

Innovation Policy and Development of Creative Industries: Case Study of Lithuanian Animation Industry

Tomas Mitkus, Vaida Nedzinskaitė-Mitkė

Abstract—The objective of this study is to identify and explore how adequate is modern innovation support mechanism to developed creative industries. We argue that current development and support strategy for creative industries, although acknowledge high correlation between innovation and creativity, do not seek to improve conditions to promote systematic innovation development in the creative sector. Using the Lithuanian animation industry as a case study, this paper will examine innovation contribution to creativity and, for that matter, the competitiveness of animation enterprises. This paper proposes insights that contribute to theoretical and practical discussions on how creative profile companies build national and international competitiveness through innovations. The conclusions suggest that development of creative industries could greatly benefit if policymakers would implement tools that would encourage creative profile enterprises to invest in to development of innovation at a constant rate.

Keywords—Creative industries, animation, innovation, innovation policy, management.

I. INTRODUCTION

TODAY one cannot analyze the dynamics of the animation industry outside the context of creative industries. In fact, the animation industry has become so intertwined with the concept of creative industries, that the former term, or to be more precise, its place and purpose today in society and the economy is defined through the lenses of creative industries. Of course the animation industry and creative industries are neither synonymous nor interchangeable. Creative industries are a concept that groups heterogeneous industries ranging from traditional arts and crafts, publishing, music, and visual and performing arts to more technology-intensive industries like film, television, animation, radio broadcasting and design [1]. Whereas, the animation industry can be defined as a group of creative profile enterprises that provides services required to execute the animation product. Thus, the animation industry is just one of many segments of creative industries.

Since the mid-1990s, scholars and local and international government agencies have increased their attention to the cultural sector in order to determine its influence to the regional or urban economy. What they found was overwhelming evidence of this economic sector's incredible

growth, efficiency and stability (even in economic crisis), not to mention high resistance to robotization [2]-[8]. Furthermore, this pattern of growth rate and scale is truly global. Thus, creative industries are perceived as among the most dynamic emerging sectors on the global trade theater [1]. However, as most key research reports conducted by the EU point out – creative industries are still a largely untapped resource [9]-[11]. Therefore, to reach strong, smart, sustainable and developed creative industries, there are various levels of problems in the fields of law, tax, education and management that need to be resolved. Thus, new methodologies and tools based on research and empirical evidence are needed to reach the full potential of creative industries. However, creative industries are still greatly under-researched. Thus, nation and international cultural policy formulated without the backing of research can lead to the poorly targeted, ill-conceived approaches that can result in a waste of time, money and other types of resources [9]. Therefore, a shortest path to achieve goals set in the Creative Europe [11] and Europe 2020 [12] strategies is to develop a better understanding of the creative sector.

This void in research on creative industries can be attributed to the perception of culture and its purpose in general. If until the 1990s most of cultural activities were executed and brought to daylight only because it was funded with direct or indirect state aid [12]-[14], today creative industries are perceived as a dynamic emerging economic sector that significantly contributes to the country's well-being. Thus, the purpose of creativity and culture shifted as well. It is important to notice that one of the reasons why the cultural sector has one through such a radical transformation in society's eyes is because creative industries have a high tendency to innovate. Furthermore, creative industries are known to stimulate innovation in other industries that are in need of creative solutions [1]. However, if scholars and policy-makers can agree that innovation can be a foundation for economic prosperity and have an extremely positive affect for an organization's growth and development, there are still debates on the types, process and even definition of innovative activities in creative industries. Thus, with the increasing need for innovation to maintain sustainability and growth of an economy, it has become essential for countries to stimulate the development and growth of their creative industries.

The purpose of this study is to enlarge the understanding of the connection between the activities of creative profile enterprises and the innovative process. More specifically, the

T. Mitkus is with Vilnius Gediminas Technical University, Vilnius, Lithuania. (corresponding author, phone: +370-652-99880; e-mail: tomas.mitkus@vgtu.lt).

Vaida Nedzinskaitė-Mitkė is with Vilnius Gediminas Technical University, Vilnius, Lithuania (e-mail: vaida.nedzinskaite-mitke@vgtu.lt).

paper focuses on the factors that in any matter affect the innovation process of creative profile enterprises in the animation industry. The evidence presented in this paper can be used to inform policy-makers how to design and implement schemes that would effectively stimulate the development and growth of creative profile enterprises and creative industries altogether.

