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FACTORS INFLUENCING STUDENT ENTREPRENEURSHIP INTENTIONS: THE CASE OF LITHUANIAN AND SOUTH KOREAN UNIVERSITIES

Živilė Baubonienė¹, Kyong Ho Hahn², Andrius Puksas³, Eglė Malinauskienė⁴

¹ *Institute of Communication, Mykolas Romeris University, Ateities St. 20, 08303, Vilnius, Lithuania*

² *School of Business Administration, Dongseo University, 47 Jurye-ro, Sasang-gu, 47011, Busan, South Korea*

³ *Law and Public Procurement Office at Chancellery of Mykolas Romeris University, Didlaukio St. 55, 08303, Vilnius, Lithuania*

⁴ *Faculty of Economics and Business Institute of Economics, Mykolas Romeris University, Ateities St. 20, 08303, Vilnius, Lithuania*

E-mails: ¹ zivileretail@yahoo.com (corresponding author); ² khahn@gdsu.dongseo.ac.kr; ³ andrius_puksas@mruni.eu; ⁴ eglemaal@mruni.eu

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Abstract. Today's ultra-competitive businesses pose new ambitious challenges for universities to become entrepreneurial, to promote creativity and student aspirations to start up a business, to contribute to the spirit of entrepreneurship, to provide the knowledge necessary for the development of business and to introduce new and innovative entrepreneurship programmes. The paper argues that this shift arises from factors such as the image of entrepreneurship, personal qualities and the environment, the university study process, study environment and university infrastructure, all of which should be taken into consideration. The aim of the research was to determine and compare the factors that influence students' intentions to start their own business in Dongseo University (South Korea) and in Mykolas Romeris University (Lithuania), using quantitative (a sample of 367 and 335 students) and qualitative (a sample of 6 and 10 experts) research methods respectively. The results showed that personal qualities, the image of student entrepreneurship and the environmental impact on entrepreneurship vary across cultures. However, it should be noted that students' intentions to start a business are affected by determining factors in the study process. These research results could help determine what are the expected knowledge, competences or practical skills to be acquired at university.

Keywords: academic factors; economic development; entrepreneurial university; intention to start a business; inclination towards entrepreneurship

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1. Introduction

Today, entrepreneurship is considered to be one of the most important drivers of a country's economic growth (Harper, 2003; Landes et al. 2012; Rideout, Gray, 2013) in order to make possible and preserve a high level of competitiveness, and is also considered to be a catalyst for improving the quality of life and changes in a society (Keat et al. 2011; Ooi, Nasiru, 2015). Entrepreneurship is associated with the creation of new opportunities in uncertain and unknown environments (Neck, Greene, 2011).

With the wave of new and extremely fast-growing enterprises over recent decades, which has brought to light the creation of such globally successful start-up examples as Facebook, Amazon, Dropbox, Uber and a number of others, entrepreneurship has become one of the most fashionable keywords. The impact of such enterprises on economic growth is extremely significant (Wong et al. 2005). Fast-growing enterprises impact emerging industries and the acceleration of the structural changes necessary for a knowledge-based economy. Public, policy circles and the academic community more frequently speak about the importance of entrepreneurship, methods of implementation of entrepreneurial programmes as well as ways of ensuring their quality and results. For this reason, academic entrepreneurship has gained the attention of academics and policymakers around the world, and they are making efforts to encourage it.

The interaction between entrepreneurship, innovation and economic development has become the main theme in policy circles (Looy et al. 2011). This interaction is brought about through a number of various training courses, conferences, the introduction of state-owned and private-capital instruments, which promote the emergence of new businesses and ideas, as well as by the rapid development of the start-up ecosystem.

The existing literature on the academic entrepreneurial university puts a strong effort into explaining the entrepreneurial university approach, and what study methods, processes, university infrastructure, activities, and initiatives lead to an entrepreneurial university.

The entrepreneurial university is described as the outcome of a revolution in the university mission (Etzkowitz et al. 2000). Universities pay far more attention to the practical implementation and commercialisation of research results. Such a process of developing scientific knowledge has encouraged the entrepreneurship of universities. Etzkowitz et al. (2000), Jacob et al. (2003), Mok (2005) analyse the role of university entrepreneurship and interpret the process of developing scientific knowledge (including the development of innovations) by applying the triple-helix model described by Etzkowitz, Leydesdorff (1999), which examines the interaction between higher education, the government and industry/production by revealing the process of developing knowledge and innovations.

Thus, the role of universities remains highly important, and they must cope with the extreme challenges associated with integrating measures stimulating entrepreneurship, education for relevant competences, skills and the entrepreneurial attitude, and with the provision of knowledge to students (Galloway, Brown, 2002; Looy et al. 2011; Zhang et al. 2014; Bordean, Sonea 2018). Universities compete with each other; their main task is not only to introduce themselves as entrepreneurial universities, but also to demonstrate which measures may help them ensure the relevant study programme (Etzkowitz et al. 2000) to promote creativity, efficient team work, an innovative approach and develop students' abilities to compete in the global market by demonstrating the skills that are innovative and necessary for the modern environment (Mok, 2005; Rideout, Gray, 2013). Nevertheless, there is agreement that universities must first of all remain the nuclei of the knowledge sector (Laukkanen, 2003).

These modifications raise an important question: what features of an entrepreneurial university promote a student's choice and decision to start a business?

The previous studies found in the literature provide some alternative explanations for this question. Some scholars focus on the perception, desirability and feasibility of new venture creation (Veciana et al. 2005), others on educational and structural support factors affecting the entrepreneurial intentions of a student (Turker, Selcuk, 2009). Keat et al. (2011) examine demographic characteristics and family business background, the entrepreneurship learning process, the entrepreneurial curriculum and content, and the role of educators or friends. The findings vary across the studies, and often indicate a link between entrepreneurial intention and study process, personality factors, the entrepreneur image, and the university role.

However, the study provides ample evidence for the influence of university activities, entrepreneurial initiatives, and the study process on students' intentions to start a business. A more focused, holistic approach to the study of the entrepreneurial university is required to determine what factors affect students' intentions to start a business.

The purpose of the research was to determine and compare the factors influencing students' intentions to start their own business in two different national and institutional business cultures: in Dongseo University (South Korea) and Mykolas Romeris University (Lithuania).

These two universities were selected for the comparison taking into consideration the attitude of students and academic experts toward different national and institutional business cultures.

