

## IDENTIFICATION OF THE SCOPE OF EXPECTED CHANGES IN NATIONAL STRATEGY DOCUMENTS: CASE STUDY OF LITHUANIA INNOVATION STRATEGY 2010-2020

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### Abstract

**Purpose.** The article deals with the problems of identifying the future that is decoded in national strategic documents. Due to complexity of their writing process often public sector strategies include abstract and vague goals and objectives. They represent different, sometimes conflicting interpretations and do not indicate precisely desired changes in future. In order to understand what kind of future is presented in strategic document, the document should be analyzed through lens of different perceptions.

**Design/methodology/approach.** The main research problem is the multiplicity and ambiguity of public strategic documents, in this particular study case – "Lithuanian Innovation Strategy 2010-2020". The article attempts to identify the scope of desired changes in "Lithuanian Innovation Strategy 2010-2020" by using method – Causal layered analysis (supported by narrative foresight).

**Research limitations/implications.** The Causal layered analysis has its own drawbacks. During implementation of this method there is a need to identify and create idealistic definitions of problems and solutions for each perceptual layer in order to be able to assign tasks and objectives of the strategy to the proper layer. Preparation of those idealistic definitions depends on the procedure, by which those layers are described. Therefore, in order to have a higher degree of objectivity, those layers have to be identified at least by the several experts in that field.

**Findings.** Analysis of Lithuanian Innovation Strategy for 2010-2020 showed that the Causal layered analysis can be used to identify scope of expected changes. This method of analysis overcomes the ambiguity of public strategy documents by attaching goals and tasks to different layers of perception. Such breakdown of the goals into different layers of perception enables research to evaluate and measure the scope of envisioned changes.

**Practical implications.** The Causal layered analysis gives an instrument for the examination of political documents that are aimed at the future. It gives a theoretical structure, which can decode political documents and give insights about the scope of expected changes.

**Originality/Value.** This research gives not only insights about the scope of desired changes that are anticipated in objectives and tasks of Innovation strategy of Lithuania, but it is one of the first attempts to use Causal layered analysis in Lithuanian context.

**Keywords:** Causal layered analysis; innovation strategy; strategic documents; goal ambiguity.

**Research type:** case study.

## Introduction

Each strategic document is an important planning tool for government to govern the development of the nation. All documents that are directed at the future, give a certain vision of desired or expected changes. If vision usually should be that element of strategy gives a view of the desired changes. Abstract visions as "being competitive or innovative nation" or visions based on comparisons as "being better than other nations" cannot explain how radical that goal is, the scope of radicality can be detalized through the strategic objectives and tasks, which are later used to achieve or at least to move towards the vision. Strategic documents in public sector has to cope with even high degree of multiplicity and abstractions, which are a result of several interconnected elements: the longer time horizon, the uniqueness of public sector, the impossibility to translate outcome and/or output into a single parameter (like a profit, which is used in the private sector) and variety of stakeholders (with sometimes conflicting interests).

Innovation development becomes increasingly important for Lithuania, because Lithuania is becoming less able to compete by lower wages. Strategic planning of innovational development becomes essential. Strategy documents used in the innovational development face greater uncertainty compared to other state policies: innovations include elements that do not have a numerical expression, their value can might be seen only in the future; they belong to the different economic sectors with different innovation potential. This uncertainty weakens possibilities to create universal innovation strategies, complicates the selection of objectives and leads to a creation of ambiguous goals and objectives. The same challenges are met in "Lithuanian Innovation Strategy 2010-2020": what kind of future does Lithuanian innovation strategy with its numerous and different objectives and tasks presents? Is it incremental, evolutional strategy or it is aimed at more radical and revolutionary goals?

**The aim of research** is to identify the scope of desired changes that are coded in "Lithuanian Innovation Strategy 2010-2020".

**The research problem** is the multiplicity and vagueness of public sector strategic documents that does not allow identifying the scope of changes.