This paper is structured as follows: firstly, the authors will review literature and previous researches related to the creative industry and innovation process. Secondly, empirical research methodology and data collected through a questionnaire will be presented. This paper will present and discuss unique properties that creative industries behold, also develop a number of propositions to support the growth and development for creative profile enterprises. The authors will conclude with the assessment of the research limitations and suggestions for further investigations.

II. LITERATURE REVIEW

Creative industries are by definition a major source of innovative ideas [15]. It is a crossroads where technology, art and business meet. Furthermore, because of overwhelming evidence of the contribution of creative sector to the local economy, policy-makers all around the globe are looking for tools that would most effectively stimulate the growth and development of local creative industries. This is the case in the EU, where creative industries are perceived as a concept that embodies an integral part of a sustainable European future that will result in the development of economic, social, environmental and cultural dimensions. Thus, the EU perceives strategic goals to stimulate innovation and the development of creative industries as complementary, rather than as two independent tasks.

An important feature of the creative sector is its irreplaceable dependency on a key strategic resource – human capital. Researches that focus on human resources in creative industries stressed the importance of innovation to the creative process and final creative products [16]. And this relationship between creative industries and innovation is instinctive because the creative process, first of all, is about experimentation. Or to be more precise, every single creative product or service has to be unique, or at least, easily distinguishable from previous creative results. Failure to do so may result in professional disgrace or even criminal offence. Thus, natural motivation to produce unique creative product or service stimulates innovations in creative industries. Furthermore, Hartley [17] argues that creativity, or desire for innovative solutions, is perhaps the most important goal for workers in creative industries. Also, Bakhshi et al. [18] claim that creative sector is considerably more innovative than other economic sectors.

Müller et al. [15] identify three ways in which creative industries contribute to the overall innovation process. Firstly, (i) the creative industry is itself a great source of innovative ideas and solutions. Secondly, (ii) the innovation process is indirectly stimulated by the service offered to enterprises that operate outside the concept of creative industries. And lastly,

(iii) the innovation process is stimulated because creative profile enterprises, such as heavy high-end technology users, constantly demand technological advances from technological service providers. Thus, the innovative process is not sealed within creative industries, but quite the opposite – developed creative industries stimulate the innovation process in a country's entire economy.

It is paramount to highlight that today the definition of the concept of innovation is very broad and diverse. For example, Edison et al. [19] conducted a literature review on the concept of innovation and found over 40 different definitions for the term. Thus, it is no surprise that the innovation process is perceived and understood with some disparity by scholars, industry representatives and policy-makers. However, innovation, in the simplest way, can be defined as a process or product that is novel and creates value. Thus, innovations are produced not only when there is a never-seen-before revolutionary product, but also when there is an improvement over an existing service or product [20]. However, it should be noticed that innovation and invention are not synonymous [21]. As mentioned before, innovation must be not only a novelty, but also has to create value. Therefore, in the context of creative industries, even when innovation is aesthetic in nature, it has to produce added value to the owner.

A literature review shows that among scholars who analyze the innovation process in creative industries currently there is no agreement upon a definition or categorization of innovations in creative industries. Furthermore, there is a strong emphasis on technological type of innovations [22]. However, the authors of this paper could distinguish the following types of innovations in creative industries – *technological*, *aesthetic*, *content* and *administrative* [15], [22]-[26] (Table I). Although, all presented types of innovations in creative industries are still a matter of debate, it is therefore likely that in the near future it will be refined.

TABLE I
TYPOLOGY AND DEFINITION OF INNOVATION IN CREATIVE INDUSTRIES

Innovation type	Characteristics and examples
<i>Technological</i>	<ul style="list-style-type: none"> - Research-based innovation; - Innovation that usually is a result of research done by R&D; - Can be patentable.
<i>Aesthetic</i>	<ul style="list-style-type: none"> - Innovation that is aesthetic in nature; - This innovation improves functionality; - Demand for this innovation type rise from customer's wish to have a unique product (e.g., company's logo or architectural design).
<i>Content</i>	<ul style="list-style-type: none"> - Content adaptation to the new media format; - A new way to execute marketing or use of the product; - Innovation that improves production process by reducing cost or increasing creativity;
<i>Administrative</i>	<ul style="list-style-type: none"> - Because creative industries are project-based this type of innovation cannot applicable once project is completed.

