1/2018

International Journal of Entrepreneurial Knowledge

An international scientific periodical peer-reviewed journal of entrepreneurship and business issues

www.ijek.org

International Journal of Entrepreneurial Knowledge (IJEK) **ISSN 2336-2952 (Print)**
Registration MK ČR E 21546 **ISSN 2336-2960 (Online)**

PUBLISHER:
VŠP Ostrava, a. s., Michálkovická 1810/181, 710 00 Ostrava-Slezská Ostrava, Czech Republic, IČ: 25861271

EDITORIAL OFFICE:
Editorial office of the International Journal of Entrepreneurial Knowledge
VŠP Ostrava, a. s.
Michálkovická 1810/181
710 00 Ostrava-Slezská Ostrava
Czech Republic
www.ijek.org
Email: **ijek@vspp.cz**

EDITORIAL STAFF:

Executive editor:	prof. Ing. Jiří Polách, CSc.
Editors:	doc. Ing. Boris Popesko, Ph.D.
	doc. Ing. Aleksandr Ključnikov, Ph.D.
IT and publishing:	Bc. Jan Krčmař

A scientific periodical peer-reviewed journal International Journal of Entrepreneurial Knowledge (IJEK) provides expert information on all aspects of entrepreneurship and business issues offers, including the results of basic and applied economic research of domestic and international authors in the English language. IJEK maintains a standard double-blind peer review process. IJEK is an Open Access Journal, and does not charge readers or their institutions for access. All publications in IJEK must be created in compliance with the publication ethics.

INTERNATIONAL JOURNAL OF ENTREPRENEURIAL KNOWLEDGE

Issue 1/2018, Volume 6

July 2018

CONTENTS

Research paper

Jesús Eduardo OLIVA ABARCA: THE CULTURAL ENTREPRENEUR: CONSTITUTION, ORGANIZATION AND WAYS OF OPERATING...…… 5

Martin HORÁK, Jana MATOŠKOVÁ: COMPARISON OF TRAINING PROGRAMMES AND ACTIVITIES FOR CLUSTER MANAGERS IN EUROPE WITH RESPECT TO THEIR FOCUS ON SKILLS DEVELOPMENT …… 16

Davit ALAVERDYAN, Filip KUČERA, Martin HORÁK: IMPLEMENTATION OF THE SMART CITY CONCEPT IN THE EU: IMPORTANCE OF CLUSTER INITIATIVES AND BEST PRACTICE CASES …… 30

Karel PERNICA , Ladislav TYLL: BUILDING OF ENTREPRENEURIAL ETHOS THROUGH MISSION STATEMENTS: THE DIFFERENCE IN APPROACH BETWEEN PUBLIC AND PRIVATE UNIVERSITIES IN THE CZECH REPUBLIC ……..…… 52

Bruno F. ABRANTES: INTRAPRENEURIAL DYNAMICS: A CASE RESEARCH AT THE INSURANCE INDUSTRY IN PORTUGAL …… 61

Moruff Sanjo OLADIMEJI , Benneth Uchenna EZE, Kazeem Adeyinka AKANNI: BUSINESS ECO SYSTEM AND MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES) PERFORMANCE IN NIGERIA …….. 76

Other issues

Zuzana KURUCOVÁ: POSSIBILITIES FOR THE USE OF INFORMATION OBTAINED BY USING INFORMATION AND TECHNICAL MEANS AND MEANS OF OPERATIVE-SEARCH ACTIVITIES IN OTHER CRIMINAL MATTERS ..…… 87

Marcela TITTLOVÁ: YOUTH CRIME AS A AVAILABILITY PROBLEM 94

Zuzana KURUCOVÁ, Marcela TITTLOVÁ: OPTIONS FOR MONITORING OF SPACES PUBLICLY INACCESSIBLE IN THE CONTEXT OF PROTECTION OF PERSONAL DATA AND PERSONAL RIGHTS ……..……..……. 99

sciendo
International Journal of Entrepreneurial Knowledge *Issue 1/2018, Volume 6*
DOI: 10.2478/ijek-2018-0001

THE CULTURAL ENTREPRENEUR: CONSTITUTION, ORGANIZATION AND WAYS OF OPERATING

Jesús Eduardo OLIVA ABARCA[1]
Universidad Autónoma de Nuevo León

ABSTRACT

Cultural entrepreneurship is proposed as a working alternative for the graduates and the professionals who are involved in the cultural production, either as artists or writers, or as cultural promoters, managers, or cultural merchandisers. Although cultural entrepreneurship is a frequent practice in developed economies, in developing countries, such as México, it is an emerging process. Therefore, an inquiry about cultural entrepreneurs was necessary in order to comprehend their organizational and working ways. This study was limited to a local analysis of cultural entrepreneurs in visual arts, audiovisual production, and graphic design in the Mexican state of Nuevo León. The study was structured on the basis of the following research question: how is an entrepreneurial initiative in visual arts, audiovisual production and graphic design established, organized, and operated in the Mexican state of Nuevo León? The research results were categorized into three main topics: the first one is the constitution of the cultural initiatives, a theme which comprises the motives, the expectations and the starting resources of the cultural entrepreneurs interviewed. The second topic refers to the organization of their projects, which consists of the structure of the initiatives of the cultural entrepreneurs. The third topic refers to their operational modes, which includes the main activities of the cultural entrepreneurs and their promotional practices.

KEYWORDS

Cultural entrepreneurs, cultural production, cultural promotion, entrepreneurial initiative, visual arts.

JEL CLASSIFICATION

Z11

INTRODUCTION

The term "entrepreneur" has turned into a very popular concept that, in everyday representation, may refer to a kind of individual that displays traits such as leadership abilities, problem solving skills, and achieving success in each project he/she undertakes. It is an increasingly accepted

[1] *Correspondence address*: Jesús Eduardo Oliva Abarca, Ph. D.; +528117852722; jesus.olivaabr@uanl.edu.mx, Universidad Autónoma de Nuevo León, Facultad de Artes Visuales, Praga y Trieste No. 4600, Fracc. Las Torres CP 64930, Monterrey, Nuevo León, México.

premise that entrepreneurs are the main characters of the modern globalized economy, because their initiative to create and innovate are necessary qualities to accomplish economic growth. Furthermore, the entrepreneur is an economic agent who starts what Schumpeter called "creative destruction", a process in which new business models and production modes arise as the result of combining the advantages while discarding the disadvantages of existing or outdated industries and production inputs.

In an economic system in which ideas and creativity are the most valuable resources and the goal is to innovate (Howkins, 2013), entrepreneurs have acquired a starring role because they are supposed to accomplish the creation of new products and services which in turn will carry out both new cultural and financial values. The shift from locally delimited economies to a more interconnected, globalized economy enable entrepreneurs to establish their niche in cultural and creative industries, an increasingly developing economic sector where entrepreneurs can exploit their skills and realize their ambitions of personal and professional success. However, just as the progressive growth of cultural and creative industries differ from country to country (UNESCO, 2012), so do the conditions and opportunities that entrepreneurs have will depend on the cultural, social and economic situation of their respective countries.

This research focused on examining entrepreneurs' activities in three cultural industries (UNDP, 2013) in the Mexican state of Nuevo León. The study aimed to cover how local entrepreneurs in visual arts, audiovisual production, and graphic design start and establish their entrepreneurial initiatives, how they regulate and coordinate their workflows and professional relationships, and what kind of practices they carry out to sustain their entrepreneurial projects. Along with México City and Guadalajara, Nuevo León is a state with a high level of economic activity and its history has been put in motion by companies and prosperous individuals. The cultural and artistic development of Nuevo León has been also supported by wealthy entrepreneurs, though today there is an increasing number of individuals who, without many resources, still start their cultural entrepreneurial initiative.

1 CONTEXT OF RESEARCH

Usually depicted as an example of economic progress and modernization (Nivón Bolán and Villalobos Audiffred, 2006), Nuevo León is a highly industrialized state and its inhabitants are often characterized as having a strong work ethic. In this context, cultural and artistic life have been closely linked both with the expansion of local enterprises, with the development of private initiatives, and to a lesser extent, with the support provided by public cultural institutions. In the period between 1940 and 1960, different cultural institutions were founded through the initiative of local impresarios (Amores, 2007). During this time, the Alliance Francaise was established, an organization which has been supported since its founding by wealthy patrons. In the same epoch, Conciertos Monterrey was also originated, which was presided over by Roberto Zambrano Lozano, a reputable local businessman. Then, with the support of the ITESM, a distinguished private university, the SAT (the acronym for Sociedad Artística Tecnológico) was founded, an association which works actively to promote a variety of artistic events. Later, a group of owners of local companies created the Opera de Monterrey, which received donations in order to operate (Amores, 2007).

Arte A.C. was created during the mid-50s, with the purpose of offering free art exhibits and teaching drawing and painting to art enthusiasts. And one year later, in 1956, the Museo del Obispado was founded to give public access to the relics of the colonial era. During 1960, the art gallery El Caracol was established by a couple of entrepreneurs who were also art enthusiasts (Rubio Elosúa, 2000). Another representative cultural space is the Centro Cultural Alfa, founded in

the late 70s and located in San Pedro Garza García, the most affluent municipality of Nuevo León. The original purpose of this cultural center was to attract potential business associates to the group of businessmen who sponsored it, but later its mode of operation changed to the exhibition of documentaries and scientific devices mainly to schoolchildren (Amores, 2007).

During the 70s the public sector started to participate more actively in the local cultural life of Nuevo León with the creation of the Dirección Estatal de Cultura (Amores, 2007), an institution which propelled fine arts development according to the public policies of the state. Along with this public project, the Casa de la Cultura was established using the old building of the Antigua Estación del Golfo (Rubio Elosúa, 2000). Both public cultural institutions were mainly financed by federal funds, and in comparison to private initiative, it would seem an incipient incursion of the public sector into the local cultural scene. However, and in order to compensate the lack of interest shown by the government, the Universidad Autónoma de Nuevo León has been playing a key role in the cultural and artistic development of the state (Amores, 2007) by promoting and training artists of diverse disciplines.

In 1991 there was a remarkable case of a very close collaboration between private initiative and the state government (Nivón Bolán and Villalobos Audiffred, 2006) with the creation of MARCO (the acronym for Museo de Arte Contemporáneo. However, MARCO would not be the only case of an alliance between public and private initiatives, as evidenced by the Parque Fundidora. While being a public recreational space, the Parque Fundidora has its own museums and galleries, along with other amenities, all sponsored by local businessmen and corporations (Nivón Bolán and Villalobos Audiffred, 2006). Although arts and culture seem to be a field of special appeal to impresarios and companies, nowadays there is a growing trend among individuals who undertake their own cultural initiatives without the support of wealthy sponsors or public funds. These independent cultural entrepreneurs in visual arts, audiovisual production, and graphic design are the subject of this research.

2 LITERATURE REVIEW

The attraction that currently exerts the figure of the entrepreneur could be explained mainly due to the imagery built around these individuals. Frequently portrayed as economic adventurers that achieve success through facing uncertainty and risk, entrepreneurs have gained such notoriety today because of all the stories about people attaining a fortuitous enrichment only with their creativity and ideas as resources, which in turn has contributed to legitimizing the concept and practice of the entrepreneurship. Since its theoretical characterization by Schumpeter, the entrepreneur has been conceived as a key agent for economic development (Nafziger, 2006). According to some recent academic perspectives, an entrepreneur is not an exceptional person but rather an attitudinal inclination or a specific mind-set that leads to the formation of opportunities (Alvarez, Barney and Young, 2010). In addition, in an ever-changing world where the national economies are becoming a whole highly competitive and collaborative economy and where varied peoples, ethnicities, and lifestyles are in permanent connection, entrepreneurs' openness and adaptability are required attributes that assure a place in the current economy and society (Berger, 1991).

Another important factor that explains the contemporary apogee of entrepreneurship is that entrepreneurial initiatives are ongoing sources of new jobs. While large corporations and government institutions are less involved in the generation of permanent jobs, small and medium-sized businesses are assuming the responsibility of jobs creation (Drucker, 2002). This ability to produce jobs is one of the most valuable features of entrepreneurs, who are also capable of detecting and exploiting business opportunities (Cuervo, Ribeiro and Roig, 2007). Furthermore, for some scholars, the entrepreneur is often conceived as "the driving force of economic change,

bringing innovation, creativity, and coordination to the economy" (Lavoie, 1991: 33), that is, the entrepreneur is depicted as a symbol and a synonym of economic progress. Being such a prominent economic agent, an entrepreneur's actions and behavior differ from those of a capitalist or a manager. While capitalists and managers usually hold and administrate resources avoiding any potential risk, the entrepreneur commences and propels new business projects accepting all contingencies (Cuervo, Ribeiro and Roig, 2007). Moreover, since entrepreneurs are commonly related to the establishment of small and medium businesses, as opposed to large consolidated companies, there is a possibility of confusing them with small business owners. However, the main difference between these two economic agents is also a matter of behavior, being that the small business owner does not undertake any innovative or risk practices while the entrepreneur is strongly committed to the innovation and the search for profitability and business growth (Carland et al., 2007: 79).

From the perspective of the theory of economic development, the entrepreneur fulfills different roles that comprise a constant aspiration to improving. Nafziger (2006) states that an entrepreneur can act simultaneously as a coordinator of production resources, as a decision-maker in uncertainty, as an innovator, and as an input completer (393). The multitasking nature of entrepreneurs includes also a high degree of creativity, a quality that aids them to adapt to a constantly changing economy and to find solutions to every-day problems (400). There are many conditions that make it possible for an individual to become an entrepreneur: education, socioeconomic background, political regime (410). But, for Drucker (2002) the decisive factor that enables the appearance of the contemporary entrepreneur is the application of a managerial way of thought to almost every aspect of human life (14). The result of this progressive implementation of management in business and non-business domains is the emergence of an individual who is always pursuing change and innovation (28) through varied creative approaches.

For their creative ways of seeking opportunities, their urge for innovation, and their adaptability, entrepreneurs are indeed key agents in cultural and creative industries (Hartley et al., 2013). As a matter of fact, since the connections between culture and economy are widely accepted (UNDP, 2013) and businesses require evolving in a more diverse, adaptive, and creative ecosystem (Howkins, 2013), entrepreneurs have become the leading characters in the economic sector based in culture. Moreover, there is a parallelism between the artist and the entrepreneur (Hartley et al., 2013) due to the two figures being closely related to being creative and innovative (Oakley, 2009). Also, both the artist and the entrepreneur represent a more flexible work pattern which is essential in the cultural and creative industries (Davies and Sigthorsson, 2013). Furthermore, academic programs, together with public cultural institutions and even international organizations encourage artists to become entrepreneurs, that is, to create and to identify opportunities to introduce new practices that encompass both cultural and economic values (UNDP, 2013).

It is necessary to add that the cultural entrepreneur has its own very specific traits, behaviors, and motivations that make it possible to distinguish it from the entrepreneur as a strictly economic agent. Even though cultural entrepreneurs are also devoted to the generation of novelties and the creation of opportunities, they are not commercially determined (HKU, 2010: 58), and they seek to create or to promote cultural values as well as to obtain profitable results from their activities. A more accurate definition on this topic is the one presented in the report prepared by the Utrecht School of Arts (HKU): "a cultural and creative entrepreneur can be understood as someone who creates or innovates a cultural or creative product or service and who uses entrepreneurial principles to organise and manage his/her creative activity in a commercial manner" (60). Usually, cultural entrepreneurs are related to self-financing and secondary employment in order to sustain their initiatives, which is another reason to establish a similarity between them and artists (Towse, 2013). Similarly, cultural entrepreneurs are regularly under a casualization labor regime, that is, they are commonly engaged in short-term works to obtain funds for their own entrepreneurial projects

(Davies and Sigthorsson, 2013).

The presence of the entrepreneurial mind-set in culture has contributed to the proliferation of small and medium-sized cultural companies (Hesmondhalgh, 2013). As independent or casual workers, cultural entrepreneurs undertake the establishment of small or medium-sized businesses, mainly to keep expenses low and to maintain their creative autonomy (Hesmondhalgh, 2013), although they still depend on customers' tastes and preferences. Consequently, even if implying the creation of an artwork, the activities of cultural entrepreneurs are mostly related to the tertiary or service sector (O'Brien, 2014), because the goods they produce are oriented to satisfy a client's specific needs. Another aspect to note is that, due to the small number of workers in small or medium-sized cultural companies, the cultural entrepreneurs fulfill multiple tasks at the same time such as the creation or production of cultural goods or services, the organization of resources, the management of the business, and the discovery of creative and financial opportunities (HKU, 2010). Under those circumstances, cultural entrepreneurial initiatives may not have a strictly hierarchical organization, that is, there may not be a need for the classical distinction between employer and employee but rather collaborators and colleagues (Kolb, 2015) who share creative affinities and professional goals.

3 METHODOLOGY

This study was carried out through qualitative method in order to obtain a proper description of the phenomenon analyzed. Qualitative methods can help to understand situations from the inside (Gillham, 2000) through the interaction with the actors involved. The research design chosen was the case study, specifically oriented to a sociological approach to the subject examined (Hancock and Algozzine, 2006) for collecting more detailed information about the development and interactions of cultural entrepreneurs. As the objective of this research was to understand a specific phenomenon, the intrinsic case study with emphasis on a descriptive design was selected (Hancock and Algozzine, 2006). The research question that guided this research can be expressed as follows: how is an entrepreneurial initiative in visual arts, audiovisual production and graphic design established, organized, and operated in the Mexican state of Nuevo León? In order to answer this research question, it was necessary to set pertinent criteria to select and distinguish the individuals who were the subject of this study, as well as to employ appropriate strategies to gather information.

Three types of general criteria for selecting the research participants were established. The first criterion referred to their professional activities. All the prospective participants had to have experience in either the creation, the promotion, or the commercialization of cultural goods and services related to the visual arts, the audiovisual production, and the graphic design. Additionally, all the prospective individuals had to have academic training oriented towards these three cultural industries (UNDP, 2013). The second criterion comprised the sociodemographic characteristics of the expected participants. The main aspects considered were age, municipality of operation, and education level. All the research participants were in an age range of 20 to 40 years, and their working places are distributed throughout Monterrey, San Pedro Garza García, San Nicolás de los Garza, and Guadalupe. Also, all the research participants hold at least a bachelor's degree. The third and last criterion involved the grade of consolidation of their entrepreneurial initiatives, that is to say, how long have their business projects lasted and have they defined their workflow. All the participants' entrepreneurial initiatives have been running from 1 to 5 years and all of them have a well-defined workflow which involves sporadic or frequent collaborative work.

The research strategies used for the case study were individual interviews with the research participants. The interviews were designed as semi-structured, in order to facilitate the interviewees' ability to freely express their perceptions and experiences (Hancock and Algozzine,

2006). All the interviews were developed focusing on five main framing questions and letting the interviewee elaborate his/her own responses according to his/her own thoughts and experiences on the topic. During each interview, it was necessary to add complementary commentaries or questions about specific topics to motivate the interviewee to elaborate on his/her responses (Gillham, 2000). All the information collected in the interviews was analyzed through the frequencies of the responses in order to discover patterns of the constitution, organization, and operation or working ways of the cultural entrepreneurial initiatives. The research results were classified in three main topics which are detailed in the following section.

4 RESEARCH RESULTS AND DISCUSSION

This research focused on the forms by which cultural entrepreneurs constitute and organize their initiatives as well as the ways they work and the factors that determine their practices. The principal data sources used were publications about the theory and practice of entrepreneurship and cultural entrepreneurship and the information obtained from interviewing local cultural entrepreneurs. The overall analysis of the research data was made by classifying the second data sources, in order to get inside information about the organizational and working models of cultural entrepreneurs of the Mexican state of Nuevo León. This study examined the perceptions, experiences, and expectations of forty-eight cultural entrepreneurs that work across specific regions of Nuevo León. Although this federal entity is formed by 51 municipalities, the cultural entrepreneurs interviewed centered in Monterrey, San Pedro Garza García, San Nicolás de Los Garza and Guadalupe, the most active municipalities of Nuevo León, in terms of population, professional and economic opportunities and cultural supply and demand.

The research findings obtained from the analysis of the collected data were listed as following: a) constitution of interviewees' initiatives, topic that includes the reasons and expectations to establish themselves as cultural entrepreneurs and their starting resources; b) organizational structure of their projects, which includes the time dedicated to their initiatives, the extent of income to maintain their cultural projects and their relationships with other cultural workers; and c) their operational models, which cover their main practices as creators, promoters or merchandisers, their target audiences, their preferred medium to promote their activities, and finally their motives to be satisfied about their own role as cultural entrepreneurs.

4.1 Constitution of local cultural entrepreneurs' initiatives

The findings on this topic concern the motives by which the interviewees decided to become cultural entrepreneurs. According to their responses, there are four main reasons that research participants undertake a cultural project as their own micro-enterprise: the first is to fulfill a personal ambition; the second is to further the autochthonous culture and inhabitants' creative potential; the third motive is to create a source of employment through their cultural disposition; the fourth is to satisfy financial needs. Twenty-point eight percent (10 out of 48) of the interviewees seek the achievement of personal goals such as improving their creative work or using their time as they like. The same percentage, 20.8% (10 out of 48) of the research participants expressed that their initiatives were started in order to promote regional culture and local creative talent. For 16.6% (8 out of 48) of the interviewees, their main purpose was to monetize the cultural goods they produce and the cultural services they provide. And, for 10.4% (5 out of 48) of the participants, their priority was to attain financial independence and labor autonomy. There were mixed responses that integrated two and three of the motives described above. Eighteen-point seven percent (9 out of 48) of the interviewees declared that their personal goals are to employ their creativity as a source of profit and, at the same time, to enhance their creative skills. Twelve-point five percent (6 out of

48) of the research participants procured to balance their economic interests with their personal goals and a cultural commitment.

Another aspect to consider on this topic is the available resources which local cultural entrepreneurs had at the moment they undertook their projects. In terms of financing, only 14.5% (7 out of 48) of the research participants had their initiatives financed by external sources, such as a government subsidy or sponsorship. Eighty-five-point-four percent 85.4% (41 out of 48) of the interviewees stated that their starting financing was either their own savings or family support. The research also considered the type of spaces where cultural entrepreneurs could afford to start their projects. While 56.2% (27 out of 48) of the research participants began their micro-enterprises on a rental property, only 12.5% (6 out of 48) of the interviewees own a property. It is worth to highlight that 31.2% (15 out of 48) of the research participants work without a physical space, using the Internet to promote the products they make or the services they offer.

Given the high competitiveness to obtain public funds, and the cuts to the budget channeled to the arts and culture, most of the local cultural entrepreneurs must rely on side jobs or in their families support to afford their business initiatives, and only a few of them obtained public subsidies. Although the economic conditions of most of the research participants are not ideal, their financial alternative gives them a greater range of freedom to realize their aesthetic values through their work (Maanen, 2009), but, at the same time, they have a limited access to institutional spaces such as museums or art galleries (Stallabrass, 2004), which is the decisive factor by which they resort to social media sites to promote their activities. It is important to note that the local cultural entrepreneurs who have their initiatives supported by external subsidies work very often in companies-sponsored projects or in public events as a way to give back the economic support, which implies that even public financing on arts and culture is adopting a credit model to recover the investment (Maanen, 2009).

4.2 Organizational structure of cultural entrepreneurs' projects

This topic covers the time the research participants spend in their initiatives, their side activities, the income and the expenses to maintain their cultural micro-enterprises, if they work alone or have sporadic collaborators or a permanent work team, and the relations they establish with other local cultural entrepreneurs. Sixty-point four percent (29 out of 48) of the interviewees are involved full time with their cultural projects, while 39.5% (19 out of 48) of them are involved part time, having to rely on side activities. Of this percentage of participants doing secondary activities, 57.8% (11 out of 19) of them are engaged in activities closely related to their cultural initiatives, such as teaching arts, photography, and design, or working at cultural governmental institutions or private galleries or museums. The remaining 42.1% (8 out of 19) of those interviewees work in activities non-related to their cultural projects, such as telemarketing.

The need to do side activities is explained by the fact that the income that local cultural entrepreneurs obtain is usually insufficient or just enough to continue with their micro-enterprises but in no case more than sufficient. In addition, due to the characteristics of cultural sectors, most of the interviewees are either self-employees or work only on temporary projects (Throsby, 2004). Fifty-four-point one percent (26 out of 48) of the research participants stated that their income is sufficient, while 45.8% (22 out of 48) of them declared that their overall expenses exceed the revenues they obtain from their cultural initiatives. Despite their financial situations, 68.7% (33 out of 48) of the research participants work within a permanent team. Thirty-one-point two percent (15 out of 48) of the interviewees work with occasional collaborators.

Moreover, all of the research participants manifested that the team members usually assume or shift between many different roles in their cultural initiatives, whether as a producer, manager,

accountant or promoter, to mention a few. This is a necessary practice for all the interviewees because their projects work with low budgets and they cannot afford specialized professionals. Along with the stated above about the necessity of cultural producers of holding multiple jobs, there are other significant traits that may define the organizational structure of local cultural entrepreneurial initiatives, such as the uncertain career prospects, the unequal salaries or the low payments per committed projects (Hesmondhalgh, 2013), and, as Throsby (2004) estates, it appears that the academic or professional training is not a synonym of financial success, but rather to be tolerant of risk, and to be able to stablish relationships with a broad kind of individuals .

Regarding the relations that the research participants set with other local cultural entrepreneurs, 72.9% (35 out of 48) of the interviewees arrange creative collaborations, where they provide a good or a service such as creating a specific artwork, or producing a promotional video or designing a brand, and in exchange they acquire or borrow goods or services from other cultural entrepreneurs. Eighteen-point seven percent (9 out of 48) of the research participants declared that they publicize the goods produced and the services provided by other local cultural entrepreneurs and at the same time their work is promoted by those they had supported. The last type of relationship that the interviewees establish with their peers is the trading of goods or services. Whereas in the creative collaborations, the research participants exchange goods or services for another, in this type of relationship, the interviewees pay for or sell a specific good or service to or from other local cultural entrepreneurs. Only 8.3% (4 out of 48) of the interviewees participate in this kind of association.

4.3 Local cultural entrepreneurs' operational models

On this topic, the findings address the major roles and practices that local cultural entrepreneurs perform in their initiatives, their target audiences, the means they employ to promote their work, and the reasons that give them a feeling of satisfaction about their own projects and activities. As it was stated above, all of the research participants assume different functions, whether as producers, as managers and promoters and, in some cases, all of these at the same time. Thirty-five-point four percent (17 out of 48) of the interviewees are mainly committed to producing cultural goods and to providing cultural services. Twenty-two-point nine percent (11 out of 48) of research participants are engaged in the promotion and commercialization of cultural assets. Forty-one-point six percent (20 out of 48) are at the same time creators, managers, and promoters. Based on the research participants' responses, 50% (24 out of 48) of them target a general audience, while 33.3% (16 out of 48) of interviewees have their own customer portfolio, which means that they have identified their most profitable and sustainable clients. Sixteen-point six percent (8 out of 48) are currently defining their cultural market by segmenting their most frequent clients.

In reference to the media where local cultural entrepreneurs prefer to promote their activities, 95.8% (46 out of 48) of the interviewees employ social networks and their own websites, due to its scope and affordability. Only 4.2% (2 out of 48) of the research participants have the means to use print media, such as brochures and posters. It is pertinent to point out that none of the interviewees use the traditional channels of cultural distribution, that is, public museums, private galleries or academic criticism. This could be explained by two arguments: first, the local cultural entrepreneurs' initiatives could be conceived as the alternative to the restricted access to the cultural and artistic elites both on public and private sectors. Second, the local cultural entrepreneurs are struggling to validate themselves in the field of cultural production as cultural agents by their own means, and the Internet has proved to be an exceptional business platform. These two statements are, in fact, correlated, as they offer an insight into the economic situation and the hierarchical structure that affect the local cultural entrepreneurs' working ways.

According to the data analysis, there are three main reasons by which local cultural entrepreneurs are satisfied with their initiatives. First, 52% (25 out of 48) of the research participants stated that

their contentment is due to artistic and creative accomplishments, as they perceive major improvements in their skills and in their creations. Second, 29.1% (14 out of 48) of the interviewees declared that their feeling of satisfaction is based on economic achievements, such as being her or his own boss and to efficiently manage their own income and expenses to sustain themselves and their micro-enterprises. The last main motive for local cultural entrepreneurs' contentment in their own initiatives is social and cultural acknowledgment. Eighteen-point seven percent (9 out of 48) of the research participants believed that their cultural micro-enterprises had slowly gained a good reputation and acceptance among other cultural agents. All the findings that were previously described can help to construct the social representation of cultural entrepreneur.

According to the above, it seems that the art-for-art creed is still the main reason for the local cultural entrepreneurs' satisfaction on their initiatives, which is also the peculiarity that differences the cultural production from other sectors (Throsby, 2004). However, the persistence of the social representation of artist as bohemian, and the art-for-art way of life could be used for ideological purposes, such as to promote in the cultural producer the acceptance of a non-pecuniary vision of life, as well as the idea of the artist or intellectual as an exceptional individual who is beyond materialistic concerns, which, in turn, implies the consent of a precariousness regime (McRobbie, 2016) that drives the cultural entrepreneur to accept unequal conditions of working, salary and life, as long as he/she has creative freedom.

CONCLUSSIONS

The results of this study showed a remarkable difference between the intervention of private initiative in the cultural life of Nuevo León from the 40s to the 90s and current day. There is a proliferation of micro, small and medium-sized cultural enterprises established with few or no resources by artists or cultural workers who want to live from their vocation. Although wealthy businessmen and companies are still deeply involved in Nuevo León cultural life, there is also major participation of many individuals who are not driven solely by financial goals but also for cultural concerns. The majority of these cultural entrepreneurs initiate their businesses in a rental property, while some of them have a property of their own. Although they are still a minority, some cultural entrepreneurs are relying on e-business to promote and to commercialize their creations and services.

Despite the increased spread of cultural entrepreneurs' initiatives, there is a persistent gap between the scope and income of their independent projects and those financed by private companies, public funds, or both. From an optimistic perspective (Kolb, 2015), this would diversify the cultural offering in the state and lead to a progressive improvement of the cultural goods and services provided by independent cultural entrepreneurs as well as by private and public cultural institutions. But, as McRobbie (2016) suggests, this competitive paradigm in culture contributes to artists and cultural workers assuming a managerial mind-set and, consequently, accepting the ups and downs of financial markets as conditions for cultural production.

The research results also demonstrate that independent entrepreneurial initiatives in culture are originated mainly as alternatives to the shortage and the centralization of resources and cultural spaces in the state. As a consequence of recent cuts to the budget for arts and culture, in Nuevo León, and presumably in other Mexican states, the cultural elites tend to centralize and dominate the classical channels of cultural production and promotion, such as museums, galleries, theaters, and specialized press. This leads to fewer opportunities for many aspiring cultural agents that endeavor to work in an institutionalized environment. Under those circumstances, the cultural entrepreneurial initiatives are attempts to generate new channels and spaces for emerging cultural production as well as for searching for alternate cultural promotion strategies and profitable opportunities (HKU,

2010), with the e-business model being a very reliable option for the local cultural entrepreneurs who manage their projects with few resources and little income.

This study contributes to the knowledge of the constitution, organization, and operation ways of cultural entrepreneurial initiatives in the Mexican state of Nuevo León. The research results showed that there is an increase of independent cultural micro, small, and medium-sized businesses. In addition, these initiatives are conceived as alternative channels and spaces for cultural production and promotion in the region. These findings could be considered in further local studies about the functioning of specific cultural systems such as visual arts, audiovisual production, and graphic design. Also, this study could propel a comparative research study about the conditions of development of cultural entrepreneurs in developed countries and those in developing countries.

ACKNOWLEDGEMENTS

This research was supported by the Programa de Apoyo a la Investigación Científica y Tecnológica (PAICyT), a program financed by the Universidad Autónoma de Nuevo León, as well as by the Apoyo de Fomento a la Generación y Aplicación Innovadora del Conocimiento, and, and by the Fortalecimiento de Cuerpos Académicos, both financed by the Programa para el Desarrollo Profesional Docente, para el Tipo Superior (PRODEP). The author of this article thanks to all of the research participants.

REFERENCES

Alvarez, Sh., Barney, J., and Young, S. (2010). Debates in Entrepreneurship: Opportunity Formation and Implications for the Field of Entrepreneurship. In Acs, Z., and Audretsch, D. (Eds) Handbook of Entrepreneurship Research. An Interdisciplinary Survey and Introduction. New York: Springer. 23-45.

Amores, J. E. (2007). Monterrey: una cultura propia. In Ortega Ridaura, I. (Coord.) Nuevo León en el siglo XX. Del Segundo auge industrial a la crisis de 1982. Monterrey: Fondo Editorial de Nuevo León. 73-107.

Berger, B. (1991). The Culture of Modern Entrepreneurship. In Berger, B. (Ed.) The Culture of Entrepreneurship. San Francisco: Institute for Contemporary Studies Press. 13-32.

Carland, J., Hoy, F., Boulton, W., and Carland, J. A. (2007). Differentiating Entrepreneurs from Small Business Owners: A Conceptualization. In Cuervo, A., Ribeiro, D., and Roig, S. (Eds) Entrepreneurship: Concepts, Theory and Perspective. New York: Springer. 73-81.

Cuervo, A., Ribeiro, D., and Roig, S. (2007). Entrepreneurship: Concepts, Theory and Perspective. Introduction. In Cuervo, A., Ribeiro, D., and Roig, S. (Eds) Entrepreneurship: Concepts, Theory and Perspective. New York: Springer. 1-20.

Davies, R., and Sigthorsson, G. (2013). Introducing the Creative Industries. From Theory to Practice. California: Sage Publications.

Drucker, P. 2002. Innovation and Entrepreneurship. Practice and Principles. New York: Harper & Row.

Gillham, B. (2000). Case Study Research Methods. London: Bloomsbury Academic.

Hancock, D., and Algozzine, B. (2006). Doing Case Study Research. New York: Teachers College Press.

Hartley, J., et al. (2013). Key Concepts in Creative Industries. California: Sage Publications.

Hesmondhalgh, D. (2013). The Cultural Industries. California: Sage Publications.

Howkins, J. (2013). The Creative Economy. How People Make Money from Ideas. London: Penguin Books.

HKU (2010). The Entrepreneurial Dimension of the Cultural and Creative Industries. Utretch:

Hogeschool vor de Kunsten Utrecht. Available from www: <http://kultur.creative-europe-desk.de/fileadmin/user_upload/The_Entrepreneurial_Dimension_of_the_Cultural_and_Creative_Industries.pdf>. Consulted: 24.5.2017.

Kolb, B. (2015). Entrepreneurship for the Creative and Cultural Industries. Mastering Management in the Creative and Cultural Industries. New York: Routledge.

Lavoie, D. (1991). "The Discovery and Interpretation of Profit Opportunities". In Berger, B. (Ed.) The Culture of Entrepreneurship. San Francisco: Institute for Contemporary Studies Press. 33-51.

Maanen, H. (2009). How to Study Art Worlds. On the Societal Functioning of Aesthetic Values. Amsterdam: Amsterdam University Press.

McRobbie, A. (2016). Be Creative. Making a Living in the New Culture Industries. Cambridge: Polity Press.

Nafziger, W. (2006). Economic Development. New York: Cambridge University Press.

Nivón Bolán, E., and Villalobos Audiffred, H. (2006). Perfil metropolitano del consumo cultural. Los casos de Guadalajara, Monterrey y el Distrito Federal. In Arizpe, L. (Coord.) Retos Culturales de México frente a la globalización. México: Miguel Ángel Porrúa. 535-559.