**The object of research** – Lithuanian Innovation Strategy 2010-2020.

**Steps of the research:**

1. Analysis of strategy-making in public sector.
2. Preparation of research methodology on how to identify the scope of desired changes that are encoded in innovation strategy.
3. Case study of "Lithuanian Innovation Strategy 2010-2020".

Case study follows such methodological logic:

1. Grouping objectives and tasks of innovation strategy according to layers of perception (Causal layered analysis);
2. Identification of the most dominant layers of perception that innovation strategy is based on;
3. Presenting narrative of the scope of desired changes.

## The theoretical grounds for strategy assessment

First of all innovation strategy is a document that is created by public institution and usually public documents are mostly written by people low in hierarch (at least

first input) for people high in hierarchy. In order to achieve a higher position, the writer has to make sure that he never compromises his superiors (Janssen, 2001). Transparent documents with controversial statements (for example, evident support to one social group and marginalization of others) can provoke marginalized groups and put their superiors or members of government in negative light. Therefore documents go through numerous checks in the hierarchy. At every level, chefs, supervisors, managers and directors add little things, cut out other, make small amendments or suggest major changes. After few week and months of the document recycling nobody would recognize the original text (Janssen, 2001). Moreover each institution has its own writing style and writer is required to follow the house style of the institution (J. Renkema, 2001). There are codes, wordings that are used and in some case understandable only in the context of institution. In the end, it is created an impersonal, specific (from style point of view) document for which no particular writer could feel any personal commitment or responsibility.

The main reader of public documents is elected representatives in case of democracy or ruling regime in general. The request or initiative to create such document comes from them. In order to be successful in this field, the writer needs to have ability to write lengthy complex and rather "vague" texts that contain compromises, especially because all the members – of different political persuasion – have to find something of their liking somewhere in the document (Janssen, 2001). It especially relevant in case of democracy as parliaments or city councils can represent broad scope of political ideologies while public institution has to maintain its neutrality.

Vagueness in legal document is usually seen in negative light as it contradicts the very idea of legal normativity. However, vagueness seems to be an intrinsic element of the legal field, because it can be used to express extremely generic concepts and therefore be applied to many different situations (G. S. di Carlo 2013). Indeterminacy and vagueness are seen as inherent characteristics of law for reasons of efficiency and in order to achieve a maximum degree of all-inclusiveness. Thus, interpretation is necessarily a part of the rule of law, and necessarily involves someone interpreting – hence the dilemma: it will be the rule of men, not strictly of law. (Bhatia, J. Engberg, M. Gotti, D. Heller, 2005). Therefore a relative level of vagueness (depending of sphere of regulation) in public documents should be not only accepted, but welcomed.

Because of the combination of these elements: insitution context, hierarch, neutrality requirement and interection with democratically elected representatives and field of impact, the public document can not avoid vagueness (especially when its field of impact is so broad as in case of future orientated strategy document). There a lot of different types how to analyse the public documents, but typically it is possible to reduce it to communication model (sender-text-receiver). It is a convinient model, but has its own drawbacks. (1) many text analyses are still fairly unsystematic and get no further than vague criteria for text quality; (2) it often unclear how readers would have responded in reality; (3) Research results can often not directly be applied to communication management (J. Renkema, 2001). Usually conclusions of such research are suggestions to improve writing quality of text itself. The problem of vagueness is not related to the writers' ability to write properly, but to earlier mentioned institutional constrains. Therefore answer lies in receiver's (reader's) ability to decode ambiguous and vogue text.

The assessment of public sector strategies is a complex process: the results of strategy can be seen only in the future, the specifics of public sector makes assessment more difficult, because it's success cannot be measured purely in terms of financial benefit, as it is done in most cases of the private sector. There are several main differences between the public and private sector in field of strategy-making:

- Objectives, targets in public organizations are defined less than in their equivalents from private sector.
- Relatively greater openness in decision-making in the public sector creates bigger constraints and time losses than in private sector.
- Strategies in public sector are generally exposed to a larger number of interest groups in a comparison with private sector.
- Strategies in public sectors are affected by political cycles (elections).
- The strategy supporting coalitions in public organizations are not so stable and can disintegrate during its implementation (Baile, 1998).