This study explores the determinants affecting the intention of students to start a business from the perspective of the university study process. Four hypotheses were developed to define the impact of the various factors on students' intentions to start a business. The hypotheses were tested and results were analysed using dispersion analysis. Finally, the paper presents discussion and conclusions applicable to both researchers and university administrators.

2. Theoretical background

2.1. The University as an educator for entrepreneurial thinking, behaviour and values

Modern conditions of globalization, rapid digital technology progress, environmental challenges and political and economic instability inevitably change the attitude towards how the activity of universities should contribute to the solution of sensitive social issues and strengthen the competitiveness of states. When physical capital and an unqualified labour force had the strongest effect on economic growth, universities had greatest effect in the social and political area by applying the Humboldt model, which promotes the freedom of thought, learning and research. When knowledge became the most important source of competitive advantage, the role of universities within the economy increased, since they became one of the main sources for the generation of knowledge, especially knowledge that could be commercially applied in practice (Audretsch, 2014).

This resulted in the emergence of the concept of the entrepreneurial university, according to which the university as an institution must undertake not only the two traditional missions of "teaching" and "research", but also a third mission of "knowledge and technology transfer" by promoting the development of new businesses, risk funds and commercially successful products within the academic community (Fayolle, Redford, 2014) and by assuming the leading role of educating for entrepreneurial thinking, behaviour and values within society (Audretsch, 2014).

In its narrow sense, the entrepreneurial university may be interpreted simply as being the place where students are taught how to start and manage their own businesses, to follow the practices and values existing in the business world, or to commercialise successfully the results of research. However, from the holistic point of view, the entrepreneurial university is characterised by a much broader spectrum of features, in particular, the *artes liberales*, which stress the importance of humanities and social sciences (especially significant for the currently developing social business branch), an orientation towards the solution of important complex social problems, innovations in internal university processes and their successful implementation, attention to the improvement of the internal culture instead of to the development of new study programmes or research subdivisions, and mixed teams of academicians and businessmen collaborating both in research and educational processes (Thorp, Goldstein, 2010).

Despite the fact that, in order to survive under conditions of stressful competitive struggle among establishments of higher education, more and more universities pursue the goal of implementing the concept of the entrepreneurial university, there still exists a certain confrontation between the proponents of the traditional university and the proponents of the entrepreneurial university. The former affirm that the idea of the entrepreneurial university has a negative effect on the development of objective knowledge, and that universities no longer direct themselves towards the solution of fundamental scientific problems because only scientific orders with a solid practical hue are in a position to attract more investments (Rasmussen et al. 2006; Kalar, Antoncic, 2015). Besides, some research shows that the representatives of life and engineering sciences treat their subdivisions as being more entrepreneurial than those of their colleagues from social sciences, while universities with more extensive multidisciplinary profiles play a more significant role in the processes leading to the emergence of new businesses and the commercialisation of scientific knowledge (Bonaccorsi et al. 2013; Kalar, Antoncic, 2015).

Thus, implementing the holistic concept of the entrepreneurial university requires any university to make considerable changes in its strategy, internal culture and relations with external partners. The following section will analyse what are the required metrics for university rankings and academic performance.

2.2. Elements of traditional university transformations in the context of student entrepreneurship

The literature contains a number of various business development scenarios and attitudes towards the assessment of the level of entrepreneurship achieved. The transformation of traditional universities into entrepreneurial universities often begins from the promotion of innovation and entrepreneurship during a study process oriented towards the integration of entrepreneurship study subjects into existing study programmes, the development of new study programmes stimulating entrepreneurship, the involvement of students and lecturers in activities such as business-plan competitions, entrepreneurship clubs, and the practical training undertaken in existing start-ups or purple enterprises (Sam, van der Sijde, 2014).

Another important element in the development of the entrepreneurial university is a changing organisational structure moving from the inflexible form of governance oriented towards functional subdivisions (faculties, research centres, laboratories etc.), which is characteristic of the research university, to the development of more flexible forms of work organisation such as teams of scientists, knowledge and technology transfer divisions and external partnerships with business and public sector institutions (Pinheiro, Stensaker, 2014). This enables universities to activate their function of knowledge and technology transfer, orientate themselves towards the investigation of major social problems, effectively share their infrastructure with partners and better respond to their true needs.

Entrepreneurial universities take an active part in national and regional economic growth promotion initiatives, which are currently manifested in such projects as the development of specialised academic complexes where the universities, together with other universities, colleges, business enterprise and non-profit organisations, implement various projects oriented towards the solution of specific community or regional problems (US Department of Commerce, 2013).

In his most recent research etzkowitz (2016) argues that the implementation of the idea of the entrepreneurial university within a traditional university consists of the following five major elements: (1) formation of a team of researchers, (2) development of a scientific base with commercial potential, (3) determination of organisational mechanisms enabling the transformation of scientific production into intellectual property products, (4) development of the academic community's skills in setting up and successfully running new businesses, and (5) establishment of research centres based on cooperation between university and industry. The first two activities generally characterise a traditional university; however, as a result of the third process the traditional university acquires the possibility to move gradually towards becoming an entrepreneurial university and later successfully to implement the last two features, which are exclusively a characteristic of the entrepreneurial university.

In order to achieve the successful implementation of these measures, it is necessary to strengthen leadership in this area, to invest in human resources and education for the specific organisational skills, to develop a positive attitude towards entrepreneurship among the students and the academic staff, to pursue internationalisation and to have a system for monitoring and assessing the entrepreneurial university (OECD, 2012; Urbano, Guerrero, 2013).

Although all prospects referred to in the scientific literature are equally significant for the development of the entrepreneurial university, if the university pursues the goal of developing entrepreneurial thinking, behaviour and values in society, as was specifically discussed in the previous section, one of the most important roles is given to the development of student entrepreneurship. Therefore, the present article will discuss in more detail which characteristics of the entrepreneurial university influence students' intentions to start a business.

2.3. Determinants of students' intentions to start a business

Entrepreneurial intentions could be defined as planned behaviour influenced by perceived self-efficacy, personal values, normative beliefs and specific desirabilities (Krueger et al. 2000). In their research, these aspects have been examined from various angles, such as the development of the entrepreneurship image at the university, personal qualities and the environment, the university study process, as well as a business-supportive environment on the university campus.