Oakley, K. (2009). 'Art Works'-Cultural Labor Markets: A Literature Review. London: Creative, Culture and Education.

O'Brien, D. (2014). Cultural Policy. Management, Value and Modernity in the Creative Industries. New York: Routledge.

Rubio Elosúa, E. (2000). De promotores, instituciones y políticas culturales. In Moyssén, X. (Ed.) Artes Plásticas de Nuevo León. 100 años de historia, siglo XX. Monterrey: Museo de Monterrey. 155-196.

Stallabras, J. (2004). Art Incorporated. The Story of Contemporary Art. New York: Oxford University Press.

Throsby, D. (2004). Economics and Culture. New York: Cambridge University Press.

Towse, R. (2013). A Textbook of Cultural Economics. New York: Cambridge University Press.

UNDP (2013). Creative Economy Report. New York: UNESCO/UNDP.

Available from www: <http://www.unesco.org/culture/pdf/creative-economy-report-2013.pdf>. Consulted: 4.6.2017.

UNESCO (2012). Measuring the Economic Contribution of Cultural Industries. A Review and Assessment of Current Methodological Approaches. Montreal: UNESCO Institute for Statistics.

Available from www: <http://uis.unesco.org/sites/default/files/documents/measuring-the-economic-contribution-of-cultural-industries-a-review-and-assessment-of-current-methodological-approaches-en_1.pdf>. Consulted: 7.6.2017.

sciendo
International Journal of Entrepreneurial Knowledge *Issue 1/2018, Volume 6*
DOI: 10.2478/ijek-2018-0002

COMPARISON OF TRAINING PROGRAMMES AND ACTIVITIES FOR CLUSTER MANAGERS IN EUROPE WITH RESPECT TO THEIR FOCUS ON SKILLS DEVELOPMENT

Martin HORÁK, Jana MATOŠKOVÁ
Faculty of Management and Economics of Tomas Bata University in Zlín

ABSTRACT

The role of cluster manager and his/her development is an essential element in order to gain a competitive advantage and to ensure sustainability of cluster organisation. Nevertheless, research on cluster management has hardly studied the scope of offered trainings with areas of developed skills for this position. Hence, the main objective of the paper is to analyze and evaluate content of current training programmes for cluster managers in Europe with respect to their focus on the development of hard and soft skills. Analyzed training programmes were chosen based on the consultations with members from National Cluster Association operating in the Czech Republic. Regarding the defined criterion, hard skills included terms related to specific cluster knowledge (tools/methods for cluster setting/development; cluster policy), knowledge in management area. Meanwhile, we understood soft skills as terms related to intrapersonal skills (one's ability to manage oneself) and interpersonal skills (how one handles one's interactions with others). The article was processed via desktop research involving collection of relevant information from secondary sources. The paper explores ten international programmes done across Europe. Based on the gathered data, we claim that analyzed programmes are overwhelmingly focused on developing hard skills (mainly specific knowledge and abilities required for success in the cluster manager position – such as knowledge about identifying cluster, tools and methods for development of clusters). However, based on the literature, it is clear that soft skills (intrapersonal and interpersonal skills) are crucial for sustainable development of organisation. Considering implications for the practice, our findings provide valuable point for organisations/initiatives offering training programmes for cluster managers.

KEY WORDS

cluster, cluster organisation, cluster management, cluster manager, training programmes.

JEL CLASSIFICATION

P13, O31.

INTRODUCTION

The concept of cluster and clustering has been popular among many researchers (see Swann & Prevezer, 1996; Knorringa & Meyer-Stamer, 1998; Cooke, 2001; Martin & Sunley, 2003; Steiner & Hartmann, 2006). However, the most accepted definition of the cluster is from American professor

and economist Michael Porter. Porter (1990) defined cluster as "geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries and associated institutions (universities, standards agencies, and trade associations) in particular fields that compete but also cooperate." The main objective common to all of the clusters is to strengthen the competitiveness of participating companies, which means providing their products and services more effectively than their competitors. Being a member of a cluster is beneficial for participating companies as well as for universities and regional government. For example, Mazilu and Sava (2011) in their paper list following benefits: the clusters can reduce the barriers of the market and determine the creation of new enterprises and business models, they can stimulate and create strong synergies, they help companies to find resources, technologies and knowledge and facilitate ideas to transform in opportunities of businesses. Therefore, cluster can be seen as an important tool to increase competitiveness of involved actors and whole regions/countries.

Nowadays more scholars are starting to give focus also on ways clusters are managed (Ingstrup and Damgaard, 2013; Schretlen et al., 2011; Sölvell, Lindqvist and Ketels, 2003) and on the importance of cluster manager/leader (Sydow et al., 2011; Zagorsek et al., 2008; Barry, 1991; Menu, 2012; Jarjabka and Weiner, 2012). It is because the performance and sustainability of the cluster depends mainly on the quality of cluster manager (Sölvell, Lindqvist and Ketels, 2003). The impact of management appears to be a crucial success factor for cluster performance (Gebhardt & Pohlmann, 2013; Günther & Meissner, 2017) and recent experience provides evidence that a professional management has a positive role to develop and keep a cluster (Günther & Meissner, 2017). When the person in a role of cluster manager is not competent enough, it may have negative consequences on the functioning of the whole cluster (Sölvell, Lindqvist and Ketels, 2003). According to Jarjabka and Weiner (2012) and Zagorsek et al. (2008), the training and the education of the cluster manager plays an important role in the success of the cluster's life. Doronina et al. (2016) add that without the necessary, qualified employees, any organization will not be able to achieve the objectives and to carry out the activity. Gebhardt and Pohlmann (2013) found out that not a lot of cluster managers will distinguish themselves in mastering complexity of management. Thus, the researchers should start giving more attention to the cluster management development. However, possible international training activities for cluster managers have not been investigated broadly among scholars yet. Furthermore, their scope and area of developed skills are limited in the literature. Hence, we stated following research questions:

- Which training programmes are offered to cluster managers within Europe?
- Which skills are being developed within these programmes?

The main objective of our paper is to analyze and evaluate content of current training programmes for cluster managers in Europe with respect to their focus on the development of hard and soft skills.

The article is structured as follows: chapter 1 introduces definitions of cluster organisation, cluster management, activities carried out by the cluster manager, which is followed by the development of managers in general; chapter 2 describes used methodology; chapter 3 focuses on an analysis of training programmes and activities for cluster managers on the international level. The next section presents results and discussion. Finally, a conclusion and suggestions for the direction of future research are given.

LITERATURE REVIEW

In our paper, we focus on the development of cluster managers skills with respect to current training programmes in Europe. Therefore, it is firstly needed to define term as cluster organization and to describe the position of cluster manager including his work agenda. Afterwards, we point out the

importance of management development with the emphasis to developing areas of skills and composition of successful training programme for managers.

The role of cluster manager in cluster organization

Cluster manager is in charge of formalised institution called cluster organisation. Meanwhile, clusters are perceived as natural groups of companies and associated institutions; cluster organisation (CO) is defined by Schretlen et al. (2011) as „organised efforts to facilitate cluster development, which can take various forms, ranging from non-profit associations, through public agencies to companies.“ A cluster organisation has a legal entity, whose form is selected by stakeholders with respect to functionality of a cluster organisation in some specific sectoral conditions. The task of the CO is according to Břusková et al. (2013) to create a favorable environment for cooperation within the cluster to ensure strategic and dynamic development, the identification of joint projects, training and support innovative business.

Day-to-day management and development of the CO is ensured by the project team, headed by the cluster manager. Günther and Meissner (2017) define cluster management as “all organizational and managerial work within a cluster that contributes to improved interconnectedness between cluster members (internal relations) and between the cluster and surrounding actors (external relations).” In this context, Břusková et al. (2013) argue that the interest of stakeholders in the quality of cluster manager from the beginning is critical to the success of the cluster, because he / she is the person who creates the necessary environment of confidence in the cluster and ensures its stability. Similarly, Pavelkova et al. (2009) add that the foreign cluster managers see the most important aspects leading to the success of the cluster in quality management, which is connected with a clear definition of objectives, the vision of the cluster and the strategic plan, as well as mutual trust, willingness to cooperate and proactivity of members. The manager thus acts as an intermediary between the members of the CO and stimulates collaboration inside and outside of the cluster. Some authors perceive the position of the cluster manager as identical to a cluster facilitator (Ingstrup and Damgaard, 2013). However, a cluster facilitator is rather defined as a person who has a key role in the initial stages of formation and development of the cluster (Pavelkova et al., 2009). In contrast, the cluster manager role is especially in the daily management of the cluster, hence in the implementation of the strategy and in realisation of the proposed activities. As Pavelkova et al. (2009) state, it cannot be automatically assumed that a proven cluster facilitator will automatically becomes its manager.

A cluster manager in cooperation with cluster members formulates vision, goals and strategies, and within his/her agenda is also organizing joint activities. In research conducted by Pro INNO Europe Initiative (2009), it was found that cluster managers across Europe must fulfill a number of tasks related to this profession. The predominant activity is networking, which involves creating and developing contacts, the inclusion of new members and the strengthening of the exchange of experience among cluster members, lobbying activities with stakeholders, managing and organizing joint events and preparing and launching cooperation projects in order to develop the appropriate CO. CLOE (2006) classifies the activities carried out by cluster management into five basic areas:

- networking,
- human resources (including staff training through courses, seminars, conferences),
- research and innovation (sharing information and ideas, joint research projects),
- commercial cooperation and promotion (joint purchasing, logistics management, use of a common logo or brand, joint participation in exhibitions, etc.),
- financing investment projects.

As stated above, the key factor influencing success of the CO is seen in the role of cluster manager. This person must have the specific properties, knowledge and skills to deal with the cluster management agenda in order to ensure the successful functioning of the CO (Břusková et al., 2013). To successfully carry out activities mentioned above, it is essential that cluster manager participates in the training programmes in order to be competent person. Lack of character traits or skills often leads to negative consequences for the functioning of the cluster organisation and it may lead even to its extinction (Sölvell, Lindqvist and Ketels, 2003). However, it is also important to bear in mind that succesful managers are not born, they are made (Veber, 2014; Northouse, 2013). People may possess an inborn disposition to perform the role of manager, but their personal qualities must be constantly evolved in order to become succesful. This hypothesis is supported by Drucker (2012), who adds that the organisation must allow its members to grow and develop in accordance with their needs and opportunities. In connection with the frequent failure of managers (Ulčín, 2014; Freeman, 2007), it is thus more than desirable to pursue their development. The development of the cluster manager should be seen as one of the key factors affecting the future success of the cluster organisation. This is recognised by countries such as Norway, Germany and Austria, where the local governments see clusters as important tools in region development and therefore they set up regional agencies offering services for cluster managers (Kergel, Köcker and Nerger, 2014). These support services are defined as non-monetary activities aimed at developing cluster management including coaching, training, education, consulting, technical assistance (Kergel, Köcker and Nerger, 2014). However, the research by Kergel, Köcker and Nerger (2014) examined only conditions on the national level. There is no systematic research related to international support activites for cluster management. Thus, in our study, we follow up on work by Kergel, Köcker and Nerger (2014) with comparision of international training programmes and activities for cluster managers. We put the emphasis on developed skills in these programmes because professional management is crucial in the successful cluster development (Günther & Meissner, 2017).

Development of managers

Armstrong (2007) suggests that education can be viewed as a continuous process, which not only improves existing capabilities, but also leads to the development of skills, knowledge and attitudes that prepare individuals for the future performance of demanding tasks. The development of skills, knowledge and abilities Armstrong (2007) likens to the evolutionary proces. The goal of education and development is then, according to Urban (2004), increasing the worker's individual performance or team performance. Brodský (2009) adds that further training and development of managers is more than desirable because it helps to increase achievements and also serves as a preparation for higher duties and more responsibility in the future. It is clear that development and continuous education of managers is crucial in order to ensure success in managing an organisation. Studies in this research area deal with several topics. The researchers in the literature are examining either management education in business schools (Salas et al., 2009; Kars-Unluoglu, 2016), management development in organisation (McKenna & Yeider, 1991; Darling & Heller 2009; McGurk, 2013; Millar & Gitsham, 2013), or link between management training and firm performance (Cosh et al., 1998; Fraser et al., 2002; Kitching and Blackburn, 2002; Storey, 2002; Storey, 2004).

Folwarczná (2010) states that the training and development of managers is focused on developing two areas of skills, hard skills and soft skills. Hard skills are closely related mainly to knowledge (e.g. English grammar, accounting) and they can be relatively easy measured (via tests) and trained (Mühleisen a Oberhuber, 2008). Laker and Powell (2011) see them as technical skills that involve working with equipment, data, software, etc. On the other hand, soft skills are more related to personal characteristics, psychological traits, preferences, attitudes and so on. The importance of soft skills and their development is stated among many scholars (Crosbie, 2005; Hunt a Baruch, 2003; Balcar, 2016; Robinson and Stubberud, 2014; Henville, 2012). They are also seen as more important compared to hard skills in the long term (Pro INNO Europe Initiative, 2009). For

example, Statt (1998) defined them as "a stable, long-lasting, learned predisposition to respond to certain things in a certain way." Laker and Powell (2011) divided them into intrapersonal skills (one's ability to manage oneself) and interpersonal skills (how one handles one's interactions with others). Soft skills generally include interpersonal relationships, working with people, communication and interaction to other individuals and groups. Folwarczná (2010) claims that area of interpersonal relationships is very important for work of managers. Hence, this area is called the soft side of management and is considered as a key in order to master leadership role (Folwarczná, 2010). Lastly, it should be noted that soft skills are hardly measurable, because it's difficult to measure how good listeners people are or how well they are able to negotiate. Their development is slower and more difficult, because improving somebody's cooperation, for example, often requires changing his or her attitudes first and then assisting in the mastery of methods to improve that skill (Balcar et al., 2011).

Another question which arise in this context is how should be composed successful training programme for managers. Firstly, it is important to mention that adult learners have different learning techniques than young ones (Du Plessis et al., 2013). According to Du Plessis et al. (2013) they are "continuous learners and they move in and out of formal education according to individual needs or life circumstances, job requirements or career development." Thus, the programmes should follow specifics of participants. It is also important to follow actual trends and challenges in the management area and modern society. The set of skills for success in manager position is changing over time. Nowadays, the manager should also adapt the leader role which should be reflected in the training programmes (Alvesson & Sveningsson, 2003). Regarding the cluster environment, the importance of leadership is also mentioned by scholars (Sydow et al., 2011; Zagorsek et al., 2008). This is also supported by Nguyen and Hansen (2016), who suggest that dual approach, the leading-managing mix, should be considered. According to Elmuti et al. (2005) and Nguyen and Hansen (2016) the leader-manager programme should be consisted from 3 parts: 1) fundamental knowledge and skills required for both leading and managing (includes hard skills such as the ability to use information technology and soft skills like cultural sensitivity and the ability to communicate with others); 2) understanding leading and managing (learn to switching mindset between leader/manager role); 3) action-based training (learning by practice).

Last but not least, as Tannenbaum and Yukl (1992) state, the selection of training method is crucial when designing training programme. In practice, there are applied two training methods in programmes, such as off the job and on the job. Off the job training takes place in environment other than actual workplace and its designed to meet the shared learning needs of a group (Alipour et al., 2009). This kind of training can takes forms such as: lectures, computer-based training, games and simulations. On the other hand, on the job training is aimed to provide employee with task-specific knowledge and skills in work area via job rotation, coaching, job instruction technique (Alipour et al., 2009). In order to select balanced approach for effective management development, the organization must consider several factors, such as the amount of funding available for training, specificity and complexity of the knowledge and skills needed, timeliness of training needed, and the capacity and motivation of the learner (Alipour et al., 2009). To conclude, designed training for managers should aim for complex development with emphasis to soft skills as an essential factor in management development.

METHODOLOGY

The article was processed by using desktop research involving collection of relevant information from secondary sources. Our methodology was divided into following phases:

1. The literature review was conducted. The studies, scientific articles from databases SCOPUS/WoS and monographies regarding clusters, cluster organisations (including their

management and development of managers) were examined. Selection criteria were the following: date of publication from 1980 to 2017; used keywords for search: cluster, cluster organisation, cluster manager, development of managers.

2. This phase was about setting the main criteria for comparative analysis – categories of hard and soft skills in specific cluster conditions were developed (reflected by the Table 1). As secondary criteria, we choose to analyze following: duration of the programme - short-term (1 – 5 days), medium-term (2 – 4 weeks) and long-term (more than 1 month), place of the programme, organization providing programme and applied training method (off the job and on the job).
3. In this phase, we selected training programmes for analysis. The list of programmes was chosen based on the consultations with members from National Cluster Association operating in the Czech Republic. Selection criteria for programmes on the European level were the following: organisation/initiative is offering a training programme for more than 3 years; the training programme must be international. The final list included ten international programmes.
4. Finally, we analyzed content of each programme and assignment appropriate category of skills (hard/soft) to these programmes. Specifically, a content analysis was applied - a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Krippendorff, 1980; Weber, 1990).

Table 1 **Developed categories for comparative analysis**, own processing

Category	**Definition**
Hard skills focus	Terms related to specific cluster knowledge (tools/methods for cluster setting/development; cluster policy), knowledge in management area.
Soft skills focus	Terms related to intrapersonal skills (one's ability to manage oneself) and interpersonal skills (how one handles one's interactions with others).

COMPARATIVE ANALYSIS OF INTERNATIONAL TRAINING PROGRAMMES AND ACTIVITIES FOR CLUSTER MANAGERS

The organisations offering training for cluster managers are spread worldwide. They provide education for novice, but also for skilled managers who want to stay oriented in actual trends. The common goal is to keep cluster management at high quality in order to develop relevant cluster organisation. The success of cluster organisation then leads to innovation and economic development in the whole region. In this chapter, we focus on analysis of international current programmes aimed at the development of cluster managers. Further characteristics of these programmes including area of developed skills is given within Tab. 2 (the information were collected via websites of organizations / initiatives TCI, Oxford Research Group Quercus, Cluster Navigators, Clusterland Upper Austria, Cluster Development, EFCE and Business School – see references).

Table 2 **International training programmes and activities for cluster managers**, own processing

Name of the programme/activity	Organization/Initiative	Brief content and focus	Duration	Place	Training method	Category of developed skills
Mentoring for cluster managers	TCI	Analysis and benchmark of other cluster initiatives; international cooperation; project collaboration; communication skills.	Long-term.	Mainly through videoconferencing.	On the job training.	Hard skills, soft skills.
International course for cluster management	Oxford Research	Theoretical and practical knowledge about clusters and cluster development; life cycles of cluster; understanding of different cluster policies and approaches; management and facilitation of clusters; tools and methods for development of clusters; evaluation and monitoring of clusters.	Short-term.	Copenhagen.	Off the job training.	Hard skills.
Training - How to make your cluster a success	Quercus Group	Ways to ensure the successful development of the cluster; tools for organizing, managing and internationalization of clusters; the possibilities of gaining new members to the cluster.	Short-term.	Copenhagen.	Off the job training.	Hard skills.
Interactive training courses	Cluster Navigators	Courses are based on a concept called "Twelve steps" leading to the development of the cluster - participants gain the skills to identify clusters in the region, to implement cooperative development strategy involving private operators, public administrations, academic municipalities and also to mobilize and recruit key enterprises needed for the development of the cluster.	Short-term.	Intensive training courses which take place in the countries of candidates.	Off the job training.	Hard skills.
Clusterland Cluster Academy	Clusterland Upper Austria	Marketing & PR; cooperation projects as a source of innovation; knowledge management; internationalization; qualification / events; financing of cluster organizations; evaluation and performance measurement tools of cluster organizations; cluster Tour.	Short-term.	Linz.	Off the job training.	Hard skills.
Cluster Training	Cluster Development	Basic and advanced courses for the development of clusters; cluster policy and competitiveness; training with the help of practical examples.	Medium-term.	Online and offline (depends on	Off the job training.	Hard skills.

				the type of the course).		
Train-the-Trainers	EFCE	The programme consists of 10 courses focusing on the development possibilities of the cluster including the processing of the project on the basis of gained theoretical information.	Long-term.	Barcelona.	Off the job training.	Hard skills.
Competitiveness School for Leading Regions, Clusters and Cities	EFCE and IESE Business School	Policy for competitiveness module - policy best practices in competitiveness and economic development for senior economic policymakers and development professionals; topics: regional competitiveness, cluster competitiveness, city competitiveness, competitiveness in action. Management for competitiveness module - strategic methodologies and frameworks to be used in competitiveness development for managers at all levels; topics: strategic tools for competitiveness, management tools, summary of all topics including panel discussions.	Short-term.	Barcelona.	Off the job training.	Hard skills.
The Essence of Cluster Excellence Management	EFCE	Cluster economics; cluster initiative screening; industry analysis and segmentation; value chain analysis; benchmarking and internationalization of SMEs. + possibility to choice further optional course.	Long-term.	*1st and 5th week consists of seminars and workshops held in Barcelona.*	Off the job training.	Hard skills.
Gold Cluster Excellence Manager	EFCE	2 parts: theoretical (content of the topics is same as in the programme The Essence of Excellence Cluster Management); practical (project realization which builds on theoretical knowledge from courses).	Long-term.	5 weeks of theory, 1st and 5th week is held in Barcelona.	Off the job training and on the job training.	Hard skills.

RESULTS AND DISCUSSION

Regarding analyzed international programmes, the interesting findings appeared. The duration of programmes was divided into short-term (1 – 5 days), medium-term (2 – 4 weeks) and long-term (more than 1 month) course. The programmes are mostly conceived as short-term, the place of event is dependent on the organisation. The longest current programmes are Mentoring for cluster managers and Gold Cluster Excellence Manager). These two courses are characteristic by their complexity and therefore take over 6 months to finish. The organisation providing the most training possibilities is called European Foundation for Cluster Excellence (EFCE). It is training academy based in Barcelona and it aims to promote the use of clusters and value chains as an effective tool for the economic development of regions. In most of the programmes, off the job training method is applied. They are designed as seminars/workshops in separate place from the job environment. One of exception is programme Mentoring for cluster managers, which is characteristic for one-to-one interaction and belongs to on the job training method (within the work environment). The programme Gold Cluster Excellence Manager combines both training methods. Nevertheless, it cannot be said which of these two possible training methods is more efficient. At the moment, there is either no research or data which would support any of these methods within cluster conditions. Generally, the effective training method should: motivate the trainee to improve his or her performance, clearly demonstrate desired skills, provide an opportunity for active participation by the trainee, provide an opportunity to practice, be structured from simple to complex tasks, be adaptable to specific problems, encourage positive transfer from training to the job and so on (Woods, 1995). However, further research needs to be done between cluster managers and these mentioned factors could be subject of this investigation.

Main fact of the analyzed programmes is the lack of developing soft skills. Most of the programmes focus on the hard skills of cluster managers. Each of the international programmes involve education in the cluster area. The participants of these courses gain specific knowledge and abilities required for success in the cluster manager position – such as knowledge about identifying cluster, tools and methods for development of clusters and so on. Current focus on developing hard skills within these programmes may be due to the fact that soft-skills training is significantly less likely to transfer to the job than hard-skills training (Laker & Powell, 2011) and are also hardly measurable. However, given the importance of soft skills (intrapersonal and interpersonal skills) in the context of effective management, their development is crucial. Also according to the cluster managers (Pro INNO Europe initiative, 2009) soft skills (namely comunication skills and leadership) are seen as the most important for successful and effective management of cluster organisation. This is also supported in study by Gebhardt and Pohlmann (2013), where interviewed cluster managers mention social networking as an essential. Porvazník (2014) adds that managers must reach a certain level of holistic eligibility which is reflected in having not only hard and soft skills, but also appropriate properties and attitudes. Thus, the trainings should develop managers complexly. Last but not least, it is important that organisations update their trainings according to the actual needs in the modern economic market (Belizón et al., 2016).

CONCLUSIONS

The purpose of the article was to analyze and evaluate training programmes for cluster managers across Europe with respect to their focus on the development of hard and soft skills. To achieve our objective, desktop research was conducted. To sum up, ten international

programmes/activities were examined in the paper. Based on the gathered data, we state that most of the analyzed programmes focus on the hard skills of cluster managers. Nevertheless, the development of soft skills is needed to achieve a competitive advantage (Crosbie, 2005; Hunt a Baruch, 2003). Organisations/initiatives offering training programmes for cluster managers should consider these findings in order to make them more attractive and effective. Overall, as Jarjabka and Weiner (2012) state, the development of cluster managers will be a decisive competitive advantage in the future. It also supports innovation in cluster organisation, which requires a certain level of creativity, knowledge and relationship skills of all involved subjects (Jarjabka and Weiner, 2012). Bearing in mind that conditions for success today's turbulent markets have changed considerably, it is needed to pursue development of cluster managers in order to ensure sustainability of appropriate cluster organisation.

Considering the limitation of the article, it should be noted that the paper works only with secondary data. Another limitation is about choosing training programmes for cluster managers. Analyzed programmes were chosen according to the consultations with members of National Cluster Association, who have rich experience (over 10 years) in the field of cluster development. The composition of programmes would be different if the consultations were made with other subjects interested in cluster management development. The article also does not contain all available international training programmes for cluster managers. The focus was mainly given to the programmes which are under the organisations providing training for cluster managers over 3 years.

As regards direction for further research, the focus could now be given on evaluation of effectiveness training programmes, respectively methods done in Europe. This could bring interesting findings regarding pros and cons of those programmes from the cluster manager\s point of view, followed by suggestions for improvement to make them more effective. This could be followed by analysing training programmes for cluster managers in some period of time. Interesting facts could emerge in the context of evolving these programmes, whether their topics are changing over time or not. The further research could also be focused on proposal training programme for cluster managers developing soft skills (such as communication skills, leadership skills, team working, organising and planning skills, etc.). The current programmes are mainly aimed on developing hard skills; adequate offers adressing soft skills are missing. Further research could also be focused on proposal self-development programmes for cluster management. Current courses are overwhelmingly conducted via training, lecturing, seminars and workshops. However, given the limited financial resources in the most of cluster organisations (Sölvell, Lindqvist and Ketels, 2003), the self-development method seems a good way to go. The advantage of self-development is particularly in flexibility – managers can plan appropriate development activities according to their temporal needs. Another reason to support this method is the fact that in cluster organizations are missing specific departments ensuring staff development.

ACKNOWLEDGMENTS

The authors are thankful to the Internal Grant Agency of UTB IGA/FaME/2016/010 - "Evaluation and management of cohesion policy interventions in relation to territorial development, with emphasis on the thematic area of smart city," which provided financial support for this research.

REFERENCES

Alipour, M., Salehi, M., & Shahnavaz, A. (2009). *A study of on the job training effectiveness: Empirical evidence of Iran.* International Journal of Business and Management, 4(11), 63.

Alvesson, M., & Sveningsson, S. (2003). *Managers doing leadership: The extra-ordinarization of the mundane*. Human relations, 56(12), 1435-1459.

Armstrong, M., 2007. *Řízení lidských zdrojů – Nejnovější trendy a postupy*. 10. vyd. Praha: Grada Publishing, a.s. 800 s. ISBN 80247-1407-3.

Balcar, J. (2016). *Is it better to invest in hard or soft skills?* The Economic and Labour Relations Review, 27(4), 453-470.

Balcar J, Homolová E, Karásek Z, et al. (2011) *Transferable Competences across Economic Sectors: Role and Importance for Employment at European Level*. Luxembourg: Publications Office of the European Union (version without appendices).

Barry, D. (1991). *Managing the Bossless Team: Lessons in Distributed Leadership*. Organizational dynamics, *20*(1), p. 31-47. doi: 10.1016/0090-2616(91)90081-J.

Belizón, M. J., Morley, M. J., & Gunnigle, P. (2016). *Modes of integration of human resource management practices in multinationals*. Personnel Review, 45(3), 539-556.

Brodský, Z., 2009. *Řízení lidských zdrojů pro managery: pro kombinované studium studijního programu Ekonomika a management*. Pardubice: Univerzita Pardubice, Ekonomicko-správní fakulta, 113 s. ISBN 978-80-7395-155-9.

Břusková, P., Hudečková, E., Poledník, J., Šarlej, M., & Ochodek, T. (2013). *Podstata a fungování klastrových iniciativ*. Retrieved from: http://partnerstvi-energetiky.msek.cz/wp-content/uploads/2013/01/06-Podstata-a-fungovani-klastrovych-iniciativ.pdf.

Cloe: Clusters Linked over Europe. (2006). *Cluster Management Guide – Guidelines for the Development nad Management of Cluster Initiatives*. Linz: TMG. Dostupné z: http://www.interreg4c.eu/uploads/media/pdf/2_Cluster_Management_Guide_CLOE.pdf .

Cluster Development. (2016). Cluster Training. In: Cluster Development [online]. Dostupné z: http://www.cluster-development.com/cluster/en/Cluster_training.

Cluster Navigators. (2016). Cluster Development - Training Workshops. In: Cluster Navigators [online]. Dostupné z: http://www.clusternavigators.com/workshops.cfm.

Cooke, P. (2001). *Regional innovation systems, clusters, and the knowledge economy*. Industrial and corporate change, 10(4), 945-974.

Cosh, A., Duncan, J. and Hughes, A. (1998) *Investment in Training and Small Firm Growth and Survival*. Department for Education and Employment, Research Report RR 36, Sheffield.

Crosbie, R. (2005). *Learning the soft skills of leadership*. Industrial and commercial training, 37(1), 45-51.

Darling, J. R., & Heller, V. L. (2009). *Organization development in an era of socioeconomic change: A focus on the key to successful management leadership*. Organization development journal, 27(2), 9.

Doronina, I. I., Kulikova, N. N., Razzhivin, O. A., Kostyukhin, Y. Y., Silnov, D. S., & Sadovnikova, N. A. (2016). *Human resource management features of an innovative cluster*. International Review of Management and Marketing, 6(6S).

Drucker, P. F. (2012). *To nejdůležitější z Druckera v jednom svazku*. 1. vyd. Praha: Management press, 300 s. ISBN 978-807261-242-0.

Du Plessis, A., Frederick, H., & Maritz, A. (2013). *Education and training deficits in industrial clusters: Empirical evidence that managers can use to rectify the skills gap in Auckland precinct*. Actual Problems of Economics, 2(3), 12-20.

Elmuti, D., Minnis, W., & Abebe, M. (2005). *Does education have a role in developing leadership skills?*. Management Decision, 43(7/8), 1018-1031.

European Foundation for Cluster Excellence. (2016a). Train-the-Trainers. In: *Towards Excellence in Cluster Management* [online]. Dostupné z: http://www.clusterexcellence.org/trainthetrainers/.

European Foundation for Cluster Excellence. (2016b). Competitiveness Summer School For Leading Regions, Clusters and Cities Barcelona, Autumn 2016. In: *Towards Excellence in Cluster Management* [online]. Dostupné z: http://www.clusterexcellence.org/summer-school/.

European Foundation for Cluster Excellence. (2016c). The Essence of Cluster Excellence Management. In: *Towards Excellence in Cluster Management* [online]. Dostupné z: http://www.clusterexcellence.org/essence/.

European Foundation for Cluster Excellence. (2016d). Gold Cluster Excellence Manager. In: *Towards Excellence in Cluster Management* [online]. Dostupné z: http://www.clusterexcellence.org/gold/.

Folwarczná, I., 2010. *Rozvoj a vzdělávání manažerů*. 1. vyd. Praha: Grada. 240 s. ISBN 978-80-247-3067-7.

Fraser, S., Storey, D., Frankish, J. and Roberts, R. (2002). *The Relationship between Training and Small Business Performance: An Analysis of the Barclays Bank Small Firms Training Loan Scheme*. Environment and Planning C, 20(2): 211–34.

Freeman, W. J. (2007). *Moral maturity and the knowledge management firm*. Nova Southeastern University: ProQuest. 142 s. ISBN 978-0-549-20287-5.

Gebhardt, C., & Pohlmann, M. C. (2013). *Managing the organisation 2.0: Entrepreneurial spirit and general management competences as early indicators for cluster success and sustainable regional development: Findings from the German Entrepreneurial Regions Programme*. The Journal of High Technology Management Research, 24(2), 153-160.

Günther, J., & Meissner, D. (2017). *Clusters as Innovative Melting Pots?—the Meaning of Cluster Management for Knowledge Diffusion in Clusters*. Journal of the Knowledge Economy, 1-14.

Henville, N. (2012). *Hard vs soft skills training*. Training Journal, 21(2), 41-44.

Hunt, J. W., & Baruch, Y., 2003. *Developing Top Managers: the Impact of Interpersonal Skills Training*. Journal of Management Development, 22(8), p. 729-752. doi: http://dx.doi.org/10.1108/02621710310487882.

Ingstrup, M. B., & Damgaard, T. (2013). *Cluster Facilitation from a Cluster Life Cycle Perspective*. European Planning Studies, 21(4), p. 556-574. doi: http://dx.doi.org/10.1080/09654313.2012.722953.

Jarjabka, Á., & Weiner, J. (2012). *The Importance and Aspects of Training in EU Cluster Development*. Közgazdász Fórum, 15(109), p. 29-47.

Kars-Unluoglu, S. (2016). *How do we educate future innovation managers? Insights on innovation education in MBA syllabi*. Innovation, 18(1), 74-98.

Kergel, H., zu Köcker, G. M., & Nerger, M. (2014). *New Approaches to Improve the Performance of Cluster Management Organisations in Europe*. Berlin: European Secretariat for Cluster Analysis (ESCA). Dostupné z: http://www.cluster-analysis.org/downloads/Newapproachestoimprove.pdf.

Kitching, J. & Blackburn, R. (2002). *The Nature of Training and Motivation to Train in Small Firms*. Research Report RR 330, Sheffield: Department for Education and Skills.

Knorringa, P., & Meyer-Stamer, J. (1998). *New dimensions in local enterprise cooperation and development: from clusters to industrial districts*. New Approaches to Science and Technology Cooperation and Capacity Building. New York, Geneva: United Nations (atas XI).

Krippendorff, K. (1980), *Content Analysis: An Introduction to Its Methodology*. Newbury Park, CA: Sage.

Laker, D. R., & Powell, J. L. (2011). *The differences between hard and soft skills and their relative impact on training transfer*. Human Resource Development Quarterly, 22(1), 111-122.

Martin, R., & Sunley, P. (2003). *Deconstructing clusters: chaotic concept or policy panacea?*. Journal of economic geography, 3(1), 5-35.

Mazilu, M., & Sava, C. (2011). *New ways of Innovation in Tourism Economy: implementing Clusters*, in Recent Researches in Economics, Proceedings of the 2-nd 669 International Conference on Business Administration (ICBA'2011), Montreux, Switzerland. Retrieved from: http://www.wseas.us/e-library/conferences/2011/Montreux/ICICIC/ICICIC-11.pdf.

McGurk, P. (2013). *Management and leadership development in public service organizations*. Human resource management in the public sector.

McKenna, J. F., & Yeider, R. A. (1991). *Management Development for an Organisation in Transition*. Journal of Management Development, 10(1), 54-63.

Menu, S. (2012). *The role of cluster policy on leadership: evidence from two Pôles de compétitivité*. Environment and Planning C: Government and Policy, 30(5), 816-834.

Millar, C., & Gitsham, M. (2013). *The role of management development in achieving a culture change towards sustainability in the organisation*. Journal of Management Development, 32(3).

Mühleisen, S. Oberhuber, N. (2008). *Komunikační a jiné měkké dovednosti. Soft skills v praxi*. 1. vyd. Praha: Grada Publishing.

Nguyen, N., & Hansen, J. Ø. (2016). *Becoming a leader-manager: a matter of training and education*. Development and Learning in Organizations: An International Journal, 30(6), 10-12.

