education and research institutions and strategic planning. Authors have performed field research that reveals two findings – (1) the impact of national and EU legislation on Latvian HERI and (2) the extent to which management applies RCG in the strategic management of higher education and research institutions to deal with the growing complexity of all kinds of regulations. Higher education and research institutions recognize the vast resources needed to successfully integrate various legislative requirements and the growing impact of RCG on their further development. Further research can be performed to reveal the role of corporate governance and synthesize the most successful strategic management models that strengthen competitive capabilities.

The research is mainly based on data acquired from higher education and research institutions in Latvia; mostly on data acquired within the research project “EU policies impact to the transformations of the higher education and research system in Norway and Latvia” and has received funding from Norway Grants Programme 2009-2014 in accordance with the agreement No NFI/R/2014/006. It pays attention to the impact of EU policies on HERI in Latvia and the way in which RCG deals with these challenges.

Several research methods, such as state of the art literature review, structured interviews and systematic content analysis, are applied in this research.

## 2. REGULATORY COMPLIANCE MANAGEMENT

Regulatory compliance management is used to ensure that organization adheres to laws, regulations, guidelines and specifications relevant to the industry where it is operating [28], [34]. The nature and spectrum of regulatory compliance is getting broader due to impact of globalization and to expanding compliance expectations. Regulatory compliance management is becoming a new emerging discipline that copes with the challenges of companies to follow all the rapid changes of regulatory requirements. RCG is mostly addressed in information technology research. This research looks at RCG from company management perspective, as a part of an organization's strategic planning. Nowadays in European Union RCG often is understood as a tool for companies that are operating in heavily regulated sectors like financial services. So proactive strategy toward regulatory compliance is becoming a part of strategic planning in almost all industries [9], [39].

The total market value for RCG expenses is increasing year by year. Scientific literature mentions 32 billion US dollars in 2008 [14] and it is continuing to increase. Many companies, especially in the US, analysing costs of RCG and losses caused by lack of RCG in a company admit that there are not only substantial financial losses but also high risks of a damaged reputation, decreased shareholder value and severe fines [1]. “The

extrapolated average cost of compliance for 46 organizations is more than \$3.5 million, with a range of \$446,000 to over \$16 million. The extrapolated average cost of non-compliance for 46 organizations is nearly \$9.4 million, with a range of \$1.4 million to nearly \$28 million” [29]. “78% of CEOs around the world view increasing regulation as the top threat to business growth” [31]. “Almost a third of global executive respondents say that they spend more than 6% of their organization’s annual revenues on governance, risk and compliance activities” [19], [31]. Studies show that there is a recent tendency to move from reactive actions towards proactive, integrated, collaborative attitude in regulatory compliance. This is reasoned by understanding that reactive and fragmented solutions cost ten times more than rising regulatory compliance management to strategic level [2].

There is a high complexity to interpret the legal knowledge and integrate it in the business processes [5]. Ambiguity, complex traceability, overlapping functions and conflicting requirements are the reasons for looking at the regulatory compliance from a wider perspective [6], [28]. Organizations must develop “beyond the law” thinking to be able to integrate the long term issues with industry needs [12] since even in the absence of laws society expects that companies will act within the ambit of informal agreements and their social responsibilities thus RCG involves also dealing with ethical issues [3]. The tendency has shifted from hiring more and more lawyers and high investment in lobbying towards collaboration of all industry stakeholders in search of optimal solutions to global challenges [4]. RCG involves extensive technical knowledge as well as detailed database of compliance requirements that are coordinated across all organizational levels to avoid duplication of planning, reporting and misleading priorities [13]. Thus it is not anymore the level of lawyers, risk and quality managers who lack a holistic view but a position at the strategic level whose tasks are to integrate risk management, ethics, company values at the stage of decision making and organizational culture within regulatory compliance management [3], [19]. The culture of compliance includes “cooperative attitudes, providing information in a timely manner, availability of senior management, access to memos of employees, internal communication from senior management, consistent disciplinary action, compliance department funding” [26].

The title of Chief Compliance Officer (thereafter CCO) has become widespread, particularly if we talk about huge multinational companies [35]. The CCO implements RCG in the company, framing company culture, serving the Board needs in order to make the proper complicated strategic development decisions like mergers and acquisitions, launching a new complex product, entering foreign markets and similar [7].