Because of these differences, assessment of the strategies in public sector is a far more complicated process than ones from private sector. Strategy assessment can sort out according to certain elements: quality of written content, quality of selected measures, quality of allocated resources and et cetera. According to R. P. Rumelt (1979) the assessment of strategy can be carried out with the use of four tests: goals' consistency test (Strategy should be rejected, if the goals and objectives are not consistent with each other); guidance test (strategy must be rejected if it is not directed at the problem areas that are relevant to a given context); competence test (strategy must be rejected if the problems that it covers, cannot be solved on the basis of available resources or competencies); practicality test (strategy must be rejected if the selected policy measures cannot be implemented due to the inaccessibility of resources or available knowledge indicates that the objectives cannot be achieved by a selected set of policy measures). Identification of the scope of expected changes can be in part attributed to tests of goals' consistency and guidance.

Creating a consistent and well-targeted strategy is a difficult, because strategy often tries to fulfill expectations of the different interest groups, the coalition partners and various other social groups. This leads to such strategy formulation, which satisfies several interested groups at once, but it leaves room for different interpretations of the strategy. This variety of possible ways to understand the strategy means that there can exist competing and conflicting interpretations. Goals of the strategy lose their clear meaning and become ambiguous when strategy begins to encompass different interpretations. There are several dimensions of strategy ambiguity:

- *Mission (vision) comprehension ambiguity* refers to the level of interpretive leeway that an organizational mission allows in comprehending, explaining, and communicating the organizational mission. Organizational leaders often promulgate mission statements to enhance the organization's legitimacy, and in turn to enhance members' commitment and "sense of mission". The level of mission comprehension ambiguity depends on understandability of mission formulation. When the mission statements are easier to understand, explain, and communicate, there will be less leeway for interpretation and more shared agreement about its meaning (Chun, Rainey, 2005).

- *Directive goal ambiguity* refers to the amount of interpretive leeway available in translating an organization's mission or general goals into directives and guidelines

for specific actions that should be taken to accomplish the mission. This uncertainty often comes from the ambiguity of mission (vision).

- *Evaluative goal ambiguity* refers to the level of interpretive leeway that strategy allows in evaluation of the achievements. Some organizations can express their performance targets in an objective and measurable manner that allows a minimal level of interpretive leeway. Other organizations, especially in public sector, often have no choice other than to describe their performance targets in a subjective and descriptive manner, which leaves a lot of room for interpretations in evaluation, whether or not the performance targets are achieved. Without objective and quantitative performance indicators organizations may try to use workload or output indicators (how many working hours were used and similar indicators) rather than outcome indicators in performance evaluation.

- *Priority goal ambiguity* refers to the level of interpretive leeway in decisions on priorities among multiple goals of the strategy. Indication of priorities usually means to be able to make decisions about which goals should take precedence over others at a given time, or to form a hierarchy in which goals are vertically arranged through means-ends relationships. The existence of multiple goals without any hierarchical arrangement and prioritization leaves much room for interpretation about which goals should have priority (Chun, Rainey, 2005).

Consistency and purposefulness of strategy objectives can be identified only after reducing strategy vagueness and ambiguity and. Objectives in strategy documents usually are different in scale, depth and complexity, but can be presented in text as equal, thereby it increases uncertainty and questions about what strategy aims at. As it was demonstrated above strategy writing (as almost in all cases of preparation of bigger public policy documents) goes through several levels of hierarchy and has to comply with several, in some case conflicting interests. The one of possible ways to deals with these challenges is to split strategy elements according to the scope of expected change. By doing this, it is possible to identify the main underlying guidelines of the projected development in strategy. Causal layered Analysis is the method that is able to reduce this uncertainty and give insights about the scope of expected changes embodied in strategy document.