Northouse, P. G. (2013). *Leadership: Theory and Practice*. 6 vyd. Los Angeles: Sage, 481 s. ISBN 978-1-4522-0340-9.

Pavelková, D., Friedel, L., Jirčíková, E., Knápková, A., Skokan, K., & Škodáková, P. (2009). *Klastry a jejich vliv na výkonnost firem*. 1. vyd. Praha: Grada Publishing, a.s. 268 s. ISBN 978-80-247-2689-2.

Porter, M. (1990). *The competitive advantage of nations*. New York: The Free Press.

Porvazník, J. (2014). *Celostní management*. Třetí přepracované a doplněné vydání. Bratislava: IRIS. ISBN 978-80-8153-030-2.

Pro Inno Europe Initiative. (2009). *CMQ – Cluster Manager Qualification: Results of a Comprehensive Survey on Tasks, Skills & Training Needs of European Cluster Managers*. INNO-Net project CEE-Cluster Network. Dostupné z: http://www.clusterplattform.at/fileadmin/user_upload/clusterbibliothek/624_CMQ-summary-report_CEE-CN_090428.pdf.

Quercus Group. (2016). *Training - How to make your cluster a success* [online]. In: Quercus Group. Dostupné z: http://www.quercus-group.com/#!Signup-for-training-how-to-make-your-cluster-a-success-2–4-March-2016/c7a5/566a050f0cf2391068761d63.

Robinson, S., & Stubberud, H. A. (2014). *Teaching creativity, team work and other soft skills for entrepreneurship*. Journal of Entrepreneurship Education, 17(2), 186.

Salas, E., Wildman, J. L., & Piccolo, R. F. (2009). *Using simulation-based training to enhance management education*. Academy of Management Learning & Education, 8(4), 559-573.

Schretlen, J.H., Dervojeda, K., Jansen, W., & Schaffmeister,, B. (2011). *Uncovering excellence in cluster management*. Price waterhouse Coopers Accountants N.V. Dostupné z: http://www.pwc.com/en_GX/gx/psrc/pdf/cluster_management.pdf.

Sölvell, Ö., Lindqvist, G., & Ketels, C. (2003), *The Cluster Initiative Greenbook*. Stockholm: Ivory Tower Publishers. ISBN 91-974783-1-8. Dostupné z: https://www.hhs.se/contentassets/f51b706e1d644e9fa6c4d232abd09e63/greenbooksep03.pdf.

Statt, D. A. (1998). *The concise dictionary of psychology*. Taylor & Francis US. ISBN 0-203-45052-3.

Steiner, M., & Hartmann, C. (2006). *Organizational learning in clusters: A case study on material and immaterial dimensions of cooperation*. Regional Studies, 40(5), 493-506. doi: http://dx.doi.org/10.1080/00343400600757494.

Storey, D.J. (2002). Education, *Training and Development Policies and Practices in Medium and Small Sized Enterprises in the UK: Do They Really Influence Firm Performance?*. Omega, 30:249–64.

Storey, D. J. (2004). *Exploring the link, among small firms, between management training and firm performance: a comparison between the UK and other OECD countries*. The International Journal of Human Resource Management, 15(1), 112-130.

Swann, P., & Prevezer, M. (1996). *A comparison of the dynamics of industrial clustering in computing and biotechnology*. Research Policy, 25(7), 1139–1157. doi: http://dx.doi.org/10.1016/S0048-7333(96)00897-9.

Sydow, J., Lerch, F., Huxham, C., & Hibbert, P. (2011). *A silent cry for leadership: Organizing for leading (in) clusters*. The Leadership Quarterly, 22(2), p. 328-343. doi: 10.1016/j.leaqua.2011.02.008.

Tannenbaum, S. I., & Yukl, G. (1992). *Training and development in work organizations*. Annual review of psychology, 43(1), 399-441.

Ulčín, P. (2014). *Ryba smrdí od hlavy*. Jak firma přijde o milion. In: Moderní řízení. Měsíčník vydavatelství Economia. 4(10), p. 32-34. ISSN 0026-8720.

Urban, J., 2004. *Výkladový slovník řízení lidských zdrojů: s anglickými ekvivalenty*. Praha: ASPI. ISBN 807357019X.

Veber, J. (2014). *Management: základy, moderní manažerské přístupy, výkonnost a prosperita*. 2.vyd. Praha: Management Press, 736 s. ISBN 978-80-726-1274-1.

Weber, R. P. (1990), *Basic Content Analysis*. Newbury Park, CA: Sage.

Woods, R. (1995). *Human Resources Management*. AHMA, Michigan.

Zagorsek, H., Svetina, A. C., & Jaklic, M. (2008). *Leadership in clusters: Attributes of effective cluster leader in Slovenia*. Transformations in Business and Economics, 7(2), p. 98-113.

DOI: 10.2478/ijek-2018-0003

IMPLEMENTATION OF THE SMART CITY CONCEPT IN THE EU: IMPORTANCE OF CLUSTER INITIATIVES AND BEST PRACTICE CASES

Davit ALAVERDYAN, Filip KUČERA, Martin HORÁK
Faculty of Management and Economics of Tomas Bata University in Zlín

ABSTRACT

The Smart City concept is a challenge for all levels of public administration. With a growing degree of urbanization socio-economic problems accumulate in urban agglomeration. The Smart City concept has the potential to effectively address those issues by implementing relevant projects. Our main objective is to analyze Smart City concept in EU with emphasize to Smart Governance. Specifically, we investigate four areas related to Smart City concept, such as: the importance of Smart City Governance including Smart City manager role, the position of Smart City concept in EU policies, tools for it's promotion among EU countries and good practices of municipalities in implementing Smart City concept. The article was processed using analysis of relevant information sources. Regarding our results, the paper brings in an useful insight into Smart City manager role, concerned EU policies (especially 5G, Big data, ICT innovation and Internet of Things), tools as Smart City Clusters, Smart City living labs and examples including comparison of municipalities representing good practices (Amsterdam, Helsinki, Barcelona, Copenhagen, Vienna). In addition, we claim that the current concept of the Smart City within the EU institutions as well as within identified Smart City clusters and cities as examples of best practice is predominantly technological. However, professional discourse has shifted in recent years to the dimension of municipalities as an organizational and management component which lead to the idea of Smart Governance. Gathered findings could provide an inspiration to municipalities and their management in order to face new challenges related to the Smart City area.

KEY WORDS

Smart City, Smart Governance, Smart City Clusters, Living Labs, European Union.

JEL CLASSIFICATION

R10, O10, O20, O30.

INTRODUCTION

The smart city phenomenon is an increasingly popular concept emerging in both media and research papers. With connection to Smart City concept, the scholars use formulation as

"ambiguous" or "fuzzy" (Waart et al., 2016; Caragliu et al., 2009). Despite the declared scope of the concept, there is a general consensus that the crucial for successful implementation of Smart City is the institutional support of municipalities. Emphasis is placed on the Smart Governance dimension respectively smart public administration. Let us note that among researchers initially dominated the strictly technological interpretation of the Smart City concept where ICT was considered to be the main driver of Smart City development. However, that discourse has shifted in recent years. Recently, the importance of municipalities as an organizational and management component is being taken into account (Waart et al., 2016). A number of researchers have connected the successful implementation of the Smart City concept with transformation and continuous changes in public administration, particulary in relation to citizen participation and emphasis on transparent decision making (Bolívar et al., 2016; Castelnovo et al., 2016). In order to successfully face these new challenges, the management of municipalities must be competent enough (Dameri, 2017). Nowadays, some EU countries are creating a special position for this issue - Smart City Manager (Michelucci et al., 2016), which will be further discussed within our paper. Regarding the situation in Europe, the European Union has gradually integrated the Smart City concept into its policies in recent years. Smart City initiative aims to make improvements in relation to a number of Europe 2020 targets. The European Commission defines its approach to Smart Cities as 'coordinated' and various parts of the Commission are collectively and independently involved in supporting Smart Cities. However, the approaches for promotion Smart City concept differ among EU countries. In this context, we point out successful tools and practice cases in order to inspire other countries. To sum up, the article aims to investigate following areas:

- the role of Smart City manager in Smart Governance,
- the position of Smart City in EU policies,
- applied tools for promotion Smart City concept among European countries,
- examples of municipalities representing good practices.

The article is structured as follows: Chapter 1 introduces research aims and used methodology, Chapter 2 focuses on describing Smart City Governance, role of Smart City manager and Smart City in EU policies; Chapter 3 defines tools for promotion Smart City in EU with good practices of municipalities, Chapter 4 presents results and discussion. Finally, conclusion and suggestions for the direction of future research are given.

1 RESEARCH AIMS AND METHODOLOGY

The main objective of our paper is to analyze Smart City concept in EU with emphasize to Smart Governance. Specifically, we want to point out that not only technological aspect of Smart Cities should be developed. It is equally important to improve the interaction between city and citizens where local governments play a crucial part. To face with this issue, we stated following research questions in our paper:

- What is the role and needed competences of Smart City manager in Smart Governance?
- What is the position of Smart City concept in EU policies?
- Which tools are used for promotion Smart City concept in EU countries?
- Which municipalities among EU countries represent good practice in implementing Smart City concept?

Overall, the article was processed using the secondary data gathered through the literature - the literature review was conducted. To fulfill mentioned research questions, we used following procedure:

- Firstly, we examined the monographies, studies, scientific articles from databases SCOPUS/WoS to describe Smart City governance and the role of Smart City manager including needed competences for that position. Selection criteria for searching were the following: date of publication from 1990 to 2017; used keywords for search: Smart City, Smart City manager, Smart Governance, Smart City manager competences. In addition, we identified masters programmes connected to the Smart City concept within this part of our work. In our case, FindAMasters database was used to find out relevant programmes, which have the keywords smart and city in their syllabus.
- Secondly, we analyzed Smart City concept in EU policies. Official documents by EU policy makers and monographies regarding area of Smart City concept were examined. With regard to the institutional framework of the Smart City concept in EU conditions, particular documents or programs such as Strategy Europe 2020, Mapping Smart Cities in the EU and European Innovation Partnership on Smart Cities and Communities were analyzed.
- Thirdly, we identified tools for promotion Smart City concept among EU countries, such as Smart City clusters and living labs. The identification was made on the basis of studied scientific articles from databases SCOPUS/WoS/Google Scholar. We used these criteria for search: date of publication from 1990 to 2017; including keywords Smart City, Smart Governance, Smart City innovation tools. Information of active Smart City clusters have been searched on Google requesting to the system to search on the web the keywords "Smart" and "Cluster" and within the biggest cluster mapping portal called European Cluster Collaboration Platform. Afterwards, the authors processed gathered information and analyzed selected clusters. The selection of analyzed clusters was made according to the amount of realised projects and their overall activity.
- Lastly, we analyzed five chosen municipalities. The selection criteria for chosing municipalities were especially given to the differing approach to the Smart Governance concept in selected municipalities. Important factor was also the relevance in relation to study Mapping Smart Cities in the EU (2014). After analyzing chosen municipalities, comparative analysis was made based on three criteria, such as: management of the cities, goals and vision, Smart City Initiatives. These three dimensions were choosen with a view to exploring issues of institutional aspects of the Smart City concept with regard to specific municipalities.

2 THEORETICAL BACKGROUND

As Odendaal (2003) states, the local governments are involved in planning and implementing the Smart City initiatives and therefore they generally play the director role in coordination of all other players in their region. In this context, scholars speak about Smart City Governance or Smart Governance (Nam & Pardo, 2011; Chourabi et al., 2012; Meijer & Rodríguez Bolívar, 2013; Scholl & Scholl, 2014). Belissent (2010) claims that governance is the core of Smart City initiatives. The main role of governance is to bring these initiatives closer to citizens and enable them participation in implementing, monitoring, and evaluating these initiatives (Misuraca et al., 2011). Nam and Pardo (2011) list so called smart actions which help in forming the Smart City governance, such as: collaboration, cooperation, partnership, citizen engagement and participation. Castelnovo et al. (2016) suggest that holistic approach should be considered within Smart City Governance, including five dimensions: community

building and management, vision and strategy formulation, public value generation, asset management, economic and financial sustainability.

The key is to create desirable connection between the city and its citizens. It leads to raise quality of life for citizens which is seen as one of the main objectives within Smart City initiatives (Shapiro, 2006; Giffinger et al., 2007). The aspect of managerial capabilities among local governments is very strong in this task (Torfing et al., 2012). In order to create such connection between governance, its citizens and furthermore successfully transform city into Smart City, the local governments must reach an appropriate level of competences. Generally, the term competences is defined by Le Boterf (1994) as "a recognized and proven set of representations, knowledge, skills and attitudes pertinently mobilized and combined in a given context". Rychen and Salganik (2003) suggest that "a competence is more than just knowledge or skills. It involves the ability to meet complex demands, by drawing on and mobilising psychosocial resources (including skills and attitudes) in a particular context. For example, the ability to communicate effectively is a competence that may draw on an individual's knowledge of language, practical IT skills and attitudes towards those with whom he or she is communicating".

However, as Dameri (2017) claims, there is a lack of competences in municipalities to manage the highest innovation and to follow modern trends in Smart City area. Dameri (2017) continues with statement that municipalities struggles with defining strategic planning for the Smart City implementation and manage the change program because the topic is too much immature and new. The other crucial fact is that local governments need official education to face such a complex topic as smart cities are (Dameri, 2017). This is supported by *Hultin (2014) who mentions that* one way to ensure the success of Smart Cities is to equip the new generation with the right set of skills for a smooth implementation of this dynamic concept. It is obvious that further education for managing and governing smart cities is needed within local governments. These findings are well understood by many universities/educational institutions which opened the masters programmes connected to the Smart City in order to develop appropriate competences in this area. According to the FindAMasters (2017) database, it was find out 40 master's degree programmes, which have the keywords smart and city in their syllabus. Some of them are more specialised and sophisticated, such as Smart City Design (Macromedia University); Energy for Smart Cities (offered by four European universities through InnoEnergy in France, Sweden, Belgium and Spain); MS in Urban Informatics (Northeastern University in Boston). These programmes could be seen as more technology-centered which is characterized by focusing on application domains that are heavily based on modern ICT (Michelucci et al., 2016). The other programmes are designed in more holistic way which is reflected by including a wider range of themes related to Smart City concept. Hence, these belong to the people-centered approach where technology and infrastructures are still important as enabling factors, but main topics are related to welfare, social inclusion, culture, and human capital (Caragliu et al., 2011). For example, it is:

- Integrative Urban Development – Smart City realised by University of Applied Sciences in Vienna. This programme is focused on developing 6 areas of competences, such as: project handling; scientific working; Smart City basics; Smart City competences; socio-technical competences; business, management and law. Graduates of this programme find the application in infrastructure planning implementaion and maintenance or in management and urban planning such as city administration.
- Management of Smart Cities Master's Programme offered by DOBA Business School in Slovenia. The content is focused on: strategic management and leadership; advanced

technologies; generating and managing innovation; global and sustainable development; communication and participation.

Overall, all of the available education programmes aim to make so called „smart people" who are according to Castelnovo et al. (2016) ''a fundamental asset for Smart Cities as they provide a relevant resource on which initiatives can rely to make cities smarter". Castelnovo et al. (2016) add that ''smart, educated, and informed people can become active users and engage with Smart City initiatives". Furthermore, smart people ''can make these initiatives a success or a failure, by both adopting and using the (smart) services made available to them and by participating in the governance and the management of the city" (Chourabi et al., 2012).

2.1 The role and competences of Smart City Manager

According to Wang (2015), crucial demand of Smart Cities is to improve the interaction between cities and citizens. This statement is also supported by Corrigan and Joyce (1997) and Nalbandian et al. (2013) who suggest that interaction between public management of municipalities and society is essential for the creation of effective services harmonized with the community needs. Nevertheless, as Michelucci et al. (2016) state, the increasing social problems are challenging public administrations to adopt new strategies in order to create smarter cities. In this context, there is an increasing need for better governance to manage initiatives or projects to make a city smart (Griffith, 2000). To follow this trend, some cities have created a dedicated organisational unit focused on planning and implementation of Smart City projects, led by Smart City Manager (Michelucci et al., 2016). Smart City manager operates as a horizontal actor, with responsibilities on projects developed in both hard and soft domains (Michelucci et al., 2016). Hence, he must be able to govern Smart City initiatives by integrating elements from multiple sectors. According to Michelucci et al. (2016), it is managerial role with a strategic vision, knowledge and responsibilities that cross several Smart City dimensions. From this point of view, Smart City manager should also be responsible for coordination and promoting the citizens' involvement and participation in planning. It leads to strengthen the city management and governance which is seen as one of key elements to claim city as smart (Nam & Pardo, 2011). The position of manager can be found for example in Belgium, where 17 Belgian municipalities have one or several people in charge of Smart City (often named "Smart City Managers") and 59% of Smart City managers are working into the strategic department of the municipality.

All changes in modern society are also reflected in the different set of competences required for manager role, Smart City manager is no exception. In the context of public manager competences, Virtanen (2000) identifies five categories, such as: task competence; professional competence in the work area; professional competence in the administration; political competence (about values, ideology and power); ethical competence (moral values and norms). However, literature related to Smart City managers and their competences is limited. The breakout in this context is made by Michelucci et al. (2016) who defined the role of the Smart City manager by identifying five main categories of required competences. Michelucci et al. (2016) list these five main competences:

- city planning capabilities (urban innovation, territorial planning and management of urban facilities, skills linked to the elaboration of a strategic, long term planning for sustainable urban services),

- legal competences (the legal notions regarding big data/open data management, data security, legal aspects of public procurement, and the contractual issues involved in public-private partnerships),
- soft skills (empathy, flexibility, output oriented and open-mind behaviours, the ability to mediate conflicts and create relationships, strategic vision, project management attitudes and leadership capacity),
- financial resources management (instruments of public financing, new financial instruments, general knowledge of economic fundamentals),
- basic capacities (familiarity with ICT, knowledge of foreign languages, and past professional experiences).

2.2 Smart City in EU policies

Europe 2020 is the EU's strategy for boosting growth and jobs across the region in order to create a smart, sustainable and inclusive economy (EC, 2017). To further these aims, key targets within five areas have been set on at national and EU-wide levels to be achieved by the 2020, including employment, R&D, climate change and energy, education, and poverty and social exclusion (EC, 2017).

Smart City initiatives can be considered a useful vehicle for cities to achieve their Europe 2020 targets. Cities as Smart entities may be particularly well suited to initiatives addressing local public goods problems, such as energy and climate change. Moreover, the impacts may be highly visible, especially compared with less densely populated areas. These are some potential uses and characteristics of Smart City initiatives:

- The Europe 2020 energy target could be addressed through initiatives that focus on Smart Environment or Smart Mobility.
- Smart Economy and Smart People initiatives are oriented towards employment and education targets, which include e-skills development. Moreover, improving citizens' skills should make them more employable which in turn supports the Europe 2020 employment targets.
- Smart Governance and Smart Living initiatives address poverty and social exclusion through measures including improvements to the quality of life, a focus on citizen connectivity (including e-government services) and the use of open data to create citizen services (EU, 2011).

A Smart City is a place where the traditional networks and services are made more efficient with the use of digital and telecommunication technologies, for the benefit of its inhabitants and businesses. With this vision in mind, the European Union is investing in ICT research and innovation and developing policies to improve the quality of life of citizens and make cities more sustainable in view of Europe's 20-20-20 targets (EC, 2017).

The European Commission (EC) defines its approach to Smart Cities as 'coordinated'; various parts of the EC are collectively and independently involved in supporting Smart Cities at international and national levels. For example, the Directorate-General for Communications Networks, Content and Technology has funded Smart City projects through 7th Framework Programme (FP7) projects and the ICT-Policy Support Programme (PSP) (EC, 2017a). The EC has provided policy support through particular policies of the Directorate-General for Mobility and Transport and via several communications that specifically refer to the role of Smart Cities (EC, 2017b).

Most Smart City initiatives have the potential to support innovative growth and R&D. They are funded by a variety of sources, including government and private companies, which share a common interest in progress in this area. To contribute to the innovation and R&D target by further stimulating private sector R&D investment, it is essential that projects are evaluated and lessons learnt from them to enable further development (EC, 2015).

Smart City initiative aims to make improvements in relation to a number of the Europe 2020 targets. For instance, a project that enhances mobility may make it easier for individuals to travel to the most appropriate school or job (thus contributing to the employment and education targets). This, in turn, can help alleviate location-based problems of poverty and social exclusion, although the impacts are likely to be less than the primary contribution to the energy and environment targets (EC, 2010).

In 2012 there were 143 ongoing Smart City projects of which 47 were located in Europe and 30 in the USA (Lee and Hancock, 2012). Cities have also been setting high targets for a clean future by taking part in initiatives and city networks such as Covenant of Mayors and Green Digital Charter. These were established to support the striving for the ambitious energy efficiency and CO2 reduction targets such as the European Union 2030 targets (Hannele, et al, 2016).

The Smart City concept goes beyond the use of ICT for better resource use and less emissions. It means smarter urban transport networks, upgraded water supply and waste disposal facilities, and more efficient ways to light and heat buildings. And it also encompasses a more interactive and responsive city administration, safer public spaces and meeting the needs of an ageing population (EC, 2017).

To speed up the deployment of these solutions, the European Commission has initiated the European Innovation Partnership on Smart Cities and Communities (EIP-SCC) that will bring together European cities, industry leaders, and representatives of civil society to smarten up Europe's urban areas, in July 2012 (EC, 2017). So far, the EIP-SCC has received some 370 commitments to fund and develop smart solutions in the areas of energy, ICT and transport. These commitments involve more than 3,000 partners from across Europe and create a huge potential for making our cities more attractive, and create business opportunities (EC, 2017). There exist several related policies in regard to the Smart City targets in the EU. Polices related to Smart City development includes:

- 5G
- Big data
- ICT innovation
- Internet of Things

The European Commission signed a landmark agreement with the ‘5G Infrastructure Association’ on 17 December 2013, representing major industry players, to establish a Public Private Partnership on 5G (5G PPP). This is the EU flagship initiative to accelerate research developments in 5G technology. The European Commission has earmarked a public funding of €700 million through the Horizon 2020 Program to support this activity. EU industry is set to match this investment by up to 5 times, to more than €3 billion euros.
Good use of data can bring opportunities also to more traditional sectors such as transport, health or manufacturing. Improved analytics and processing of data, especially Big Data, will make it possible to:

- transform Europe's service industries by generating a wide range of innovative information products and services;
- increase the productivity of all sectors of the economy through improved business intelligence;
- better address many of the challenges that face our societies;
- improve research and speed up innovation;
- achieve cost reductions through more personalised services
- increase efficiency in the public sector (EC, 2017).

Scaling-up the ICT innovation ecosystem in Europe. The Commission works to improve innovation in Europe by providing instruments that enhance research, entrepreneurs and companies. Internet of Things (IoT) merges physical and virtual worlds, creating smart environments. For the past six years, the European Commission has been actively cooperating with the industry and various organisations as well as with EU Member States and third countries to unleash the potential of the IoT technology (EC, 2017).

In the institutional environment of the EU the technological aproach to Smart City concept prevails. Beyond the EU's policy framework, it is possible to rely on a number of definitions of the Smart City concept in the literature. In the past, the emphasis on technology prevailed. However, lately there is a shift towards wider Smart Governance approach.

One of the oldest and the most complex definitions of Smart City was described by Giffinger et al. (2007). Smart City has been divided into six dimensions - smart governance, smart people, smart economy, smart mobility, smart environment and smart living. According to Mulder (2014), the city government is responsible for implementing relevant technologies that will primarily enhance the quality of life of citizens, and criticizes innovations primarily driven by interest on the supply side of technological companies.

Emphasis on the participatory aproach to the concept can be found in many different papers in recent years. For example, Caragli et al. (2011) describes Smart City as a place where investments in human and social capital and traditional industries (transport, energy) as well as modern digital technologies are stimulated by sustainable economic growth with an emphasis on high quality of life, sustainable use of natural resources and participative governance. Meijer and Bolivar (2016) states that the city's smartification process is related to the ability to activate human capital and involvement of various stakeholders (institutions and individuals) through the use of modern digital technologies. In this context, Nalbandian et al. (2013) suggest that interaction between public management of municipalities and society is essential for the creation of effective services.

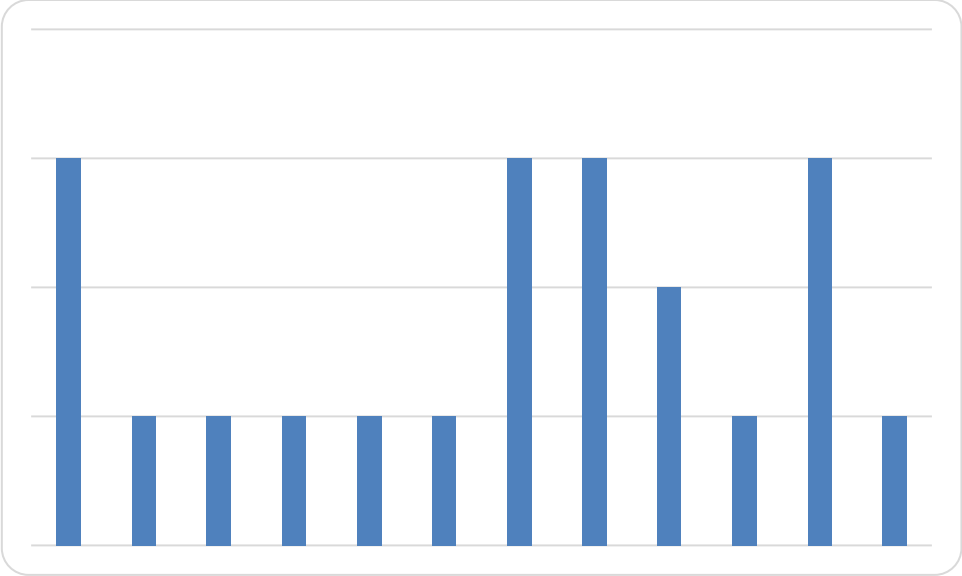
3 TOOLS FOR PROMOTION SMART CITY IN EU – SMART CITY CLUSTERS, LIVING LABS AND BEST PRACTICE CASES

The chapter describes selected measures to support the widening of the general awareness of the Smart City concept across the EU. It focuses primarily on the co-operation of institutionalized actors through cluster initiatives, participation of the public and other actors through Smart Living Labs and also mentiones the most frequently described examples of specific cities as successful cases of Smart City implementation.

3.1 Smart City Clusters

Recently, the idea of clusters/clustering appear in fulfilling the Smart City concept. The cluster is defined as "geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries and associated institutions (universities, standards agencies, and trade associations) in particular fields that compete but also cooperate" (Porter, 1990). Being a cluster member is one of the few ways for SMEs how to be competitive in comparison to the large companies. According to Zagorsek et al. (2008), cluster members gain many competitive advantages, such as "increasing returns in the context of globalization, reduced transaction costs, externality benefits, improved quality, positive effects of collective learning and high growth led by innovation." It follows that clusters further enhance business performance, resource efficiency, economies of scale, and new opportunities. On Figure 1 below are clusters operating in smart area, which were identified by the authors of this paper. Furthermore, Table 1 reflects analysis of selected Smart City Clusters in Europe.

Figure 1 –Smart City Clusters in Europe, own processing



Tab. 2 **– Selected Smart City Clusters in Europe, own processing**

Name of the cluster	Main focus and developed areas of the cluster	Place of the cluster	Source
Smart City Cluster	The cluster brings solutions through pilot projects in 3 categories, such as: smart public transportation, smart governance, smart infrastructure. Main focus of the cluster is given to: • ICT in different activities and processes of the cities, • ICT and other technologies in developing healthcare and social welfare in an efficient and cost-effective way, • energy saving in constructing and maintaining different buildings.	The cluster operates in Estonia.	http://smartcitylab.eu/about
Czech Smart City Cluster	The mission of cluster is to develop a unique partnership between companies, government, self-government, knowledge institutions and urban citizens. The main tools of support are: • transformation related to knowledge of development and research into the environment of cluster members, • the strengthening links to scientific and research institutions, • the joint development of know-how in the field of social, technical and economic solutions, • the popularization of the smart cities concept. The cluster members are focused on integration of smart technologies such as energy, smart buildings, transport and ICT.	The cluster operates in Czech Republic.	http://czechsmartcitycluster.cz
Cluster Andalucía Smart City	The cluster formulates 4 main goals: • to create Smart Cities: sustainable, efficient and comfortable (designs, develops and promotes smart – environmentally sustainable – cities), • to generate wealth and jobs in the cities,	The cluster operates in region of Andalusia in Spain.	http://www.andaluciasmartcity.com

	• to base action on R&D, • to cooperate among sectors (connects businesses and institutions from diverse sectors, such as energy, environment, transport, ICT, mobility…).		
Smart City Tech	*Smart City* Tech is a European Strategic *Cluster* Partnership which aims to: • develop a joint vision on smart systems for urban areas which will lead to concentrating available resources, • build a global ecosystem of companies, policy makers, academia, investors and citizens ready for joint projects, • develop global innovation capacities which allows for efficient development of new smart systems solutions for urban areas, • stimulate active collaboration between stakeholders on concrete projects leading to added value for all ecosystem stakeholders involved, • mobilize funding, either public or private money, as key resource to drive SmartCityTech projects forward.	The cluster operates in Belgium, associates international members from: Denmark, Germany, Spain, France and Italy.	http://www.smartcitytech.eu/
The Technologies for Smart Cities & Communities – Lombardy Cluster	The cluster promotes and facilitates research to support innovation, in order to design, develop and implement the most advanced technology solutions for the integrated management system of urban and metropolitan scale. The focus is mainly given to: • renewable energy and efficiency energy, • security and territorial monitoring, • mobility, • health, • wellness, • e-government and justice, • education and training, • cultural heritage and tourism	The cluster operates in region of Lombardy in Italy.	http://www.clusterscclombardia.it/

EUREKA's Smart City: EUREKA's inter-Cluster initiative	Initiative is gathering all EUREKA Clusters, namely: • ACQUEAU (innovation in water sector), • CATRENE (micro and nanoelectronics), • Celtic Plus (telecommunication and ICT), • EUROGIA2020 (innovative energy technologies), • EURIPIDES (smart electronic Systems), • ITEA3 (software-intensive systems & services).	The cluster operates in Brussels.	http://www.eureka-smart-cities.org/clusters/
Smart IT Cluster	Cluster's main objective is to develop integrated and innovative IT solutions for the agricultural, energy and banking sectors.	The cluster operates in Lithuania, associates international members from Belorussia, Latvia, Poland, Ukraine, Russia	http://smartitcluster.eu
Smart Cities Mediterranea Cluster	The scope of the Partnership is to identify, develop and deploy replicable, balanced and integrated solutions in the energy, transport, and ICT, in small and medium sized cities and islands in the Euro-Mediterranean region.	The cluster operates in Euro-Mediterranean region, group members from 26 countries.	http://www.smartcitiesmed.com/

3.2 Smart Living labs

Secondly, living labs are used as a tool to promote Smart City concept (Cosgrave et al., 2013; Bifulco et al., 2014; Bifulco et al., 2017). Living labs could be seen as a supplement to traditional cluster and regional innovation policy (Almirall & Warenham 2008). Bifulco et al. (2017) suggest, that the implementation of living labs brings together city managers and all the urban actors. Schaffers and Turkama (2012) defined living labs as places where multiple actors collaborate to achieve common aims through resource integration, new technologies, and continuous relationships. The European project CoreLabs described them as "a system enabling people, users/consumers of services and product, to take active roles as contributors and cocreators in the research, development, and innovation process" (Arnkil et al., 2010). It could be stated that creating such labs lead to fostering relationships among stakeholders which is also important element in cluster conditions. Living labs were created for example in Amsterdam, Barcelona and Helsinki (Bifulco et al., 2017). Stakeholders in either clusters or living labs are usually represented by the following three spheres - science (universities, research-and-development units, science supporting institutions, etc.), industry (enterprises) and government (including regional and local self-governments). These three spheres represent the triple helix which was proposed in the 1990s by Etzkowitz and Leydesdorff (1995). Developing interactions between mentioned three spheres is crucial to regional development (Leydesdorff & Etzkowitz, 2001). However, some authors add the fourth sphere - users/citizens – which is characteristic for quadruple helix (Waart et al., 2016; Carayannis & Campbell, 2009). Apparently, user-driven innovation approaches are seen as an essential element to SMEs, because it could open up new possibilities to participate in innovation activity (Arnkil et al., 2010). Santoro and Conte (2009) found out that entities within living lab argue that such user-driven innovation can help the SMEs to shorten the incubation time and also minimize the risks associated to the development of new products/services. According to Arnkil et al. (2010), the development possibilities of SMEs are very much dependent on how well they can involve users in their innovation activities. These findings should be considered by management entities of either clusters or living labs in order to succeed.

3.3 Examples of best practice cases: Amsterdam, Helsinki, Barcelona, Copenhagen and Vienna

Selected best practice cases rely on the research objectives emphasizing that not only technological aspect of Smart Cities should be developed. It is equally important to improve the interaction between city and citizens where local governments play a crucial part with respect to transparency and participatory governance.

Listed cases describe the elements of Smart Governance concept from various points of view. For example, in the case of Amsterdam, it is a network of living labs (Health Lab). Policy makers in Helsinki focused on open data. Vienna and Copenhagen are looking for a participatory approach to mobility projects. Barcelona emphasizes transversely and cooperative knowledge as one of the pillar of its strategy. The purpose of the chapter is to provide an insight into the specific Smart City solutions, which moves traditional orientation on technologies further. The relevance of these examples is based on study Mapping Smart Cities in the EU, published by the European Parliament in 2014.

The authors have the ambition to continue with research and explore how Smart City activities can also work in smaller municipalities. The mentioned study Mapping Smart Cities in the EU (2014) included only settlements with a population of more than 100,000. This offers the research gap for a more detailed analysis of the Smart City concept also in smaller settlements of regional significance.

Amsterdam

Amsterdam, generally considered the first Smart City in the world, defines a Smart City considering both infrastructures and people, and especially the quality of life for every citizen (ASC, 2017).

Before starting the Amsterdam Smart City (ASC) project in 2009, Amsterdam Living Lab (ALL) had already been launched in 2008 to test new products for several firms. The ALL played a crucial role in the city's smart development as it led to collaborations both inside and outside the city. Widespread collaborations also took place among inhabitants, local businesses, research centers and local agencies regarding environmental issues; additionally, Amsterdam was involved in ENOLL to benefit from resource integration with actors dealing with smart projects in Europe (Francesco, et al. 2017).

Amsterdam set out its sustainability targets in the Structural Vision 2040 (CoA, 2011) and the Energy Strategy 2040 (CoA, 2011(a)). In these documents they stated the ambitions of:

- climate-neutral municipal organisation in 2015,
- 40% reduction in CO2 emissions in 2025, compared with 1990 levels,
- 75% reduction in CO2 emissions by 2040.