Formation of an entrepreneurship image at the university: dissemination of successful business examples at the university, education for certain personal qualities required for starting up a business

The fact that students' personal qualities (Grandi, Grimaldi, 2005) and the quality of the entrepreneurship programme contribute to the creation of new businesses was disclosed by Galloway, Brown (2002). Students' personal motivation, their understanding of the image of entrepreneurship (Keat et al. 2011; Naushad et al. 2018), self-efficacy (Kristiansen, Indarti, 2004), enthusiasm, proactive approach, wish to assume risk Sánchez (2011) all influence the implementation of the business idea, and the same needs to be said about the entrepreneurship programme, which must satisfy modern needs and comply with the current peculiarities of the business-creation process. Ooi and Nasiru (2015), Keat et al. (2011) examined how the authority demonstrated by lecturers, scientific career advisors, parents, relatives, and friends, who all surround the students, may encourage or influence them to start a business. For this purpose, the authors proposed the following hypothesis:

H1: At least half of the factors related to the formation of a positive entrepreneurship image at the university have significant influence on the students' intentions to start their own business.

Personal qualities and the environment (examples to be followed)

Entrepreneurship education also depends on demographic factors such as gender, working experience, parental working experience (whether the student comes from a family of entrepreneurs) or environmental factors such as interactive communication between the students or their involvement and participation in other university communities or meetings (Ooi, Nasiru 2015; Keat et al. 2011; Zhang et al. 2014). On the basis of these assumptions, we advanced the following hypothesis:

H2: At least half of the personal qualities and environmental factors (examples to be followed) have significant influence on the students' plans to start their own business in the near future.

University study process: overview of the main teaching methods such as case studies, simulations, design-based thinking etc. as referred to in our questionnaire.

Entrepreneurship-oriented study programmes and teaching methods have a very positive impact on students' inspiration to start their own business, on the development of a circle of colleagues sharing similar attitudes towards business, and on heightening positive emotions towards starting a new venture (Souitaris et al. 2007). Neck and Greene (2011) identified the methods that must be applied at the university in order to promote entrepreneurship at the university. They established that the following methods help achieve better results and contribute to successful entrepreneurship education: a portfolio of practice-based pedagogies, including starting businesses as part of the coursework, serious games and simulations, design-based thinking, and reflective practice. On this basis the authors formulated the following hypothesis:

H3: At least half of the factors related to the university study process have significant influence on students' plans to start their own business in the near future.

In their research, Mok (2005) revealed that appropriate government programmes promoting entrepreneurship at universities, also fellowships (grants) or any other financial encouragement tools at university, activate the development and expansion of new prospective businesses.

The studying environment at the university, the academic inventory and the network of partners: laboratories, business camps, network of business advisors and investors, competences of lecturers to advise future businesses

An important factor for the creation of businesses at universities and in any other environment is the formation of competent teams. This requires an appropriate infrastructure and access to a search system that can search for relevant team members wishing to contribute to the implementation of a new business (Clarysse, Moray, 2004)

The importance of external communication has an effect on the emergence of new businesses (Fini et al. 2011; Todorovic et al. 2011). International and inter-institutional cooperation not only help link researchers with different competences, but also expand the attitude towards the problem under discussion. Institution-based actions (university policy) such as obligations towards innovations (initiatives and internal goals) (Grandi, Grimaldi, 2005; Todorovic et al. 2011), the commercial orientation of the university towards research and cooperation, and the preservation of intellectual property (Gregorio, Shane, 2003), the frequency of communication with the research teams and an extended network of communication as well as the external relations, contribute not only to the creation of new businesses, but also to their successful development (Grandi, Grimaldi, 2003; Jacob et al. 2003). The following also stimulate the emergence of new businesses: the university study environment (Ooi, Nasiru, 2015), the infrastructure (including the patent and intellectual property subdivision) (Looy et al. 2011), an appropriate team of experts and a network of competent specialists capable of

sharing their experience and knowledge (Lockett et al. 2003), consultations during the process of developing a business plan or generating ideas, the ability to find the relevant experts, proper directions and assistance in attracting investments (Rideout, Gray, 2013; Rothaermel et al. 2007).

On the basis of these results, the authors formulated the following hypothesis:

H4: At least half of the university infrastructure factors have significant influence on the students' plans to start their own business in the near future.

2.4. Research methodology and design

The main research goal was to determine which factors, in the opinion of the students from both participating higher-education institutions, influence students' intentions to start their own business in the near future. In order to establish the opinion or position expressed by the university students in relation to the factors promoting the emergence of businesses at their Alma Mater, analogous surveys were conducted in January-June 2016 at Dongseo University (South Korea) and at Mykolas Romeris University (Lithuania). Both universities represent different national and institutional business cultures and traditions, therefore the data obtained are also valuable for comparing and assessing the influence of different entrepreneurial traditions on the students' opinion and their desire to start their own business.

By taking into account the number of students at the participating institutions, and in order to ensure the representativeness of the survey sample (probability – 95 per cent, error – 5 per cent), 367 students from DSU and 335 students from MRU were taken for the survey. The distribution of respondents based on gender was as follows: 225 women and 110 men were surveyed at the Lithuanian MRU, and 132 women and 235 men were surveyed at the South Korean DSU. In the case of the survey conducted in Lithuania, 235 respondents had practical working experience and 100 respondents were without any practical working experience, whereas in South Korea there were 211 respondents who had practical working experience and 155 respondents who had no practical working experience. As regards the presence of entrepreneurs within the families of the respondents, the answers distributed as follows: in Lithuania 160 respondents had entrepreneurs in their families and 173 respondents did not, whereas in South Korea there were 136 students with entrepreneurs in their families and 228 respondents without.

For preparing the survey questions for the students and the experts, the format of a five-level Likert scale was chosen, which helped assess the opinions expressed on the basis of a level of agreement or disagreement with each statement. In their answers, the respondents were asked to mark the most realistic statement, based on their point of view, and to evaluate it between 1 and 5 (1 – absolutely disagree, 2 – disagree, 3 – more agree than disagree, 4 – agree, 5 – absolutely agree).

Accordingly, when answering the question of whether they intend (by assigning 3-5 points to the intention and 1-2 points to no intention) to start a business in the near future, the respondents distributed as follows: the MRU respondents who intended to start a business comprised 39% (of them only 29% women and 58% men), whereas the numbers of DSU respondents who intended to start a business were significantly higher and comprised 63% (of which 61% women and 65% men).

The calculation of the average score enabled the authors to assess the total opinion expressed by the respondents from each institution about certain factors, and to establish which factors were given a more positive assessment. The estimated average scores between the institutions of higher education were compared by means of an ANOVA test in order to determine whether the differences between the different groups were significant or not.