### **Methodology for identifying the scope of desired change**

The method, which is used for identification of the level of the desired change and for reduction of ambiguity, is causal layered analysis (CLA). Causal layered analysis for its focus on the future is usually assigned to methods of future studies. The scope of desired change depends on identification and description of the (social) problem/phenomenon and way to solve it. The (social) problems and their solutions within the CLA theoretical framework are identified through 4 levels of perception (table 1 gives a practical example of the use of CLA in case of traffic jams):

- First level is called "litany". This level refers to the quantitative trends, problems, which usually can be easily identified in the media and is often used for political purposes. In this level of perception problems are treated separately, usually isolated from other phenomena.

- The second level is associated with social causes, economic and political factors. Level is used for quantitative data and academic analysis. The data might be

questioned, but the paradigm that frames understanding of the phenomenon is not challenged.

- The third level is related to analysis of worldview/discourse grounded in society. At this level the social, linguistic and cultural structures (discourses) independent from the actors are analyzed. Based on different discourses different it can be created different possible stories, scenarios about the causes of the problem. This calls into question the foundation, which determines how the problem is understood and by which variables it is described.

- The fourth layer deals with a metaphor or myth. It is the collective archetypes, the subconsciousness, and emotional dimensions. The goal at this level is to question the fundamental images of phenomena (Inayatullah, 2005).

**Table 1. Causes of traffic jam and air pollution according to air pollution**

CLA levels	Causes for traffic jam and air pollution
Litany	Lack of roads and buses.
Social causes	Inappropriate urban planning and underdeveloped public transport system.
Culture/discourse	Cause for traffic jam and air pollution – discourse about modernist centralized city and its dwellers (usual elements of city discourse: "speed of city life" – car as a mean to cope with it; "wealth accumulation and competition" – car as symbol of success and independence).
Myth	Cause for traffic jam and air pollution – the belief that the bigger the city, the better chances (it encourages people to move to the big cities and the increase the population of residents and the number of cars).

Source: Inayatullah, 2008

Causal layered analysis of allows researchers to get out of the traditional and conventional scientific frames while investigating the causes of social phenomena. This method can change the levels of analysis and opens different approaches to the same phenomenon herewith enriches the analysis of the phenomenon. It can be also used in analysis of policy documents, because they deal with one or other social phenomenon (social problem) and gives measures and instruments how to solve the phenomenon. By doing that, political document gives a certain view of phenomenon that can be reduced into CLA levels of perception. If document is based on higher levels of CLA perceptions, the scope of that is more fundamental than in case of solutions, which are based on levels of litany or social causes.

In case of strategies there is presented the phenomenon (in this case, innovation), the desired change (vision, goals) and actions (tasks), which would lead to desired changes. There is a risk that the actions and the expected change are on different perceptual levels: strategy offers solutions of evolutionary nature (1-2 levels), but the desired changes are revolutionary (3-4 levels). In order to identify the level of desired changes, strategy goals and actions will be split in accordance with CLA levels of perception. The ideal types of problems and solutions regarding innovation are created so as goals and objectives could be assigned to the proper level of CLA:

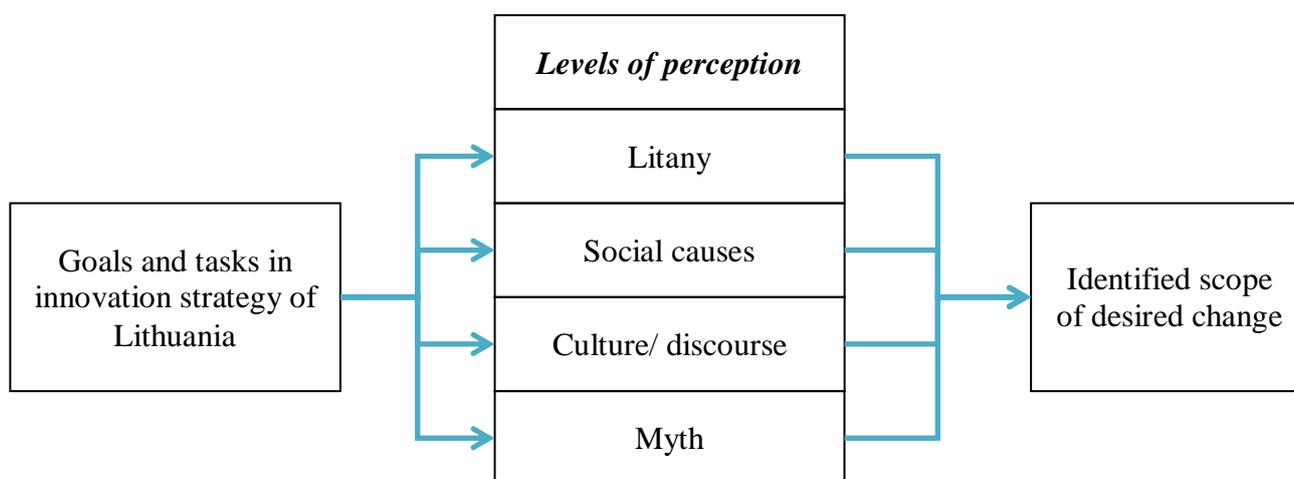
1. Litany. The problem – the lack of investment in innovative activities. Solution – to increase size of investments in R&D and provide financial support for innovative companies.