From Table I, it can be seen that every single creative project will embody at least one type of innovation. Thus, it is not surprising that creative industries are becoming perceived as an avant-garde of innovation [18], [27]-[29]. However, there is still a formidable gap between creative industries and policy-makers. Therefore, it is paramount that national

innovation development policy should coincide with the development policies of creative industries.

The aim of this study is to gather data about the innovation process in the Lithuanian animation segment and explore the innovation phenomena in creative industries in general. Moreover, this study examines the innovation process from the industry's perspective rather than from the official government's point of view. This paper also analyzes how effectively Lithuanian cultural policy stimulates the innovation and development of local creative industries. Finally, this paper proposes insights that can contribute to theoretical and practical discussions on how animation enterprises build competitiveness through innovations. The authors anticipate that the animation industry recognizes innovation's role to retain competitiveness in local and global market. Thus, the key task for policy-makers should be implementing policy mechanisms that would stimulate creative profile enterprises to pursue innovative solutions constantly and at the bigger scale rather than only when it is necessary or convenient. Therefore, the authors hypothesize that:

- H1. The innovation process in Lithuania is perceived mostly as technological.
- H2. The animation industry recognizes innovation's role to maintain competitiveness in the market.
- H3. In the animation industry, innovation strongly intertwines with creativity.

III. EMPIRICAL STUDY

The data used for this study was collected by quantitative questionnaire conducted in January 2017. The research was done with 18 respondents that represented animation industry enterprises working in Lithuania. The firms investigated had to meet the following three criteria in order to be included in the study:

- 1) They needed to be registered as a legal body in Lithuania;
- 2) They needed to publicly demonstrate evidence that the company has the competence to produce or execute a cinematographic animation project;
- 3) They needed to be independent firms.

The first step in the study was to compile a list of animation enterprises using partial lists available in various government agencies, animation industry associations, specialized institutes, etc. The authors identified 24 animation studios in Lithuania that met the criteria above. An electronic invitation to participate in this study was sent to these animation enterprises. The invitation emphasized the relevance of the study in order to collect data about the animation industry and its potential impact to Lithuanian cultural policy-makers. A structured questionnaire of 63 questions (23 out of them were five-point Likert-type questions) and one extra section at the end for comments was posted on the digital platform designed to conduct this type of questionnaire. The questions were formulated so they would be in coherence with the EU's Europe 2020 strategy [12], Creative Europe program goals [11], Lithuanian Republic Ministry of Culture Policy Guideline [30] and Lithuanian Creative Industry Policy

Guidelines for 2016-2020 timeframe [31]. However, six studios verbally informed authors that they refuse to participate in the study for various reasons. Therefore, data was gathered from 18 animation studios (75% of the active animation enterprises in Lithuania).

The main objective of the questionnaire was for a first time in modern Lithuanian history to gather all-round information about animation industry. However, this paper only analyses collected data related to the innovation process in Lithuanian animation industry. Therefore, other collected data about industry's specific education, preferred animation techniques of a studio, artistic achievements at national or international levels, internationalization processes and so on will not be addressed in this paper.

IV. FINDINGS

Respondents were given single-answer five-point Likert scale questions about how strongly they agree with the statement that "innovation plays a very important role in the animation industry in order to maintain competitiveness in the market". To this, 50% of respondents indicated that they "strongly agree"; a third of respondents indicated that they "more agree that disagree"; while 17% of respondents stated that they "neither agree, nor disagree" with the statement (Fig. 1).

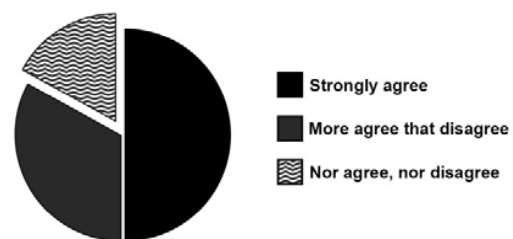


Fig. 1 Respondents answers on the statement that "innovations play very important role in animation industry in order to maintain competitiveness in the market"

When asked if their studio's work culture stimulates innovation, 83% of the respondents indicated that "Yes, it does" whereas the remaining respondents stated that their work culture only "partly encourages" the pursuit of innovative solutions. When asked if animation studios use innovations in their animation projects, a positive answer was indicated by 89% of the respondents.