Role of RCG in strategic management of HERI growing. The labour market as the consumer of the products of the education system demands a certain level and quality of learning outcomes as well as recognition of qualifications across borders which is important not just in the common European space, but across the globe. This brings quality, conformity with labour market as well as need for common or comparable standards and international recognition of education to the forefront of education systems [22].

### 3. STRATEGIC MANAGEMENT IN HERI

Nowadays the necessity of strategic management within organizations is indisputable. Universities follow the trend and implement strategic management as a means of setting, communicating and implementing long-term strategic aims. Hill & Jones define strategy as “a set of related actions that managers take to increase their company’s performance. For most, if not

all, companies, achieving superior performance relative to rivals is the ultimate challenge [15]”. The same authors write that strategic management is “about how to most effectively manage a company’s strategy making process to create competitive advantage”. Needle stresses the necessity to set certain aims and defines strategy as “a set of objectives and methods of achieving those objectives. A strategy is usually formulated by top management and is based on a mixture of careful analysis of the environment and the organization, the personal preferences of the managers involved, and a process of negotiation with various other stakeholders” [27]. Porter supports broad and long-term scope of strategy by stating that “the root of the problem is the failure to distinguish between operational effectiveness and strategy [30]”. Mintzberg’s theory describes ten schools (design, planning, positioning, entrepreneurial, cognitive, learning, power, cultural, environmental and configurational) [25], whereas Whittington categorizes four types of strategies – processual, systemic, classical or evolutionary thinking [41]. These are only a few examples of ways to define and formulate strategy.

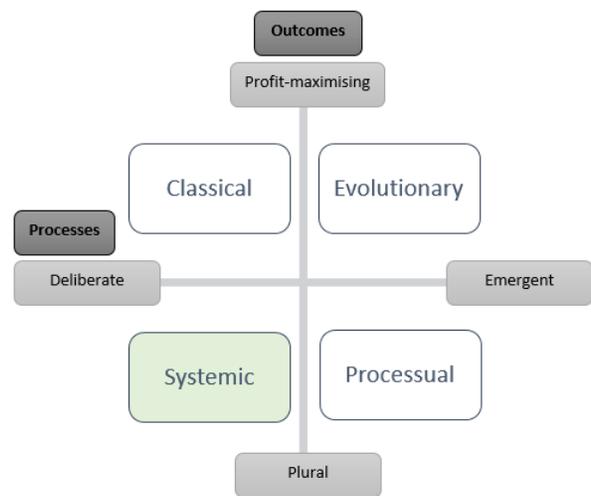


Figure 1. Whittington theory. Four types of strategies [41]

This research is based on Whittington’s theory and understanding of strategy and strategic management. Whittington emphasises the human element of strategy: “The term strategic management underlines the importance of managers with regard to strategy. Strategies do not happen just by themselves. Strategy involves people, especially the managers who decide and implement strategy.” [41] Universities are following the systemic approach of strategy definition (Figure 1. Whittington theory. Four types of strategies). According to Whittington’s theory, a systemic approach is applied when the organization’s strategy defines plural outcomes (not only profit) and the process of strategy definition and implementation is deliberate – the organization performs rational planning and takes into account the environment and context surrounding the organization. Managerial competencies required to successfully lead a company differ in various market conditions, alongside the more global economic changes, each company is also passing through its own lifecycle not bound to economic cycles, thus adding extra complexity [20]. In a modern organization, its managerial approaches and investment facilities are changing along with the growing importance of intellectual capital and the changes of its components, thereby changing the managerial approaches and focusing on value creation [23]. Company performance depends on the integration ratio between strategy and business model

[36]. The systemic approach believes that strategy reflects the particular social systems in which strategists participate, defining for them the interests in which they act and the rules by which they can survive [41].