2. Social (systemic) causes. The problem – the lack of effective innovation network. Solution – creation of national innovation system and strengthening competence of participants in network.

3. Culture (discourse). The problem – ideological division between the science and business. The solution – a promotion of new approach to scientific-innovative activities.

4. Myth. The problem – the attitude that only business can innovate. Solutions – promoting overall creativity in society.

This will allow identifying dominant sets of goals and actions and determining the level of desired changes. The study will be carried out according to the scheme (Fig. 1). The result will be given in percentages (Total and separately between goals and tasks/actions) of used levels of perception in document.



**Figure 1. Method for identifying the scope of desired change in innovation strategy of Lithuania**

CLA is impacted by the new tendencies in foresight analysis called as narrative foresight. Narrative foresight moves futures thinking from a focus on new technologies and generally to the question of what’s next, to an exploration of the worldviews and myths that underlie possible, probable and preferred futures (Milojevic, S. Inayatullaha, 2015). While CLA includes and treats equally several levels of perception, the narrative foresight aims at the deepest levels. Narrative foresight consists of: (1) the deconstruction of outdated narratives, including the used futures of gender relationships; (2) the writing of new endings - of as many novel alternatives as possible; (3) dialogue about many possibilities and personal and group decision as to which alternative is desired and preferred; and lastly (4) actions in the present that are oriented toward the creation of preferred futures (Milojevic, S. Inayatullaha, 2015). The aim of article is to identify the scope of expected changes that are encoded in strategy document (not create a new one), therefore only deconstruction part (1) will be covered in analysis of Innovation strategy of Lithuania 2010-2020. Deconstruction will be based on evaluation part of strategy, because it frames narrative and describes what is success and failure.

### Analysis of Innovation strategy of Lithuania 2010-2020

While performing content analysis, it is necessary to distinguish the main strategy aims. Lithuanian Innovation Strategy 2010-2020 vision – " the basis of the Lithuanian economy is the production of high added value products and services; its competitiveness in the global market will be determined by environment favorable for innovative business; the system of education, science, research and development, interaction with business will help to educate a creative society and will create high-level knowledge base for novelties" (Lietuvos Respublikos Vyriausybė, 2010). The objective of the strategy is "to build a creative society and create the conditions for the development of entrepreneurship and innovation" (Lietuvos Respublikos Vyriausybė, 2010). It is worth noting that both the strategy's vision and objective distinguishes creation of creative society, which shows a deeper approach to the innovative development. Creative society formation as a response to the lack of innovation is related to changes in the worldview level, since innovation is no longer regarded only as economic activity, but also as a part of broader phenomenon - creativity. The second element is – the formation of the appropriate environment for the development of entrepreneurship and innovation. Solution for lack of innovative activities through improvement of conditions for innovation and entrepreneurship should be regarded as 2 level of CLA, because it is based on the perception that innovation is a dependent variable of the environment. By ensuring appropriate environment (appropriate taxes, investments, cooperation in the system), innovation growth can be expected.