The next question asked respondents to describe briefly their innovative solutions created by their studio. To this, 72% of the respondents complied with this request and the rest refused or could not indicate any innovative solutions created by the animation studio they represented. However, all presented innovations were of a technological type.

Respondents were asked if their studio has an R&D department. To which, 28% of respondents indicated that they do. However, when asked if in their studio there are researchers who would periodically publish academic papers, only 22% of respondents stated that there was. Interestingly, in the entire Lithuanian animation industry there is only one

studio that has an R&D department and a researcher who periodically publishes academic papers.

Collected data from the questionnaire conducted revealed that 56% of industry representatives “strongly agree” and 44% “more agree that disagree” with the statement that it takes considerable time for various animation specialists to master a new innovation. Although, when asked if respondents agree with the statement that creatives in the animation industry accept innovations relatively easy, 11% indicated that they “strongly agree”, 39% - “more agree that disagree”, 44% indicated that they “neither agree, nor disagree”, and lastly 6% of representatives stated that they “more disagree that agree”.

Finally, when representatives of the animation enterprises were asked if they agree with the statement that “the innovation process is promoted by current government policy”, the statements of “more agree that disagree” and “neither agree, nor disagree” were chosen by 17% of respondents; while 28% of respondents stated that they “more disagree that agree” and 38% stated that they “strongly disagree”.

V.DISCUSSION

It is important to highlight that the Lithuanian government at this point has policies focused on the growth and development of Lithuanian creative industries. The Lithuanian Republic Ministry of Culture Policy Guideline [30] and Lithuanian Creative Industry Policy Guidelines for the 2016-2020 timeframe [31] are key documents that embody the principles of how this growth and development should be achieved. And because Lithuania is a member of the EU, the country's cultural policy is in coherence with the Creative Europe program goals [11]. Thus, innovation development policy plays a considerable part in the overall strategy to develop local creative industries. Furthermore, strengthening the innovation process in Lithuanian creative industries is declared as one of four key tasks [31]. However, these documents heavily focus on technological innovations and the generation of innovation through cooperation with the academic sector. This suggests that the government body envisions the innovation process in creative industries mostly through technical advances. However, this strategy may backfire because this would mean that government is concentrating its efforts on increasing the quantity rather than the quality of creative products and services. Thus, directing Lithuanian creative industries towards providing creative service to others rather than stimulating to create unique cultural products. Although, it is important to notice that creative service providers and owners of creative product are not a dichotomy, in the sense that a country may have one or the other. In fact, optimal creative industries are those that have sufficient quantities of talented content creators and competent creative service providers. It is important to notice that these documents acknowledge that it is difficult to form a targeted approach to stimulate the development and growth of creative industries because data about this economic sector are till scarce. Thus, this can partly explain why Lithuanian key cultural policy documents are so abstract and vague.

Therefore, it is not surprising that the industry's evaluation of government activities towards promoting the innovation process in creative industries is generally negative. However, this abstract understanding of the innovation process and its purpose in creative industries is not limited to government bodies, but is visible in the industry as well. The fact that all presented innovative solutions created by Lithuanian animation studios are only of a technological type suggests that innovative solutions of administrative or content types are not even perceived as true innovations within the industry. Therefore, although creative industries are naturally a stimulating environment for innovations, the dominant standpoint that technological innovations are more valuable than any other type of innovation is harmful in the long run. Thus, gathered data with the analysis of Lithuanian cultural policy documents supports the first hypothesis.

The quantitative questionnaire conducted by the authors clearly shows that the animation industry recognizes the importance of innovation to gain or even just to maintain competitiveness in the market. Moreover, 72% of respondents indicated that the studio they represented had produced innovative solutions of a technological type. In addition, the fact that a bit less than a third of the animation studios have an R&D department, suggests that the industry not only perceives innovation as the key element to achieve its strategic goals, but also that it is a constant necessity in order to survive in the truly global market. Moreover, the fact that more than 80% of respondents indicated that their studio's work culture stimulates the search for innovative solutions suggests that creativity is organically linked with a search for innovative solutions. Or in other words, creative industries naturally form a demand for a work environment that stimulates innovations. Therefore, the second and third hypotheses are supported empirically. These results are consistent with the theoretical propositions and empirical findings in the literature that claims that enterprises in creative industries are innovation-orientated [17], [18], [15], [27]-[29].