To help achieve these targets, the Amsterdam Innovation Motor (AIM), now Amsterdam Economic Board (AEB, 2017), the city of Amsterdam, net operator Liander and telecom provider KPN started the Amsterdam Smart City platform in 2009. The Amsterdam Smart City (ASC) platform is a partnership between businesses, authorities, research institutions and the people of Amsterdam that initiates, stimulates and advances Smart City projects in Amsterdam. This platform has one central office with several people working on the Smart City platform. In 2013 this platform has grown into a partnership with over 70 partners who are engaged in 37 different Smart City projects (ASC, 2017). Europe 2020 targets are covered by all Smart City initiatives in Amsterdam. There were several solutions introduced in the Smart City Amsterdam. Some of them are introduced below.

a) The 'Klimaatstraat'

'Klimaatstraat' (climate street) is a holistic concept for shopping streets with a focus on a number of different aspects: public space, logistics and entrepreneurial spaces. This project combines physical and logistical initiatives in the public space, as well as sustainable initiatives within present businesses. Objectives of the Klimaatstraat Project, as defined by Smart Stories, include the reduction of CO2 emissions and energy consumption in Utrechtsestraat (ASS, 2011) This was to be achieved through a combination of sustainability initiatives (sustainable waste logistics, energy displays, LED lighting, smart meters and energy management systems) and the related changes in user behaviour (CoA, 2011).

b) Ship-to-grid (green energy)

The Port of Amsterdam has the ambition to become one of the most sustainable harbours in Europe by 2020 and has invested in the ship-to-grid electricity project to achieve this (ASS, 2011). This project allows inland ships in the harbour of Amsterdam to use green energy from the grid instead of their own stationary diesel generators. This reduces CO2 emissions and leads to less noise and air pollution. The ICT component of this project is that ship owners can pay via a telephone payment system. In total, 195 ship-to-grid connection points are installed in the Amsterdam harbour (Tan, 2016).

c) Smart building management systems (ITO Tower Project)

The Smart Building Management System Project was aimed at reducing energy use and operating costs for office buildings. This pilot project ran in the ITO Tower, the head office of Accenture in the Netherlands, where various Smart Energy management solutions were deployed. The main objective was to reduce energy consumption by collecting, analysing and visualising data about the amount of energy consumed and applying energy saving strategies based on this information (ASS, 2011).

d) Health Lab

Health Lab is a network of living labs in the Amsterdam region bringing together researchers, government, practitioners and healthcare users in the field of ICT technologies and innovative healthcare solutions. The programme was initiated by the AIM (ASC platform founder) and various research, business and governmental partners. The programme focuses on increasing the efficiency of technological innovation in the health sector and circulates around scientists, practitioners and entrepreneurs. End-users play a central role and ICT is considered the most important enabler (ASC, 2013).

Helsinki

The network of Smart City initiatives and projects in Helsinki is coordinated by Forum Virium, a private non-profit organisation owned by the city of Helsinki. As an urban innovator and initiator of public–private partnerships, it has the aim of developing new urban digital services in collaboration with the private sector, the municipality, public sector organizations and Helsinki residents (GSMA, 2012).

a) Open data platform (Helsinki Region Infoshare)

Opening up public data plays an important role in Helsinki's Smart City developments. The Helsinki Region Infoshare Project aims to make regional information from public organisations more easily accessible to the public. The data are free of charge and can be used by businesses, academia and research institutes, governmental institutes or citizens. In July 2013, over 1,030 databases were available at the website, covering a wide range of urban phenomena, such as living conditions, employment, transport, economics and well-being. Geo-referenced, geographic information system data are well represented in this dataset (HRI, 2013).

b) Finnish Living Lab

The Finnish Living Lab in Helsinki directly focused on urban innovation, rather than on new products. Public organizations, local agencies, and citizens acted together to attain innovative community services through digital instruments. Moreover, user-driven innovation was particularly promoted and only after achieving the first outcomes related to public services, firms were allowed to test innovation they deployed internally. Smart City solutions applied in Helsinki are introduced below (Francesco, et al, 2017).

Barcelona

The city of Barcelona has got the ambition to become a model Smart City for the whole world. Its vision is to:

- integrate the information technologies in the city,
- relate the different areas and sectors,
- find synergies and added value,
- generate transversely and cooperative knowledge (MCoE, 2012).

a) The 22@Barcelona

The 22@Barcelona district created a Living Lab to support business innovation and to enable better usage of public spaces. The positive outcomes achieved led the city managers to promote new initiatives built around public services, transport, ecology, and ICTs. The role of universities was fundamental in teaching how to manage relationships in LLs and in promoting a culture of open innovation based on citizens and making the city an open laboratory. The key results are related to creativity, innovation, culture and knowledge (Francesco, et al, 2017).

b) Smart parking

The introduction of wireless sensors at parking places can ease city traffic by showing car drivers where there are free parking spaces. The information is sent to a data centre and made available for smart phones sending real-time data to users. In this way the system guides the driver to the nearest parking spot (MCoE, 2012).

Copenhagen

Copenhagen has a vision to become the world's first carbon-neutral capital by 2025 (CoC, 2009). Therefore, the city is currently implementing a range of new and innovative solutions within the fields of transport, waste, water, heating and alternative energy sources to support this aim and improve sustainability, in many initiatives. By testing these solutions, the city hopes to attract innovative companies, which will in turn support the economy through the process of becoming greener and smarter. At the same time, the city is working to increase growth and improve the quality of life of its inhabitants. This vision is supported by clear targets in different sectors. For example, Copenhagen has the objective to increase the number of people 'cycling to work and education from 35% in 2011 to 50% by 2050' and to reduce 'each Copenhagen citizen's (water) consumption from 100 litres per day to 90 litres per day in 2025' (C.C.C., 2014). The city of Copenhagen has deployed many concrete projects, which are described and assessed as potential solutions below.

a) Cycling

Copenhagen has an extensive network of cycle lanes, which is still being expanded. In 2011, 35% of commuters went to work by bicycle. Urban planning takes cycling infrastructure into account as a crucial parameter of the city's traffic concept. Cycle lines are built in a way to reduce time and improve safety (SoC, 2012). This is achieved by installing specific traffic lights for bicycles that (in the future) turn green when cyclists are travelling at a certain speed (GtC, 2017).

Another feature of this solution is a project called The Copenhagen Wheel. This allows bicycles to become Smart by equipping them with sensors in their wheels. These sensors measure environmental data like 'noise pollution, congestion and road conditions'. The collected data are sent anonymously to the city in order to analyse environmental factors and measure the impact of traffic on the city infrastructure; furthermore the data may be fed into the decision-making process when environmental or transportation issues are on the agenda (Maroula et al, 2016).

Vienna

Vienna was listed as the world's number one Smart City in 2011 and ranked fourth in the European list of Smart Cities of 2012. The Smart City project of the Austrian Capital Vienna runs under the direction of the Vienna city administration. In order to reduce energy consumption and emissions without renouncing quality of life the city is continuously modernised. The project is long term and covers all areas of life, work and leisure activities. It includes infrastructure, energy and mobility as well as all aspects of urban development (Cohen, 2013). Solutions deployed in the Smart City Vienna included:

a) Integrated mobility concept 'SMILE'

Smart Mobility Info and Ticketing System Leading the Way for Effective E-Mobility Services (SMILE) is the prototype of a multi-modal mobility platform. The platform aims to cover all public and individual mobility services for customers, providing comprehensive Information on the various options for getting from A to B. It is developed in a joint research project by two city-owned enterprises (public utility company Wiener Stadtwerke and public transport operator Wiener Linien) and the Austrian Federal Railways (ÖBB) (SCW, 2017).

b) Mobility solution 'eMorail'

eMorail is a demonstration project, which aims to produce a blueprint for an innovative, cost-efficient and environmentally friendly mobility solution for commuters. It has been implemented in

the cities of Vienna and Graz. Core elements of the project are an integrated transport service and an intermodal e-car sharing and e-bike service. Commuters should have a ticket for the Austrian Federal Railways as well as access to the use of an e-vehicle at their place of residence and destination. Additional services such as information and repair are intended to complete the package. eMorail maintains a smart phone application, which increases accessibility for customers (CEF, 2013).

4 RESULTS AND DISCUSSION

Considering the first research question, we found out that some municipalities implemented a specific position to manage a Smart City initiative. In connection with the Smart Governance enter into the forefront also need of competent human resources - in the ideal case, the Smart City Manager position (e.g. in Belgium). In this research area, we brought an overview of that role in available literature. To succeed in that role, it is needed to have appropriate competences, such as: city planning capabilities, legal competences, soft skills, financial resources management and basic capacities (Michelucci et al., 2016). According to Kourtit et al. (2014), the importance of management of financial resources is decisive for the prosperity and sustainability of Smart Cities over time. Meanwhile, competences connected to city planning capabilities and basic capacities are included in management of city infrastructures and ICT infrastructures as enabling factors for Smart City development (Castelnovo et al., 2016). However, it needs to be mentioned that research by Michelucci et al. (2016) is pioneer one in the area of Smart City manager and his/her competences. The topic is new, and the further investigation about his/her position and role needs to be done.

Speaking about the second research question, there exist several related policies in regard to the Smart City targets in the institutional level of EU. In this context, we emphasize the coordinating role of The European Commission. Polices related to Smart City development includes especially folowing digital agendas: 5G, Big data, ICT innovation and Internet of Things. According to the studied documents, it could be said that the current concept of the Smart City within the EU institutions is predominantly technological.

The third investigation area was focused on tools used for support Smart City. Based on gathered findings, we identified two main tools for promotion Smart City concept in EU countries, namely Smart City clusters and living labs. Regarding identified clusters, it should be noted that agenda of their activity is mainly focused on technological aspects of Smart City concept. This consists mainly of developing areas related to the energy, transport, and ICT. Nevertheless, in analyzed clusters lack activities to improve the interaction between city and citizens which is crucial factor for Smart City development according to Wang (2015), Corrigan and Joyce (1997) and Nalbandian et al. (2013). On the other hand, in some cities, especially in connection with projects of Smart Living Labs, which brings together city managers and all the urban actors, it begins to develop a participative dimension of the Smart City concept. Living labs appear to be one of the main initiatives in City of Helsinki and Barcelona.

Regarding the fourth research question, we deeply investigated five municipalities: Amsterdam, Helsinki, Barcelona, Copenhagen and Vienna. We claim that cities have different approaches to their ‘smart’ development, however there are several similarities and differences between the cities. Results of comparing three areas (management of the cities, goals and vision, Smart City initiatives) in these municipalities are presented below:

- **Management of the cities:** There is a quite big similarity between the management and administrative types in all presents cases. Smart City initiatives, involved organizations and cooperation is based on public and private partnership. Mainly, municipalities of the cities are the main accountable bodies for the Smart City goals of their cities. Smart City initiatives in

Helsinki are coordinated by the Forum Virium, which is nonprofit organization working under the city administration. Meanwhile in Vienna, Copenhagen and in Barcelona the administration of the cites is the direct coordinator of the Smart City projects.

- **Goals and Vision:** Above mentioned cities have clear vision and goals related to the Smart City initiatives. However, goals and vision of the cities differ. If the city Copenhagen wants to become world's first carbon-neutral capital by 2025, municipality of Barcelona has a goal to make a model Smart City in the whole world. The administration of the Vienna city has some similar goals as like in Copenhagen related to reduction of energy consumption and emissions without having an impact on quality of life in the city. City of Amsterdam also tries to address environmental issues with the Smart City goals, while city of Helsinki is more concentrated on ICTs and digital adoption of the city.
- **Smart City Initiatives:** Living labs (LLs) appear to be one of the main initiatives in City of Helsinki and Barcelona. However, the main goal of the LLs are vary in both cities. LLs in Barcelona are initiated to support business innovation and to utilize public spaces efficiently. City of Helsinki uses LLs for the urban innovations and it is based on the public and private cooperation and initiatives. City of Vienna and Copenhagen have similar initiatives that are built to coordinate public transport and mobility in the cities. Smart Mobility Info and Ticketing System Leading and eMorail initiatives in Vienna, The Copenhagen Wheel and many other smart approaches are making the public mobility easier and faster in both cities. City of Amsterdam is leading in all directions with its initiatives. Municipality of Amsterdam is accomplishing all types of Smart City projects mentioned in all other cities.

CONCLUSION

This paper reacts to an intensified interest in the field of the Smart City concept. The main objective of our paper was to analyze Smart City concept in EU with emphasize to Smart Governance. The paper was processed using secondary data only concerning relevant information sources, especially from the Scopus/WoS database. Firstly, we described the role of Smart City manager including his/her competences for effective performance at this position. However, the data in this area are limited only to the research by Michelucci et al. (2016) and partially in studies by Kourtit et al. (2014) and Castelnovo et al. (2016). Secondly, the documents related to Smart City concept by the European Commission was analyzed and compared to the opinions of scholars in the literature. Thirdly, we looked at the tools applied for promotion Smart City concept in EU countries. In this context, Smart City clusters and living labs were identified. Lastly, we presented five municipalities (Amsterdam, Helsinki, Barcelona, Copenhagen and Vienna) considered as good practices in implementing Smart City concept. These municipalities were also compared in three dimensions, such as: management of the cities, goals and vision, Smart City initiatives.

Our paper have several implications for practice, especially for educators and municipalities. Nowadays, municipalities struggle with implementing Smart City concept due to the lack of competences. Thus, further education for managing and governing Smart Cities is needed within local governments. This is important especially for universities and their curriculums. They must try to update their syllabus to face current needs related to implementing Smart City concept within governments. In this context, having competent human resources is essential factor to become Smart Governance. Regarding next implication, position of Smart City manager together with tools such as clusters and living labs might be inspiring for municipalities in order to successfully transform city into Smart City. However, we suggest that not only technological aspects should develop, but also connection between the city and its citizens. It is needed to create a bond and involve citizens into city development which leads to raise quality of their life.

It is desirable that the future research of the Smart City concept should focus on the general preparedness of the muncipalities with regard to the quality of human resources, the ability of strategic planning and transparency and co-operation with other actors involved in city development. This is in line with further research undertaken by the authors. As the Nam & Pardo (2011) say, strengthen the city management and governance is seen as one of key elements to claim city as smart. Further research in relations to Smart Governance approach pushing the entire concept beyond the boundless of dominant technological projects whose implementation in municipalities of regional significance is often too costly or ineffective.

ACKNOWLEDGEMENT

The authors are thankful to the Internal Grant Agency of UTB IGA/FaME/2016/010 - "Evaluation and management of cohesion policy interventions in relation to territorial development, with emphasis on the thematic area of smart city," which provided financial support for this research.

REFERENCES

Almirall, E. & Wareham, J. (2008). Living Labs and Open Innovation: Roles and applicability. The Electronic Journal for Virtual Organizations and Networks, *Special Issue on Living Labs*. eJOV, Vol. 10, pp. 21–46.

Amsterdam Economic Board (AEB). (2017). Project on Amsterdam Innovation Motor. Available at: https://www.amsterdameconomicboard.com/.

Amsterdam Smart City (ASC). (2013) Health-Lab', Amsterdam Smart City, 2013b, available at: http://amsterdamsmartcity.com/projects/detail/label/Health-Lab.

Amsterdam Smart Stories (ASS) (2011). Published by Amsterdam Smart City initiatives. Available at: https://issuu.com/amsterdamsmartcity/docs/smart_stories.

Arnkil, R., Järvensivu, A., Koski, P., & Piirainen, T. (2010). Exploring quadruple helix outlining user-oriented innovation models.

Belissent, J. (2010). Getting clever about smart cities: New opportunities require new business models. Cambridge, MA: Forrester Research.

Bifulco, F., Tregua, M., & Amitrano, C. C. (2014). Living labs for smart innovation: a user-centric approach, *The Human Side of Service Engineering*, 1, 282-294.

Bifulco, F., Tregua, M., & Amitrano, C. C. (2017). Co-Governing Smart Cities Through Living Labs. Top Evidences From EU, *Transylvanian Review of Administrative Sciences*, 13(50), 21-37.

Bolívar, M., P., R. and Meijer, A. (2016). Governing the smart city: a review of the literature on smart urban governance, *International Review of Administrative Sciences*, Vol 82, Issue 2.

Caragliu, A., C., Del Bo, and P. Nijkamp, (2011). Smart cities in Europe, *Journal of Urban Technology*, 18:2; 65-82.

Carayannis, E. G., & Campbell, D. F. (2009). Mode 3 and Quadruple Helix: toward a 21st century fractal innovation ekosystém, *International journal of technology management*, 46(3-4), 201-234.

Castelnovo, W., Misuraca, G., & Savoldelli, A. (2016). Smart cities governance: The need for a holistic approach to assessing urban participatory policy making, *Social Science Computer Review*, 34(6), 724-739.

City of Amsterdam, (2011a). Amsterdam a different energy 2040 Energy Strategy, City of Amsterdam, Klimaatbureau, Amsterdam.

City of Amsterdam. (2011). Economically strong and sustainable Structural Vision: Amsterdam 2040, PlanAmsterdam, No. 1-2011, City of Amsterdam, Dienst Ruimtelijke Ordening, Amsterdam.

City of Copenhagen. (2009). Copenhagen Climate Plan The short version. The Technical and Environmental Administration City Hall.

Climate and Energy Fund. (2013). eMORAIL, Integrated eMobility Service for Public Transport, available at: http://www.klimafonds.gv.at/assets/Uploads/Themenprojekte/Leuchttuerme/eMORAIL/22052012EMORAILBeschreibung-EN.pdf.

Cohen B. (2012). The Top 10 Smart Cities on The Planet, available at: http://www.fastcoexist.com/1679127/thetop-10-smart-cities-on-the-planet.

Copenhagen Cleantech Cluster (CCC) (2014). Copenhagen: Solutions For Sustainable Cities. Published by Copenhagen City Hall.

Corrigan, P., and Joyce, P. (1997). Reconstructing public management: A new responsibility for the public and a case study of local government, *International Journal of Public Sector Management*, 10:6; 417-432.

Cosgrave, E., Arbuthnot, K., & Tryfonas, T. (2013). Living labs, innovation districts and information marketplaces: A systems approach for smart cities, *Procedia Computer Science*, 16, 668-677.

Dameri, R. P. (2017). The Conceptual Idea of Smart City: University, Industry, and Government Vision. In Smart City Implementation (pp. 23-43). Springer International Publishing.

Etzkowitz, H., & Leydesdorff, L. (1995). The Triple Helix--University-industry-government relations: A laboratory for knowledge based economic development.

European Commission. (2010). EUROPE 2020: A European strategy for smart, sustainable and inclusive growth. Communication from The Commission, available at: http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf.

European Commission. (2015). Perspectives for Research and Innovation Strategies for Smart Specialisation (RIS3) in the wider context of the Europe 2020 Growth Strategy. Luxembourg: Publications Office of the European Union, 2015. ISBN 978-92-79-49245-7 doi: 10.2777/872170.

European Parliament. (2014). Mapping smart city in the EU. Brussels. Retrieved from http://www.europarl. europa.eu/thinktank/en/document.html?reference¼IPOL-ITRE_ET%282014%29507480

European Union. (2011). Cities of tomorrow: Challenges, visions, ways forward. Communication, Information, Relations with Third Countries, Brussels. doi:10.2776/41803.

Francesco B., Marco T. and Cristina C. (2017). Co-Governing Smart Cities Through Living Labs. Top Evidences From Eu, *Transylvanian Review of Administrative Sciences*, No. 50 E/2017, pp. 21-37. DOI:10.24193/tras.2017.0002.

FindAMasters.com. (2017). Find A Masters Degree Worldwide - Postgraduate MSc MA MBA MPhil MRes MBA & LLM Courses. [online] Available at: https://www.findamasters.com/ [Accessed 23 Oct. 2017].

Giffinger, R., Fertner, C., Kramar, H., Kalasek, R., Pichler-Milanovic, N. and Meijers, E. (2007). Smart Cities-Ranking of European Medium-sized Cities. [Online] available at http://www.smart-cities.eu/download/smart_cities_fi nal_report, accessed on March 15, 2016.

Griffith, J. C. (2000). Smart governance for smart growth: The need for regional governments. Ga. St. UL Rev., 17, 1019.

GSMA. (2012) 'Finland: Forum Virium Helsinki', GSMA Connected Living, Available at: http://www.gsma.com/connectedliving/wpcontent/uploads/2012/12/cl_forum_virium_12_12.pdf.

Hannele A., Aapo H., Isabel P. and Miimu A. (2016). What are the differences between sustainable and smart cities?, *Elsevier Ltd, Cities* 60 pp 234–245.

Helsinki Region Infoshare (HRI). (2013) 'About Helsinki Region Infoshare'. Available at: http://www.hri.fi/en/about/.

Chourabi, H., Nam, T., Walker, S., Gil-Garcia, J.R., Mellouli, S., Nahon, K., Pardo, T.A. and Scholl, H.J. (2012). Understanding smart cities: An integrative framework. In System Science (HICSS), 2012 45th Hawaii International Conference on(pp. 2289-2297). IEEE.

Kourtit, K., Macharis, C., & Nijkamp, P. (2014). A multi-actor multi-criteria analysis of the performance of global cities, *Applied Geography*, 49, 24-36.

Le Boterf, G. (1994). De la compétence. Essai sur un attracteur étrange.Lee, J. H., & Hancock, M. G. (2012). Towards a framework for smart cities: A comparison of Seoul, San Francisco and Amsterdam. Stanford Program on Regions of Innovation and Entrepreneurshiphttp://iis-db.stanford.edu/evnts/7239/Jung_Hoon_Lee_final.pdf

Leydesdorff, L., & Etzkowitz, H. (2001). The transformation of university-industry-government relations. Electronic journal of Sociology.

Major Cities of Europe, 'Barcelona Urban Habitat, The vision, approach and projects of the City of Barcelona towards smart cities', Vienna, 6th June 2012.

Maroula A., Diofantos H., Phaedon K. and Konstantinos S. (2016). "Smart City planning from a bottom-up approach: local communities' intervention for a smarter urban environment", Proc. SPIE 9688, Fourth International Conference on Remote Sensing and Geoinformation of the Environment. doi: 10.1117/12.2240762.

Michelucci, F. V., De Marco, A., & Tanda, A. (2016). Defining the Role of the Smart-City Manager: An Analysis of Responsibilities and Skills, *Journal of Urban Technology*, 23(3), 23-42.

Mulder, I. (2014). Sociable smart cities: Rethinking our future through co-creative partnerships. In N. Streitz & P. Markopoulos (Eds.), Distributed, ambient, and pervasive interactions (pp. 566–574). Heidelberg, Germany: Springer.

Nalbandian, J., R., O'Neill, J. Michael Wilkes, and J. Kaufman, (2013). Contemporary Challenges in Local Government: Evolving Roles and Responsibilities, Structures, and Processes, *Public Administration Review*, 73:4; 567-574.

Nam, T., & Pardo, T. A. (2011). Conceptualizing Smart City with dimensions of technology, people, and institutions. In Proceedings of the 12th annual international digital government research conference: digital government innovation in challenging times (pp. 282-291). ACM.

Odendaal, N. (2003). Information and communication technology and local governance: Understanding the difference between cities in developed and emerging economies, *Computers, Environment and Urban Systems*, 6(27), 585–607.

Official webpage European Commission (2017 a). The Directorate-General for Communications Networks, Content and Technology. https://ec.europa.eu/info/departments/communications-networks-content-and-technology_en.

Official webpage European Commission (2017 b). European commission Mobility and transport Available at: https://ec.europa.eu/transport/index_en.

Official webpage European Commission (2017). European commission on Smart Cities. Available at: https://ec.europa.eu/digital-single-market/en/policies/smart-cities .

Official webpage of 'The Copenhagen Wheel' (TCW). (2017). About the project Copenhagen Wheel. Available at: http://senseable.mit.edu/copenhagenwheel/index.html.

Official webpage of Smart City Wien (SCW). (2017). Project 'Smile – einfach mobil', available at: https://smartcity.wien.gv.at/site/en/smile-2/.

Porter, M. (1990). The competitive advantage of nations. New York: The Free Press.

Rychen, D. S., & Salganik, L. H. (Eds.). (2003). Key competencies for a successful life and well-functioning society. Hogrefe Publishing.

Santoro, R., & Conte, M. (2009). Living labs in open innovation functional regions. In Technology Management Conference (ICE), 2009 IEEE International (pp. 1-8). IEEE.

Shapiro, J. M. (2006). Smart cities: Quality of life, productivity, and the growth effects of human capital, *Review of Economics & Statistics*, 88, 324–335.

Schaffers, H., & Turkama, P. (2012). Living Labs for cross-border systemic innovation, *Technology Innovation Management Review*, 2(9), 25.

Scholl, H. J., & Scholl, M. C. (2014). Smart governance: A roadmap for research and practice. In M. Kindling & E. Greifeneder (Eds.), iConference 2014 Proceedings (pp. 163–176). Urbana-Champaign, USA: iSchools.

Tan Y. (2016). Technology and the City: Systems, Applications and Implications. Published by Routledge. 2 Park Square, Milton Park, Abington. ISBN 9781315739090.

The Official Webpage of Amsterdam Smart City (ASC). (2017). Amsterdam Smart City initiatives. Available at: https://amsterdamsmartcity.com.

Torfing JB, Peters G, Pierre J and Sorensen, E. (2012). Interactive Governance: Advancing the Paradigm. Oxford: Oxford University Press.

Waart, van, P., Mulder, I., & de Bont, C. (2016). A participatory approach for envisioning a Smart City, *Social Science Computer Review*, 34(6), 708-723.

Virtanen, T. (2000). Changing competences of public managers: tensions in commitment, *International Journal of Public Sector Management*, 13:4; 333-341.

Wang, M. (2015). Smart cities of the future: Creating tomorrow's education toward effective skills and career development today, *Knowledge Management & E-Learning: An International Journal* (KM&EL), 6(4), 344-355.

YouTube. (2017). The Future is Smarter Cities by Jerry MacArthur Hultin. [online] Available at: https://www.youtube.com/watch?v=sgeZiCzQamA [Accessed 23 Oct. 2017].

Zagorsek, H., Svetina, A. C., & Jaklic, M. (2008). Leadership in clusters: Attributes of effective cluster leader in Slovenia, *Transformations in Business and Economics*, 7(2), p. 98-113.

sciendo
International Journal of Entrepreneurial Knowledge *Issue 1/2018, Volume 6*
DOI: 10.2478/ijek-2018-0004

BUILDING OF ENTREPRENEURIAL ETHOS THROUGH MISSION STATEMENTS: THE DIFFERENCE IN APPROACH BETWEEN PUBLIC AND PRIVATE UNIVERSITIES IN THE CZECH REPUBLIC

Karel PERNICA[2], Ladislav TYLL[3]

ABSTRACT

Corporate mission statement is an essential statement to all stakeholders of the organization about its own purpose, its goals and the competitive advantage it offers to its customers. Another purpose of the mission is to create a so-called positive ethos. Universities represent a specific group of institutions from the perspective of defining missions and working with ethos. This paper identifies the elementary components of university missions that help build a positive ethos. The research is focused on the analysis of mission statements of all public and private universities operating in the Czech Republic. The results of this research show that there is a difference in the approach to defining missions between public and private universities (in terms of the inclusion of individual components that help building a positive ethos).

KEY WORDS

Content analysis, Ethos, Mission, Mission statement components

JEL CLASSIFICATION

L26, L25, I23, I25.

INTRODUCTION

Mission statements have been representing very valuable strategic tool for last forty years. The importance of their communication is integrated into virtually all activities. Starting with strategic planning, followed by manufacturing, marketing, public relations, personnel management and employee motivation, social responsibility and many others. Mission statement is considered to be a perfect basic building block for the company's strategic management process (David, 1984; Staples and Black, 1984). Recently, in addition, they have an important role when building a positive corporate ethos. In the given context, there is a question how universities, representing the highest level of education and bearers of the progress, work with this statement. To answer this question, there are two goals of this paper. (1) Firstly, identification of mission statements components contributing to a positive ethos building and (2) second, finding out whether there is a different

[2] Ing. Karel Pernica, Ph.D. student at University of Economics, Prague, Faculty of Business administration
[3] Ing. Ladislav Tyll, MBA., Ph.D., assistant professor at University of Economics, Prague, Faculty of Business administration

approach to building a positive ethos using mission statements between public and private universities (in terms of contained components).
Every mission should be as unique as possible. Several guidelines have been introduced over years about which key components should be included. They vary in numbers or names; however, the content is still more or less the same. In this respect, one of the most often cited author is Fred. R. David (2011) and his nine components approach. According to David, company should provide information about the following nine components: customers; products and services; markets; technology; concern for survival, growth and profitability; corporate philosophy; self-concept; concern for public image; and concerns for employees.

Mission statement is most effective when it is approximately 100 words in length and when it avoids inclusion of monetary amounts, numbers, percentages, ratios of objectives. (David and Davis, 2003, Davies and Glaister, 1997, Kemp and Dwyer, 2003) Well designed mission should also create an emotional bond between company and its employees or customers. (Campbell and Yeung, 1991).

Content of the mission statement

Mission statement of a university should in general integrate all three following components: education, research and kind of public service (Scott, 2006). These components should define not only the structure of the institution and its expected educational and research deliverables but they should also represent a guideline for measuring organizational efficiency. Further, they should also contribute to building the positive identity of the university (Fugazzotto, 2009), thus to its positive ethos. Jongbloed, Enders and Salerno (2008) consider the university mission statement as a reflection of how the institution sees its contribution to society. In this regard, the authors suggest answering the following questions when defining a mission:

- What do we do? – What should we do?
- Who are our students? Who should be our students?
- What is the environment we operate in like? What are the opportunities?
- What are our resources? How should we redistribute our assets?

Mission statement and organizational ethos
Relating to the corporate mission statement there has been so far rarely used the term corporate ethos. The way the company wants to be perceived was expressed rather as an image (external ethos) or identity (an internal ethos). The theoretical basis for understanding the concept of ethos and the reason why it is indispensable for all speakers who want to be convincing is the rhetoric. Cross (1991) sees persuasiveness as a certain ability to win over audiences and inspire action, which should be the primary goal for all corporate messages, no matter whether the company wants to build a positive image or maintain a good reputation. If the company fails to persuade its stakeholders to trigger a desired action (such as stock purchases, increased employee performance, commitment, public perceptions of the environment), then any attempt to create a mission is useless (Williams, 2008).

Aristotle used the term "ethos" in his Rhetoric, where he described the techniques of convincing speech and presentation that have remained up to date. It is true that Aristotle was aiming his findings primarily on individuals, not on groups, let alone businesses. However, if someone wants to gain admiration and favor of the audience, it is completely irrelevant whether they are individuals or groups, the rules are still the same. In the first part of the book, ethos is one of the principles of persuasion, the other two are logos (rational reasoning) and pathos (emotions and passion) (Williams, 2008). Aristoteles considered the ethos as the most important. It consists of three parts:

intelligence, character and goodwill, and it means some recognition by the listener in terms of the credibility of the speaker (Cooper, 1960).

Intelligence

Aristotle puts emphasis on intelligence (knowledge, common sense and expertise), which is a major contributor to credibility. If listeners for any reason doubt the speaker's knowledge, they can hardly take it seriously. Therefore, Aristoteles provides several strategies for formulating arguments to influence listeners. Swales and Rodgers (1995), however, due to the nature of the missions, do not see the implementation of these strategies as realistic. Nevertheless, if the organization provides in its mission accurate information on its products and services, management capabilities and procedures used to gain competitive advantage, thus the organization according to Stoddard (1984) demonstrates a certain amount of expertise. Moreover, a well-formulated mission is also an evidence of certain organization's knowledge and skills (Williams, 2008).

Character

Speaking about the second aspect of ethos, character, Aristotle claims that the speaker should prove the right character. In order to do so, he must know the differences between virtues and vices, and be aware of the qualities that are valued by the listener and society (Beason, 1991). Thus, If the organization presents values important to both society and stakeholders in its strategic mission statement, it will strengthen its ethos (Williams, 2008). When formulating the mission, the organization should carefully consider the values and beliefs that are important to it, because they could not only reinforce its ethos but if defined wrongly (wake and insincere) they could also seriously damage it (Collins and Porras, 2008).

Building of the right character through various statements of the organization influences countless factors. The authors must take into account the characteristics of the stakeholders, the purpose of each message, the context of the environment in which it operates, etc. (Stoddard, 1984). For example, public interest in corporate social responsibility and ethics is still increasing.

It seems to be also effective to emphasize the elements which are common for both the organization as well as for its stakeholders. When the speaker pops out of similarity, it will give the audience the impression that he is "one of them". It is therefore obvious, that people tend to trust someone who shares certain values and goals with them (Williams, 2008). Thus, when formulating mission statement, the word “we” (or any other pronoun in the first person of the plural) should not be omitted. So, the reader gets the feeling that he/she is a member of a particular group (Beason, 1991). For example, internal stakeholders (employees) identify themselves easier with the organization. Another reason to use the first person in the plural can be a simple demonstration of the team spirit and the cohesion of an organization that is externally presented as "we".

Goodwill

With regard to the third aspect of the ethos, Aristotle argues that the speaker should present himself as a man of goodwill with good intentions. If he/she can manage to create this image of him(her)self, he/she may expect good will also from the audience. Such behavior is mainly associated with altruism. Organizations must prove their unselfish way of thinking and act indiscriminately in favor and benefit of others (Shanahan a Seele, 2015). In order to satisfy the reader, it is essential to recognize his/her needs (emotional) and then to project them into the corporate mission. Different emotions are primarily build due to unmet needs (Williams, 2008).

University mission statement ethos

In order to evaluate and compare missions’ ethos of Czech public and private universities, it is necessary to determine the individual components of missions involved in building a positive ethos. For the purpose of this paper they were defined as follows:

Intelligence: 1) Education (product, service); 2) Research; 3) International impact.
Character: 4) Philosophy (values and believes); 5) Social responsibility (interest in public image).
Goodwill: 6) Public service; 7) Is the mission formulated using the pronoun "we".

Through the first three components, the university demonstrates its expertise. The pure character then through its values and interest in social responsibility. Goodwill and some altruism states through the components "public service" and the use of pronoun "we" in the mission. In regards the above mentioned there remains the question, whether there is a different approach to building positive ethos throughout mission statements (in terms of the use of above mentioned components) between public and private universities. Thus, we formulated the zero hypothesis.

H0: There is not a different approach to use individual components in their mission statements between public and private universities in the Czech Republic.

Methodology
The research includes all public, state and private higher education institutions in the Czech Republic that are allowed to provide higher education in its territory. Their list can be found on the website of the Ministry of Education, Youth and Sports of the Czech Republic. Their mission statements were subsequently searched firstly on universities websites and then in the documents available on these websites. Of these, there was first analyzed the document entitled "The Long-term Plan of the University for the Years 2016-2020", followed by annual reports. It should be noted that in some cases the mission published on the websites differed from the mission in the long-term plan document. Since the goal of this paper is to evaluate the building of ethos, there was always preferred a mission that was better accessible to website visitor.

The scoring of individual components of the missions was carried out using a two-point scale. If the mission contained the full component, it was awarded two points. If the mission contained the component only partially, it gained one point. If the mission did not include the component at all, no point was assigned to it. Scoring is based on the subjective evaluation of the authors of the paper.

The H0 hypothesis was tested in SPSS Statistics program using a two-tier Student's t-test, where there is an assumption of identical variance of tested variable in compared sample sets. That is, the final rating of individual missions based on used components.

Results
The research set comprised 69 universities, out of which 26 were public, 2 state-owned (analyzed together with public) and 41 private ones. From the perspective of explicitly declared and publish organizational mission statement public universities showed significantly better results compared to private ones. 96% of public universities formulated their missions compared to 73% of private universities. The bellow mentioned table displays number of searched missions.

Table 1 **Overview of analysed universities – mission statements**

	Mission	
	Yes	No
Public universities	27 (96%)	1 (4%)
Private universities	30 (73%)	11 (27%)

It should be noted that in certain cases universities have included mission components in their strategic vision. Consequently, the resulting assessment in missions can be noticeably lower.

However, the focus of the research was only on the missions of universities. In the table below, the numbers of visions are also presented.