Low statistical significance (Sig.) estimates (less than 0.05) show that the average score for each factor in at least one group has a statistically significant difference from the average score for the same factor in another group.

Regression analysis was performed by applying the methodology of rejection: during the development of the regression equation, all block factors (X) were first assessed and the significance of each of these factors within the equation was estimated. This was then followed by the performance of single rejection steps (when the significance of the factor X exceeded 5 per cent) until a reliable regression equation was developed showing which of the factors influenced the “intention to start one’s own business in the near future”.

In the case of the survey compiled for the students, the independent variables named were divided into eight subgroups: (1) image of entrepreneurship, (2) intentions to start a business, (3) personal qualities, (4) role of examples to be followed (lecturers and friends), (5) university study process, (6) role of the university in the promotion of entrepreneurship (study environment at the university, employees, assistance, advice), (7) academic inventory, (8) experts and network. The last block “demographic characteristics” enabled the researchers to determine significant information about each respondent (gender, information about studies, working experience and availability or absence of entrepreneurs within the family). In the case of the survey compiled for the experts, the variables named were divided into six subgroups: (1) image of entrepreneurship, (2) image of student entrepreneurs, (3) university study process, (4) role of the university in the promotion of entrepreneurship (study environment at the university, employees, assistance, advice), (5) academic inventory, (6) experts and network, cooperation. The questionnaire for the experts also contained one open question allowing a personal opinion about the factors promoting the entrepreneurial university.

2.5. Analysis and interpretation of results: the cases of MRU and DSU

2.5.1. Step One. Quantitative Research – Student Surveys

Assessment of separate factors constituting the image of student entrepreneurship and comparative analysis between the universities (presented in Table 1).

Table 1. Dispersion analysis of separate factors constituting the image of entrepreneurship by conducting the ANOVA test

Question	MRU	DSU	ANOVA TEST result P
Entrepreneurs who start a business contribute to economic growth (Q1)	4.16	3.92	0.001
Business helps create new jobs (Q2)	4.54	3.94	0.000
I respect those who take up the challenge of starting their own business (Q3)	4.44	3.87	0.000
Getting a good job is much more important than thinking how to start a business (Q4)	2.55	3.09	0.000
I admire successful business examples (Q5)	4.56	3.30	0.000
One’s own business is an excellent opportunity to realise oneself (Q6)	4.31	3.48	0.000
A business is good if you cannot find a good job (Q7)	2.69	2.77	0.396
TOTAL AVERAGE FOR THE QUESTIONS:	3.89	3.48	

The results of the ANOVA analysis show significant differences in the *assessment regarding the factors relating to the image of*

entrepreneurship at both universities in the E1 - E6 cases ($p < 0.05$) and the absence of any differences between the universities in the E7 case ($p = 0.396 > 0.05$).

It was also noted that the MRU students gave greater value to successful business examples (4.56 points in the average) and to their own business as an excellent opportunity for self-realisation (4.31 points in the average) than did the DSU students (respectively 3.30 points and 3.48 point in the average). The assessment of the other factors relating to the image of entrepreneurship was similar.

Assessment of the factors related to the image of entrepreneurship

H1: At least half of the factors related to the image of entrepreneurship (Q1-7) have significant influence on the students' plans to start their own business in the near future (Q8). The hypothesis included subgroup (1) of the questionnaire.

The regression analysis data showed that, in the case of MRU, only 3 factors related to the image of entrepreneurship (E6, E4, E1) have significant influence on the students' intentions to start their own business in the near future, therefore H1 is rejected for MRU. However, 5 factors (E7, E3, E4, E6, E5) have significant influence on the intentions of the DSU students to start their own business, therefore H1 is accepted for DSU. It should be noted that, in the opinion of both the MRU and the DSU students, E4 (Getting a good job is much more important than thinking of how to start up a business) reduces students' intention to start their own business in the near future.

On the basis of the available calculations, the H1 hypothesis is rejected for MRU and accepted for DSU.

Assessment of personal qualities and separate environmental factors (examples to be followed) and comparative analysis between the universities.

H2: At least half of the personal qualities and environmental factors (examples to be followed) (Q15-25) have significant influence on the students' plans to start their own business in the near future (Q8). The hypothesis includes subgroups (3) and (4).

Table 2. Dispersion analysis of the personal qualities and separate environmental factors by conducting the ANOVA test

Question	MRU	DSU	ANOVA TEST result P
I am open to challenges (Q15)	3.8776	3.5792	0.000
I am not afraid of the business being unsuccessful (Q16)	3.0663	2.6421	0.000
If the business is unsuccessful, it is always possible to start another (Q17.)	3.7246	3.2213	0.000
If the business were unsuccessful, I would return to contract employment (Q18)	3.2126	3.6749	0.000
I care what those who belong to my immediate environment think about my decision to start a business (Q19.)	3.5976	3.2951	0.000
Those who belong to my immediate environment urge me to start a business (Q20)	2.8464	2.4536	0.000
I care what university lecturers think about my intention to start a business (Q21)	2.2036	2.9342	0.000

University lecturers urge me to start a business (Q22)	2.136	2.377	0.006
The majority of university lecturers have business-related practical experience (Q23)	2.8669	3.0301	0.032
I would like to start a business because my friends have a business (Q24)	2.2043	2.1066	0.219
I would like to start a business because my parents (or one of the parents) have (has) a business (Q25)	2.3191	2.2268	0.321
TOTAL AVERAGE FOR THE QUESTIONS:	2.914091	2.867355	

The ANOVA analysis shows significant differences in the *assessment of personal qualities and environmental factors (examples to be followed)* at both universities in cases 15-23 ($p < 0.05$) and the absence of any differences between the universities in cases 24 and 25 ($p > 0.05$) (Table 2).

The data from the regression analysis showed that as many as 6 out of 11 factors have significant influence in the case of MRU, therefore H2 is accepted, whereas at DSU there are only 4 factors having significant influence, therefore H2 is rejected. Only PQ 16-18 (not afraid of the business being unsuccessful; if the business is unsuccessful, it is possible to start another or to return to contract employment) are significant for the students of both universities. This shows that fear of the business being unsuccessful will not reduce the students' intentions to start their own business.

Influence of the university study process factors on student entrepreneurship

H3: At least half of the university study process factors (Q26-30) have significant influence on the students' plans to start their own business in the near future (Q8). The hypothesis included subgroup (5) of the questionnaire.