Solutions and problems of strategy were divided according to the PSA ideal levels of perception (Table 2). Problem field is composed of elements that were identified as a weakness in the analysis of strengths, weaknesses, opportunities, threats (SWOT hereinafter) and the problems that were identified separately in the other parts of strategy (they are bolded in the table). Threats from SWOT analysis were not included in the research, because they are related to external factors, so solutions to these threats can be only indirect.

**Table 2. Matrix of problems and solutions presented in Innovation strategy of Lithuania 2010-2020 according to causal layered analysis**

Ideal descriptions of problems according to CLA levels	Ideal descriptions of solutions according to CLA levels	Problems identified Lithuanian Innovation Strategy (Lietuvos Respublikos Vyriausybė (2010), Nutarimas dėl Lietuvos inovacijų 2010–2020 metų strategijos)	Solutions proposed in Lithuanian Innovation Strategy (Lietuvos Respublikos Vyriausybė (2010), Nutarimas dėl Lietuvos inovacijų 2010–2020 metų strategijos)
the lack of investment in innovative activities (level 1)	The increase of investments in R&D and financial support for innovative companies.	<ul style="list-style-type: none"> <li>• <b>Too low quality of human resources and material facilities;</b></li> <li>• Lithuania lags behind the average of EU countries According to security indicators of industrial property;</li> <li>• There are too few R&amp;D employees in business, especially in high-technology industry;</li> <li>• Business sector invests in R&amp;D too little;</li> <li>• Few companies develop innovation; their research and abilities of (technological) development and innovation are not sufficient.</li> </ul>	<ul style="list-style-type: none"> <li>• to establish conditions to commercialize research: to create necessary infrastructure (technology transfer center) and legal mechanisms;</li> <li>• to increase access of small and medium-sized enterprises to various funding sources;</li> <li>• to promote innovation oriented towards demand and consumers' needs;</li> <li>• to encourage enterprises, having considerable growth potential;</li> <li>• to promote foreign direct investment in high added value products and services;</li> </ul>

Ideal descriptions of problems according to CLA levels	Ideal descriptions of solutions according to CLA levels	Problems identified Lithuanian Innovation Strategy (Lietuvos Respublikos Vyriausybė (2010), Nutarimas dėl Lietuvos inovacijų 2010–2020 metų strategijos)	Solutions proposed in Lithuanian Innovation Strategy (Lietuvos Respublikos Vyriausybė (2010), Nutarimas dėl Lietuvos inovacijų 2010–2020 metų strategijos)
the lack of effective innovation network (level 2)	Creation of national innovation system and strengthening competence of participants in network.	<ul style="list-style-type: none"> <li>• Innovation system is fragmented; internal relations among participants of innovation system are poor.</li> <li>• Hierarchical closeness of higher education and research institutions, unattractive structure of salaries and few career possibilities do not allow talented people to join these institutions and encourage brain drain.</li> <li>• Education system (secondary schools and universities) is fragmented and quality of studies does not correspond to economy and society needs of today.</li> <li>• Inter-institutional activities aimed at development of science and business cooperation and implementation of purposeful innovation policy are poorly coordinated; there is no institution that is directly responsible for development of science and business cooperation.</li> </ul>	<ul style="list-style-type: none"> <li>• to strengthen knowledge base and develop integrated science, studies and business centers (valleys) of the international level;</li> <li>• to establish Agency for Science, Innovation and Technology, the institutional structure, responsible for business and science cooperation;</li> <li>• to ensure inter-institutional coordination when implementing the state innovation strategy;</li> <li>• to participate in the implementation of international initiatives (Strategy for the Baltic Sea Region, Knowledge and Innovation Communities created by European Institute of Innovation and Technology, activities of European Space Agency and others);</li> <li>• to promote business networking and joining international innovation networks;</li> <li>• to participate actively in the creation of the European Research Area;</li> <li>• to develop export of high added value products and services and business internationalisation;</li> <li>• to ensure periodic (every two years) international assessment of Lithuanian innovation system and management reforms of public sector.</li> </ul>
ideological division between the science and business (level 3)	Promotion of new approach to scientific-innovative activities.	<ul style="list-style-type: none"> <li>• <b>A lack of systematic approach to innovation, poor culture of inter-institutional cooperation and a lack of cooperation traditions between business and science.</b></li> </ul>	<ul style="list-style-type: none"> <li>• to promote entrepreneurship of education of various levels and private sectors;</li> <li>• having reorganized research institutes, strengthen their cooperation with business;</li> <li>• to strengthen interaction among science, studies and business;</li> <li>• to develop effective mechanisms of business and science cooperation and schemes for support of joint business and science projects;</li> </ul>
the attitude that only business can innovate (level 4)	Promotion of overall creativity in society.	<ul style="list-style-type: none"> <li>• <b>A lack of creativity and entrepreneurship in private and public sectors.</b></li> </ul>	<ul style="list-style-type: none"> <li>• create education and higher education system which promotes creativity and innovation;</li> <li>• to promote life-long learning;</li> <li>• to promote technological, non-technological, social and public innovation;</li> </ul>