Table 2 **Overview of analysed universities – mission statements and visions**

	Mission and vision	Only mission	Only vision	No statements
Public universities	25 (89%)	2 (7%)	1 (4%)	0 (0%)
Private universities	25 (61%)	5 (12%)	1 (2%)	10 (24%)

University mission ethos

In the first twenty universities, only 6 private universities are ranked according to the rankings of missions based on the components that reflect the positive ethos of universities. There is only 1 private university in the Top10 universities.

Table 3 **Universities with mission statements with strongest ethos**

	Components								
	Type	1	2	3	4	5	6	7	Σ
Palacky University in Olomouc (UP)	public	2	2	2	2	2	2	2	14
Janáček Academy of Music and Performing Arts in Brno (JAMU)	public	2	2	2	2	2	2	0	12
University of Ostrava (OU)	public	2	2	2	2	2	2	0	12
University of Economics, Prague (VSE)	public	2	2	2	2	2	2	0	12
University of Chemistry and Technology Prague (VSCHT)	public	2	2	2	2	1	2	0	11
Academy of Performing Arts in Prague (AMU)	public	2	2	2	1	1	2	0	10
Academy of Fine Arts in Prague (AVU)	public	2	0	0	2	2	2	2	10
University of Pardubice (UPa)	public	1	2	2	2	1	2	0	10
Moravian University College Olomouc, o.p.s.	private	2	2	2	0	2	2	0	10
Technical University in Liberec (TUL)	public	2	2	2	0	1	2	0	9

As an example, we may use the mission statement of the university with the strongest ethos:

Palacky University in Olomouc

The mission of the University is to promote the involvement of students in all areas of research, to cultivate their critical and creative thinking, and to provide high-quality university education in a broad range of natural, medical, and social sciences and humanities on the Bachelor's, Master's, and Doctoral levels. Our active partnership with both the regional community and the global community contributes to the development of the intellectual wealth of the society and its sustainable scientific, technological, cultural, and social development.

In all that we do at Palacký University, we strive for perfection, innovation, engagement, team work, transparency, academic integrity, freedom and autonomy, necessary continuity, and integration into the society. We proudly acknowledge the rich and successful history of the university since 1573. We will continue to do our utmost to preserve and care for these values, maintaining and developing them.

Palacký University Olomouc will continue to be a leading research-oriented university with the ambition to place among the top 5 Czech universities and the top 500 universities the world over.

At the opposite end of the ranking, the situation is diametrically different. There are only 5 public universities among the twenty universities with missions with the weakest ethos. The following table lists ten universities with missions with the weakest ethos.

Table 4 **Universities with mission statements with weakest ethos**

	Components								
	Type	1	2	3	4	5	6	7	Σ
Masaryk University (MU)	public	1	0	0	0	0	2	0	3
Mendel University in Brno (MENDELU)	public	1	0	0	0	0	2	0	3
The Institute of Technology and Business in Ceske Budejovice	public	0	0	1	1	0	1	0	3
STING Academy, o.p.s. – Brno	private	1	0	0	0	0	2	0	3
College of Business and Hotel Management	private	1	0	1	0	1	0	0	3
The College of Physical Education and Sport PALESTRA Ltd.	private	2	0	0	0	0	1	0	3
Film Academy of Miroslav Ondricek in Pisek, o.p.s.	private	2	0	0	0	0	0	0	2
University of Finance and Administration, a.s.	private	1	1	0	0	0	0	0	2
Karel Englis College in Brno, a.s.	private	1	0	0	0	0	1	0	2
College of Entrepreneurship and Law – Prague, a.s. (VSPP)	private	2	0	0	0	0	0	0	2

There follows an example of the college with the weakest ethos:
College of Entrepreneurship and Law – Prague, a.s.

VSPP is a joint-stock company, which carries out its key processes in the form of education in accredited study programs and in compliance with the Higher Education Act and its own Statute. It creates conditions for the continuity of education focused primarily on entrepreneurship, which is the main mission of the school. As part of the strategic change, it seeks to achieve synergies that will lead to a shared goal and values sharing.

It is not surprising that the university's missions most frequently referred to education (Component 1, 54 occurrences) - see Table 5. With greater frequency, universities also saw their operations as a form of public service (No. 6; 49 occurrences). Only in four cases the university formulated its mission in the first-person plural “we”. These were 3 public and 1 private university. Significant differences between public and private schools are only observed for the "research" (No. 2) and "social responsibility" components (No. 5) that are more commonly used by public universities.

Table 5 **Individual components use in mission statements.**

	Components						
	1	2	3	4	5	6	7
Total number of occurrences	54	35	33	23	20	49	4
Public universities	25	25	17	13	14	24	3
Private universities	29	16	16	13	6	25	1

Hypothesis testing in SPSS Statistics

H0: There is not a different approach to use individual components in their mission statements between public and private universities in the Czech Republic.

Table 6 **Outcome from SPSS Statistics 1**

Group Statistics

	University	N	Mean	Std. Deviation	Std. Error Mean
Ethos score	public	27	7,48	3,155	,607
	privat	30	5,37	2,220	,405

Table 7 **Outcome from SPSS Statistics 2**

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ethos score	Equal variances assumed	5,354	,024	2,950	55	,005	2,115	,717	,678	3,552
	Equal variances not assumed			2,897	46,131	,006	2,115	,730	,646	3,584

By comparing the p-value of the test (Sig 2-tailed), namely 0.005, with the chosen significance level $\alpha = 0.05$, we find that the p-value is lower than the chosen level of significance, thus we reject the zero hypothesis and accept the alternative hypothesis.

H1: The approach to use individual components in their mission statements between public and private universities in the Czech Republic is statistically significantly different.

That is, at the level of significance $\alpha = 5\%$ there was a statistically significant difference in the approach of public and private universities in the Czech Republic in terms of the use of individual components.

CONCLUSIONS

The aim of this paper was to identify and define the components of the missions of universities that help to build a positive ethos. Individual mission statements of all universities in the Czech

Republic were subsequently identified and ranked. Specifically, the task was to identify following components: Education (product, service); Research; International impact; Philosophy (values and believes); Social responsibility (interest in public image); Public service; Using "we" when writing mission statement. The other goal was to analyze, whether there is different approach of public and private universities when building their missions in terms of use of above mentioned individual components.

By simply looking at the scorecard tables, it was clear that the number of the individual components contributing to building a positive mission statement ethos was more common in case of public universities, which was also confirmed by the outcomes of SPSS Statistics program. Based on the evaluation of the two-tier Student´s t-test, there was accepted the alternative hypothesis: The approach to use individual components in their mission statements between public and private universities in the Czech Republic is statistically significantly different.

Concerning the use of individual components, a more pronounced difference was observed only in case of research activities and social responsibility, which are reported more frequently by public higher education institutions.

The researched findings of a lower propensity of private universities to focus more on a comprehensive and well-designed corporate statements is also aligned with a previous research of authors focusing on 214 leading private companies in the Czech Republic which showed even lower capability to formulate their mission statements. Only 33% of companies in the sample had their mission statements (Pernica and Tyll 2016). Thus, it would be interesting to track the evolution and approach of private, profit based organizations towards this strategic message compared to their public or state-owned peers.

The topic opens up countless possibilities for further research. There would be an interesting analysis of other strategic statements in the context of the ethos of the universities. Besides missions, the attention could be paid to vision statements, ethical codes, values and more. One of the limitations of the research described above was a purely subjective assessment of the use of individual components in university missions. With this in mind, we would recommend that a larger number of evaluators should be involved in the research to objectify the results.

RESOURCES

AMATO, C. H., AMATO, L. H. Corporate commitment to quality of life: Evidence from company mission statements. 2002, *Journal of Marketing Theory and Practice*, roč. 10, č. 4, s. 69-87. BEASON, L. Strategies for establishing an effective persona: An analysis of appeals to ethos in business speeches. *Journal of Business Communication*, 1991, 28.4: 326-346.

COLLINS, J. C.; PORRAS, J. I. Organizational vision and visionary organizations. *California management review*, 2008, 117-137.

COOPER, By Lane. *The rhetoric of Aristotle: an expanded translation with supplementary examples for students of composition and public speaking*. Renewed. New Jersey: Prentice-Hall, 1960. ISBN 9780137806928.

CROSS, M. Aristotle and Business Writing: Why We Need to Teach Persuasion. *Bulletin of the Association for Business Communication*, 1991, 54.1: 3-6.

DAVID, F. R. How companies define their mission. *Long range planning*. 1989, roč. 22, č. 1, s. 90-97.

DRUCKER, P. F. *Management: Tasks, Responsibilities, Practices*. London: Heinemann, 1974. FUGAZZOTTO, S.J. Mission Statements, Physical Space, and Strategy in Higher Education, *Innovative Higher Education*, 2009, Vol. 34, No. 5, pp.285-298

JONGBLOED, B., ENDERS, J., SALERNO, C. Higher education and its communities: Interconnections, interdependencies and a research agenda, *Higher Education*, 2008, Vol. 56, No. 3, pp.303-324.

MŠMT. Přehled vysokých škol v ČR. *MŠMT* [online]. 2016. [ref. 2015-11-25]. Available at: http://www.msmt.cz/vzdelavani/vysoke-skolstvi/prehled-vysokych-skol-v-cr-3

SCOTT, J. C. The Mission of the University: Medieval to Postmodern Transformations, *Journal of Higher Education*, 2006, Vol. 77, No.1, pp.1-39

SHANAHAN, F., SEELE, P. Shorting ethos: Exploring the relationship between aristotle's ethos and reputation management. *Corporate Reputation Review*, 2015, *18*(1), 37-49.

STODDARD, E. W. The Role of Ethos in the Theory of Technical Writing. *Technical Writing Teacher*, 1984, 11.3: 229-41.

SWALES, J. M., ROGERS, P. S. Discourse and the projection of corporate culture: The mission statement. *Discourse & Society*, 1995, 6.2: 223-242.

TYLL, L. *Podniková strategie*. *1. ed.* Prague: C.H. Beck, 2014.

UNIVERZITA PALACKÉHO V OLOMOUCI. Základní informace. *Univerzita Palackého v Olomouci.* [online]. 2016 [ref. 2016-11-25]. Available at: *http://www.upol.cz/univerzita/zakladni-informace/#c4*

VYSOKÁ ŠKOLA EKONOMICKÁ V PRAZE. Profil školy. *Vysoká škola ekonomická v Praze.* [online]. 2016 [cit. 2016-11-25]. Available at: *https://www.vse.cz/obecne/mise.php*

VYSOKÁ ŠKOLA FINANČNÍ A SPRÁVNÍ. Poslání, sdílené hodnoty a vize. *VŠFS.* [online]. 2016 [ref. 2016-11-25]. Available at: *http://www.vsfs.cz/?id=1001-univerzita*

VYSOKÁ ŠKOLA PODNIKÁNÍ A PRÁVA. Výroční zpráva Vysoké školy podnikání a práva, a. s. za rok 2015. *Vysoká škola podnikání a práva – VŠPP.*[online]. 2016 [ref. 2016-11-25]. Available at: *http://www.vspp.cz/Frontend/Webroot/uploads/files/2016/10/vyrocni_zprava_2015418.pdf*

WILLIAMS, L. S. The mission statement A corporate reporting tool with a past, present, and future. *Journal of Business Communication*, 2008, 45.2: 94-119.

sciendo
International Journal of Entrepreneurial Knowledge *Issue 1/2018, Volume 6*
DOI: 10.2478/ijek-2018-0005

INTRAPRENEURIAL DYNAMICS: A CASE RESEARCH AT THE INSURANCE INDUSTRY IN PORTUGAL

Bruno F. ABRANTES
Business Research Unit (BRU), ISCTE University Institute of Lisbon

ABSTRACT

This research focusses on the firm endowments; focusing on the impact of an organizational structure and its managerial systems as the intrapreneurial conditions (IC) for constraining and/or leveraging behavioral patterns of intrapreneurial dynamics (ID). With a positivistic stance and deductive approach to theory development, the researcher attempts to test the phenomenon using a single case design with a holistic frame. The intrapreneurial assessment model of Hartman (2006) outlines the IC variables. Online questionnaires directed to the stakeholders of the partaking firm have originated a probabilistic and randomized sample of 9,70% of respondents of the target-population (670 employees). We argue that the firm´s environment has a direct impact on the intrapreneurial behavior at both, managerial and non-managerial levels, since data exhibits an interaction of variables IC-ID with a positive correlation in its mutation patterns. Herein, is not encompassed the subset of ID with roots upon corporate entrepreneurship (CE); however, it constitutes a clear gap for further statistical and analytical generalizations. This study illuminates the determinism of the organizational ecosystems on the formation of intrapreneurial ideas and ventures and shaping the new intraprises with regard to Entrepreneurial Employee Activity (EEA).

KEYWORDS

Corporate entrepreneurship (CE), entrepreneurial employee activity (EEA), intrapreneurship, intrapreneurial conditions (IC), intrapreneurial dynamics (ID), intraprise

JEL CLASSIFICATION

L26, L25, L22.

INTRODUCTION

The ability of the firm to compete is intrinsically attached to its resources ownership (Oviatt and McDougall, 1994; Eisenhardt and Martin, 2000). Yet, several studies support an alternative stance. Unlike valuing resources, they advocate the criticality of the formation of organizational capabilities, rooted on the processes and routinization, are an explanatory factor condition of knowledge acquisition and attainment of innovations in the market (Teece *et al.*, 1997; Eisenhart and Martin, 2000; Weerewardena *et al.*, 2007; Brennan and Garvey, 2009; Cardeal and António, 2012).

This study focus on the endowments of a firm: structure configuration, resources, processes and culture in order to comprehend how these affect the capability-building mechanisms towards an entrepreneurial culture that empowers intrapreneurs and changes strategic positions and business competitiveness (Wang and Ahmed, 2007). Thus, the study unfolds as follows: first, addresses the theoretical framework on the fields of corporate entrepreneurship and intrapreneurship beginning with seminal conceptualizations, and the contextualization of the investigation. Secondly, introducing the methodological design rooted on a holistic single case design research and revealing the contours of data collection and sampling frame tools, and the underlying data manipulation and analysis. Then, at the final section discusses previous results, findings and delivering its conclusions.

1. THEORETICAL FRAMEWORK

Literature in macro, micro, transactional cost and evolutionary economics, and management sciences and business administration, and most particularly the systems theoretical approach has extensively referred to the complexity of company-market interrelations, and the influence of external market factors in company´s performance. However, it should not be neglected the firm internal endowments as argued by the resource-based theory (RBT) the so-called resource-based view (RBV) with micro-foundations of the Penrosian growth of the firm. Several authors postulate within the RBT/RBV an entrepreneurial view, which argues the link between innovation and competitiveness, while recognizing the importance of human capital and the employees' proactiveness to achieve the latter. Similarly, Kovács *et al.* (1998) argue that the lack of innovation strategies and knowledge development may requires a dichotomic approach through two different perspectives. One *stricto sensu* perspective confined to the technique or technology (technocentrism) in which information and communication technologies are seen as a means of replacing human expertise, through the incorporation of maximum knowledge, regularized and formalized, in computer programs. The second perspective does not confine itself to technological resources but it provides a broader use of all tangibles and intangibles in the organization (anthropocentrism) and suggests the adoption of Anthropocentric Production Systems (APS) with architectures designed to value people, and the qualification of human resources, in clear approach towards the capabilisation the firm. An APS approach acknowledges the principles of decentralized and participatory structures in firms, aiming to generate innovation, not only technological, but also in organizational management, processes, business models, and products and services. Likewise, the innovation process within the organizational environment, named as *"intrapreneurship*" by Kuratko and Hodgetts (1995:121) is perceived as a synonym for business competitiveness, and therefore a central concern of companies in the XXI century (Lozinsky, 2010). Thus, Brandão (2008:120) claims this construct "in *the modern sense ... should not be understood as an external fact to man, but rather as a choice and construction." "The future is intrapreneur*" stated Pinchot (1985:321) emphasizing the role of intrapreneurship in innovation´s value creation. In addition, Behram & Özdemirci (2014) recognize corporate entrepreneurship as an important means to ensure the survival and prosperity of companies, while an IBM (2010) report **"***Capitalizing on Complexity, Insights from the Global Chief Executive Officer Study"* corroborates both ideas underlining intrapreneurship as an effective solution for managing complexity in business and innovation´s progression.

1.1. From Conventional Entrepreneurship to Entrepreneurship inside the Organizations

The study begins with a conceptual approach to the conventional entrepreneurship, and intrapreneurship in the organizations, a task that does not seem easy. Audrestch *et al.* (2002) assert that part of the difficulty in defining entrepreneurship lies in the multidimensionality feature of the concept that encompasses a variety of fields, being a phenomenon that crosses borders, assuming

different ways of expression and different amplitudes, according to industrial, cultural, geographical and temporal differences. Also the Global Entrepreneurial Monitor Report reflects, likewise, the complexity of this concept in his own definition: *"The entrepreneurship process is a complex endeavor that is affected by many factors, including prevailing attitudes within a society, the rate of activity and the kind of opportunities available, and the growth aspirations of entrepreneurs* "(Xavier *et al.*, 2012:18).

Regarding the entrepreneurship within the organizations, it is acknowledged that the first use of the term "*intrapreneur*" attributed to Gifford Pinchot in 1978 (Baruah and Ward, 2013). Similarly, Miller (1983) considered entrepreneurship inside the organizations as the ability to innovate, to take risks and compete proactively. Later, Pellman and Pinchot (1999) defined intrapreneurial activity (intrapreneuring) as the everyday innovations that make the company more agile to respond to customers taking as a starting point, an idea, a desire to overcome itself, or simply provide a service more cost-effectively. The authors contend that any innovation requires the willingness of an intrapreneurial person to assume the command, and the relentless persistence to make it happen. Other scholars have also addressed the entrepreneurial dynamics topic in the organizations, such as Zahra (1995), Antoncic and Hirsch (2001) and Mintzberg (2007), and conceptualized it as intrapreneurship. Mintzberg (2007) argues that intrapreneurial dynamics is a positively sensitive phenomenon perceived within adhocratic structures where intrapreneurs are risk-takers in order to achieve personal rewards.

Further conceptualizations have emerged from the corporate entrepreneurship, such as "intracapital" as the use of internal risk capital (corporate venture capital) for the establishment of an internal fund, to serve intrapreneurial projects (Kuratko and Hodggets, 1995). The previous concept precedes the notion of "intraprise" (as "an entreprise inside an entreprise") describing it as being the functioning of a business within another business, as a way of explaining what intrapreneurs are creating inside the company they work regardless of whether it is a new product, service, process, or spin-off launch (Pellman and Pinchot, 1999:3). Nevertheless, an alternative conceptual path is suggested by Bosma *et al.* (2013) similar to the Global Entrepreneurship Monitor Report in which they separate the business entrepreneurship in three different conceptions: (a) corporate entrepreneurship; (b) intrapreneurship; and (c) Entrepreneurial Employee Activity (EEA). For these authors, corporate entrepreneurship (CE) is a top-down process, which has its origin in the diffusion of management efforts and initiatives for business development. The authors relate EEA with employee individual actions, and therefore a bottom-up process in which the individuals develop entrepreneurial initiatives of labor proactiveness. Briefly, intrapreneurship is a joint dynamic of EEA with corporate entrepreneurship. Thereby, the research takes a differentiating stance diverging from the conceptions of linearity, which claim, the corporate entrepreneurship and intrapreneurship egalitarianism, and an epistemological assumption show be raised to clarify the definitions adopted in this study. With regard to the definition of intrapreneurship which comprised a dual etymology (CE and EEA) this study focuses on the the EEA as a subset of ID; nevertheless accepting the other subsets but not pursuing them while collecting data and running empirical tests.

At present time, entrepreneurship inside the organizations is a topic addressed in a multidisciplinary fashion (Stanworth, 1989; Hisrich, 1990; Carrier, 1994; Pearce *et al.*,1997; Allali, 2010; Alpkan, 2010; Bager et al, 2010; Bosma et al., 2010) while new perspectives, concepts and developments are emerging and interconnecting. Binding, social and corporate entrepreneurship, appears the "social intrapreneurship" concept (Grayson *et al.*, 2011) as the creation of sustainable value (social and environmental innovations), for the benefit of the company itself and the society. Complementarily, the vision of social-orientated firms, creating pioneer solutions for social problems, arise with Venn and Berg (2013). It should not be overlooked a previous Kanter´s (2010) contribution, underpinning business resilience lies on a sustainable organizational model (named as

vanguardist model) with high business performance and social innovation impact without direct profit motivations (humanistic culture).

1.2. The Intrapreneurship in Portugal

The GEM Report review highlights the Nordic countries high perception of opportunity, and lower entrepreneurial abilities and Southern Europe lower business chances, contrasting higher indexes of entrepreneurial activity (Xavier *et al.*, 2012). In the particular case of Portugal, the "*nascent entrepreneurship rate*" (new venturing) is lower than EU27 average, while the "*discontinuation of businesses*" figures are in line with EU other State-Members. Currently, the information available on the topic of intrapreneurship in Portugal is still scarce. The first study on the topic of intrapreneurship in Portugal was published in November 2012 by Dana T. Redford and it was called "INTRApreneurship in Portugal". This was a basic research study conducted by the Platform for Entrepreneurship Education in Portugal (PEEP), and the American Chamber of Commerce in Portugal (AMCHAM), and co-sponsored by the Luso-American Foundation (FLAD).

The next year, a country-comparison (Poland-Portugal) reviewed the original results on the field and was performed by Duarte *et al.* (2013) focusing on Micro, Small and Medium Enterprises (MSMEs). Focusing on the firms established at Vale do Sousa region in Portugal compared it with the Lublin province companies in Poland. These researchers concluded that the region of Vale do Sousa (composed by a business community with 97% of micro or small firms, and and 3% of medium enterprises) featured low intrapreneurship at the time. This study concluded that, just, 5,2% of firms have good levels of intrapreneurship, 33,6% a moderate level, and 61,2% low, or very low, levels of intrapreneurship. Portuguese national figures compared with the Polish region under study, shown a weaker intrapreneurial performance at "moderate level", and "good level", and revealed an overall reduced ability to perform intrapreneurial dynamics in the Portuguese region.

A similar correlational study conducted about intrapreneurial cultures at Portuguese and Brazilian industrial companies (Lopes *et al.*, 2013). The results revealed lower intrapreneurial behavior evidences in Portuguese firms, pointing as main obstacles, the centrality of decisions, the low autonomy of employees, the individual´s alienation with business results, the lack of monitoring and evaluation (of intrapreneurial performance) and the lack of compensation and reward mechanisms.

1.3. Organizational Conditions for the Entrepreneurship Development

In the past, several studies have devoted attention to the correlation between the external environment and entrepreneurial performance and there is wide consensus on the influence of market factors on intrapreneurial behavior. Empirical evidences confirm many environmental variables are pushing companies towards the adoption of strategies of innovation and the assumption of risks (Behram and Özdemirci, 2014).

Paradoxically, some endogenous factors seem to be pulling down the intrapreneurial actions and innovation processes. Tidd *et al.* (2003) identified those factors as, the predominance of vertical relationships, weak lateral communication, limited resources and tools, top-down command orders, limitation on formal channels for change, valuing external innovation, and finally, unfocused activities and/or unplanned practices. The same authors also stress the importance of openness to new stimuli from the outside, and pull them into corporate thinking. Some researchers, hold that the internal firms´ conditions play an important role enhancing intrapreneurial performance (Kuratko, Montagno and Hornsby, 1990; Carrier, 1994; Myzuka and Birley, 2001; Hashimoto, 2006; León *et al.*, 2009; Allali (2010). and Lizete *et al.*, 2013).

First, Kuratko, Montagno and Hornsby (1990) considered the management support, the firm´s structure and the availability of resources, the main internal constructs leading to entrepreneurial activity. While, Myzuka and Birley (2001) underpin the endogenous communication strategies, and Hashimoto (2006) stands internal communication is relevant for building an intrapreneurial culture. A broader vision, in line with Kuratko, Montagno and Hornsby (1990), is given by León *et al.* (2009). These authors state that the size of the firm, its structure, the rewards assigning and a managerial supportive team are internal requirements of entrepreneurship, whereas, Lizete *et al.* (2013) holds in a more linear manner, it comes from a combination of entrepreneurial competences and organizational factors.

Closer to Hashimoto (2006) are Behram and Özdemirci (2014) who claim the value of corporate culture in the ability to stand out as an entrepreneur. They distinguish between integrative and segmentalist cultures. Adhocracy and market cultures, taken as integrative yield a positive effect on intrapreneurial performance. The opposite way go the segmentalist cultures, which inhibit an entrepreneurial mindset. In the second case (segmentalist cultures), the authors add that the munificence associated with democratic management styles and leadership have negative effects on innovation and entrepreneurial activities.

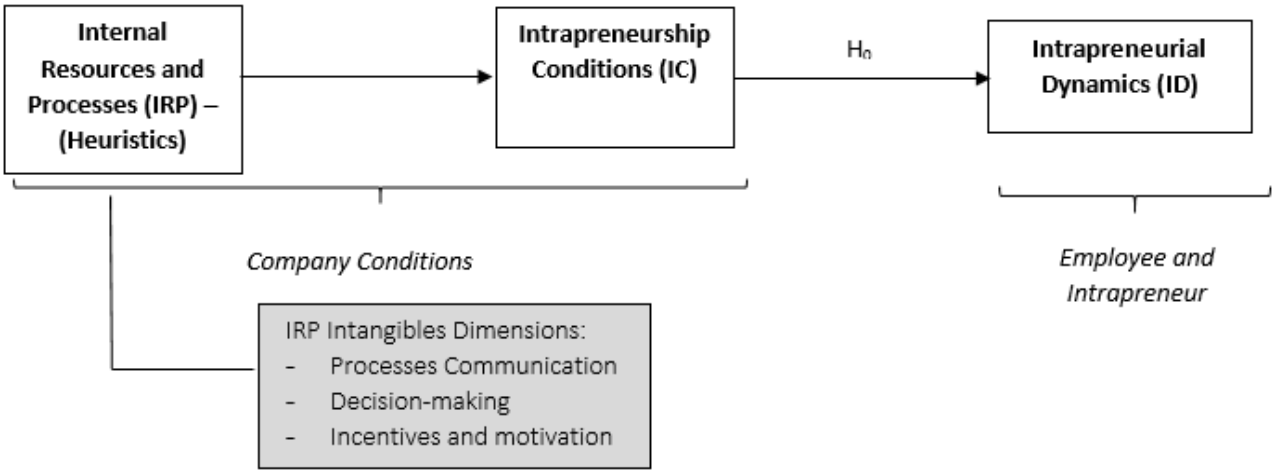
2. METHODOLOGY

The research applies the Yin (2003) case design Type 2. The case research has an embedded format with multiple units of analysis (UAs) being observed, but focusing on a single-case design (one partaking firm) within the focal economic activity (insurance industry). The UAs constituted a sample of approximately 10% of the population within an universe of 670 employees of the firm. The sample was obtained through the response to an online questionnaire, applied at the intranet, monitored by the IT department with the approval of the strategic apex of the firm. The response rate of 9,70% constituted he final valid sample accounting stakeholders from different areas and locations at the central office and across local branches.

The questionnaire used closed-end enquiries related with the dimensions of Hartman´s (2006) framework of intrapreneurial culture, which constituted the ground for measuring the perception of employees regarding IC. The responses to the questionnaire were linked to Likert scale of 5-points regarding the judgments of agreement and satisfaction. The dimensions of Hartman´s framework constitute the independent variables for both, hypothesis testing and data estimation of IC/ID, based on the primary data collection.

The dependent variable shown below, as Y is associated with the Intrapreneurship Dynamics (ID) phenomenon whom is explained a combination of sub-variables that constitute the firm Intrapreneurship Conditions (IC). In turn the IC summarizes the set of independent variables, (X), as follows: (i) Vision and Objectives; (ii) Communication (VOC); (iii) Customer Focus (CuF); (iv) Strategy Communication (SCo); (v) Satisfaction on Incentives (QSI); (vi) Decision-Making viewing midterm results (DMR); (vii) Organizational Practices in accordance with communication policies (OrP); (viii) Ethical, Environmental and Social Responsibility Programs (SRP); (ix) Incentives for New Ideas (INI); (x) Incentives when a Entrepreneur Fails (IEF); and (xi) Stimuli of Ideas with no Obligation to Succeed (IOS). Figure 1 exhibits the research paradigm:

Figure 1 **Research paradigm (IC-ID)**

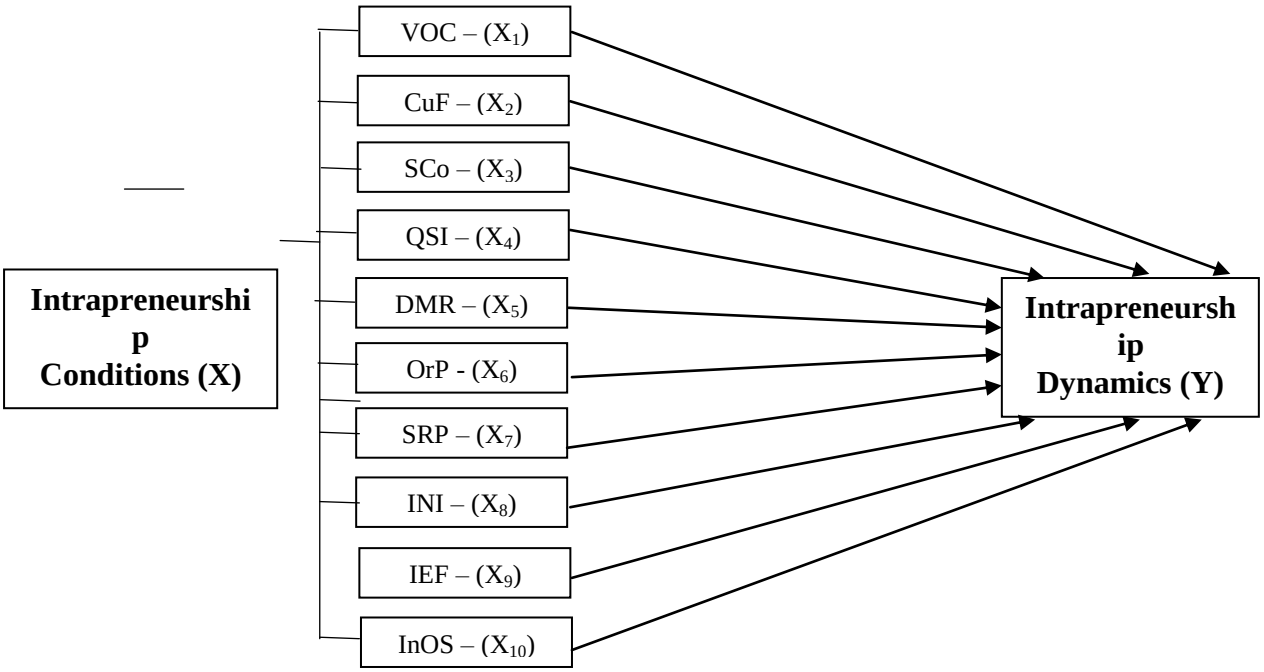


(*Source*: Own ellaboration)

The ontology of the case design reveal a foundation on the RBV as the RBT acknowledges that the capability formation is dependent on the existence of firms´ resources and its utilization through the performance of groups of activities that obey a heuristic setting of perceived in the processes which be routinized. The bundle of resources and capabilities comprised in the firm´s processes (IRP) and the firm´s structure and environment set the tone for the intrapreneurial conditions described in Figure 2 that orientate the intrapreneurs actions.

This research basis itself on the resources and capabilities but focusing on the environmental conditions of the organizations, as an ID ecosystem for intrapreneurs that are the structuring aspects that trigger ID. Thus, the resources championed by the resources-based view (RBV) are deliberately untapped at our investigation. Based on the structural equation model for measuring ID we describe below the IC composition of sub-variables that account for the IC.

Figure 2 **IC conditionants of ID**



(Source: Own ellaboration)

As referred, primary data follows Hartman´s (2006) framework, applied in a questionnaire composed of 10 questions, each one related with an independent variable from X_1 to X_{10}.of Figure 2. The data analysis process incorporates descriptive and inferential statistical tools: frequencies, cross-tables, central tendency, dispersion measures, estimation and hypothesis testing. The estimating inference on population considers some assumptions for simple linear regressions. First, the linearity of relations between variables, then standard deviations of the error follows a normal distribution and finally, the variance is constant (homoscedastic). As null hypothesis (H0) is considered: the company provides the conditions for the development of intrapreneurial dynamics; and the alternative hypothesis (Ha) is a rejecting assertion of the H0 since is false. The significance level (α) is 0.05 with a confidence interval of 95 percent. The questionnaire design accounted in the question formulation phase a rhetorical assumption, which is the compromise to avoid polysemic and idiomatic language, which according to Hill and Hill (2012) hinders communication and can falsify the results of the questionnaires and therefore misrepresent the inference to the universe.

To assess the degree of agreement of the respondents to each of the survey questions of Hartman´s questionnaire, was used a five elements (1-5) *Likert* Scale, with a bipolarity between strongly disagree and totally agree, respecting the properties of ordinal level (considering the transitivity principle) and intermediate level providing a constant magnitude throughout the scale. Our independent variables are linked with IRP dimensions through this connection: $X_{1\ to}\ X_4$ variables answers the IP dimension of firm´s communication, the $X_{5\ to}\ X_7$ explains decision-making and the X_8 to X_{10} the incentives and motivation. The questionnaire became available on the company intranet platform with a prior notification alert via e-mail, sent to all company employees.

2.1. Case Study

It was selected the insurance as an industry-target for its significance in the national macroeconomic context of the Portuguese economy. The case study was developed at one of the largest insurance companies in the world, with a relevant market share at Portugal and a large working population of six hundred and seventy employees, spread across all provinces (including the Azores and Madeira islands). The study was coordinated by the Communication and Brand Department of the company, with the technical support from the IT Department. The data collection features the following respondents profile: female worker, at Lisbon area (NUTS II – region 17) at the Great Lisbon area (NUTS III – region 171) at the age group of 35 to 44 years old, with a full-time job in the company, fulfilling non-operational functions at the subsidiary central office. Given the sample size (n>30) it was applied a Kolmogorov-Smirnov´s normality test to determine the normal distribution of the responses. Also confirmed were the skewness and kurtosis coefficients containing, respectively, symmetric figures (1.92) and a mesokurtic profile (0.844). We´ve also conducted an internal consistency analysis test to our primary data through Cronbach´s alpha (α) to determine the reliability of the sample. The average interitem covariance got a 0.363 result and the scale reliability coefficient a 0.939, proving its soundness. To determine the results of the survey, we´ve analyzed the responses using measures of central tendency, and dispersion.

Table 1 **Results of central tendency**

Variables	Mean	Standard deviation
VOC – Vision Objectives & Communication	3.984	4.07e+08
CuF – Customer Focus	4.046	1.038212
SCo – Strategy Communication	3.738	.9590159

QSI – Query Satisfaction on Incentives	4.015	.8343583
DMR – Decision-making viewing midterm results	3.276	.8195332
OrP – Organizational practice in accordance with communication policies	3.753	1.023287
SRP – Ethical, environmental and social responsibility programs	4.707	.9190819
INI – Incentives for new ideas	4.061	.4583625
IEF – Incentives when entrepreneurs failure	3.569	.8992518
IOS - Stimulation of ideas with obligation to succeed	3.569	.8094989

The results of the descriptive statistical summarized at Table 1 indicate: (a) an average of responses fitting grade 4 ("Agreement"), from question one to ten, except for question five, which presents an average rating of grade 3 ("Undecided "); (b) in question 7. There is a total agreement of the respondents; (c) its observed no responses with average ratings fitting grades 2 or 1 (disagreement or total disagreement). Noticeable is the dispersion measures (S and S-Squared) that show a high degree of variability in most of the answers. The aggregate results are exhibited in Table 2.