Table 3. Dispersion analysis of separate university study process factors by conducting the ANOVA test

Question	MRU	DSU	ANOVA TEST result P
The methods of lectures used by university lecturers lead to more clarity on how to create one's own business (Q26)	2.8399	2.8937	0.495
During their lectures, university lecturers analyse actual business situations (Q27)	2.9426	3.139	0.015
In the study process, university lecturers use computer games and business simulations (Q28)	2.2561	2.9098	0.000
University lecturers encourage design-based thinking and reflective practice (Q29)	2.9383	2.9725	0.649
Computer software development must be included in the list of compulsory subjects for the students in any study area (Q30)	2.8212	3.2775	0.000
TOTAL AVERAGE FOR THE QUESTIONS:	2.75962	3.0385	

The ANOVA table shows significant differences in the *assessment of the university study process factors* at both universities in cases 27, 28 and 30 ($p < 0.05$), and the absence of any differences between the universities in cases 26 and 29 ($p > 0.05$) (Table 3).

On the basis of the calculated regression analysis data, only 2 out of the 5 factors have significant influence for both universities, therefore H3 was rejected. Factor UP30 (Computer software development must be included in the list of compulsory subjects for the students of any study area) coincides for both universities and has a significant influence on the students' intentions to start a business.

Assessment of the factors related to the role of the university in the promotion of entrepreneurship

H4: At least half of the factors related to the role of the university in the promotion of entrepreneurship (Q31-46) have significant influence on the students' plans to start their own business in the near future (Q8). The hypothesis included subgroups (6), (7) and (8) of the questionnaire.

Table 4. Dispersion analysis of the factors related to the role of the university in the promotion of entrepreneurship by conducting the ANOVA test

Question	MRU	DSU	ANOVA TEST result P
The university is an excellent place to learn how to start one's own business (Q31)	3.106061	2.752044	0.000
The university academic community shows great willingness to advise on any business-related issue (Q32)	2.844037	3.027248	0.017
The university is the ideal place to learn the things that are necessary before starting a business (Q33)	3.205438	2.809264	0.000
The university has a well-developed infrastructure and an environment that encourages entrepreneurship (Q34)	3.036474	2.940054	0.185
The university arranges competitions for students' business ideas (Q35)	2.80625	3.289617	0.000
The university promotes the businesses created by the students by granting uncompensated financing through special fellowships (Q36)	2.495082	3.571038	0.000
More business camps arranged at the university could encourage students to start a business (Q37)	3.427119	3.538251	0.162
Lecturers encourage participation in various projects that develop new innovative products (Q38)	2.866261	3.565934	0.000
The university provides excellent possibilities to use innovation centres and laboratories (Q39)	3.320872	3.123288	0.013
The university provides conditions for conducting research and experiments (Q40)	3.214953	2.986339	0.004
The university has a wide network of business partners (Q41)	3.15674	3.193989	0.613
The university lecturers actively encourage cooperation with business enterprises that could advise on issues arising in the process of business creation (Q42)	2.916667	3.331445	0.000

The university offers cooperation with business angels and venture capital funds for the attraction of investments as a business startup aid (Q43)	2.696594	3.073973	0.000
I always have a possibility to consult with and use the network of university business mentors (Q44)	2.858025	3.099723	0.001
I could start a business, but I cannot find anyone who accepts and shares my idea (Q45)	2.404255	2.776567	0.000
The university has a community (club, network), where I can find a team member based on the required competence (Q46)	2.552795	3.054645	0.000
TOTAL AVERAGE FOR THE QUESTIONS:	2.931726	3.133339	

The ANOVA analysis shows the absence of any *significant* differences *in the assessment of the factors related to the role of the university in the promotion of entrepreneurship* in cases 34, 37 and 41 ($p > 0.05$), whereas the remaining cases show significant differences (Table 4). The largest difference exists when comparing factor 36 (the university promotes the businesses created by the students by granting uncompensated financing through special fellowships) and shows that the DSU students give a more favourable assessment (3.6 points) than the MRU students (2.5 points).

The regression-analysis data showed that, out of the 16 factors comprising the role of the university in the promotion of entrepreneurship, only 3 at MRU and 5 at DSU have significant influence on the students' intentions to start a business, therefore H4 for both universities was rejected.

Meanwhile, UR37 (More business camps arranged at the university could encourage students to start a business) coincided for both universities.

2.5.2. Step Two. Qualitative Research: Expert Survey

The survey data showed that **the factors related to the image of entrepreneurship** are assessed similarly at both universities. However, it should be noted that the statement "The university is an excellent environment to start a business" received a more favourable assessment from the DSU experts (3.8 points on average) than it did from the MRU experts (respectively 2.7 points on average).

A similar assessment is given by university experts to the **influence of the factors related to the university study process on student entrepreneurship**: 3.5 points by MRU, 3.25 points by DSU. Significant differences between separate factors were not observed.

When compared with the questions given to the students, the experts received more questions related to the role of the university in promoting student entrepreneurship (the academic inventory, network of experts, cooperation). The results of the survey suggest that the discussed **factors related to the role of the university in promoting entrepreneurship** received a sufficiently similar assessment from the experts at both universities, since the MRU experts gave 3.1 points and the DSU experts gave 3.6 points on average. It should be noted that the majority of the factors received a more favourable assessment from the DSU experts than from their MRU colleagues. A more significant difference was noticed in the replies to Questions 14, 17, 18 and 36 – here the representatives of MRU were much more sceptical.

Separate attention needs to be given to the opinion expressed by the university experts concerning the image of student entrepreneurs. When assessing *the image of student entrepreneurs*, it should be noted that the opinions of the experts coincided only with regards to the statement “Only talented students with exceptional qualities can create their own business”. Meanwhile, statements 6 and 7 received a more favourable assessment from the DSU experts (3.6 points each on average) rather than from the MRU colleagues (2.7 and 2.8 points respectively). However, the statement “Students know where to go if they need advice for the development of a business plan” received a more favourable assessment from the MRU experts (2.6 points on average) than from the DSU experts (2 points on average).