For state universities profit as outcome is rarely expected. Basic outcomes in most of the strategies are high quality study process and excellence in research, technical universities add on sustainable innovation and commercialization [9], [16], [18], [32], [33], [36], [38], [40]. Strategy development in HERI is highly dependent on the surrounding context most commonly defined by triple helix concept that describes university relationship with industry and government in order to create “new knowledge, innovation and economic development” [20]. Excellent organisations achieve and sustain outstanding levels of performance that meet or exceed the expectations of all their stakeholders [21]. During strategy development process, universities involve internal and external stakeholders such as employees and advisory councils (internal) and Ministry of Education and Science, and companies that represent biggest cooperation partners (external). Such approach reflects wide scope of interests and helps to shape main goals that support strategic direction of the environment [42], [43]. Consequently, HERI already apply systemic strategy development principles that involve quite wide scope of outcomes, careful study of environment, and involvement of internal and external parties in setting up the scope of the strategy. RCG is compatible with such strategic management style as a discipline dealing with one of environmental aspects affecting HERI activities in a short and long-term context.

#### 4. RESULTS OF THE RESEARCH

In order to discover the extent of the impact of legislation and RCG practice within the strategic management process of higher education institutions in Latvia, structured interviews were carried out. Top managers of three major HERI in Latvia: Riga Technical University (RTU), University of Latvia (LU) and Riga Stradins University (RSU) were interviewed. These three universities are the largest state funded universities in Latvia by number of students. In addition, these are strong research and science institutions. According to reports, in 2015 RTU had 14797 students, LU – 13600, RSU – 7774 [16]. Riga Technical University is the oldest university in Latvia, founded in 1862, and since founding it represents mainly STEM (Science, Technical, Engineering and Mathematics) disciplines. University of Latvia, founded in 1919, represents mostly humanitarian and natural sciences although has strong departments dealing with exact sciences and medicine. Riga Stradins University was founded as a medicine institute in 1950 and carries on strong traditions of medical education, also adding other subjects to their curriculum. The total number of respondents interviewed is 13, involving all vice-rectors (science, study and finance) of RTU, directors of marketing and legal departments, development director, rector (*Rector in Latvia is elected head of the university. Same position as president (US), chancellor (UK)*) of LU and all vice-rectors (science, study and finance) of LU and two vice-rectors (study and development) of RSU and the legal department director of RSU. The chosen sample of respondents strongly represents the most important management positions in the three largest universities, all of them involved in strategy development. Legal department directors represent the know-how of university legal compliance management. Development directors, or vice-rector as in RSU case, are responsible for strategy development, updates and implementation within universities.

The survey contained 12 main questions and consisted of three parts, the first of which (1) included questions about

understanding of RCG as a discipline and made further inquiries about the impact of RCG on the strategic management of the universities. The second part (2) of the survey examined the impact of particular EU regulations on the strategic management of studies and scientific research of the universities and the final part (3) of the questionnaire investigated the place of RCG functions in the universities and impact on managerial functions.

#### (1) Role of RCG in strategic management of HERI

During the interviews it was found out that, none of the institutions had implemented the RCG function and a separate CCO position. Even more, 93% of respondents were not familiar with the concept of RCG. Financial vice-rectors knew RCG terminology and it can be explained by the fact that RCG is a discipline in finance management, banks in Latvia being one of the few organizations that have a CCO position. One of the respondents was not familiar with the RCG terminology, but already before the interview had decided to introduce a position that precisely corresponds to the duties of CCO. Nevertheless, after agreeing on terminology, most of the interviewees agreed that RCG is a substantial part of HERI strategic management. Only 7% of respondents indicated RCG as not applicable in strategic decisions and 21% indicated the impact as minimal (see Figure 2 Role of RCG in HERI strategic decisions).

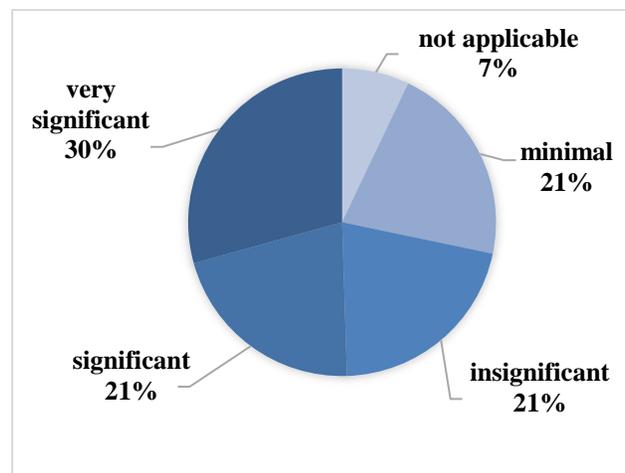


Figure 2. Role of RCG in HERI strategic decisions [created by authors]

Views on who is responsible now for RCG management in HERI divided equally. Half of respondents believe that it is performed in a decentralized manner by the top management of the universities, mainly by administrative or development directors. The other half assigned all the responsibility of RCG management on the rector of the university.