Table 2 **Intrapreneurial condictions (IC) perception results**

Variables	Mean	Standard deviation
IC - Intrapreneurship Conditions	3.872	0.607

(Source: Own ellaboration)

The table below presents the correlation coefficient between the dependent variable (Y) the intrapreneurship dynamics (ID), and the independent variables ($X_{1, 2, \dots n}$) measuring the strength of association between variables: vision and objectives communication (VOC); customer focus (CuF); strategy communication (SCo); query satisfaction on incentives (QSI); decision-making viewing midterm results (DMR); Organizational practice in accordance with communication policies (OrP); ethical, environmental and social responsibility programs (SRP); Incentives for new ideas (INI); Incentives when entrepreneurs failure (IEF); Stimulation of ideas without obligation to succeed (IOS).

Table 3 **Results of Correlation Coeficient**

Variables	Correlation Coeficient
VOC – Vision Objectives & Communication	0.7396
CuF – Customer Focus	0.7044
SCo – Strategy Communication	0.7895
QSI – Query Satisfaction on Incentives	0.6344
DMR – Decision-making viewing midterm results	0.7309

OrP – Organizational practice in accordance with communication policies	0.8266
SRP – Ethical, environmental and social responsability programs	0.5144
INI – Incentives for new ideas	0.6006
IEF – Incentives when entrepreneurs failure	0.6327
IOS - Stimulation of ideas with obligation to succeed	0.7202

(Source: Own ellaboration)

The Pearson´s test results address the correlations X_1 -Y_1 revealing considerable variability. The lowest figures values are linked with the environmental, ethical and social responsibility program (SRP). The maximum correlation values are achieved at "Organizational practice in accordance with communication and policies" (OrP). The correlation coefficient (r) of the medium variables X_1 and Y_1 according to the dependent variable was r=0.68933. Furthermore, the variables of the operational model are presented below at the correlation matrix:

Table 4 **Results of Correlation Matrix**

Variables	ID	VCO	CuF	SCo	QSI	DMR	OrP	SRP	INI	IEF	IOS
ID	1.000										
VCO	0.739	1.000									
CuF	0.704	0.534	1.000								
SCo	0.789	0.626	0.523	1.000							
QSI	0.634	0.385	0.496	0.417	1.000						
DMR	0.730	0.592	0.416	0.598	0.311	1.000					
OrP	0.826	0.552	0.580	0.627	0.420	0.555	1.000				
SRP	0.514	0.417	0.422	0.328	0.428	0.108	0.382	1.000			
INI	0.600	0.268	0.177	0.417	0.274	0.320	0.510	0.423	1.000		
IEF	0.632	0.326	0.368	0.408	0.316	0.410	0.485	0.202	0.316	1.000	
IOS	0.720	0.320	0.342	0.462	0.445	0.511	0.557	0.215	0.524	0.545	1.00

(Source: Own ellaboration)

Based on the correlation results, we have applied the determination coefficient (r2), checking the variation degree of the intrapreneurship dynamics (IC) explained by independent variables (X) 1 to 10.

Table 5 **Results of Determination Coeficient and Adjusted Corrrelation Coeficient**

Variables	Determination coeficient	Determination coeficient (Adjusted)
VOC – Vision Objectives & Communication	0.547	0.539
CuF – Customer Focus	0.496	0.488

SCo – Strategy Communication	0.623	0.617
QSI – Query Satisfaction on Incentives	0.402	0.393
DMR – Decision-making viewing midterm results	0.534	0.526
OrP – Organizational practice in accordance with communication policies	0.683	0.678
SRP – Ethical, environmental and social responsibility programs	0.264	0.253
INI – Incentives for new ideas	0.360	0.350
IEF – Incentives when entrepreneurs failure	0.400	0,390
IOS - Stimulation of ideas with obligation to succeed	0.518	0.511

(Source: Own ellaboration)

The determination coefficient results register an r^2 (mean of X_{1-10}) = 0.475 and an r^2-adjusted = 0.474 explaining the ID perception through the overall factors. OrP (Y_6) accounting an r2-adjusted = 0.678, constitutes the most relevant explanatory factor (X_{1-10}) explaining ID perception according to the questionnaires responses. Therefore, the firm´s management practices in compliance with its internal communication and polices was considered the factor which contributed the most for ID positive perception. On the other hand, SRP (Y_7) and INI ($_{Y8}$) were the major constraints to IC perception. Thus, "ethical, environmental and social responsibility programs" (SRP) and "Incentives for new ideas" (INI) were perceived the factors that contribute less to ID positive perception.

To review the degree of adjustment between variables (x, y) a regression was ran attaining the following results:

Table 6 **Results of the OLS Regression**

Variables	Coef.
VOC – Vision Objectives & Communication	0.433***
	[0.496]
CuF – Customer Focus	0.446***
	[0.566]
SCo – Strategy Communication	0.575***
	[0.563]
QSI – Query Satisfaction on Incentives	0.470***
	[0.722]
DMR – Decision-making viewing midterm results	0.434***
	[0.510]
OrP – Organizational practice in accordance with communication	0.546***

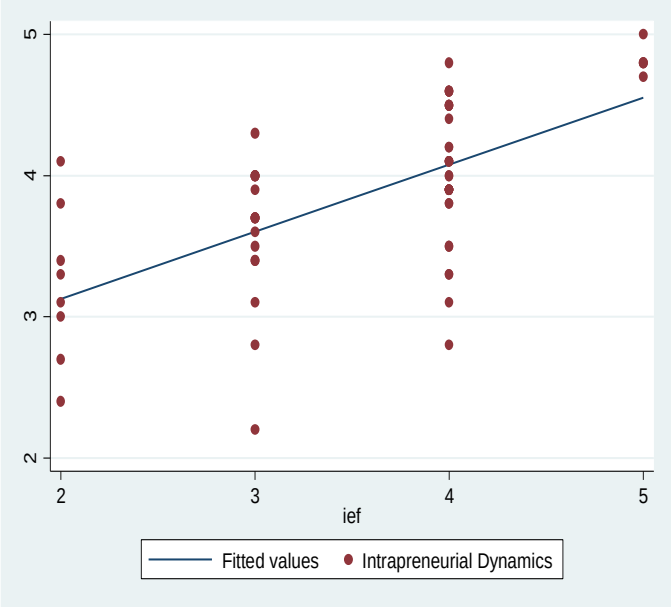
policies	[0.468]
SRP – Ethical, environmental and social responsibility programs	0.682***
	[0.143]
INI – Incentives for new ideas	0.405***
	[0.680]
IEF – Incentives when entrepreneurs failure	0.475***
	[0.732]
IOS - Stimulation of ideas with obligation to succeed	0.476***
	[0.578]

* p<0.05, ** p<0.01, *** p<0.001; standard errors in parentheses.

(Source: Own elaboration)

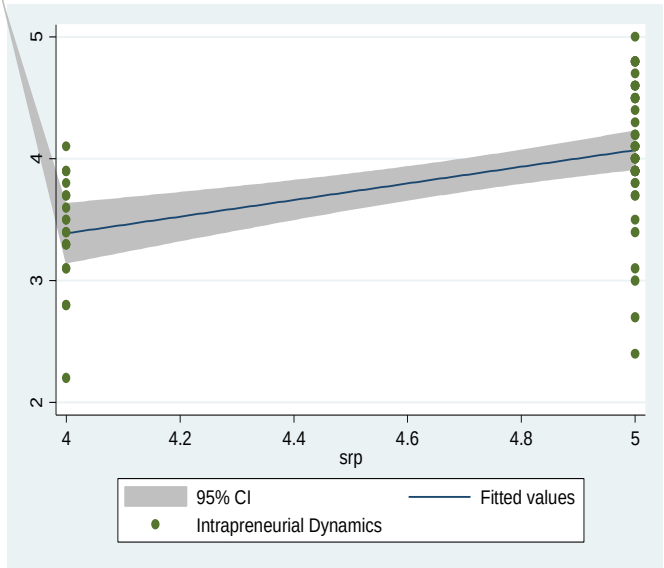
The regress model demonstrates the mean results (per variable $x_{1\text{-}n}$) of t statistics (from 0.433 to 0.682), a noteworthy standard error, graphically demonstrated below (from 0.143 at SRP to 0.732 at IEF) and some minor differences between X_1 to X_{10} at the confidence interval considering ID as the dependent variable (Y). The SRP program usually a milestone on social programs its graph reveals the respondent´s positive perception (Figure 2). In parallel, looking to the IC overall results it can identified the standard error and the heteroscedastic behavior of the sample (Figures 2 and 3).

Figure 2 **SRC Results**



(Source: Own elaboration)

Figure 3 **SRP results, standard error (U) and heteroscedasticity**



(Source: Own elaboration)

The responses demonstrate a considerable uncertainty and quite distinct outcomes per each dimension (or independent variable). The overall results lead to a p-value below 0.05 ($p < 0.05$). The overall perception of the respondents about ID considering data collected from the questionnaires and regarding the IC explanatory factors/dimensions (X) or independent variables withdrawn from Hartman´s (2006) study leads to the deductive observation that IC impacts directly on ID. Therefore, it may be claimed that the intrapreneurial behaviors are intrinsically linked with the perception of the organizational environment and most specifically related with the existence of favorable ecosystems. ID is influenced by multiple criteria of the IC phenomenon and the latter exhibiting interdependencies in their variation.

3. DISCUSSION AND CONCLUSION

The empirical study is comprised in a research paradigm following a positivistic philosophical stance, with a deductive approach to theory development, where its design applies to quantitative approach a case research strategy of type 2 (Yin, 2009). The results of the study indicate a clear correlation between the intentions of the employees in the organization to engage in intrapreneurial dynamics in a EEA perspective, according to the corporate culture, organizational environments structure and resources. The results reveal that organizational environment influence the intentions of the employees to engage in intrapreneurial actions inside the organization. Moreover, it is recognized the existence of intangible endogenous processes that influence decisively the entrepreneurial practices. The most significant is OrP (Organizational practices in accordance with communication policies) which has the highest impact factor on employees positive perception of conditions for ID. On the other hand, SRP (Ethical, Environmental and Social Responsibility Programs) and INI (Incentives for New Ideas), had the lowest impact factors in employees perception. In this sense, the pecuniary intrinsic factors seem to don´t account much for motivate potential intrapreneurs. Nevertheless, intrapreneurs reveal aversion to uncertainty as the OrP is the variable hampering their actions the most, which contradicts some of the myths in literature regarding the risk-acceptance of the entrepreneurs. Moreover, the recognition of the uncertainty avoidance by EEA candidates raises the quest for the structural flexibility of the organizations to

match their business strategies with corporate policies accommodating intrapreneurship-friendly ecosystems and levering further innovations.

REFERENCES

Allali, B. (2010) Intrapreneuriality and the perceived autonomy indicators. International *Journal of Entrepreneurship and Small Business*, 10, no.:3, pp. 324-338.

Alpkan, L., Bulut, C., Gunday, G., Ulusoy, G., & Kilic, K. (2010) Organizational support for intrapreneurship and its interaction with human capital to enhance innovative performance. *Management decision*, 48, no.:5, pp. 732-755.

Antoncic, B, Hirsch, R. D. (2001*)* Intrapreneurship: Construct, Refinement and Cross-Cultural Validation. *Journal of Business Venturing*, 16, no.:5, pp. 495-527.

Audrescht, D. B., Thurik, R., & Verheul, I., Wennekers, S. (2002) Entrepreneurship: Determinants and Policy in a European-U.S. Comparison. *Kluwer Academic Publishers.*

Bager, T., Ottosson, H., & Schott, T. (2010) Intrapreneurs, entrepreneurs and spin-off entrepreneurs: similarities and differences. *International Journal of Entrepreneurship and Small Business*, 10, no.:3, pp. 339-358.

Baruah, B. & Ward, A. (2013). Can CEOs Be Influential Facilitators of Intrapreneurship. *Voice of Research, 2*, no.:3, pp. 47-54.

Behram, N. K., & Özdemirci, A. (2014) The Empirical Link between Environmental Conditions, Organizational Culture, Corporate Entrepreneurship and Performance: The Mediating Role of Corporate Entrepreneurship. *International Journal of Business and Social Science, 5, no.:2*, pp. 264-276.

Bosma, N., Stam, E., & Wennekers, S. (2013) Institutions and the allocation of entrepreneurship across new and established organizations (No. H201213). *EIM Business and Policy Research*.

Brandão, N. G. (2008) Século XXI – Novas solidariedades e incertezas. Lisboa, *Edições Universitárias Lusófonas*.

Brennan, L. & Garvey, D. (2009) The role of knowledge in internationalization, *Research in International Business and Finance*, 23, no.:2, pp. 120–133.

Cardeal, N., & Nelson, A. (2012) Valuable, rare, inimitable resources and organization (VRIO) resources or valuable, rare, inimitable resources (VRI) capabilities: What leads to competitive advantage?. *African Journal of Business Management*, *6, no.:*37, pp. 10159-10170.

Carrier, C. (1994) Intrepreneurship in large firms and SMEs*: A comparative study*. International Small Business Journal, 12, no.:3, pp. 54-61.

Duarte, N., Diniz, F., Arent, A. & Bojar, M. (2013) Entrepreneurship Strategies in a Portuguese and in a Polish Region. *Proceedings of the first international conference on management, marketing tourism, retail, finance, and computer aplications*, Croatia.

Eisenhardt, K. M., & Martin, J. A. (2000) Dynamic capabilities: what are they?. *Strategic management journal*, *21, no.:10-11*, pp. 1105-1121.

Freixo, M. (2012) *Metodologia Cientifica - Fundamentos, Métodos e Técnicas*, 4ª ed., Instituto Piaget, Lisboa.

Grayson, D., MClaren, M, & Spitzeck, H. (2011) Social Intrapreneurs—An Extra Force for Sustainability, *A Doughty Centre for Corporate Responsibility Occasional Paper*.

Hartman, A. (2006) Avaliação da Cultura Intra-Empreendedora: Desenvolvimento e Teste de uma Metodologia, *Ponta Grossa-PR: Universidade Tecnológica Federal do Paraná.*

Hashimoto, M. (2006) Espírito Empreendedor nas organizações:aumentando a competitividade através do intraemprendedorismo. *Saraiva*.

HILL,M. M. & HILL, A. (2012) Investigação por Questionário (2a ed.). Lisboa, *Edições Sílabo*.

Kanter, R. K. (2010) Superempresa. Lisboa, *Actual Editora*.

KAO, John J. (1989) *Entrepreneurship, Creativity & Organization*, Prentice-Hall.

Kelley, D. J., Singer, S., & Herrington, M. (2012) The global entrepreneurship monitor. *2011 Global Report, GEM 2011, 7*.

KOVÁCS, Ilona (1993) *Sistemas Antropocêntricos de Produção*, Lisboa, SOCIUS - Centro de Investigação em Sociologia Económica e das Organizações, Lisboa.

Kovács, I., Castillo, J. J., & Pereira, M. S. (1998) Novos modelos de produção: trabalho e pessoas. *Celta Editora, Oeiras.*

Kuratko, D. F., Montagno, R. V., & Hornsby, J. S. (1990) Developing an intrapreneurial assessment instrument for an effective corporate entrepreneurial environment. *Strategic Management Journal*, 11, no.:1, pp. 49-58.

Kuratko, D. F., & Hodgetts, R. M. (1995) Entrepreneurship: A contemporary approach. *Dryden Press.*

Grayson, D., McLaren, M., & Spitzeck, H. (2011) Social Intrapreneurs—An Extra Force for Sustainability. *A Doughty Centre for Corporate Responsibility Occasional Paper*.

Hisrich, R. D. (1990). Entrepreneurship/intrapreneurship. *American Psychologist*, 45, no.:2, p. 209.

León, J. A. M., Topa, G., Valero, E., & Lévy, J. P. (2009) Identificación organizacional y conducta" intraemprendedora". *Anales de psicología*, 25, no.:2, pp. 277-287.

Lizote, S. A., Verdinelli, M. A., & Silveira, A. (2013) Organizational Factors and Intrapreneurial Competences. *International Journal of Innovation*, *1*, no.:1, pp. 01-18.

Lopes, S., Gaspar, F., Hartman, A., Silva, F., Reis, D. (2013) Avaliação do nível da cultura intraempreendedora: Estudo de caso entre seis empresas portuguesas e seis empresas brasileiras. *Revista Portuguesa e Brasileira de Gestão, 12, no.:*1, pp. 52-68.

Lozinsky, S. (2010) Implementando o empreendedorismo na sua empresa – Experiências e Idéias para Criar uma Organização (Intrapreneurship). São Paulo, *M. Books.*

Miller, D. (1983) The correlates of entrepreneurship in three types of firms. *Management science*, *29*, no.:7, pp. 770-791.

Mintzberg, H. (2007) Mintzberg on Management. *Simon & Schuster.*

Muzyka, D. F., & Birley, S. (2001) Dominando os desafios do empreendedor. São. Paulo, *Financial Times. Makron Books*.

Oviatt, B. M., & McDougall, P. P. (1994) Toward a theory of international new ventures, *Journal of International Business Studies*, 25, no.:1, pp. 45-64.

Pearce, J. A., Kramer, T. R., & Robbins, D. K. (1997). Effects of managers' entrepreneurial behavior on subordinates. Journal of Business Venturing, 12, no.:2, pp. 147-160.

Pelmann, R. & Pinchot, G. (1999). Intrapreneuring in Action: A Handbook for Business Innovation. San Francisco, *Berrett-Koehler*.

Pinchot III, G. (1985). Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.

Stanworth, J., Stanworth, C., Granger, B., & Blyth, S. (1989) Who becomes an entrepreneur?. *International Small Business Journal*, 8, no. 1, pp. 11-22.

Teece, D. J., Pisano, G., & Shuen, A. (1997) Dynamic capabilities and strategic management. *Strategic Management Journal*. *16*, no.:7, pp. 509-533.

Tidd, J.; Pavitt, K. & Bessant, J. (2003) Gestão da Inovação - Integração das mudanças tecnológicas, de trabalho e organizacionais. Lisboa, *Monitor*.

Tidd, J.; Pavitt, K. & Bessant, J. (2009) Inovação e Empreendedorismo. Lisboa, *Bookman*.

Venn, R., & Berg, N. (2013) Building competitive advantage through social intrapreneurship. *South Asian Journal of Global Business Research*, 2, no.:1, pp. 104-127.

Xavier, S. R., Kelley, D., Kew. J., Herrigton, M & Vorderwülbecke, A. (2012) The GEM 2012 Global Report. Kuala Lumpur, *GEM 2012*.

Wang, C. L., & Ahmed, P. K. (2007). Dynamic capabilities: A review and research agenda. *International Journal of Management Reviews.* 9, no.:1, 31-51.

Weerawardena, J., Mort, G. S., Liesch, P. W., & Knight, G. (2007). Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business*, *42*, no.3, 294-306.

Yin, R. K. (2009). How to do better case studies. The SAGE handbook of applied social research methods.

Zahra, S. A. (1995). Corporate entrepreneurship and financial performance: the case of management leveraged buyouts. *Journal of Business Venturing*, 10, no.:3, pp. 225-247.

sciendo
International Journal of Entrepreneurial Knowledge *Issue 1/2018, Volume 6*
DOI: 10.2478/ijek-2018-0006

BUSINESS ECO SYSTEM AND MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES) PERFORMANCE IN NIGERIA

Moruff Sanjo OLADIMEJI[1] **,** *Benneth Uchenna EZE*[2]*, Kazeem Adeyinka AKANNI*[3]
Olabisi Onabanjo University

ABSTRACT

Firms are adopting collaborative network, which allow group of enterprises to enhance their performance and competitiveness. This study examines the effect of business ecosystem on MSMEs financial and non financial performance. The study employed survey research design, through the administration of structured questionnaires to 400 chief executives of MSMEs in Lagos, Anambra and Kano. The research instrument was validated by some academics and practitioners. A pilot study was conducted to ascertain the reliability of the instrument, by distributing the questionnaire to chief executives of 10 MSMEs twice within an interval of 14 days and the correlation of the first and the second study gave a Cronbach alpha of 0.84, which indicated that the instrument is highly reliable. Hypotheses were formulated and ordinary least square was employed to estimate the model with the aid of STATA version 14. Findings revealed that business eco system have positive and significant effect on MSMEs financial and non-financial performance. Therefore, it is recommended that MSMEs should consider their business eco system towards the enhancement of their financial and non financial performance

KEY WORDS

Business Eco System, MSMES, Financial and Non-Financial Performance

JEL CLASSIFICATION

L25, L22, L26

1. INTRODUCTION

Business ecosystems are ways of describing the operating environment and information framework that enterprises and investors are actively involved in. In the second half of the 20th century, business challenges, as well as business network pervasiveness evolved due to the development of social, economic, political, and technological systems (Iansiti & Levien, 2004). The business ecosystem includes; suppliers, distributors, customers, competitors, government agencies, among others, it is an economic community supported by a foundation of interacting organizations and individuals, that is, the organisms of the business world (Moore, 1993).

[1]*Corresponding address: Moruff Sanjo Oladimeji (Ph.D.)* Department of Business Administration, Faculty of Administration &Management Sciences, Olabisi Onabanjo University, Ago – Iwoye, Ogun State, Nigeria Email: sanjolanre4life@yahoo.com +234 8023567721
[2] *Corresponding address: Benneth Uchenna EZE* , Department of Business Administration, Faculty of Management and Social Sciences, Hallmark University, Ijebu-Itele, Ogun State, Nigeria
[3]*Corresponding address: Kazeem Adeyinka AKANNI,* Department of Business Administration, Faculty of Administration &Management Sciences, Olabisi Onabanjo University, Ago – Iwoye, Ogun State, Nigeria

Scholars (Littunen, 2000; Baghbadorani & Harandi, 2012; Ekpe & Norsiah, 2015; Pratono & Mahmood, 2016; Oladimeji, 2017) have established relationship between business eco system and firm performance. However, most of the study used only financial performance measure and considering the shortcomings of financial performance measures, Kaplan and Norton (1996) suggested the balanced scorecard, which entails the combination of financial and non-financial measures. Financial performance measures include; profit, revenue, earnings per share, return on investment, return on equity. Watt and Zimmerman (1986) opine that one major demerit of financial performance measures is that; it can be manipulated by top executives, since bonuses are usually tied to financial performance.

According to Ibrahim & Lloyd (2011) non-financial measures include; customer satisfaction, workforce development, on time delivery, product quality, productivity, employee satisfaction, market share, among others. While financial performance measure focuses on the past record of the firm, non-financial performance measure considers the future of the firm. High performance on non-financial performance measures is positively related with future financial performance Ibrahim & Lloyd (2011).

In addressing the research gap, this study therefore sought to empirically examine the effect of business ecosystem (measured by competitive intelligence, social network, innovation and collaboration) on MSMEs financial and non-financial performance (measured by revenue, market share and employees satisfaction) in Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1. Business Ecosystem

Business ecosystem was introduced by Moore (1993), which he refer to as an economic community supported by a foundation of interacting organizations and individuals, which is the organisms of the business world. This economic community produces goods and services of value to customers, who are themselves members of the ecosystem. The members of the business ecosystem also include; suppliers, lead producers, competitors, and other stakeholders. Over time, they co-evolve their capabilities and roles, and tend to align themselves with the directions set by one or more central firms.

Business challenges, as well as business network pervasiveness, have evolved due to the development of social, economic, political, and technological systems (Iansiti & Levien, 2004). Lewin & Regine (1999) opine that a business ecosystem is a network of enterprises each occupying a place on its own landscape of possibilities, and each landscape being united to many others (competitors, collaborators, and investors). Due to this interconnectedness, changes in the landscape of one enterprise cause changes in the landscapes of other members of the business ecosystem.

The concept of business ecosystem is increasingly gaining concern among stakeholders thus, encouraging the social network of collaboration, innovation and competitive intelligence among key market players, such as; suppliers, distributors, competitors, consumers, producers, government agencies and so on, towards sustainable survival and enterprises performance. The elements of business ecosystem employed for this study includes: Competitive intelligence, social network, innovation and collaboration.

2.1.2. Innovation

Innovation is the introduction of new product, process or market, Schumpeter (1934) identify the following five types of innovations that define business act: Product innovation (the introduction of a new good or service, that is, one with which consumers are not yet familiar or of an higher quality, process innovation **(**the introduction of a new method of production or service delivery)**,** business model innovation (the opening of a new market for the branch or producer; the discovery of a new source of supply of raw materials of manufactured goods, irrespective of whether this source already exist), mergers and divestments **(**The formulation and implementation of strategy, like the creation of a monopoly position or the breaking up of a monopoly position). Innovation is also categorized into four kinds: Launch of a new product or a new brand of already known product, application of new methods of production or sales of a product, opening of a new market (the market for which a branch of the industry was not yet represented), acquiring of new sources of supply of raw material or semi-finished goods (Amit, Glosten & Muller, 1993; Hobday, 1995).

2.1.2. Competitive Intelligence

Competitive intelligence (CI) is the action of defining, gathering, analyzing, and distributing intelligence about products, customers, competitors, and any aspect of the environment needed to support executives and managers in strategic decision making for enterprises (Erickson & Rothberg, 2009). CI means understanding and learning what is happening in the world of one's business, towards enhancing competitiveness. It means learning as much as possible, as soon as possible, about one's industry in general, one's competitors, or one's countries. It is the practice or process of ensuring that the strengths of your own business or product outweighs those of other businesses, in order to make your business or product more competitive.

Erickson and Rothberg (2009) explored level of competitive intelligence activity in firms in business oriented and consumer-oriented industries and concluded that the level of competitive intelligence is higher in consumer industries than business-to-business. Barnea (2010) noted that competitive intelligence (CI) is the gathering of publicly available information about an enterprise's competitors and the use of that information to gain a business advantage.

The goals of competitive intelligence include discerning potential business risks and opportunities and enabling faster reaction to competitors' actions and events. Enterprises use competitive intelligence to compare themselves to other firms (competitive benchmarking), to discover opportunities and identify risks in their markets and to weight their tactics on market response towards making informed decisions. Most firms today want to know what their competitors are doing and how the industry is changing, however, information gathered allows firms to understand their strengths and weaknesses. One of the major activities involved in corporate competitive intelligence is the use of key performance indicators (KPI) (Gilad, 2008).

2.1.3. Social Network

According to Portes (1998) social network is the connection among individuals, enterprises, institution and the norms and trust that arise from that relationship. It focuses on the ability of group members (enterprises) to receive economic benefits from social network, and increase access to resources that influence their shared or collective interactions, as they relate with other enterprises (players). Portes (1998) criticism of social network is that individual enterprise is often ignored

although; this may not be the case in practice because many different types of relationship exist. Social network focuses on both intra-enterprises; and inter-enterprise, in terms of formal and informal relationship (Kim & Sherraden, 2014)

2.1.4. Collaboration

Collaboration refers to a purposeful relationship in which all parties (players) strategically choose to associate and cooperate in order to achieve shared or overlapping objectives. Hessman (2013) noted that enterprises are usually afraid that someone else might steal their ideas and take them to the market, that competitors might profit from what they have done, but in order to push technologies and processes to the next level, one need to reach out to other enterprises, even your competitors. This presupposes that firms should collaborate with other players in the business ecosystem.

2.1.5. Micro, Small and Medium Enterprise (MSMEs)

The micro, small and medium enterprises (MSMEs) yard stick varies across countries. Eze, Woremegbe & Kolawole (2016) opine that in defining MSMEs, reference is usually made to some quantifiable measures such as number of paid employees, capital investment, the annual turnover (sales), asset value, profit margin and market share or a combination of two or more of these measures. In categorizing organizations as micro, small, medium scale enterprises (MSMEs) so many criteria have been employed across nation and across agencies. Some of these criteria include:

The European Commission EC (2013) defined MSMEs largely in terms of the number of employees as follows:

- Enterprises with 1to 9 employees- micro enterprises;
- 10 to 99 employees-small enterprises
- 100 - 499 employees -medium enterprises.

National Council on Industry of Nigeria (2001) defined Micro, Small and Medium Enterprises (MSMEs) as follows:

- Micro/Cottage Industry: Industry with asset base of not more than ₦1.5 million excluding cost of land, but including working capital and a staff strength of not more than 10.
- Small Scale Industry: Industry with asset base of more than ₦1.5 million but not in excess of ₦50 million excluding cost of land, but including working capital and/or a staff strength from 11 to 100.
- Medium Scale Industry: Industry with asset base of more than ₦50 million, but not in excess of ₦200 million excluding cost of land but including working capital and/or a staff strength from 101 to 300.

Table 2.1: Classification adopted by National Policy on MSMEs

	SIZE CATEGORY	**EMPLOYMENT**	**ASSET (₦million) (excluding land and buildings)**
1.	Micro Enterprise	Less than 10	Less than 5
2.	Small Enterprises	10-49	5 - less than 50
3.	Medium Enterprises	50-199	50 - less than 500

Source: National Policy on MSMEs (2011)

Similarly, drawing from MSMEs statistical analysis published by National bureau of statistics report (NBS) (2016), the number of unregistered MSMEs in the country is 36,407, 416. While

approximately 1,481,457 or 4. 07 per cent are registered micro, small and medium enterprises in the country.

2.2. Theoretical Review

There are various theories that aid the exploration of the effect of business eco system on firms' performance. However, this study adapts social network theory.

Social Network Theory

Social networks theory was originally developed by Bourdiew (1985), it emphasis was on group member's ability to access actual or potential resources, such as information, from the social networks. Social networks theory Portes (1998) states that social networks is the ability of group members to receive economic benefits from social network, and gain access to resources that influence their social interactions, as they relate with other group members.

Social network theory postulates that social groups can exist as personal and direct social ties that either link individuals who share values and belief or impersonal, formal, and instrumental social links, which can benefit the players. Kim and Sherraden (2014) pointed to the nature of networks and the effect of network size on interaction; and examined the likelihood of interaction in loosely knit networks rather than groups.

Social network theory focuses on both intra-organization; and inter-organization, in terms of formal and informal relationship. Intra-organizational networks often contain simple levels of analysis, specifically, in micro enterprises with less branches or semi-autonomous units. In these cases, research is often conducted at a workgroup level and enterprises level, focusing on the interplay between the structures. However, Rather than tracing interpersonal interactions, macro-level analyses generally trace the outcomes of interactions, such as economic, markets, distribution, supply or other resource transfer interactions over a large population of players (Portes, 1998).

2.3. Empirical review

David (2007), used exploratory method to review the dynamic capabilities on the nature of micro foundations for sustainable enterprise performance, findings established that the framework advanced can help scholars understand the foundations of long-run enterprise performance while helping entrepreneurs and managers mark-out relevant strategic considerations and the priorities they must adopt to enhance enterprise performance and escape the zero profit tendency associated with operating in markets open to global competition. Barney, Pan, Lu, and Huang (2009) examined the effect of leveraging digital business ecosystems for enterprise agility, the study contributes to a networked perspective of IT-enabled enterprise and provides practitioners with a comprehensive and empirically-supported framework for the development and subsequent leverage of a digital business ecosystem.

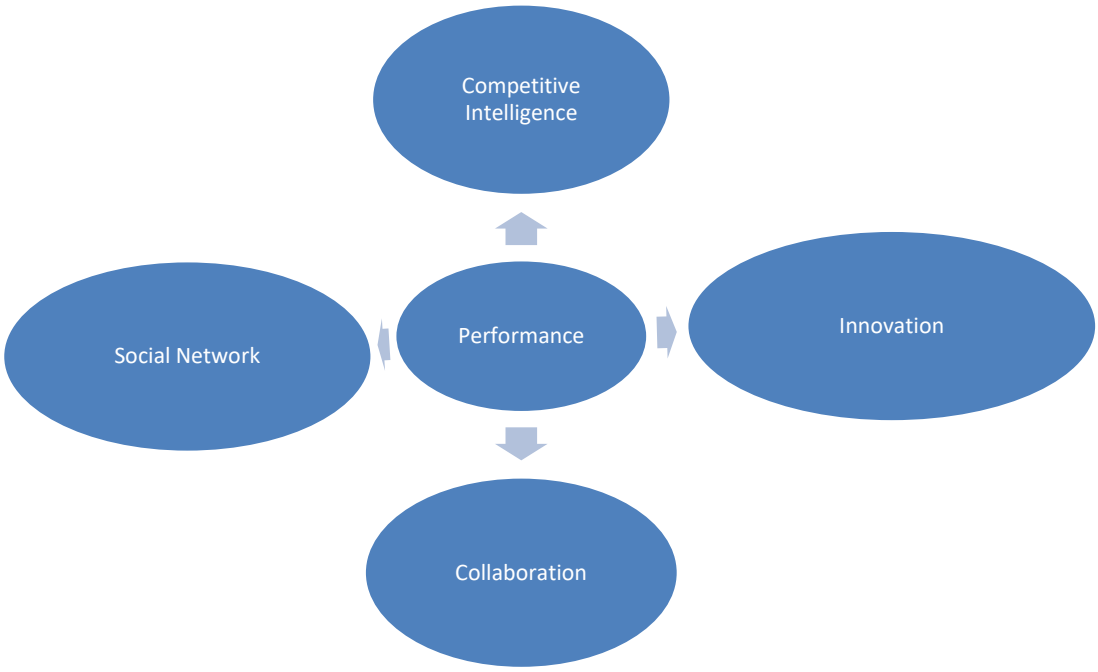
Baghbadorani and Harandi (2012) adopted a biological term to develops a new way of looking at relationship between enterprises, in which they are seen as interconnected and interdependent members of 'ecosystems' that co-evolve and share a common fate . They uncover the dynamics of business ecosystems and propose a conceptual model that can lead to better understanding of the concept, as well as paving the way for future study of its various components. Ekpe and Norsiah (2015), employed cross sectional design on social networks and women micro enterprise performance; the study shows that entrepreneurs and micro enterprises do not only need loans and skill acquisition training but also social network to provide access to information and other resources such as professional advice and avenue for customers.

Ebitu, Basil and Ufot (2016) empirically appraise Nigeria's micro, small and medium enterprises (MSMEs): Growth, challenges and prospects. The results shows that setbacks to MSMEs include; limited financing, lack of action plan to deal with eventualities, lack of managerial and

marketing skill, and lack of research appreciation and technical expertise. The study concluded that entrepreneurship and micro enterprise is very crucial to the economic growth and development of Nigeria. As such, it was recommended that government policies should support the establishment, nurturing and growth of MSMEs by curtailing or banning importation of certain products, training of young entrepreneurs, establishment of centers for entrepreneurial development and promoting entrepreneurial spirit through the provision of conducive entrepreneurial environment, funding and empowerment programmes.

Oladimeji (2017) examine the relationship between entrepreneurship skill, strategic thinking and business ecosystem in Nigerian businesses using survey method and finds that entrepreneurship skill and strategic thinking have a significant relationship with business ecosystem in Nigeria. Paula and Luís (2017) found in their study that collaborative business ecosystem influences financial and non financial performance Indicators of firms. Balogun, Yusuf, and Oloniniyi (2017) conducted a study on the effects of social network, an indicator of business ecosystem on production output of maize farmers in Kwara State, Nigeria using survey research method. Results showed that labour contribution and decision making index of farmers are the only significant variables affecting productivity.

Figure1 **Conceptual Framework**



Source: Authors 2018

The conceptual framework suggests that Competitive intelligence, social network, innovation and collaboration will enhance MSMEs performance.