It is interesting to note that the empirical evidence suggests that there is some kind of misalignment between evaluations of how easily innovations are implemented into the creative work environment. Although, the respondents generally agree with the statement that it takes considerable time for various animation specialists to master new innovation, there is no decisive verdict on how easy innovations are accepted by the average animation specialist. The literature on this topic suggests that acceptance to innovations can vary greatly and the aspect that innovation is proven to be an improvement is not a determining factor [32], [33], because the decision about the acceptance of innovation can be influenced by various factors including environment, as well as the characteristics of the individuals and organizations that adopt the innovation, not to mention characteristics and attributes of the innovation itself [33]-[36]. Thus, animation studios could be exposed to entirely different experiences involving acceptance and implementation of innovation. However, additional data is needed to explain such a varying assessment of the process of acceptance of innovation in the animation industry.

VI. CONCLUSIONS

The quantitative questionnaire conducted by authors for the first time in Lithuanian history provides data about the innovation process in direct relation to the animation industry. Empirical evidence shows that the Lithuanian animation industry recognizes innovation's role to achieve and maintain competitiveness in the market. Moreover, evidence shows that innovation strongly intertwines with creativity in the animation industry. However, our approach has limitations. Although, 18 animation studios represented 75% of the active animation industry in Lithuania, the sample is still small to define conclusive patterns. Furthermore, factors of the country's origin, economic and political environment, the status of direct and indirect state aid, even the quality of education or traditions in the local industry will influence how creative profile enterprises perceive innovation and its benefits and challenges. Therefore, since the study was built based on a survey with Lithuanian animation studios, researchers and policy-makers should be cautious when generalizing to other countries and/or creative industry segments. The authors, thus, suggest that this study would be expanded to other countries and creative segments as a way to validate the universality of the results.

Lastly, data gathered by this quantitative questionnaire provide an insight about how Lithuanian animation industry perceives its own innovation process, scope and relationship with creativity. Therefore, it is a subjective evaluation by representatives of the animation industry. Thus, one should exercise some caution when interpreting the results related to the achievements of innovation efficiency or quality. Thus, further investigation should consider more robust methods of evaluation on the innovation process and its results in the Lithuanian animation industry.