43% of respondents indicate that the biggest state universities go further in RCG - they play a significant role in shaping the future of legislation by suggesting the recommendations that reflect the future needs and opportunities of HERI in local and global contexts.

#### (2) Impact of EU policies and legislation on HERI

The second part of interviews ascertained the impact of EU legislation on HERI. The first response of respondents, before heading through further questions regarding particular impact of EU legislation, was a statement that universities are fairly autonomous.

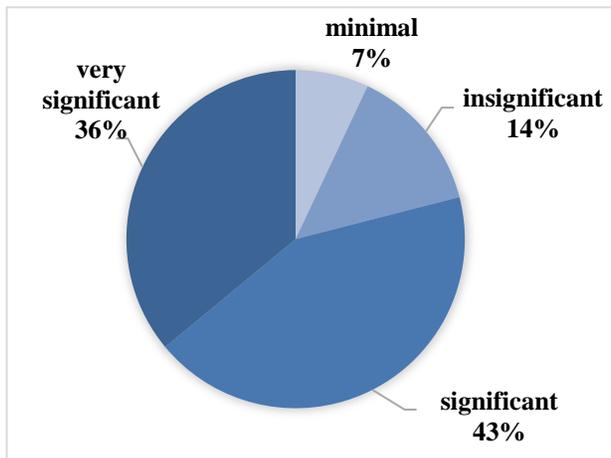


Figure 3. Impact of EU legislation on HERI

All the EU initiatives are recommendations, not laws. Only local government can decide whether to follow these recommendations and integrate them in local legislation. After completing the second part of the questionnaire many respondents had to admit that EU impact is significant and often indirectly influences HERI by financing or rating conditions and requirements (see Figure 3. Impact of EU legislation on HERI). Further questions examined the impact of particular EU policies, recommendations and activities separately on research and study processes. Interviews examined the impact of Europe 2020 and Bologna process recommendations on Latvian HERI. Although they are not compulsory, most respondents scored the impact as significant because of the necessity to operate in a global context. Respondents were asked to indicate the level of impact of particular EU policies on HERI research activities and strategic planning. The following table shows the number of respondents estimating the level of impact corresponding to a particular EU activity, e.g. five respondents assert that Horizon 2020 has a significant impact and five respondents assert that it has a very significant impact on HERI research (see Table 1. Impact of EU policies on research in HERI).

Table 1. Impact of EU policies on research in HERI

Impact level*	0	1	2	3	4
<b>EU policy/activity</b>					
<b>Bologna Process</b>	2	3	1	2	
<b>Lisbon Strategy &amp; Europe 2020</b>	1		2	4	
<b>Horizon 2020</b>				5	5
*Impact level: 0 – not applicable, 1 – minimal, 2 – insignificant, 3 – significant, 4 – very significant					

Respondents were also asked to indicate the level of impact of particular EU policies on HERI study activities and strategic planning. The following table shows the number of respondents estimating the level of impact corresponding to a particular EU activity. E.g. one respondent asserts that Erasmus+ has an insignificant impact, four indicate that it has a significant impact and five respondents assert that it has a very significant impact on HERI study process (see Table 2 Impact of EU policies on study process in HERI).

Research more than study process is indirectly impacted by EU policies since there EU project financing plays an important role and financing regulations impact HERI who want to take active part in EU funded research projects. They also influence future research directions by setting the priority sectors for financing.