Discussion and Conclusions

Academic entrepreneurship education comes about through the implementation by modern universities of their three main missions: teaching, research, and knowledge and technology transfer. By analysing the realisation of those three missions under the conditions of the knowledge economy and the fast progress of digital technology, attempts are made to define the concept of the entrepreneurial university and to suggest various scenarios for the development of such a university. The most recent research shows that the entrepreneurial university has already been defined not only as an institution capable of successfully commercialising the results of its research and efficiently teaching students how to start and manage their own businesses, but also as the leading institution for education in entrepreneurial thinking, behaviour and values within society. Therefore, analysing how the organisation of various university activities might influence the entrepreneurial mindset of students and their intentions to start their own business is significant for the body of knowledge about the entrepreneurial university. So far this has been researched from such perspectives as the formation of the image of entrepreneurship at the university, the effect of personal qualities, influence of existing business success stories, design of the university study process, and an academic environment supportive of start-ups.

In the context of countries with different cultures, this research helped to identify what knowledge, competences or practical skills should be acquired at the universities, assess the attitudes towards the entrepreneurial environment created by the universities and how they differ. People, business and education are going global, so Lithuanian and South Korean universities were chosen as cases for this research.

This study explores the determinants related to student intentions to start a business from university study-process perspectives. Four hypotheses were developed to define the impact of the various factors on the students’ intentions to start a business. The hypotheses were tested and results were analysed using dispersion analysis.

The study was conducted with the help of a two-step research process for specifying which factors influence students’ intentions to start a business from two points of view: that of students and that of experts, using case-study methodology. The first step was to implement a quantitative study: surveys of 367 respondents at Dongseo University (DSU) and surveys of 335 respondents at Mykolas Romeris University (MRU). The second step was devoted to qualitative research by conducting surveys of 6 experts from DSU and 10 experts from MRU.

The results of the quantitative study and the accepted hypotheses showed that significant influence on the plans of the MRU students to start their own business in the near future was exerted by at least half of the personal qualities and environmental factors (examples to be followed), while significant influence on the plans of the DSU students to start their own business in the near future was exerted by the factors related to the image of entrepreneurship. A more detailed analysis of the effect of separate factors related to the entrepreneurship

education process on the students' intentions to start their own business made it possible to identify several interesting observations. According to the factors related to the entrepreneurship image, the students believe that getting a good job is much more important than thinking about how to start their own business. This weakens the students' intentions to start their own business in the near future. Respondents from both universities gave more favourable answers to the statement that a business is good when there is no possibility of finding a good job. Personal qualities and environmental factors (examples to be followed) show that the students are not afraid of their business being unsuccessful, and if the business is unsuccessful, it is possible to start another business or to return to contract employment: the attitude shown by the students from both universities was favourable and they were more inclined to agree with this. This shows that the fear of their business being unsuccessful will not reduce students' intentions to start their own business.

The survey of student respondents from both universities also revealed less agreement with the statement that university lecturers, or friends and parents, who have their own business have any influence on their starting their own business. Having looked through the university study-process factors, we should highlight the fact that the students from both universities agreed with the statement affirming that computer software development must be included in the list of compulsory subjects for the students of any study areas, and it is one of the study subjects influencing the students' intentions to start a business.

While the DSU students accepted on a number of occasions the statement affirming that university lecturers use computer games and business simulations, the MRU students disagreed with this statement to a greater degree. When assessing the factors related to the role of the university in promoting entrepreneurship, the DSU and MRU university students agreed that more business camps organised at the university could encourage students to start a business.

The expert-survey data disclosed that at both universities the factors related to the image of entrepreneurship are given a similar assessment. However, the statement that "The university is an excellent environment to start a business" received a more favourable assessment from the Dongseo experts (3.8 points on average) than from the MRU experts (respectively, 2.7 points on average). A similar assessment was given by the university experts on the effect of the factors related to the university study process on the students' entrepreneurship: 3.5 points by MRU and 3.25 points by Dongseo. The research results suggest that the experts from both universities give a sufficiently similar assessment of the factors related to the role of the university in promoting entrepreneurship, since the MRU experts gave 3.1 points and the Dongseo experts gave 3.6 points on average. However, the majority of the factors and the statements saying that the university organises business camps and competitions for students' ideas and that research is conducted by university scientists together with business, received a more favourable assessment from the Dongseo university experts than they did from the MRU experts. It should be noted that the statement "Students know where to go if they need advice for the development of a business plan" received a more favourable assessment from the MRU experts (2.6 points on average) than from the DSU experts (2 points on average), who disagreed with this statement on more occasions.

The research results suggest that entrepreneurship education within the study process must change in order to keep up with the changing context. It is necessary to retain the ability to adjust and integrate the learning tools and adapt them to the peculiarities of the newly developing business world, and to become a university that is modern, competitive, marketable and entrepreneurial.

Directions for Future Research

The present study does not analyse the factors stimulating the creation of a business by taking into account its type, i.e. whether it is a spin-off (business created together with the university) or a business created without

academic involvement, such as a high-tech start-up. Therefore, any future studies could examine separately the factors relating to the creation of new businesses during studies by taking into account the type of the business. This could help broaden attitudes and examine the acts that need to be taken or the factors that especially contribute to, or promote, the creation of spin-offs. The factors determined during the study will help universities define in more detail their strategies for the entrepreneurial university, to integrate the measures that encourage and help start and develop new competitive and global businesses during studies, and to maintain their important role within society by contributing to economic growth and by providing all the knowledge and competences required to help develop the entrepreneurial university and the students' inclination to play a more active role in entrepreneurial initiatives and to start their own business.