According to the quantitative analysis, goals and actions can be divided in such order: systemic causes (35%), litany (30%), discourse (20%) and myth (15%). The first two elements that make up to 65% of the Lithuanian strategy are related to the exploitation of current conditions, resources and structures in order to accelerate the innovation progress. When state sets and implements such objectives, it complies with existing perceptual frames of innovation process. Such solutions are characterized by the evolutionary nature, copying of good practice copying and using quantitative indicators for measurement of success. Cultural and perceptual elements that make up to 35% of the tasks and objectives are related to the more radical and more fundamental changes. When State choses to realize such strategy, it aims at revolutionary change of situation, which is based on a new reinterpretation of situation. It is difficult to assess the success of implementation of such type goals in quantitative terms, as they are related to qualitative changes, which cannot be captured by quantitative indicators.

Narrative of Lithuanian innovational development can be extracted from the assessment criteria, because it frames our understanding and gives measurements for success or failure. Evaluation of the strategy is not based on measurable goals (as it is given above goals are quite vague and complicated – example of the vision). The main source for evaluation is European Union Innovation Scoreboard and it is sought that Lithuanian summary innovation index would reach the European average in 2020 (Lietuvos Respublikos Vyriausybė, 2010). The use of this criterion shows several things: relativistic and quantitative approach based on a view from outside. Success can be measured in comparison with other countries and by the outside source. Narrative behind that is an understanding of Lithuania as lagging behind the more developed EU countries and goal for Lithuania according to chosen assessment is to become at least a "normal", average EU country in sphere of innovation. What is important, the chosen assessment shows that this pursuit for this "averageness" is not pursuit of innovativeness in the strict sense, because Lithuania can achieve goal (average score in Scoreboard) not only by the growth of Lithuanian innovation capacities, but the decline of these capacities in other EU countries. The "average result" does not necessary show if country is innovative, it can highly be dependent on results in EU major innovators. The "average result" shows that country is in "normal" state in comparison to other EU countries. To sum up the main principal of developmental narrative is becoming a "normal" EU country, which "normality" is recognized by other countries.

## Conclusions

Innovation Strategy of Lithuania 2010-2020 has the same challenges as other policy documents. Elements of strategy are vague and in some cases too intricate. However the use of causal layered analysis of Innovation Strategy of Lithuania 2010-2020 showed that it can be used to identify the level of desired change. This method of analysis overcomes the multiplicity and ambiguity of strategy text by reducing goals and tasks into the perceptual groups of casual layered. Such breakdown of goals allows to identify the scope of changes that was envisioned strategy. The most tasks and goals that are described in strategy can be assigned to first (litany) or second (systemic causes) levels of causal layered analysis. Tasks and goals related to more radical perceptual levels (discourse and myth) create a smaller fraction of the text.

Therefore The desired changes of Lithuanian innovation strategy can be described as evolutionary, based on the exploitation of existing resources and realization of the standard ideas about innovation. Such evolutionary approach to innovation development is supported by narrative that can be extracted from the choice of assessment criteria.. Firstly assessment use EU innovation scoreboards with uses sophisticated statistical indicators, but they are based on the current understanding of innovation processes. Secondly success in assessment is described as achievement of an average result in summary innovation index. It highlights the narrative importance to be considered by others as "normal" EU nation.