Table 2. Impact of EU policies on study process in HERI

Impact level*	0	1	2	3	4
<b>EU policy/activity</b>					
<b>Lisbon Strategy &amp; Europe 2020</b>	1		3	5	2
<b>Bologna Process</b>				3	
<i>BOLOGNA INSTRUMENTS: the single Union framework for the transparency of qualifications and competences (Europass)</i>			2	6	4
<i>the European Qualifications Framework (EQF)</i>	2		2	3	3
<i>the European Credit Transfer and Accumulation System (ECTS)</i>				3	8
<i>the European Credit System for Vocational Education and Training (ECVET)</i>	1	5	2	3	
<i>the European Quality Assurance Reference Framework for Vocational Education and Training (EQAVET)</i>	3	5	1	2	
<i>the European Quality Assurance Register for Higher Education (EQAR) and the European Association for Quality Assurance in Higher Education (ENQA)</i>	1	2		7	2
<i>the provision of support to Union-wide networks and European non-governmental organisations (NGOs) active in the field of education and training</i>	1	2	3	2	
<b>Erasmus+</b>			1	4	4
*Impact level: 0 – not applicable, 1 – minimal, 2 – insignificant, 3 – significant, 4 – very significant					

Another indirect factor influencing HERI is international rankings. Although all of them are voluntary, universities take it as a must to follow the most recent trends and to participate in the international rankings. It is explicable by fall of demographic indicators for the population applicable for studies [8] and also by living and working conditions in Latvia that are lower than in other EU countries [11]. The latter motivates young people to emigrate and search for study opportunities in other EU countries. In this context HERI are competing for students in the international market and rankings are an important parameter in this competition.

### (3) Impact of local and international policies and legislation on HERI

Respondents were asked to indicate the level of impact of local and international policies in general on particular HERI management functions. The following table shows the number of respondents estimating the level of impact corresponding to a particular management function (see Table 3. Impact of local and international legislation on HERI).

Table 3. Impact of local and international legislation on HERI

Impact level* / Management function	Latvian legislation				International legislation			
	0	1	2	3	0	1	2	3
General Management, Corporate Governance			1	10	1	5	3	4
Financial Management			3	8	1	2	4	5
Accountancy, Financial Reporting				11	2		4	7
Quality Management, Internal Audit		3	4	3	1	3	2	4
External Audit		2	1	7	1	2	4	4
Risk Management	2	4	4		4	6	1	
Legal Management		1	1	8	1	1	6	3
HRM		1		9	1	4	4	2
Operational and Labour Safety	1	1	2	7	3	5	2	2
IT & Cyber Security		3		7	2	1	3	4
CSR, Ethics (anti-bribery, anti-corruption)		3	2	6		3	4	4
Intellectual Property Management		2	3	5		1	4	6
Marketing	3	5	2	1	6	2	3	

\*Impact level: 0 – not applicable, 1 – small, 2 – moderate, 3 – high

According to the respondents, local legislation has higher impact on management functions than international regulations.

Department directors' functions are more affected by local legislation in specific functional matters corresponding to their particular specialization. Interviews revealed that the most regulated functions by local legislation in HERI are general management and corporate governance, financial management and accountancy. A high level of impact is observed in legal management, human resource management and labour safety. Quality and risk management, internal and external audit, intellectual property management, ethics and IT security functions are moderately impacted by local legislation. The least regulated functions are risk management and marketing and communications.

The respondents indicate that international legislation mostly influences accounting and financial reporting as well as intellectual property management whereas the least regulated functions here are risk management, operational and labour safety and marketing.

### 5. CONCLUSIONS AND DISCUSSION

The research revealed the main gap in understanding the impact of RCG on university management. Universities are fairly autonomous and at first sight there is little regulation, especially by EU since there are no EU laws that directly apply to HERI, all the above-mentioned EU regulations are given as

recommendations. Local governments may convert these recommendations into binding regulations for the universities but that does not happen often. However, administrative and support functions in state owned HERI are quite heavily regulated by local legislation, it mainly refers to financial management, procurement procedures and program accreditation.

Most of the universities are highly dependent on EU funding. In order to be able to get access to EU projects, they must comply with EU recommendations that are often integrated within the conditions of EU financing. Thus, financial tools quite heavily indirectly regulate strategic management of universities often. Another instrument that reflects EU recommendations are different kinds of HERI ratings. Conformity to the requirements or regulations of the ratings is a free choice for universities, but in the times when a poor demographic situation sets a severe struggle for each potential student and researcher, especially for international ones, conformity to the ratings is necessary. That makes RCG function an important part of HERI strategic planning since it involves more than local legislation or even EU regulations. Although none of the surveyed HERI has implemented a separate chief compliance officer's position, the highest level management, e.g. development manager, accomplishes the same functions. The biggest state universities go further in RCG - they play a significant role by shaping the future of legislation – suggesting the recommendations that reflect the future needs and opportunities of HERI in global context.