References

- Audretsch, D. B. 2014. From the entrepreneurial university to the university for the entrepreneurial society, *Journal of Technology Transfer*, 39(3): 313–321. <https://doi.org/10.1007/s10961-012-9288-1>
- Bonaccorsi, A.; Colombo, M. G.; Guerini, M.; Rossi-Lamastra, C. 2013. University specialization and new firm creation across industries, *Small Business Economics*, 41(4): 837-863. <https://doi.org/10.1007/s11187-013-9509-5>
- Bordean, O. N.; Sonea, A. 2018. Student satisfaction and perceived skills: any link to employability?, *Entrepreneurship and Sustainability Issues* 6(1): 356-370. [https://doi.org/10.9770/jesi.2018.6.1\(22\)](https://doi.org/10.9770/jesi.2018.6.1(22))
- Clarysse, B.; Moray, N. 2004. A process study of entrepreneurial team formation: the case of a research-based spin-off, *Journal of Business Venturing*, 19(1): 55–79. [https://doi.org/10.1016/S0883-9026\(02\)00113-1](https://doi.org/10.1016/S0883-9026(02)00113-1)
- Etzkowitz, H. 2016. The Entrepreneurial University: Vision and Metrics, *Industry, Higher education*, 30(2): 83–97. <https://doi.org/10.5367/ihe.2016.0303>
- Etzkowitz, H.; Leydesdorff, L. 1999. Whose Triple Helix?, *Science and Public Policy*, 26(2): 138–139. <https://doi.org/10.1093/spp/26.2.138>
- Etzkowitz, H.; Webster, A., Gebhardt, Ch.; Cantisano Terra, B. R. 2000. The future of the university and the university of the future: evolution of ivory tower to entrepreneurial paradigm, *Research Policy*, 29(2): 313–330. [https://doi.org/10.1016/S0048-7333\(99\)00069-4](https://doi.org/10.1016/S0048-7333(99)00069-4)
- Fayolle, A.; Redford, D. 2014. *Introduction: Towards more Entrepreneurial Universities – Myth or Reality?* In Handbook on the Entrepreneurial University. Eds. Edward Edgar Publishing Limited. <https://halshs.archives-ouvertes.fr/halshs-01073674>
- Fini, R.; Grimaldi, R.; Santoni, S.; Sobrero, M. 2011. Complements or substitutes? The role of universities and local context in supporting the creation of academic spin-offs, *Research Policy*, 40(8): 1113–1127. <https://doi.org/10.1016/j.respol.2011.05.013>
- Galloway, L.; Brown, W. 2002. Entrepreneurship education at university: a driver in the creation of high growth firms?, *Education + Training*, 44(8/9): 398 - 405. <https://doi.org/10.1108/00400910210449231>
- Grandi, A.; Grimaldi, R. 2003. Exploring the Networking Characteristics of New Venture Founding Teams, *Small Business Economics*, 21(4): 329–341. <https://doi.org/10.1023/A:1026171206062>
- Grandi, A.; Grimaldi, R. 2005. Academics' organizational characteristics and the generation of successful business ideas, *Journal of Business Venturing*, 20(6): 821–845. <https://doi.org/10.1016/j.jbusvent.2004.07.002>
- Gregorio, D. D.; Shane, S. 2003. Why do some universities generate more startups than others?, *Research Policy*, 32(2): 209–227. [https://doi.org/10.1016/S0048-7333\(02\)00097-5](https://doi.org/10.1016/S0048-7333(02)00097-5)
- Harper, D. A. 2003. *Foundations of Entrepreneurship and Economic Development*, London and New York: Routledge. Available from internet: <http://www.mu.edu.et/edc/images/Resorces/Harper2003FoundationsofEntrepreneurship.pdf>

- Jacob, M.; Lundqvist, M.; Hellsmark, H. 2003. Entrepreneurial transformations in the Swedish University system: the case of Chalmers University of Technology, *Research Policy*, 32(9): 1555–1568. [https://doi.org/10.1016/S0048-7333\(03\)00024-6](https://doi.org/10.1016/S0048-7333(03)00024-6)
- Kalar, B.; Antoncic, B. 2015. The entrepreneurial university, academic activities and technology and knowledge transfer in four European countries, *Technovation*, 36-37: 1–11. <https://doi.org/10.1016/j.technovation.2014.11.002>
- Wong, P. K.; Ho, Y. P.; Autio, E. 2005. Entrepreneurship, Innovation and Economic Growth: Evidence from GEM data, *Small Business Economics*, 24(3): 335-350. <https://doi.org/10.1007/s11187-005-2000-1>
- Kristiansen, S.; Indarti, N. 2004. Entrepreneurial intention among Indonesian and Norwegian students, *Journal of Enterprising Culture*, 12(01): 55-78. <https://doi.org/10.1142/S021849580400004X>
- Krueger, N. F.; Reilly, M. D.; Carsrud, A. L. 2000. Competing models of entrepreneurial intentions, *Journal of business venturing*, 15(5): 411-432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0)
- Landes, D. S.; Mokyr, J.; Baumol, W. J. 2012. *The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times*, Princeton University Press. ISBN: 1400833582. Available from internet: https://books.google.lt/books?hl=lt&lr=&id=6rw1fxYalfUC&oi=fnd&pg=PR7&dq=Landes,+D.+S.%3B+Mokyr,+J.%3B+Baumol,+W.+J.+2012,+The+Invention+of+Enterprise:+Entrepreneurship+from+Ancient+Mesopotamia+to+Modern+Times,+Princeton+University+Press.&ots=44cE0GYAGH&sig=O1VLSp395vT5aePHTgaDatdyqk&redir_esc=y#v=onepage&q=Landes%2C%20D.%20S.%3B%20Mokyr%2C%20J.%3B%20Baumol%2C%20W.%20J.%202012.%20The%20Invention%20of%20Enterprise%3A%20Entrepreneurship%20from%20Ancient%20Mesopotamia%20to%20Modern%20Times%2C%20Princeton%20University%20Press.&f=false
- Laukkanen, M. 2003. Exploring academic entrepreneurship: drivers and tensions of university-based business, *Journal of Small Business and Enterprise Development*, 10(4): 372-382. <https://doi.org/10.1108/14626000310504684>
- Lockett, A.; Wright, M.; Franklin, S. 2003. Technology Transfer and Universities' Spin-Out Strategies. Technology Transfer and Universities' Spin-Out Strategies, *Small Business Economics*, 20(2): 185–200. <https://doi.org/10.1023/A:1022220216972>
- Looy B. V.; Landoni, P.; Callaert, J.; Bruno van Pottelsberghe, Sapsalis, E.; Debackere, K. 2011. Entrepreneurial effectiveness of European universities: An empirical assessment of antecedents and trade-offs, *Research Policy*, 40: 553–564. <https://doi.org/10.1016/j.respol.2011.02.001>
- Mok, K. H. 2005. Fostering entrepreneurship: Changing role of government and higher education governance in Hong Kong, *Research Policy*, 34: 537–554. <https://doi.org/10.1016/j.respol.2005.03.003>
- Naushad, M.; Faridi, M. R.; Syed, A. M. 2018. Economic development of community by entrepreneurship: an investigation of the entrepreneurial intent and the institutional support to the local community in Al-Kharj region, *Entrepreneurship and Sustainability Issues* 5(4): 899-913. [https://doi.org/10.9770/jesi.2018.5.4\(14\)](https://doi.org/10.9770/jesi.2018.5.4(14))
- Neck, H. M.; Greene, P. G. 2011. Entrepreneurship Education: Known Worlds and New Frontiers, *Journal of Small Business Management*, 49(1): 55–70. <https://doi.org/10.1111/j.1540-627X.2010.00314.x>
- OECD, 2012. A Guiding Framework for Entrepreneurial Universities [online]. Available from internet: <https://www.oecd.org/site/cfecpr/EC-ECD%20Entrepreneurial%20Universities%20Framework.pdf>
- Keat, O. Y., Selvarajah, Ch., Meyer, D. 2011. Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students, *International Journal of Business and Social Science*, 2(4): 206-220. Available from internet: https://www.researchgate.net/profile/Ooi_Keat2/publication/228417374_Inclination_towards_entrepreneurship_among_university_students_An_empirical_study_of_Malaysian_university_students/links/00b4953630b9610571000000/Inclination-towards-entrepreneurship-among-university-students-An-empirical-study-of-Malaysian-university-students.pdf
- Ooi, Y. K.; Nasiru, A. 2015. Entrepreneurship Education as a Catalyst of Business Startups: A Study on Malaysian Community College Students, *Asian Social Science*, 11(18): 350-363. <http://dx.doi.org/10.5539/ass.v11n18p350>