REFERENCES

- [1] UNCTAD. *Creative Economy. Report 2008*. Geneva: United Nations, 2008.
- [2] TERA Consultants. *European Competitiveness Report 2010*. Luxembourg: Luxembourg Office for Official Publ. of the European Communities, 2010.
- [3] DCMS. *A new cultural framework*. London: HMSO, 1998.
- [4] DCMS. *Creative industries mapping document 2001*. London: Department of Culture, Media and Sport, 2001.
- [5] H. Blair, S. Grey, and K. Randle. "Working in film. Employment in a project based industry", in *Personnel Review* vol. 30, 2001. pp. 170-185.
- [6] S. Hotho, and K. Champion. "Small businesses in the new creative industries: innovation as a people management challenge", in *Management Decision*, vol. 49, pp 29-54. 2011.
- [7] L. De Propris. How are the creative industries weathering the crisis?" in *Cambridge Journal of Regions, Economy and Society*, vol. 6, 2013. pp. 23-35.
- [8] M. Goede, and G. Louisa. "A case study of the creative zone Scharloo and Pietermaai in Curacao" in *International Journal of Social Economics*, vol. 39, 2012.
- [9] EC. *Communication from the Commission to the European Parliament, the Council, the European Economical Social Committee and the Committee of the Regions – Promoting cultural and creative sectors for growth and jobs in the EU*. Brussels: European Commission, 2012.
- [10] ESTEP. *2007–2013 metų Europos Sąjungos struktūrinės paramos poveikio kultūrai vertinimas. Galutinė ataskaita*. Vilnius: ESTEP, 2016.
- [11] Creative Europe. *Regulation (EU) No 1303/2013 of the European Parliament and of the Council*. Brussels: Official Journal of the European Union, 2009.
- [12] Europe 2020. *Communication from the Commission Europe 2020 a strategy for smart, sustainable and inclusive growth*. Brussels: European Commission, 2010.
- [13] T. Mitkus. "Lithuanian Film Industries in Twenty-First Century: State Supported Art or Business?" in *Santalka. Filosofija. Komunikacija*, vol. 19, 2011. pp. 76–89.
- [14] T. Mitkus, and V. Nedzinskaite-Mitke. "The impact of globalization to creative industries: the analysis of film industries of Central and Eastern Europe", in *Creativity studies*, vol. 9, 2016. p.p. 64-74.
- [15] K. Müller, C. Rammer, and J. Trübky. "The Role of Creative Industries in Industrial Innovation" in *Innovation: Management, Policy and Practice*, vol. 11, 2009. pp. 148-168.
- [16] H. Bakhshi, and D. Throsby. "New technologies in cultural institutions: theory, evidence and policy implications", in *International Journal of Cultural Policy*. Vol. 18, 2012. pp. 205-222.
- [17] J. Hartley. *Creative industries*. Blackwell Publishing: Oxford, 2005.
- [18] H. Bakhshi, E. McVittie, and J. Simmie. *Creating Innovation: Do the creative industries support innovation in the wider economy?* London: Nesta, 2008.
- [19] H. Edison, N. B. Ali, and R. Torkar. "Towards innovation measurement in the software industry." in *The Journal of Systems and Software*. vol. 86. 2013. pp. 1390-1407.
- [20] C. Dibrell, P. S. Davis, and J. Craig. "Fueling innovation through information technology in SMEs." in *Journal of Small Business Management*. vol 46, 2008. pp. 203–218.
- [21] J. A. Schumpeter, *Business Cycles. A Theoretical, Historical and Statistical Analysis of the Capitalist Process*. London: McGraw-Hill Book Company, 1939.
- [22] I. Miles, and L. Green. *Hidden innovation in the creative industries*, London: NESTA Research Report, 2008.
- [23] C. W. Handke, *Measuring Innovation in Media Industries: Insights from a Survey of German Record Companies*. Berlin: Humboldt University, 2004.
- [24] P. Stoneman. *An introduction to the definition and measurement of soft innovation*. London: NESTA working paper, 2007.
- [25] A. J. Scott. *The Cultural Economy of Cities*, London: Sage, 2000.
- [26] Y-L. Jaw, C-L. Chun-Liang, S. Chen. "Managing innovation in the creative industries – A cultural production innovation perspective." In *Innovation*, vol. 14, 256-275. 2012.
- [27] C. W. Handke, *Surveying innovation in the creative industries*, Berlin: Humboldt-University, 2006;
- [28] R. Barras, "Interactive innovation in financial and business services: The vanguard of the service revolution." in *Research Policy* Vol. 19, pp. 215-237. 1990.
- [29] S. Lash, and J. Urry, *Economy of signs and spaces*. Goldsmiths: University of London, 1994.
- [30] LR Ministry of Culture. *Policy Guideline of Lithuanian Republic Ministry of Culture*. Vilnius: LR Ministry of Culture, 2007.
- [31] LR Ministry of Culture. *Lithuanian Creative Industry Policy Guidelines for 2016-2020 timeframe*. Vilnius: LR Ministry of Culture, 2015.
- [32] P. Planing. *Innovation Acceptance– The Case of Advanced Driver-Assistance Systems*. Stuttgart: Springer Gabler.
- [33] F. Damanpour, and M. Schneider. "Phases of the Adoption of Innovation in Organizations: Effects of Environment, Organization and Top Managers", in *British Journal of Management*, vol. 17, pp. 215–236. 2006.
- [34] E. M. Rogers. *Diffusion of Innovations*. New York: Free Press, 1995.
- [35] L. G. Tornatzky, and M. Fleisher. *The Process of Technological Innovation*. Lexington: Lexington Books.
- [36] R.A. Wolfe. "Organizational Innovation: Review, Critique, and Suggested Research Directions", in *Journal of Management Studies*, vol. 31, pp. 405–431. 1994.