RCG will play a more and more important role as the industry is facing increasing regulation at the national as well as international levels. The findings of this research can be applied in strategic management process of higher education and research institutions.

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### 7. REFERENCES

- [1] N. S. Abdullah, S. Sadiq, M. Indulska, "Emerging Challenges in Information Systems Research for Regulatory Compliance Management", **22nd International Conference on Advanced Information Systems Engineering**, Scopus, Tunisia, Mammemet, 2010, pp. 251-265.
- [2] J. Bace, C. Rozwell, J. Feiman, B. Kirwin, **Understanding the Costs of Compliance**, Gartner, Inc., 2006.
- [3] S.C. Beardsley, D. Bugrov, L. Enriquezm, **The role of regulation in strategy**, McKinsey's quarterly, 2007.
- [4] S.C. Beardsley, L. Enriquez, R. Nuttall, **Managing regulation in a new era**, McKinsey Quarterly, 2009, pp. 90-97.
- [5] G. Boella, M. Janssen, J. Hulstijn, L. Humphreys, L. Van Der Torre, "Managing legal interpretation in regulatory compliance", **International Conference on Artificial Intelligence and Law**, Proceedings, Rome, 2013, pp. 23-32.
- [6] R. Bonazzi, Y. Pigneur, "Compliance Management in Multi-actor Contexts", **2nd International Workshop on Governance, Risk and Compliance**, Amsterdam, Netherlands, 2009.