- Pinheiro R.; Stensaker B. 2014. Designing the Entrepreneurial University: The Interpretation of a Global Idea, *Public Organization Review*, 14: 497–516. <https://doi.org/10.1007/s11115-013-0241-z>
- Rasmussen, E., Moen, Ř.; Gulbrandsen, M. 2006. Initiatives to promote commercialization of university knowledge, *Technovation*, 26(4): 518–533. <https://doi.org/10.1016/j.technovation.2004.11.005>
- Rideout, E. C., Gray, D. O. 2013. Does Entrepreneurship Education Really Work? A Review and Methodological Critique of the Empirical Literature on the Effects of University-Based Entrepreneurship Education, *Journal of Small Business Management*, 51(3): 329–351. <https://doi.org/10.1111/jsbm.12021>
- Rothaermel, F. T.; Agung, Sh. D.; Jianget, L. 2007. University entrepreneurship: a taxonomy of the literature, *Industrial and Corporate Change*, 16(4): 691–791. <https://doi.org/10.1093/icc/dtm023>
- Sam, Ch.; van der Sijde, P. 2014. Understanding the Concept of Entrepreneurial University from the Perspective of Higher Education Models, *Higher Education*, 68: 891–908. <https://doi.org/10.1007/s10734-014-9750-0>
- Sánchez, J. C. 2011. University training for entrepreneurial competencies: Its impact on intention of venture creation, *The International Entrepreneurship and Management Journal*, 7: 239–254. <https://doi.org/10.1007/s11365-010-0156-x>
- Souitaris, V.; Zerbinati, S.; Al-Laham, A. 2007. Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources, *Journal of Business venturing*, 22(4): 566-591. <https://doi.org/10.1016/j.jbusvent.2006.05.002>
- Thorp, H.; Goldstein, B. 2010. *Engines of Innovation: The Entrepreneurial University in the Twenty-First Century*, The University of North Carolina Press, Chappel Hill. Book collections on Project MUSE. ISBN: 9780807834381. Available from internet: https://books.google.lt/books?hl=lt&lr=&id=VoDAAAAQBAJ&oi=fnd&pg=PP2&ots=WWKPewWCUt&sig=iPGk3vli7azbUdPAB40ILeE6eto&redir_esc=y#v=onepage&q&f=false
- Todorovic, Z. W.; McNaughton, R. B.; Guild, P. 2011. ENTRE-U: An entrepreneurial orientation scale for universities, *Technovation*, 31: 128–137. <https://doi.org/10.1016/j.technovation.2010.10.009>
- Turker, D.; Selcuk, S. S. 2009. Which factors affect entrepreneurial university students?, *Journal of European Industrial Training*, 33(2): 142-159. <https://doi.org/10.1108/03090590910939049>
- Urbano, G.; Guerrero, M. 2013. Entrepreneurial Universities: Socioeconomic Impacts of Academic Entrepreneurship in A European Region, *Economic Development Quarterly*, 27(1): 40–55. <https://doi.org/10.1177/0891242412471973>
- US Department of Commerce, 2013. *The Innovative and Entrepreneurial University: Higher Education, Innovation, and Entrepreneurship in Focus* [online]. Available from internet: https://www.eda.gov/pdf/the_innovative_and_entrepreneurial_university_report.pdf .
- Veciana, J. M.; Aponte, M.; Urbano, D. 2005. University students' attitudes towards entrepreneurship: a two countries comparison, *The International Entrepreneurship and Management Journal*, 1(2): 165-182. <https://doi.org/10.1007/s11365-005-1127-5>
- Zhang, Y.; Duysters, G.; Cloudt, M. 2014. The role of entrepreneurship education as a predictor of university students' entrepreneurial intention, *The International Entrepreneurship and Management Journal*, 10: 623–641. <https://doi.org/10.1007/s11365-012-0246-z>

About the authors:

Živilė BAUBONIENĖ, PhD candidate, Institute of Communication at Mykolas Romeris University, Lithuania. Research interest: entrepreneurship, education, startup success factors, business cycle theories, lean startup methodology, entrepreneurship theories.

ORCID ID: <https://orcid.org/0000-0003-2363-1721>

Kyong Ho HAHN, Professor, School of Business Administration, Dongseo University (DSU), South Korea. He is CEO of DSU Creative Startup Cluster, Chief Strategy Officer – Future Strategy Office at Dongseo University. Research interest: Smart Technology, Business Development, ICT industry, Management Systems, Political Economy

ORCID ID: <https://orcid.org/0000-0002-1387-0764>

Andrius PUKSAS, Ph.D, Head of Law and Public Procurement Office at Chancellery (formerly Head of the Social Innovations Doctoral School at Research and Innovation Support Centre) of Mykolas Romeris University, Lithuania. He is a member of the Lithuanian Radio and Television Council, Council of the Lithuanian Society of Young Researchers and the Lithuanian Scientific Society; Director of the Institute of the Lithuanian Scientific Society. Research interest: Higher Education, Law and Economics, Competition Law, IT Law, IP Law, Data Protection, Migration Policy.

ORCID ID: <https://orcid.org/0000-0002-1678-4634>

Eglė MALINAUSKIENĖ is Assoc. Professor at the Faculty of Economics and Business, Institute of Economics, Mykolas Romeris University and Head of the Business Innovation Laboratory. Research interest: IT governance and leadership, Innovation management, dynamic organisational capabilities.

ORCID ID: <https://orcid.org/0000-0002-1333-9877>

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