3. RESEARCH SAMPLE AND METHODOLOGY

Survey research design was adopted, through the use of questionnaire to collect primary data from chief executives of MSMEs in Lagos, Kano and Anambra. Creswell (2014) posits that survey method is used when a researcher aim at gathering information from a given sample or population and to examine the interactions of relevant variables in the study. The population of the study consists of 37,067,416 MSMEs in Nigeria (NBS, 2016).

Taro Yamane (1967) sample size determination formula was adopted to arrive at a sample size of 400 (399.99). The study employed purposive sampling technique to select 400 MSMEs in Lagos, Kano and Anambra. The reason for sourcing information from chief executives of MSMEs in Lagos, Kano and Anambra was because they are among the top ten states with the highest number of MSMEs in Nigeria.

Primary data was collected through the administration of structured questionnaires to chief executives of MSMEs in Lagos, Kano and Anambra. A 4-point likert scale with responses structured as strongly agree (4), agree (3), disagree (2), strongly disagree (1) was stated on the instrument so that the respondents can indicate their levels of agreement or disagreement with regards to each of the statements.

The validity of the instrument was tested using content validity index (CVI), through the assessment of four academics and four chief executives of MSMEs, the assessors rated the instrument on a two-point scale (relevant and not relevant) which gave a value of 0.9054, which indicated that the instrument was highly valid. A pilot study was conducted through test re-test method to ascertain the extent of reliability of the instrument, the questionnaire was administered twice within an interval of fourteen days, the result of the first and second test was correlated, which gave a Cronbach alpha of 0.84, which indicated that the instrument is reliable.

In attaining the research objective, which is to empirically examine the effect of business ecosystem (measured by competitive intelligence, social network, innovation and collaboration) on MSMEs financial and non-financial performance (measured by revenue, market share and employees satisfaction) in Nigeria, five research hypotheses were formulated.

Research Hypotheses

Ho_1: Competitive intelligence does not significantly affect MSMEs performance in Nigeria.
Ho_2: Social network does not significantly affect MSMEs performance in Nigeria.
Ho_3: Innovation does not significantly affect MSMEs performance in Nigeria.
Ho_4: Collaboration does not significantly affect MSMEs performance in Nigeria.
Ho_5: Business ecosystem components (Competitive intelligence, social network, innovation and collaboration) do not have a combine significant effect on MSMEs performance in Nigeria.

Model Specification

The theory underpinning the model for this study is the social network theory.

$$PERF = f(CI, SN, INV, COL) \_\_\_\_\_ (i)$$

$$\text{PERF} = \beta_0 + \beta_1 CI + \beta_2 SN_i + \beta_3 INV_i + \beta_4 COL + {}_i\mu_i \; ------(ii)$$

Where:
PERF represents Performance
β_0 is the constant term
β_1, β_2, β_3, β_4 are the coefficient of the estimator.
$\beta_1, \beta_2, \beta_3, \beta_4 > 0$
CI, SN,INV and COL are Competitive intelligence, social network, innovation and collaboration respectively.
μ_i is the error term

The apriori expectation is such that business ecosystem components (Competitive intelligence, social network, innovation and collaboration) are expected to positively affect MSMEs performance in Nigeria; hence, the parameters of business ecosystem (Competitive intelligence, social network, innovation and collaboration) should have a positive sign.

400 copies of questionnaires were administered to the targeted respondents, 328 copies were returned and useable. This gave a response rate of 82%, which is sufficient for this study. The data analysis was guided by the objective and hypothesis of the study as well as the instrument employed for data collection. STATA 14 was employed for the analysis; this was obtained by using ordinary least square to estimate the regression model.

4. RESULTS AND DISCUSSION

Tables 4.1 **Micro, Small and Medium Enterprises (MSMEs) by State**

STATE	MICRO	SMALL	MEDIUM
ABIA	904,721	1,769	40
AKWA-IBOM	1,319,607	898	195
ANAMBRA (Targeted state)	**1,223,395**	**1,620**	**117**
BAUCHI	944,503	2,039	27
BAYELSA	541,332	354	72
BENUE	1,479,145	1,146	22
CROSS RIVER	921,256	1,126	168
DELTA	1,536,158	1,444	-
EBONYI	577,216	1,206	4
EDO	898,084	1,879	118
EKITI	964,179	903	126
ENUGU	1,064,893	812	99
GOMBE	527,230	1,043	65
IMO	1,296,386	1,259	135
JIGAWA	820,001	1,022	75
KADUNA	1,635,453	2,712	170
KANO (Targeted state)	**1,794,358**	**7,790**	**496**
KATSINA	1,216,604	1,256	99
KEBBI	692,104	898	91
KOGI	967,431	827	17
KWARA	717,909	164	62
LAGOS (Targeted state)	**3,224,324**	**11,044**	**619**
NASARAWA	382,086	1,098	22
NIGER	977,240	1,258	100
OGUN	1,165,848	1,690	104
ONDO	1,026,770	1,805	194
OSUN	1,356,174	2,247	25
OYO	1,864,954	7,468	519

PLATEAU	786,504	2,070	110
RIVERS	1,749,911	2,981	41
SOKOTO	700,106	631	210
TARABA	513,973	891	69
ZAMFARA	722,360	577	16
FCT	482,365	2,244	446
Total	**36,994,578**	**68,168**	**4,670**
Grand total	**37,067,416**		

Source: National Bureau of Statistics Report (2016)

Table 4.1 above shows the numbers of micro, small and medium enterprises in each of the thirty six (36) states of the Federal Republic of Nigeria as well as the Federal Capital Territory (FCT). The study focused on three states, namely: Anambra, Kano and Lagos States.

Table 4.2 **Regression Result from Stata 14 (Dependent variable- PERF)**

Variable(s)	Coefficient	T-statistics	P-Value
C	1.7876234	19.39	0.000
Competitive intelligence	.2201324	17.39	0.000
Social network	.1902673	9.06	0.000
Innovation	.1203452	5.05	0.001
Collaboration	.0894753	3.42	0.153
F-Statistics = 248.03 (0.0000)		R-Square =0.2613 Adj R-Square= 0.2501	

Source: Authors computation from STATA 14

Table 4.2 above revealed that business ecosystem components have a combined effect on MSMEs performance (F-value 248.03 *0.0000). However, while competitive intelligence, social network, innovation all have significant positive effect on MSMEs performance, collaboration do not have significant effect on MSMEs performance at 5% level of significant. The adjusted R^2 revealed that business ecosystem accounts for 25% variation in MSMEs performance.

CONCLUSIONS

The study empirically examined the effect of business ecosystem (measured by competitive intelligence, social network, innovation and collaboration) on MSMEs performance (measured by revenue, market share and employees satisfaction). Using survey research design, the findings revealed that business ecosystem components have a combined effect on MSMEs performance (F-value 248.03*0.0000). However, while competitive intelligence, social network, innovation all have significant positive effect on MSMEs performance, collaboration do not have significant effect on MSMEs performance at 5% level of significant, with t-value of 17.39*0.000, 9.06*0.000, 5.05*0.001 and 3.42*0.153 respectively. The adjusted R^2 revealed that business eco system accounts for 25% variation in MSMEs performance. This is inconsistent with the study by Paula & Luís (2017) who carried out a meta-analysis on collaborative business ecosystem and firms' performance in Portugal and found that collaborative business ecosystem influences financial and non financial performance Indicators of firms.

The inconsistency in findings might be as a result of the economic, political and socio-cultural differences between Nigeria and Portugal. However, business ecosystem components have positive and significant effect on MSMEs financial and non-financial performance, but collaboration, which is one of the component of business ecosystem does not significantly affect MSMEs financial and non-financial performance in Nigeria.

It can therefore be recommended that MSMEs seeking improved performance should enhance their competitive intelligence, social network, innovativeness, as this tends to improve their financial and non-financial performance.

SUGGESTION FOR FURTHER STUDY

The study faces potential limitations that may guide the directions for further research, further studies can be carried out on the effect of business eco system on large firms, the firms can equally be considered using sectors of the economy, like financial service sector, manufacturing sector, and agricultural sector, among others. Furthermore, future studies can employ interview as the method of data collection, as it tends to provide more information.

REFERENCES

Akanji, O.O. (2006). Micro finance as a tool for poverty reduction. *Central Bank of Nigeria*

Amit, A., Gloster, A., & Muller, A. (1993). *Challenges to theory and development in entrepreneurship and Policies.* (2nd ed). Harlow: FT. Prentice Hall.

Baghbadorani, M., & Harandi, A. (2012). A conceptual model for business ecosystem and implications for the future, *Research Gate Publication*, 52 (17).

Balogun, O. L., Yusuf, S.A., & Oloniniyi, M.T. (2017). Effects of social network on production output of maize farmers in Kwara State, Nigeria. *Global Advanced Research Journal of Agricultural Science*, 6(2)

Barnea, A., (2010). Intelligence failures: Competitive intelligence and strategic surprises. Competitive Intelligence Magazine, 13(3), July/ September.

Barney, T., Pan, Shan L., Lu, X., & Huang, L. (2009). Leveraging digital business ecosystems for enterprise agility: The tri-logic development strategy of alibaba.com

Blanch, F., Oswald, D., & Stutzer, A. (2001). Latent entrepreneurship across nations, *European Economic Review*, 45 (4-6), 680-91.

Clausen, T. H. (2006). *Who identifies and exploits entrepreneurial opportunities?* Centre for Technology, Innovation and Culture, University of Oslo. Retrieved from www.ccsr.ac.uk/method/festival/.../paper Tommy Clausen pdf.

Coleman, J. S. (1990). *Foundations of social theory*. Massachusetts, Cambridge: University Press.

Creswell, J.W. (2014). *Research design: Qualitative and quantitative approaches*. Thousand OAK, CA: Sage.

David, J. T. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance, *Strategic Management Journal, 28*(13), 19-31

Drucker, P.F. (1954). I*nnovation and entrepreneurship practice and principles***.** London: William Heinemann LTD.

European Commission Discussion Paper (2013). Bruxelles. Retrieved from http://www.digitalecosystem.org/html/repository/dbe_discussionpaper.pdf

Ebitu, E., Basil, G., & Ufot, J. A. (2016). An appraisal of Nigeria's micro, small and medium enterprises (MSMEs): Growth, challenges and prospects. *International Journal of Small Business and Entrepreneurship Research,* 4(4)

Ekpe, I., & Norsiah, M. (2015). Social Networks and Women Micro-Enterprise Performance: A Conceptual Framework, *Mediterranean Journal of Social Sciences*, 6(4)

Eze, B.U., Worimegbe, P.M., & Kolawole, O.O. (2016). The causal relationship between short-term finance and micro, small and medium scale enterprises survival in Nigeria. *Crawford journal of business and social sciences, 6(2).*

Gilad, B. (2008). The future of competitive intelligence: Contest for the profession's soul. Competitive Intelligence Magazine, 11 (5), 21–25

Iansiti, M., & Levien, R. (2004). *Creating value in your business ecosystem.* Harvard Business Review, March 2004.

Ibrahim, S., & Lloyd, C. (2011). The association between non-financial performance measures in executive compensation contracts and earnings management. *Journal of Accounting and Public Policy*, *30*(3), 256-274.

Kaplan, R. S., & Norton, D.P. (1996) Using the Balanced Scorecard as a Strategic Management System, *Harvard Business Review* (January-February), 75-85.

Kim, S. M., & Sherraden, M. (2014). The impact of gender and social networks on microenterprise business performance. *Journal of Sociology & Social Welfare* , XLI(3), 49-69.

Kotler, P. (2010). *Marketing Management, Analysis, Planning, Implementation and Control*. USA: Prentice-Hall.

Kuzilwa, J. (2005). The role of credit for small business success: A study of the national entrepreneurship development fund in Tanzania. *The Journal of Entrepreneurship*, *14*(2), 131-161.

Moore, J. F. (1993). Predators and prey: A new ecology of competition. *Harvard Business Review*.Available at http://hvrd.me/QPp06g.

Muller, A., Amit, A., & Gloster, A. (1993). Challenges to theory and development in entrepreneurship research. J*ournal of Management Studies,* 30(5), 815-825.

National Bureau of Statistics (2016). Micro, small and medium enterprises statistical data.

Ojo, O. (2009). *Impact of microfinance on entrepreneurial development: The case of Nigeria.* Doctoral desertation, University of Bucharest, Romania.

Paula, G., & Luís, M. (2017). Performance indicators for collaborative business ecosystems – Literature review and trends. *Technological Forecasting and Social Change*, 116(1).

Portes, A. (1998). Social networks: Its origins and applications in modern sociology. *Annual Review of Sociology* , 24(1), 1-24.

Oladimeji, M.S (2017). *Relationship between entrepreneurship skill, strategic thinking and business ecosystem in Nigerian*. Lasu Conference of Management Science, May, 2017.

Schumpeter, J. A. (1934). *The Theory of Economic Development*, Harvard University Press, Cambridge.

Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory,* Englewood Cliffs, NJ: Prentice-Hall.

Yamane, T. (1967). Statistics: An introductory analysis, 2nd edition, New York: Harper and Row.

sciendo
International Journal of Entrepreneurial Knowledge *Issue 1/2018, Volume 6*
DOI: 10.2478/ijek-2018-0007

POSSIBILITIES FOR THE USE OF INFORMATION OBTAINED BY USING INFORMATION AND TECHNICAL MEANS AND MEANS OF OPERATIVE-SEARCH ACTIVITIES IN OTHER CRIMINAL MATTERS[4]

Zuzana KURUCOVÁ
Institute of Theory and History of state and socio-science disciplines, Faculty of Law PEU

ANNOTATION

Information that were obtained legally using information and technical means and means of operative-search activities have the nature of evidence in criminal proceedings. The nature of evidence is granted directly to this information, not to the media where they are recorded. In the case of legal use, this information has the nature of evidence in the criminal case, but the provisions of Criminal Procedure Code in the Slovak Republic contribute significantly to the detection and proving of serious criminal offences, because such information can be indirectly used also in other criminal case. Problematic is the fact that the Supreme Court of the Slovak Republic adopted differing positions precisely on these options of the use of evidence in other criminal case, this dispute was also joined by the Prosecutor's office and this application problem has not been resolved even by the unifying opinion at the level of the Supreme Court of the Slovak Republic. There is therefore still an open question from the point of argumentation and application, what evidence can be used also in other criminal cases or under what conditions.

KEY WORDS

information, evidence, con-current conduction of criminal prosecution, application practice.

JEL CLASSIFICATION

K14, K20, K30.

INTRODUCTION

Detection and proving of serious crimes or serious types of crimes was only a little effective by the use of classic detection institutes in recent years. Sophisticated forms and methods of committing criminal offences also direct the law enforcement authorities to use modern, offensive means for their detection and proving, but these intensively intervene in the area of guaranteed rights. Using these means, especially the information and technical means, as well as the means of operative-search activities may be assessed as absolutely necessary in the process of detection and proving of many criminal offences. Their detection and proving by means of other typical evidence is

[4] This study was supported by the Agency for the promotion of research and development on the basis of the Contract No. APVV-16-0521

considerably complicated and in most cases unsuccessful exactly with respect to the specific features of advanced forms of criminality. Probative misery is typical for the detection and the process of taking evidence; several standards of evidence and means of evidence cannot be used in the process of taking evidence (witness statements, if witnesses are absent) and the significance of evidence of some other is or may be relatively low (examinations of informants, intermediaries, the accused). Often, even persons who in some way know about committed crimes, are afraid to report it for fear of potential threats to themselves or their relatives.[5] The often fear to make a statement because of fear of possible criminal prosecution. It often happens that they prefer to state that they know nothing about that crime, they did not see or hear anything, rather than speaking openly, fully and truthfully about the facts they know. Persons taking directly or indirectly part in criminal activity or involved in it in any way, in turn, are not interested that their activity was discovered and that their substance was revealed.[6] Many information that would potentially be important for criminal proceedings are, moreover, covered by legal protection in the form of protection of personal data, protection of legally protected secrets and it is not possible to obtain them in a standard way. Of course, one can see here the clash with a range of individual rights.[7] The evidence obtained with the aid of information and technical means (the "ITP"), as well as the means of operative-search activities (the "OSA") helps to get over this considerably complicated situation. The options of evidence use in other criminal case laid down by law at the present also allow to get over this, if these were obtained legally in the original criminal case.

1. EVIDENCE OBTAINED BY ITP AND OSA

In both cases, in ITP as well as OSA, it is important to state that these means are implemented directly on the basis of legal provisions by covert manner so that the persons concerned are not at the time and place aware that they are being used. If they had the knowledge, as a general rule, they would adjust their action so that no facts showing their unlawful and criminally relevant action was revealed. The intensity of intervention may also be seen here, as in the case of these sources. Therefore, it is important to ensure consistent compliance with basic legal requirements of their use, so that they could be pronounced legal, and this also within the meaning of our regulation, as well as within the meaning of the Convention on the protection of human rights and fundamental freedoms.

Rapporteur method of these means (most of them) allows to obtain objective knowledge not influenced by interests of the participated subject, and the knowledge is very important in the process of taking evidence.[8] The evidence obtained using information and technical means and means of operative-search activities have the nature of direct evidence in criminal proceedings, whether information or things in the form of real evidence.[9] Yet the most often used information was obtained (legally) by using information and technical means (mainly by tapping and records of telecommunications and taking of video, audio or video/audio recordings) and also information and things that were obtained (legally) by using operative-search activities (as tracking people and things, agent, controlled delivery or even a pretended transfer). With regard to the taking of evidence, this is done by law enforcement bodies in the pre-trial process and by the parties to the proceeding who proposed the individual evidence in the proceedings before the court. Real

[5] Kyjac, Z.: Použitie informačno-technických prostriedkov v trestnom konaní. Bratislava: Wolters Kluwer, 2015, p. 62 et seq.
[6] Tittlová, M.: Zákon o ochrane súkromia pred odpočúvaním. Comment. Bratislava: Wolters Kluwer, 2017, p. 31 et seq.
[7] Skorková, V., Kotrecová, A.: Vplyv judikatúry ESĽP na rozhodovanie vnútroštátnych súdov vo veciach práva na ochranu súkromia. In: Acta Iuridica Olomucensia, No. 8/2013, p. 129
[8] Ivor, J., Polák, P., Záhora, J.: Criminal Procedure Code. II[nd] part. Bratislava: Wolters Kluwer, 2017, p. 216 et seq.
[9] Ivor, J., Tóthová, M.: Informácie získané použitím informačno-technických prostriedkov a prostriedkov operatívno-pátracej činnosti. In Ivor, et al.: From crime to punishment. Bratislava: EUROKÓDEX, 2012, p. 141 et seq.

evidence shall be taken by submission and inspection, examination by parties and where appropriate, these shall be submitted for inspection to witnesses and experts. Documentary evidence shall also be submitted for inspection and it shall be possible to consult their content. Audio, video or audio/video recordings are taken as evidence on technical equipment, namely by consulting their entire content or their part, which concerns or is in some way related to the fact to be proven in a way linked to the established fact (§ 270 CPC – Criminal Procedure Code). If this is due to the nature of evidence, it is also possible to take evidence by consulting their entire written transcription or part of this transcription, which relates to the proven fact.

Various aspects of criminal activity and the agreement or communication, may also be communicated through the *telecommunications service*. It can be information on the object of crime, on certain acts, provided performances, place, and time of the relevant persons involved in criminal activity, etc. It is often possible to obtain such knowledge by *tracking people and things* in criminal proceedings, or by *making video, audio and video/audio recordings* in criminal proceedings.

Legal use of these institutes leads to the finding of facts important for criminal proceedings; and this information has the nature of evidence in criminal proceedings. It is the use of this institute in the framework of criminal proceedings and on the grounds of the criminal procedural provisions. This fact must be pointed out that it is the procedural use of these sources. The nature of evidence is also granted to information obtained by making use of this institute outside the context of criminal proceedings, on the grounds of special regulations (e.g. the Act on protection of privacy before tapping[10]). If facts are discovered outside the scope of the proceedings that are important for criminal proceedings these can be used as evidence therein. Such a possibility of use does not exist in the Czech Republic for example[11]; however in Slovakia it is possible, because directly § 119(2) CPC states that everything that is directed to proper clarification of things and was obtained on the grounds of the Criminal Procedure Code or under a special regulation can be used as evidence. This last part – special regulation – subsumes for us the possibilities of indirect use of evidence obtained outside the procedural rules in the criminal proceedings, at the procedural level (indirect use).[12]

In order to use the information thus obtained as evidence in criminal proceedings, it is necessary that the person who was tapping and recording, tracking, or producing records made a written record containing the data on the place, time and legality of the use of this means, and attached the literal transcription to such a record. Only information that is covered by reasons for use of this means in the application and reflected in the disclosed order can be used as evidence. Other evidence cannot be used in the criminal proceedings.

In accordance with the provisions of § 113(8) CPC and § 114(6) CPC, which also refer to the provisions of § 115(6) CPC, where information obtained by using these means on the grounds of § 113 through to § 115 CPC is to be used in criminal proceedings as evidence, it is necessary to make their transcript within the scope of facts significant for criminal proceedings, if it is allowed by the nature of the record. The transcription is not made of whole hours, weeks or months of records, but only those facts are transcribed that are important for criminal proceedings. Transcripts shall be carried out by members of Police forces, who took these means or provide real tracking, tapping, and drafting of records. At the same time, it is necessary to state all data on place and time of the activity, who carried out this work and the data on the legality of these means. The transcription made in this way is put to file and is no longer subject to confidentiality. It could be subject to confidentiality, only if it included facts that are protected under special regulations as secrets

[10] Tittlová, M.: Zákon o ochrane súkromia pred odpočúvaním. Comment. Bratislava: Wolters Kluwer, 2017, p. 23 et seq.
[11] Ruling of the Constitutional Court of the Czech Republic I. US 3038/07
[12] Tittlová, M.: Zákon o ochrane súkromia pred odpočúvaním. Comment. Bratislava: Wolters Kluwer, 2017, p. 62

defined by law. The record is also kept on an appropriate data medium directly in the dossier, and therefore it is available for possible making of copies (they are also important with a view to possible correction procedure). The defendant and defence attorney may request transcripts to the extent considered to be appropriate and necessary on their own costs, but of course, only after the end of tapping activity. In general, the information that was obtained legally by using this means can be used as evidence in criminal proceedings only after the activity was finished. Before, i.e. during real use of these means, it is not possible to use such information as evidence. It is also not possible to use the information as evidence that was obtained by tapping, tracking or recording activity, if it is communication between the defendant and the defence attorney on such matters, where the defence attorney represents the defendant in criminal proceedings.

2. USE OF EVIDENCE IN OTHER CRIMINAL CASE

On the grounds of provisions in § 113(9), § 114(7) and § 115(7) CPC, information obtained by using the information and technical means can be used both in the proceedings in which the use of means was directed, but it is also possible to use it in other criminal case on condition that also in this other criminal case the criminal prosecution is held *con-currently* for such a criminal offence for which it is possible to use this means in criminal proceedings (§ 113(1) CPC , § 114(1) CPC and § 115(1) CPC). If the information thus obtained is to be used as evidence also in other criminal case, the criminal prosecution must also be conducted con-currently for some of the identified criminal offences in this criminal case. The purpose and nature of this provision is to facilitate the taking of evidence in the most serious criminal offences so that the evidence obtained in one criminal case could be "indirectly" also used in other criminal case, if there is also criminal prosecution conducted (first procedural condition) and if it is a proceeding for offences where the use of the means is possible (second condition of substantive law). Though the second condition, i.e. the list of criminal offences in that the criminal prosecution is conducted also in the second criminal case does not cause any problems in the application practice, the first condition is very controversial. It is disputed to which moment the requirement of con-current conduction of criminal prosecution relates. This condition may be applied to the moment when the information and technical means are being used, i.e. the moment when the tapping is actually done and telecommunication connection recorded, or to the moment when the records obtained by the use of this means are being used, i.e. when information obtained from them are being used as evidence. The criminal procedural provisions of the Criminal Procedure Code neither solve this problem explicitly, nor offer specific instruction how to clearly resolve this problem. It is interesting that the use of such records also in other case shall be conditional on any such request – condition of con-current conduction of criminal prosecution also in other criminal case. This is interesting because at the non-procedural level, i.e. where the legislation should be a bit more stringent and exact, since it is outside the context of criminal proceedings, and therefore there is no criminal complaint filed, criminal prosecution initiated or a charge being made, at this non-procedural level there are no such restrictions stipulated for usability of evidence. If facts important for criminal proceedings and obtained through information and technical means are used outside the context of criminal proceedings on the grounds of specific regulations, these can be used in criminal proceedings as evidence. There is no condition expressed that at the time of use of these means or until the end and during the time of use of records obtained from them, there had to be a criminal prosecution conducted in the criminal case. Therefore, at the non-procedural level, where the regulation for the use of such evidence should be even stricter, there are no such restrictions, while at the procedural level, i.e. upon existence of suspicion ensuing from criminal complaint or after the initiation of a criminal prosecution and, where appropriate, also after bringing of charges, this condition or restriction is stipulated. Therefore, where such restrictions with regard to the level of use, should exist, they do not, and where they did not need to be they are stipulated. Naturally, this regulation is both illogical and then in any case inharmonious. The rights of persons in criminal proceedings in a

certain position (a suspect or a defendant) are protected to a higher degree then the rights of persons, who are not in such a criminal procedural position.

The purpose of provisions in § 113(9), § 114(7) and § 115(7) CPC is to facilitate taking of evidence in selected criminal offences for which these means may be ordered. It is exactly the condition of con-current conduction of criminal prosecution also in other criminal case which is disputed, and which limits its applicability to a significant degree. The fact that it is not quite clear to which moment the con-current conduction of criminal prosecution in the other criminal case relates also provoked discussions on this issue and that without a clear conclusion. Different criminal boards of the Supreme Court of the Slovak Republic (SC SR) failed to agree on solution of this problem within their decision-making activities. One criminal senate of the SC SR relates the condition of con-current conduction of criminal prosecution also in other criminal case to a moment when the results of tapping and record of telecommunication connection are used, not the moment of use of these means, and the second criminal senate of the SC SR interpreted that condition exactly in the opposite way. The senate of the SC SR directly stated that it would be illogical, if the record obtained by legal tapping in a case where the use of such means had been ordered (and this also in the time even prior to the commencement of prosecution, i.e. in the procedure prior to the commencement of prosecution) could only be used in a criminal case under the condition that already at the time of tapping there would have to be a prosecution initiated in other criminal case. If we insisted on the condition that there had to be a criminal prosecution initiated where the evidence is to be used already at the time when the tapping and record of telecommunication connection was made, this would be illogical. Nothing would prevent to issue an order for legal use of this means also in this other criminal case and it would not be necessary to use the evidence obtained indirectly in other criminal case. If we interpreted the condition for con-current conduction of criminal prosecution in the opposite way, it would also limit the usability of provisions in § 113(9), § 114(7) and § 115(7) CPC to a minimum, if at all to some cases and naturally, this is not the purpose and nature of this provision[13]. This would not help the taking of evidence also in other criminal offences for which that means may be ordered (its use may be ordered), and this was most probably the intention of the legislator when creating the provision in question. This decision therefore applies to the condition for con-current criminal prosecution also in other criminal case to the moment of records use, or the use of information obtained by the means (legal use).
On the other hand, there is the opinion of other senate of the Supreme Court of the Slovak Republic[14] and it states that the condition of con-current conduction of criminal prosecution should relate to the moment when tapping and the record of telecommunication connection were made. It directly states that under the con-current conduction of criminal prosecution also in other criminal case it is necessary to understand the action, decision or other procedure taken on the basis of CPC, which in other criminal case happened before obtaining the probative information on the matter in which that procedure was ordered (its obtaining, tracking of people and things by video, audio, video/audio recording, tapping and records of telecommunication connection, through an agent or by comparing data in the information systems).

Coincidence in time of two criminal cases and criminal prosecutions in the cases, namely in the moment when the probative information to be used also in the other criminal case (i.e. in duplicate), is considered to be decisive. It is not possible to put the factual relationship to the foreground, this was also stated by the criminal senate of the SC SR in its ruling of February 2012. The Senate of the SC SR has refused the finding of the first instance court here, which related the con-current conduction of criminal prosecution in the other case to the moment of use of records obtained in this way (or information from them as evidence in criminal prosecution). According to the senate of SC SR, the court of first instance was wrong here. “It does not correspond to material logic that the

[13] Ruling of the Supreme Court of the Slovak Republic 3 To 2/2011 of 21 September 2011
[14] Ruling of the Supreme Court of the Slovak Republic 2 To 5/2011 of 07 February 2012

law required con-current conduction of criminal prosecution in the case as a condition for probative usability of information, if the information was obtained legally in the case and the con-currency of proceedings should have been given at the time, when the information was used in other criminal prosecution (that is, in the end, sometimes first only at the main hearing of court proceedings).[15]

CONCLUSION

On the basis of this brief outline, it can be seen that the criminal procedural regulation does not clearly solve the moment related to the condition of con-current criminal prosecution in other criminal case. Interpretation of this condition is therefore difficult and, in particular, allows to take different positions, as is shown by the various decisions of various boards of the SC SR, where one of them was supported also by the opinion of PO SR (Prosecutor´s Office of the Slovak Republic). Within the possibility of the SC SR to adopt unifying opinions aimed at uniform application and interpretation of the provisions of legislation, the collegium of the SC SR tried to adopt a unifying opinion also in this case. However, it supported the conclusion contained in the opinion of PO SR and at the same time in the ruling of the SC SR of February 2012 in its proposal. But in the end, the unifying opinion on this matter wasn't adopted and so it was recommended to the legislator to solve this problem at the legislative level. Despite this, until today it did not happen, and it is not a young application problem at all.

It can only be recommended that the provisions in question were amended, and the possible solutions are several. The first leads toward a clear interpretation and purpose of the controversial condition and the provision in question. Its purpose is to help in taking of evidence in criminal offences, where it is possible to order the use of this institute. Therefore it is illogical that this option was complicated by setting of nonsensical conditions and restrictions. There is no such condition stipulated at the non-procedural level that should be even stricter in terms of protection, however. By following the example of this non-procedural regulation, the condition of con-current criminal prosecution in other criminal case should be removed from this provision (this is the second possible solution to this problem). Or the provisions of § 113(9), § 114(7) and § 115(7) CPC should be supplemented by an explanatory statement that the con-current criminal prosecution in the other criminal case is linked to the moment of using the outputs obtained by these means, i.e. to the moment of using the obtained records as evidence. It would be illogical that criminal prosecution also in the other case had to be conducted already at the time when the information and technical means and the means of operative-search activities were carried out, as in that time it could be already achieved in the second criminal proceeding or prosecution by issuance of such an order. Such information wouldn't have to be used indirectly. In addition, if within one criminal case certain facts are found within the scope of particular information-technical means, this is as a general rule in their nature unique information, therefore it is possible to state and rather incline to the conclusion and opinion that with the exception of substantive scope of the institute, the option of indirect use of evidence also in the other criminal case should not be restricted at all.

REFERENCES

Ivor, J., Polák, P., Záhora, J.: Criminal Procedure Code. II[nd] part. Bratislava: Wolters Kluwer, 2017.

Ivor, J., Tóthová, M.: Informácie získané použitím informačno-technických prostriedkov a prostriedkov operatívno-pátracej činnosti. In Ivor, et al.: From crime to punishment. Bratislava: EUROKÓDEX, 2012.

Kyjac, Z.: Použitie informačno-technických prostriedkov v trestnom konaní. Bratislava: Wolters Kluwer, 2015.

[15] Ruling of the Supreme Court of the Slovak Republic 2 To 5/2011 of 07 February 2012, p. 17 and 18

Skorková, V., Kotrecová, A.: Vplyv judikatúry ESĽP na rozhodovanie vnútroštátnych súdov vo veciach práva na ochranu súkromia. In: Acta Iuridica Olomucensia, No. 8/2013.
Tittlová, M.: Zákon o ochrane súkromia pred odpočúvaním. Comment. Bratislava: Wolters Kluwer, 2017.
Criminal Procedure Code (Act No. 301/2005 Coll., as amended).
Ruling of the Constitutional Court of the Czech Republic I. US 3038/07.
Ruling of the Supreme Court of the Slovak Republic 3 To 2/2011 of 21 September 2011.
Ruling of the Supreme Court of the Slovak Republic 2 To 5/2011 of 07 February 2012.

sciendo
International Journal of Entrepreneurial Knowledge *Issue 1/2018, Volume 6*
DOI: 10.2478/ijek-2018-0008

YOUTH CRIME AS A AVAILABILITY PROBLEM[16]

Marcela TITTLOVÁ
Institute of Public law, Faculty Law PEU

ABSTRACT

Criminal behavior of youth is a constantly current problem. It is not a new problem, a new one emerging and exploring. In the historical context, we meet him quite early. Likewise, we are punished with the possibilities and attempts to solve it. As we are currently talking about a very topical issue, it is clear that this phenomenon is not quite at the professional and legal level. Instead, rather than the consequences, it is necessary to examine the causes of the criminal behavior of youth. Often, they are conditioned by the criminal behavior themselves against the children taking these patterns and models into their behavior and their reactions. From the point of view of the possibilities of solution, then we get completely into other areas and other spheres.

KEYWORDS

youth, criminality, causes of crime, consequences of crime.

JEL CLASSIFICATION

K10, K20, K30.

INTRODUCTION

Juvenile delinquency is a concomitant of any transforming society. The negative socio-pathological phenomenon disrupts the harmonious development of society, threatens the fundamental rights and freedoms of the individual, the company produces a feeling of fear and insecurity. Youth crime continues to be a problem because it has failed to completely eliminate its causes and to change the conditions to protect the company and the individual. Youth crime is considered a multidisciplinary issue that has aspects of social and personality, as well as sociological, psychological, educational and criminal law.

1. HISTORICAL EXCURSION PHILOSOPHICAL SCHOOLS

While exploring seeking to clarify the causes of crime dates back to the end of the last century research focused exclusively on juvenile delinquency date back much later. The first research arose until after World War II. And those specific investigations, however, followed the earlier views and focused on factors dual nature.

[16] This study was supported by the Agency for promotion of research and development on the basis of the Contract No. APVV-15 - 0644

The first group includes the so-called exogenous factors, existing outside „perpetrator", primarily factors in social and community areas, which had a decisive influence over the conduct of the offender. The second group consisted of endogenous factors, linked directly to the individual offender that were trapped in the offender. Were factors here included particularly in the field of psychology, biology and medicine.

Historical development of views on the causes of crime helps us better understand our present and current views on crime.

Positivist school, which was established in the last quarter century of the 19th century in Italy taught that crime is defined by two series of causes. These are the causes of internal, arising from the nature and heritage of the offender. Then there are external causes, comprising physical and especially in the social environment in which the offender lives. Enrico Ferri taught that every crime is the result of three groups of factors: anthropological, physical and social. In a social setting, crime is strongly dependent on these factors. Ferri is the law of criminal saturation. Founder of the positivist school, an Italian physician Cesare Lombroso, examined psychophysical, biological and social factors of juvenile delinquency. Its conclusion was based on research results 79 minors less than 12 years, located in the detention centers. At the same time with them he compared a group of 160 trainees who have previously committed any crime. Lombroso came to the conclusion that the moral defects in children exhibit much stronger than in adults, but they have the same cause. It arises primarily from predisposition inheritance. Education and other external factors not under Lombroso absolutely no meaning. Positivists tried also a new typology of offenders looking for more general types. Their position in the offenders who were mentally ill were perpetrators of habit, casual, and perpetrators of affect.[17]

Protecting the Company can be secured by positivists preventive measures. Ferri in support of its opinion example that became famous: In a dark street are committed many crimes. To prevent them, you only need to illuminate the street. This is a sensible and economical to let police officers patrolling the street and build a prison for criminals.[18]

Sociological trends in criminology give crucial in crime of external factors and conditions in society. They show the impact of various factors of social life, such as unemployment, poverty, poor existential conditions, alcoholism and underline the need to combat these criminal factors. Emil Durkheim, the founder of the French sociological school, tried to prove that crime as a pathological social phenomenon is something normal, associated with a company with a given culture. The center of his attention are no longer just as they did at Ferri, individual, empirically detected factors crime. He understands crime as a social phenomenon, having its legality, which is nothing accidental and arise from accidental causes. On the contrary, it is with Durkheim normal phenomenon, arising from the regular operation of the company. Anomie is therefore a mechanism that produces in a given society conflict situations leading to crime when his individual criminal behavior, refuses to abide by recognized and established standards and rules of human behavior.