- [7] Career Resources, **American College of Healthcare Executives**, 2016, <http://www.ache.org/newclub/career/comploff.cfm> [electronic source]
- [8] **Central Statistical Bureau of Latvia**, Population and social processes, 2016, <http://www.csb.gov.lv/en/statistikas-temas/metodologija/number-population-and-key-demographic-indicators-36808.html> [electronic source]
- [9] M. Dubickis, E. Gaile-Sarkane, "Impact of Human Capital on Development of Innovation Ecosystem in Latvia", **Economic Science for Rural Development: Proceedings of the International Scientific Conference**, Latvia, Jelgava, 2013, pp. 37-42.
- [10] Ernst, Young, **Regulatory compliance: adapting to a pressurized environment**, 2011, U.S.: June.
- [11] **European Commission**, Living and working conditions, 2016, <https://ec.europa.eu/eures/main.jsp?catId=8705&acro=living&lang=en&parentId=7817&countryId=LV&living=> [electronic source]
- [12] F. Friedman, "Environmental strategy and regulatory compliance: Environmental leadership in the next century", **Corporate Environmental Strategy**, 1997, pp. 78-80.
- [13] C. H. Grand, **Building a Culture of Compliance**, IBS America, Inc., 2005.
- [14] W. J. Hagerty, J. Hackbush, D. Gaughan, S. Jacobson, **The Governance, Risk Management, and Compliance Spending Report**, Boston: AMR Research, 2008-2009.
- [15] C. W. Hill, G. R. Jones, **Strategic Management. An integrated approach**, Boston, New York: Houghton Mifflin Company, 2008.
- [16] J. Iljins, I. Eriņa, E. Gaile-Sarkane, "Project Based Internationalization as a Driving Force for Change Management in Higher Education Institutions in Latvia", **Procedia - Social and Behavioral Sciences**, Vol.156, 2014, pp. 47-52.
- [17] Innovation and Higher education department, **Review about Higher education in Latvia 2015**, Riga: Ministry of Education and Science, 2016.
- [18] Kaunas University of Technology, **Kaunas University of Technology strategy 2012-2020**, Kaunas, 2012.
- [19] KPMG, **A Good Offense is the Best Defence: Managing Regulatory Compliance with GRC.**, U.S.A.: KPMG, 2012.
- [20] I. Lapiņa, J. Caune, E. Gaile-Sarkane, I. Borkus, M. Ozoliņš, "Development of Managers Competence Model in Dynamic Environment", **The 19th World Multi-Conference on Systemics, Cybernetics and Informatics**, United States of America, Orlando, Proceedings, Winter Garden: International Institute of Informatics and Systemics, 2015, pp. 219-224.
- [21] I. Lapiņa, I. Kairiša, D. Aramina, "Role of Organizational Culture in the Quality Management of University", **Procedia - Social and Behavioral Sciences**, Vol.213, 2015, pp. 770-774.
- [22] I. Lapiņa, R. Roga, P. Mürsepp, "Quality of Higher Education: International Students' Satisfaction and Learning Experience", **International Journal of Quality and Service Sciences**, Vol. 8, 2016, pp. 263-278.
- [23] O. Lentjušenkova, I. Lapiņa, "The Transformation of the Organization's Intellectual Capital: from Resource to Capital", **Journal of Intellectual Capital**, Vol.17, 2016, pp. 610-631.
- [24] L. Leydesdorff, H. Etkowitz, Emergence of a Triple Helix of University Industry Government Relations, **Science and Public Policy**, 1996, pp. 279-286.
- [25] H. Mintzberg, J. Lampel, B. Ahlstrand, **Strategy Safari: A Guided Tour through the Wilds of Strategic Management**, New York: The Free Press, 2005.
- [26] J.C. Morton, The development of a compliance culture, **Journal of investment compliance**, 2005, pp. 59-66.
- [27] D. Needle, **Business in Context: An Introduction to Business and Its Environment**, Singapore: Cengage Learning, 2010.
- [28] S. Niemand, S. Feja, S. Witt, A. Speck, "On improving the maintainability of compliance rules for business processes", **Business Information Systems: 18th International Conference**, Poland, Poznań, Proceedings, Poznan: Springer Verlag, 2015, pp. 178-190.
- [29] Ponemon Institute, **The Role of Governance, Risk Management & Compliance in Organizations**, Ponemon Institute, 2011.
- [30] M. Porter, **What is Strategy?** Harvard Business Review, 1996.
- [31] PWC, Bernstein, Falcione, **Moving beyond the baseline leveraging the compliance function to gain a competitive edge**, PricewaterhouseCoopers LLP, 2015.
- [32] Riga Technical University, **Riga Technical University strategy for 2014-2020**, Riga: RTU, 2014.
- [33] Riga Stradins University, **RSU Development concept 2013-2017**, Riga, 2013.
- [34] M. Rouse, Regulatory Compliance, **TechTarget**, 2012, <http://searchcompliance.techtarget.com/definition/regulatory-compliance> [electronic source]
- [35] S. Sadiq, G.A. Governatori, Methodological Framework for Aligning Business Processes and Regulatory Compliance, Handbook of Business Process Management, **Introduction, Methods and Information Systems Series: International Handbooks on Information Systems**, Springer, 2010.
- [36] V. Šatrevičs, E. Gaile-Sarkane, "Strategic Fit Relation Model as a Tool for Organization Development", **19th World Multi-Conference on Systemics, Cybernetics and Informatics**, United States of America, Orlando, Proceedings, Winter Garden: International Institute of Informatics and Systemics, 2015, pp. 94-99.
- [37] Tallinn University of Technology, **Strategic Plan of Tallinn University of Technology 2020**, Tallinn, 2016.
- [38] University of Latvia, **University of Latvia Strategic Development 2009-2019**, Riga, 2009.
- [39] P.F. Viewpoint, **Let's make a difference: Managing compliance and operational risk in the new environment**, PricewaterhouseCoopers, 2013.
- [40] Vilnius Gediminas Technical University, **Vilnius Gediminas Technical University**, Mission, vision, goals, 2016, <http://www.vgtu.lt/about-university/mission-vision-goals/4127?lang=2> [electronic source]
- [41] R. Whittington, **What Is Strategy and Does It Matter?** London: CENGAGE learning, 2001.
- [42] A. Zeps, L. Ribickis, Role of Advisory Council in Developing Competitive Technological Universities, **Baltic Rim Economies**, Quarterly Review, 2013, pp. 21-22.
- [43] A. Zeps, L. Ribickis, Strategy development and implementation – process and factors influencing the result: Case study of Latvian organizations, **Procedia - Social and Behavioral Sciences**, Kaunas: Elsevier, 2015, pp. 931-937.