The method has some drawbacks. During research it was found, that there is a need to identify ideal definitions of problems and solution in order to be able to assign objectives and tasks from strategy to the proper levels of CLA. Despite clear frames of the analysis, the creation of those ideal elements is not sufficiently protected from subjective evaluation. In order to achieve the higher degree of objectivity, these ideal solutions and problems should be identified with the inclusion of the substantial number of the experts.

## References

- Baile, K. C. 1998. *A study of strategic planning in federal organizations*, Dissertation submitted to the Faculty of the Virginia Polytechnic Institute and State University [interactive]. [accessed 2016-01-15]. <<http://scholar.lib.vt.edu/theses/available/etd-4598-12456/unrestricted/stratpln.PDF>>
- Carlo, G. S. 2013. *Vagueness as a Political Strategy: Weasel Words in Security Council Resolutions Relating to the Second Gulf War*. Cambridge Scholars Publishing: Newcastle, United Kingdom.
- Chu, Y. H., Rainey H. G. 2005. Goal ambiguity in U.S. federal agencies. *Journal of Public Administration Research and Theory* [interactive]. 30, p. 1-30 [accessed 2016-01-15]. <<http://oied.ncsu.edu/selc/wp-content/uploads/2013/03/Goal-Ambiguity-in-U.S.-Federal-Agencies.pdf>>
- Endicott, T. 2005. The Value of Vagueness. In V. K. Bhatia (ed.) *et al, Vagueness in Normative Texts (Linguistic Insights)*. Peter Lang AG, European Academic publishers: Bern, Switzerland. p 27-48.
- Inayatullah, S. 2008. Six pillars: futures thinking for transforming. *Foresight* [interactive]. 10 (1) [accessed 2016-02-10]. <<http://metafuture.org/Six%20pillars%20-%20futures%20thinking%20for%20transforming%20Foresight%20vol%2010%20issue%201%202008.pdf>>
- Inayatullah, S. 2005. Causal Layered Analysis – Deepening the future. *Questioning the Future: methods and tools for organizational and societal transformation* [interactive]. [accessed 2016-01-15]. <<http://www.metafuture.org/cla%20papers/Inayatullah%20Causal%20layered%20analysis%20-%20%20Deepening%20the%20Future.pdf>>
- Janssen, D. 2001. Improving the quality of public documents: Or: Why training public writers often doesn't work. In D. Janssen (Ed.), R. Neutelings (Ed.), *Reading and Writing Public Documents: Problems, Solutions, and Characteristics*. John Benjamins Co: Amsterdam, Netherlands. p. 105-124.
- Lietuvos Respublikos Vyriausybė . 2010. *Nutarimas dėl Lietuvos inovacijų 2010–2020 metų strategijos (nr 163)* [accessed 2016-02-01].
- Milojevic I., Inayatullah S. 2015. Narrative foresight. In *Futures* [interactive]. 73 (2015). p. 151–162 [accessed 2016-03-01]. <<http://www.sciencedirect.com/science/article/pii/S0016328715001160>> <[http://www.ukmin.lt/uploads/documents/imported/lt/veikla/veiklos\\_sritys/ino/LIS.pdf](http://www.ukmin.lt/uploads/documents/imported/lt/veikla/veiklos_sritys/ino/LIS.pdf)>
- Renkema, J. 2001. Undercover research into text quality as tool for communication management: the case of the Dutch tax department. In D. Janssen, R. Neutelings (Ed.), *Reading and Writing Public Documents: Problems, Solutions, and Characteristics*. John Benjamins Co: Amsterdam, Netherlands. p. 37-59.
- Rummelt, R. P. (1979). *Evaluation of Strategy: Theory and Models*. in Schendel (ed.), *Strategic Management: A New View of Business Policy and Planning*. Boston: Little, Brown, and Co. p. 197-211.