Sociologically oriented theory of the causes of crime have achieved the largest expansion in the United States. These theories, which show the main causes of serious youth crime and disorganization of adults in American society and differentiation pooling, are actually modifications mentioned Durheims ideas. The company as a result of the weakened integrative function of culture extends to various groups, recognizing their own scale of values and forming their own subculture. Thus, neither individuals directly related to each other do not recognize the same values, do not

[17] SEJČOVÁ Ľ., Deti, mládež a delikvencia, Bratislava: ALBUM, 2002, p. 43
[18] SUCHÝ O., Praha: MELANTRICH, 1972, Mládež a kriminality, p. 24

respect the same standards of conduct, getting into conflict situations. It is creating state of social disorganization, in production pathologies such as alcoholism, crime, suicide rate. One of the main theories dominating in American criminal sociology during the last twenty years, Sutherland's theory of Differential association. Sutherland also understand crime as a socio-cultural process that is part of each company. Individual criminal behavior is explained by the process of which this behavior stems are not different from the process of normal human behavior. Criminal behavior occurs in a social system Freedom of Association, as well as normal behavior. Both of these systems are social worlds, creating groups, the association of shorter or longer duration, were tightening the appropriate scale of values recognized. And it is, according to Sutherland, just criminals associative system in which the developing personality of a criminal offender. The same basic processes of learning and socialization that characterize the integration of personality in society, characterize the criminal personality. A criminal is a member of associations or groups that it considered normal "member his" society. Also here is the root cause of crime social disorganization. Types of individual sectors, which are among them conflict with each other. Sutherland sees crime as a learned behavior normal human beings who are the meaning of their existence in conflict situations caused by social disorganization. Therefore no longer Lombroso-type native criminals, but ,, normal "individuals who commit crimes in the conflict social situations. Typical is the pessimism and hopelessness of these theories.[19]

2. HISTORICAL EXCURSION IN THE POLITICAL ARENA

All human societies have had a standard specifying the desired behavior of people. It is a broad set of written and unwritten rules and customs. Standards matter most, are assigned penalties applied when crossing generally known limits. Standard and penalties are determined by value said stops of a company, the spirit of the time.[20] The concept of standards and appropriate sanctions in the West Country and historically variable the understanding of standards and related sanctions in Western culture we can follow different trends. Standards codified receive similar laws. Meaning practices decreases. Guarantor formulation of laws and their application becomes a state, unlike the Middle Ages, when the legal procedure of blood revenge, which carried the victims' relatives. Performance rights were later covered by the aristocracy and privileged places. Today, the state guarantees treatment of the accused, the course of judicial proceedings and imprisonment. Laws gradually begin to apply to all equally. In ancient times and the Middle Ages crimes judged as appropriate to the social situation and the penalties they were so stringent, which was less socially engaged person who is guilty. Punishment ceases to be public, and until recently was the most common form of imprisonment. In recent decades, developing alternative penalties that extend the range of sanctions and, in some cases, respect the interests of victims and also save the exchequer because the prison is now the most expensive penalties applied. Modern states have been building up extensive bureaucratised apparatuses for the detection of crime, the prevention and sanctioning. For example, at present it falls criminal youth within the remit of several ministries and organizations dependent on them. Gives rise to various detention centers, social reintegration and diagnostic centers. In the sphere of crime is committed by many non-governmental organizations that cooperate to varying degrees with the state the are many departments that deal with or specify the different areas of crime[21].

For us in the past, not all trends Western states be enforced because they lacked facilities democratic political system. After the change of the social regime in 1989, our country suddenly became a democratic state is trying to cope up with Western democratic states. Since then, we see that both in prevention as well as the oppressed juvenile delinquency consistently designed and

[19] SUCHÝ O., Praha: MELANTRICH, 1972, Mládež a kriminality, p. 24
[20] MATOUŠEK O., MATOUŠKOVÁ A., Praha: Portál, Ltd., 2011, the Youth and Delinquency, p. 68
[21] FIRSTOVÁ J., Plzeň: Aleš Čeněk, 2014, Kriminalita mládeže v sociálních souvislostech, p. 11

enforced measures that still work well elsewhere, in our country are not connected to the corresponding historical development or lack the necessary background in public understanding, of opinion experts or the priorities of the political scene. Despite this handicap in our public debate began. The focus became, as in other countries, the sense of imprisonment and the effects of this punishment. Building prisons wanted to create a place where they could isolate those citizens who embody evil and pose for the rest of danger or threat. The prison was and is justified with as a means of removing offenders from committing further crimes. In the 19th century began to also consider whether or not the prison inmates to work educationally.

Numerous independent studies have been found, however, that once the juvenile and adult offender returns after serving a sentence of imprisonment to freedom, the probability that it will continue to conduct criminal will not fall, but rise. The prison is therefore no doubt institution that actual prisoners although prevented from committing a crime, but in the future a substantial part of preparing to commit another crime. We can therefore conclude that the sanctions applied to juvenile increase the likelihood of criminal behavior in adulthood.[22]

Adverse and after a few years in prison irreparable effects on the juveniles are now in western countries widely recognized a man whose socialization just starting. Therefore, several countries legislation limits the period of detention of minors less than human borders.[23]

3. HISTORICAL EXCURSION LAWS

The following summary does not provide all the relevant laws and documents referring to the fact that when working with youth at risk are used most frequently:

a.) Act on Criminal Justice of the youth of 1931- prepared already in the days of the Austro-Hungarian Empire, set the age of criminal responsibility to 14 years,

b.) Act on the protection of children from inappropriate entertainment from the 1922- defend youth participation in gambling, dances, banning young people to smoke and drink alcohol

c.) Act on the right of a family of 1949- introduce the same rules both parents to children

d.) Act on social and legal protection of children from 1952- up the Office for the Protection of youth as judicial authorities, civil law courts in every district. These bodies could independently from the courts to decide on the placement of children in institutional care

e.) Criminal Code and the Criminal Procedure Act 1950- increased the age of criminal responsibility at 15 years young, adolescents allows the use of protective care and protective treatment

f.) The Education Act 1953 defines the types of after-school educational establishments. They were orphanages, children's homes with higher educational care, retaining youth homes and homes with special care.

CONSCLUSIONS

Preventing youth crime is a complex interdisciplinary problem. It is obvious that the coordinated and systematic human to operate on multiple pages is, the success of our prevention efforts more realistic. Prevention activities should be but focus mainly on the local level. Right here it should be no more effective search of young people requiring help create functional models of prevention activities.

[22] SEJČOVÁ Ľ., Deti, mládež a delikvencia, Bratislava: ALBUM, 2002, p. 30
[23] MATOUŠEK O., MATOUŠKOVÁ A., Praha: Portál, Ltd., 2011, the Youth and Delinquency, p. 69

Among experts to work with delinquent youth in recent years, it is thought that more effective at preventing crime than the perpetrators after the commission of the offense as to punish. Many times it has been shown that only indiscriminately repressive approach to tackling crime does not bring the desired result.

Repressive component of criminal policy is obviously still necessary, but it should nevertheless be considered as ,,ultima ratio", that is just something that started off as a last resort solution to the problem. Still has to be a balance between the application of prevention and repression, and used all the possibilities for preventive action and social reintegration to not have to commute to the use of extreme repressive means of criminal law. In other words, it is necessary to look for such instruments of action for members of society to be more or less like itself to avoid antisocial, thus the instruments of preventive action have been if it were possible, suitably tailored to their individual needs and the needs of society. This is particularly true in the process of socialization of young people, which should play a preventive effect of a dominant position.

Preventing youth crime in recent decades considerable attention, leads to the formation of various prevention programs through which crime prevention is put into practice. The reasons for this effort are evident, they aim to capture the problematic behavior of children and youth in the bud and to guide it in the desired direction. The problem is usually that prevention programs are either applied excessively or inadequately. It is therefore necessary to coordinate the various prevention activities, get them to a functional system. Without systematic and coordinated effort it will reduce the effectiveness of the action, in some cases it becomes counterproductive. For this reason, underway since the seventies coordination efforts of these interventions on a systemic approach to the whole issue and in developed countries, are designed for different procedures, methods, systems and crime prevention.

REFERENCES

FIRSTOVÁ J., Plzeň: Aleš Čeněk, 2014, Kriminalita mládeže v sociálních souvislostech.
MATOUŠEK O., MATOUŠKOVÁ A., Praha: Portál, Ltd., 2011, the Youth and Delinquency
SEJČOVÁ Ľ., Deti, mládež a delikvencia, Bratislava: ALBUM, 2002
SUCHÝ O., Praha: MELANTRICH, 1972, Mládež a kriminality.

sciendo
International Journal of Entrepreneurial Knowledge *Issue 1/2018, Volume 6*
DOI: 10.2478/ijek-2018-0009

OPTIONS FOR MONITORING OF SPACES PUBLICLY INACCESSIBLE IN THE CONTEXT OF PROTECTION OF PERSONAL DATA AND PERSONAL RIGHTS[24]

PaedDr. Zuzana Kurucová, PhD.
Institute of Theory and History of State and Social-Science disciplines, Faculty of Law PEU
doc. JUDr. Marcela Tittlová, PhD.
Institute of Public law, Faculty Law PEU

ABSTRACT

The submitted article devotes to the protection of personal data, the protection of personal rights in connection to the use of monitoring devices – camera systems. It analyses legal regulation valid and effective up to 25.5.2018, namely the selected parts, which are assessed in view of suitability and sufficient protection of personal data of data subjects. Several of its parts are subject to scrutiny. Subsequently, the attention is given to the legal regulation effective from 25.5.2018, which is a response to the adoption of a Regulation of the European Parliament and of the Council ***2016/679 of 27 April 2016*** *on protection of personal data of natural persons. Even though the original regulation is subjected to a relatively strong criticism, this new regulation does not contain even those guarantees, which are contained by the still effective act. Within this context, the conclusion contains the formulated specific recommendations and proposals to a significantly more effective protection of personal data of data subjects with regard to the used monitoring devices – camera systems.*

KEYWORDS

monitoring devices, options for monitoring of publicly inaccessible spaces, options of using the information obtained.

JEL CLASSIFICATION

K10, K20, K30.

INTRODUCTION

Under the Article 1 of the Slovak Constitution, the Slovak Republic has the nature of a separate, legal, sovereign, democratic state. This framework, but also other provisions allow to deduce that it is a state that honours fundamental human rights and freedoms of citizens and human beings (regardless of their nationality), as required from such states by many European and international documents. In the end, their content is reflected in many provisions in the Slovak legal order, from

[24] This study was supported by the Agency for promotion of research and development on the basis of the Contract No. APVV-16-0521

the Constitution up to the specific legislation. This is the reflection of co-existence and belonging of Slovakia to transnational grouping, but also to many international ones and at the same time the obligation to incorporate some of the adopted acts in full or in terms of achieving the purpose, which is thereby pursued.

A particularly sensitive issue arising not only in the national context, but also in the European context is the protection of privacy. This is understood very widely in terms of partial authorizations, which are subsumed thereunder.[25] Besides the protection of family life, secrecy of communicated, sent messages, it is also protection of personality and protection of personal data, which are subsumed under the protection of privacy.[26] It is important to understand the provision in Article 8 of the European Convention for the protection of human rights and fundamental freedoms within this context, i.e. that everyone has the right to have his/her private and family life respected, to respect his/her home, his/her correspondence, but these rights are not absolute. It is possible to interfere with the rights under conditions set out in Article 8(2) of this document. The key condition is the legality of this interference, i.e. is that the interference with the right to privacy is in accordance with law and for the purposes that are directly defined. This requirement of legal interference with the right to privacy and at the same time reasons for which this is possible are also reflected in the Constitution of the SR. Equally, if personality rights are concerned, their interference and limitation is only possible under the Article 13 of Constitution if the law so provides (permits under certain conditions). In connection therewith, the provisions of Civil Code in §12 specify that the documents of personal nature, video images, video and audio recordings relating to a natural person or expressions of personal nature can be created and subsequently used only with his/her consent. Exception to this rule is the existence of the so-called legal, statutory licenses, which shall be governed by the provisions of the Civil Code. Use of these statements and recordings without the consent of the data subject (their creation and use) shall be possible for specific purposes within their meaning.

Protection of personal data is a very delicate issue. It is a very personal question. Information related to a person, its specific knowledge that characterize this person have become a very sensitive, carefully followed and regulated issue over the last years. As a component part of the right to protection of privacy, it is important to define the concept of "personal data" itself and what has such a nature. The rules and obligations of how to handle them unwind from this subsequently. Whereas these data about the various aspects and parts of life of people, are of fundamental importance, they are carefully protected and obligations, under which the data may be obtained, handled, treated, stored and in the end also used, are consistently regulated
Camera systems, or systems to monitor persons in various situations and for different purposes, have become very important in the last years and will progressively become a more and more expanding means of protection and prevention. This is both a tool that is being used as a means of preventing criminal behaviour, crime, but at the same time it is a tool that allows some control (e.g. for business entities) of how certain activities are carried out, whether they are taking place in accordance with the internal rules and legal standards (e.g. banks monitoring specific banking activities and their course). They are also a means representing certain degree of protection of rights for natural persons as non-business entities, as well as for the business subjects (natural persons and legal persons). Gradually they have therefore become more and more expanded means whether in the publicly accessible spaces, but also in a publicly inaccessible, i.e. non-public spaces. It is only natural that their use brings about interference with the right to privacy and also the conflict with a lot of data having personal nature about each individual (personal data). On the one hand, we are

[25] Tittlová, M.: Zákon o ochrane súkromia pred odpočúvaním. Comment. Bratislava: Wolters Kluwer, 2017, p. 31 et seq.
[26] Ivor, J.: Monitorovanie obydlia kamerovým systémom a jeho využitie na účely trestného konania. In Zborník príspevkov z medzinárodnej vedeckej konferencie „Teoretické a praktické problémy využívania informačno-technických prostriedkov, FP PEVŠ, Bratislava, 2017, p. 83 - 84 et seq.

focusing on the possibility of personal data protection in the submitted article, and the possibilities for their use from the point of view of camera systems according to the still effective regulation and legal regulation effective from 25.5.2018 on the other. We have analysed and assessed, compared these regulations and have formulated concrete conclusions and recommendations in the end of this scientific work.

1. LEGAL REGULATION EFFECTIVE UP TO 25.5.2018

On 30 May 2014, the full wording of the Act No. 122/2013 Coll. on protection of personal data was published in the Collection of Acts of the Slovak Republic as an official publishing medium. This complete wording was published under the No. 136/2014 Coll. and it summarised several amendments of the original act into one newly designated regulation (indicated with a new number, but the original name). These are legal regulations establishing principles and rules on protection of personal data also in the context of options to use the camera recordings as monitoring means. It is a legal regulation which was effective until 25.5.2018. Already before this date a new act on protection of personal data, the Act No. 18/2018 Coll., has been adopted. The original above-mentioned regulation (its full wording) still remained in force and effect until it took effect, i.e. until 25 May 2018, and for this reason we are devoting to the options in this respect.

Directly the subject-matter of the Act notes (§ 1) that the provisions of this Act regulate the protection of rights, which is provided to natural persons against unauthorised interference with private life of such persons, including processing of their personal data. They are laying down a series of rights and obligations including liability, which shall be determined when processing personal data of natural persons. It is decisive what is considered to be personal data. Provision of § 4(1) specifies that the personal data shall be considered *the data concerning the identified or identifiable natural person, where such a person is the one who can be identified either directly or indirectly, in particular on the basis of a generally applicable identifier or on the basis of one or more characteristics or characters that form the physical, physiological, psychological, mental, economic, cultural or social identity.*

The use of camera systems, their legality, and indeed the legitimacy of use, is a very sensitive subject also in the context of this Act. It is precisely because of requirements for the protection of personal data under this Act. This is not the only act that introduces such requirements. It is necessary to take into account the directive of the European Parliament and of the Council 95/46/EC on the protection of personal data, which is incorporated in our legal order, i.e. our legal regulation is in compliance therewith. Here it is necessary to outline the provision of § 15 (7) of the Act, which provides for monitoring possibilities of public or larger space, which is accessible to the public. This provision regulates the conditions under which it is possible to monitor publicly accessible spaces with camera systems and the conditions under which this monitoring is possible. The legislator sets out a number of requirements that must be met in order to use the monitoring devices (camera systems), namely the condition that:[27]

a.) the space is publicly accessible,
b.) the space can only be monitored to achieve the defined purpose,
c.) this space is clearly marked as space that is monitored.

These conditions shall be considered cumulative, i.e. all of them must be met simultaneously in order to interfere with the right to privacy by the use of the monitoring devices and at the same time to record the personal data of persons. The legislator makes the legality of intervention and recording of personal data with these means subject to these conditions. *A contrario*, if one of the following conditions is not met, then it is an illegal intervention in the right to privacy and illegal

[27] Tittlová, M.: Korupcia (vybrané kriminologické a trestnoprávne aspekty). Bratislava: Wolters Kluwer, 2015, p. 146 et seq.

recording, collection of personal data. The legislator links the conditions for the use of such resources and possible collection and subsequent processing of personal data to conditions that are clearly formulated and at the same time, many of their aspects are also legally defined for its purposes.

To point a.) The legislator requires that spaces and plots of land to be monitored in this way must be accessible to public. Their use in the private spaces without access of a wide and in advance unidentified group of individuals is therefore excluded. As a rule, these are parks, means of transport (their interior is monitored), business premises of banks, for example. The provision of § 4 (3)(j) defines which premises are considered to be publicly accessible and legal under this Act and for its purposes. Spaces accessible to public are those, which *can be freely entered and where one can freely stay without a time limit or in the specified time, where other restrictions, if any, are met by the person and do not affect the entry and free movement in the space, or it is a space defined by a special act.*

To point b.) Monitoring is not for its own sake, i.e. its purpose is precisely defined in the present provision. Therefore, if a particular entity, e.g. a business entity wishes to monitor certain space which is public, the reasons for this activity must be subsumed under those defined in this provision. In particular, premises publicly accessible can be monitored on condition that this is done for the following purposes (alternative reasons):

- Protection of public order and safety,
- Detection of criminality,
- Breaches of state security,
- Protection of property or health.

To point c.) Publicly accessible spaces can be monitored (for the above stated purposes) to reach the above mentioned objectives only on condition that they are clearly marked. The space itself must be clearly sufficiently visibly marked as a monitored space usually at the entrance, but also inside the space itself. It is important that the legislator expresses the condition for visible marking of the space. Required marking must be sufficiently visible, and it must clearly and unambiguously state that the space is being monitored. As a general rule, it is at the entrance to the space, whether in the form of a verbal inscription in the official language, or a camera pictogram on a plate. It is important, and for this reason, if any person does not understand the official languages he/she has the option to figure it out from the camera pictogram and to find out that the space is monitored. The legislature does not impose any requirements as regards the size or method of notification. It only states that the space has to be marked clearly. Specific subjects using these means therefore have the option to choose a specific way of notification via clear marking. As a general rule, this is done by using a verbal inscription and the above shown camera pictogram on a plate at the entrance to the spaces which are subject to this monitoring. Consequently, it is considered that the persons who are thus notified, enter the spaces with the knowledge that their personal data are collected and may be processed for legal purposes. It is assumed that if they do not agree with this intervention in their guaranteed rights, they will not enter the spaces and plots of land, or that they leave them.
The operation of camera systems naturally means that the personal data of persons will be processed by means of monitoring devices.[28] Most commonly people's faces, figures, several expressions of personalities are recorded.

The legislator further states that such recordings, which were recorded after meeting the conditions stated above, although they are interference with the right to privacy, they record personal data of

[28] Ivor, J.: Monitorovanie obydlia kamerovým systémom a jeho využitie na účely trestného konania. In Zborník príspevkov z medzinárodnej vedeckej konferencie „Teoretické a praktické problémy využívania informačno-technických prostriedkov, FP PEVŠ, Bratislava, 2017, s. 84 - 85

subjects and this of various nature, even without their express consent, are useful for the purposes of criminal and administrative procedures. If these monitoring conditions are met, individuals cannot claim protection of their rights (personalities, personal data) against their recording, storage and use, as these are legal interventions.

The present regulation, nor the previous directly included the term "monitoring". The partial lack of this regulation has been replaced by legal theory. Monitoring shall be considered to be a way of tracking, namely tracking by monitoring device, i.e. the camera, resulting in creation of a video.

In the event that no facts are discovered, for which the recorded data could be used, the legislator sets out the requirement in the § 17(7) that after 15 days of storage these obtained recordings shall be destroyed. Their use is possible in the process of inferring legal accountability, therefore their usefulness is bound solely to the use of evidence in administrative or criminal proceedings. If these cannot be used, the legislator lays down an obligation to the operator to destroy them within 15 days of obtaining them.

As it turned out also in our state, the use of camera systems is widespread. And it is not only our case, but also abroad. This is both the result of options provided by the camera systems (their use can gain very valuable knowledge about activities of persons and also identify them), but also of a strong information progress and development of monitoring devices. The fact is that this amendment includes the options for monitoring of public areas after meeting the legal conditions. As directly stated in § 2(3), the amendment of this act does not apply to personal data, which are:

a.) processed by a natural person for their own use within the scope of exclusively personal or home activities, in particular keeping of personal directory or correspondence,
b.) have been obtained randomly without prior determination of purpose and means of processing, without the intention of being further processed in a consolidated system under specific criteria and are not further systematically processed.

Questionable, therefore, are the options of use of the recordings that have been acquired by private individuals in non-public spaces. These are relatively simple cases that are currently strongly expanded – monitoring of homes as the private space (house, flat). One can see that the legal regulation does not apply to them, but there is no other legal regulation, which would deal with these cases. Thus it comes to an intensive interference with the right to privacy, personal rights; and the use of monitoring devices naturally results in recording of personal data. The nature of those systems and their use is the same as in the public spaces – interference with the right to privacy, recording of personal data. The only difference is that these spaces are not publicly accessible, but private. The Civil Code requires consent of the data subject with making of recordings and portraits and their use, and so this regulation cannot be applied here either.

With regard to the use of monitoring devices and collection of personal data in the publicly inaccessible spaces, it is important to define these private premises – the *homes.* Yet it is a term that is subject to protection and guarantees as from the national, but also from the international and European point of view. For example, Article 8 of the Convention contains guarantees of protection of private and family life, home and correspondence. In connection with these guarantees, the Article 21(1) of the Slovak Constitution also contains formulation that the home is inviolable. Without the consent of the person living in it, it is not possible to enter it. An interesting definition is also offered by the Criminal Code, which stipulates in §122(5) that for law enforcement purposes

home means a house, apartment or any other space that is used for housing, including those premises and plots of land belonging thereto, if they are closed as part of the home.[29]

Certain rules for monitoring private spaces were found in the Methodological guidance of the Office for the protection of personal data No. 5/2016 called the "Monitoring of publicly inaccessible spaces". The above guideline comes from the year 2016 and one can see that the solution to this problem was missing for a relatively long time. It is still questionable, whether the form of methodological guidance is suitable for these purposes. This guideline states that monitoring of publicly inaccessible spaces, private premises and property (home) is not the case of monitoring private property and spaces, which are used for business purposes. These are, as a general rule, spaces delimited with fence, green, fencing and so on. If such a space is to be monitored, it is necessary to take the nature of the monitored spaces and their extent into account. It is possible to distinguish between several cases when only non-public spaces are monitored (only the space of a house or flat), or when the private space (courtyard, house), as well as part of public space (pavement, part of road, etc.) is monitored. If exclusively private space is monitored, the Office for the protection of personal data proceeds in accordance with § 3(2)(a) of the Act on the protection of personal data – i.e. the activities to which the provisions of this Act do not apply. In view of this, the person carrying out monitoring has no notification obligation against the Office. On the other hand, if a private home is monitored, it is a private-law relationship being subject to private regulation – persons making these recordings must respect the rules on the protection of personal rights under § 12(1) and (2) of the Civil Code (requiring the consent of the data subject with its making and use)[30]. It is only natural that if a private space is monitored, so only that person can monitor the space who has sufficient legal relationship thereto. One cannot monitor the other person's homes, adjacent parcels and so on. If this happened and such recordings would be published, e.g. on the Internet, on social networks and etc., persons recorded therein can demand protection of personality within the meaning of this civil regulation. In the case where exclusively own space is monitored, or a space to which the recorder has certain rights, the unauthorised intrusion – breaking-in by a certain person constitutes an offence. Such a record is usable as evidence in criminal proceedings (and also in administrative procedures), under § 10(3)(c) of the currently applicable Act on the protection of personal data. This provision makes it possible to process personal data without consent of the data subject, if this is necessary to protect life, health or property of the data subject. The letter g) is also applicable. It states that personal data can be processed without the consent of the person, if this is *necessary for the protection of the rights and the interests of an operator or a third party protected by law, in particular personal data processed in the framework of assets, financial or other interests of the operator and personal data processed for the purpose of securing the safety of the operator by cameras or similar systems; this shall not apply where such processing of personal data is outweighed by the fundamental rights and freedoms of data subjects, which are subject to protection under the Act.* There is however a certain conflict between the interests protected by law – protection of personal data and personality of potential offender and the interests of persons in the home which was intruded illegally. We can only agree that the rights of individuals end where the rights of other persons begin[31] and the protection of their rights (personal data and personality) cannot be invoked by someone who has infringed the rights of other persons. In this case, the person who has intruded the home of another person without authorisation cannot invoke its protection, as the person violated the right of another person. It is necessary to actively speak out for the protection of the rights of this person (whose home was intruded without authorisation) and to sacrifice the personal rights and recording and using the recordings with its personal data without its consent in favour of its protection. Such recordings can be used in criminal proceedings as evidence, although this is not explicitly

[29] Čentéš, J. a kol.: Criminal Code. Large comment. III[rd] updated release. Bratislava: EUROKÓDEX, 2016, p. 412 et seq.
[30] Lazar J. et al.: Substantive civil law 1st and 2nd volume. Bratislava: IURIS LIBRI, 2014. p. 93 et seq.
[31] Jtk 10/2012

mentioned by law.[32] Spaces publicly available can be monitored after meeting the legal conditions, and therefore recordings containing personal data of the data subjects can be obtained (recorded), kept and used, and such recordings can be used as evidence in criminal and administrative proceedings; in case of recordings from the monitoring of non-public spaces there is nothing stated about such usability.

From the above context it is clear that monitoring of public and private spaces and processing of personal data in this way, and the use of such recordings is not quite appropriately and sufficiently addressed in the Act. While monitoring of public spaces is addressed by the legislator at the level of the Act, cases of private spaces monitoring are not mentioned at all together with recording or overlapping with public spaces (pavements, parts of road, etc.). The monitoring with camera systems in vehicles is also not addressed legally. The Office for the protection of personal data is trying to deal with these issues by methodological guidelines, but important issues should be addressed directly in the act and significantly more comprehensively and in more details.

2. LEGAL REGULATION EFFECTIVE FROM 25.5.2018

New legislation on the protection of personal data took effect on 25.5.2018, in particular the Act No. 18/2018 Coll. on the protection of personal data and on amendments to certain acts (the new act). Its existence in our legal order is the expression or result of the fact that the European Union has adopted the Regulation of the European Parliament and of the Council 2016/679 of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, repealing the Directive 95/46EC (on the protection of personal data). In view of the nature of the regulation, as the act of secondary law, this is directly effective and applicable in the territories of all Member States.[33] There was no need to adopt this regulation by a separate act. With regard to the existence of legal provisions in our state, the legislator has decided not to repeal them, but to transpose the text of the regulation into national law in the form of legal wording – a new act on the protection of personal data.

Right in the introduction of this part it should be said that the legislator often literally transposes European acts in our country and this without any more concrete and a more detailed consideration. In the case of directives it is not an appropriate procedure, in the case of regulation it is in principle the only appropriate procedure. It has to be noted that this legal regulation differs in many ways from the original. It differs more substantially also in matters of use of monitoring devices in relation to public spaces. While the previous legal regulation was evaluated as insufficient in matters of this monitoring and processing of personal data in the context of their use in many ways, this new legal regulation is even briefer and does not explicitly outline neither the above indicated monitoring of public spaces. Assessment of cases where the monitoring is used and personal data are processed by monitoring devices in private (non-public) premises, if they take up public spaces (pavements, parts of road), is not at all resolved; it does not address the use of vehicle cameras and recording of data by their use (on the road, pavement – what type of space it is actually? – public, private?), and the like. Since this is a reflection of regulation, this provision copies the text as it was adopted by the European Parliament and the Council. Previous European regulation was adopted by way of a directive, so it allowed the Member States to take various means to achieve the objective of the protection of personal data. In relation to the protection of personal data as from 25.5.2018 and in fact already now a range of issues remained unsolved. These are covered partly by the Methodological guidance, but we have already indicated that this is not the entirely suitable form of

[32] Ivor, J.: Monitorovanie obydlia kamerovým systémom a jeho využitie na účely trestného konania. In Zborník príspevkov z medzinárodnej vedeckej konferencie „Teoretické a praktické problémy využívania informačno-technických prostriedkov, FP PEVŠ, Bratislava, 2017, p. 85 - 86

[33] Siman, M., Slašťan, M.: Primárne právo EÚ. Bratislava: EUROKÓDEX, 2012, p. 43 et seq.

regulation of such important issues. Clearly there is a space for further legislative action of the legislator and resolution of these fundamental issues in terms of both protection of the rights of data subjects, operators of camera systems (in houses, flats, family houses, if they record a part of public spaces, in vehicles in the form of vehicle cameras), as well as from the point of view of personal data protection, protection of the personality of individuals.

One can only outline that the new regulation also defines the essential points of personal data protection. Thus under § 2 of the new act, personal data are the *data relating to an identified natural person or identifiable natural person, which can be identified either directly or indirectly, in particular on the basis of generally applicable identifier, other identifier, such as the first name, surname, and the identification number, location data, or on-line ID, or on the basis of one or more characteristics or characters that form his/her physical identity, physiological identity, genetic identity, psychological identity, mental identity, economic identity, cultural identity or social identity*.

Also here (§ 3(5) of the new act) it is stated that its provisions shall not apply to the processing of personal data by means of natural persons in their personal activities, home activities. It does not define in any way what is a personal activity or home activity of a natural person, and so it is slightly polemical, whether it includes, for example, the use of motor vehicles and the camera systems built-in in the vehicles.

The only thing that the new act requires in relation to processing of personal data is that it can be processed only in legal manner so as not to violate the fundamental rights of data subjects (§ 6 of the new act). In addition to the requirement of legality, there are no other requirements defined, for example, recording and processing of personal data by monitoring devices in public spaces, contained in the previous. The legislator formulates principles of use in the new regulation, e.g. the principle of purpose limitation for processing of personal data, the correctness principle, minimising of personal data, the principle of integrity and confidentiality and the principle of responsibility. Legality of personal data processing is subject to some legal bases in § 13(1) in the new regulation; the use of camera systems and processing of personal data in this way is thus perhaps possible only under point (d), (e) or (f):

- processing of personal data is inevitable for the protection of life, health or property of the data subject or other natural person (d).
- processing of personal data is inevitable for the performance of a task carried out in the public interest or in the exercise of public authority conferred on the operator (e), or
- processing of personal data is inevitable for the purposes of legitimate interests of an operator or a third party, except for cases where the interests or rights of the data subjects which require protection of personal data prevail over those interests, in particular if the data subject is a child; this legal basis does not apply to the processing of personal data by public authorities in the performance of their tasks (f).

This is an analogy to the original regulation, i.e. that processing of personal data is possible even without consent of the data subject, if this is necessary to protect life, health, property of that person or any other person. Without the consent, the cases can be addressed where the personal data are processed for the purpose of protecting the interests of the person or a third party – this can be the case of use of monitoring devices in homes (in the house, flat), where the interest of person being burgled clearly predominates over the interest of the offender in the protection of personal data and the protection of personality.

This application is partially complicated by the fact that this Act does not apply to personal and home activities. And it is not clear what is included in them. The question is, what is processing of personal data for the purposes of home activities, i.e. whether these are the monitoring systems in

homes, houses, flats, in publicly inaccessible spaces, or not, whether it may be making of personal lists of debtors with their identification data, and the like. This formulation was taken over from the previous regulation, i.e. the Act valid and effective at the moment, where it is stated that these are personal lists, e.g. keeping of personal directory and the like. The legislator, however does not define it any closer in this regulation. If yes – and also these systems are a home activity, the Act does not apply to them under §3. If this is not a home activity, the Act applies to this activity, and thus allows to process the personal data.

Overall, this regulation can be assessed as yet a more problematic from the point of view of options to process personal data in connection with the use of camera systems and the use of recordings thus obtained. Naturally, there are methodological guidances of the Office for the protection of personal data, but their content rather relates to the original regulation and these have yet not been updated. The problem is that if the Office publishes some guidelines, it will remove them in 1-2 days from their site, because their application or substantive wording proves to be problematic. This does not add to legal certainty in this already complicated area.

3. CONCLUSIONS AND PROPOSALS *DE LEGE FERENDA*

With effect from 25.5.2018, the Act No. 18/2018 Coll. on protection of personal data and on amendments to certain acts becomes the effective part of our legal order. It is a reaction to the adoption of new EU regulation on the protection of personal data, as a consequence of the Slovak Republic being a part of the EU. This regulation replaces the still effective Act on the protection of personal data (full wording of the Act No. 136/2014 Coll.).

This original Act regulated the options for processing and the use of personal data obtained by the use of monitoring devices after meeting the legal conditions (in publicly accessible places). It partly addressed the processing of personal data without the consent of the data subject in places which are purely private (monitoring devices in the houses, flats), if they record only the private area. The new act links the processing of personal data only to the requirement of legality and pursued legitimate purpose – under Article 13(1)(d), (e) and (f). As we have already indicated, the regulation does not solve several aspects of personal data processing in the context of camera systems use. After the analysis of the original regulation and also the new one that has entered into effect on 25.05.2018, the following modifications, additions or amendments to this regulation are advisable. Their implementation will promote protection of personal data when using camera systems (monitoring devices) and at the same time allows to protect the rights of persons using these systems. Setting out of conditions, under which it will be possible to process the personal data, clearly specifies the cases where the personal data can be processed even without the consent of the data subject, where it will be possible to intervene in its personality rights for the purposes of achieving higher and legitimate objective – the protection of rights and the interests of personal data processor protected by law. This will prevent many problematic cases, where the solution is not supported by law, or not supported by a clear legal formulation, and depends on the assessment of the actual entity assessing it. We can therefore recommend the following:

a.) Methodical guidances of the Office for the protection of personal data that still exist and are still attached to the original regulation must be updated.

b.) It is not possible that the Office for the protection of personal data publishes a guidance on one day and removes it on the second day because it found out that its application is problematic; these are phenomena that violate the principle of legal certainty.

c.) These methodological guidelines should only solve the methodology for processing of personal data and not the options, how and under what conditions the personal data should be processed and used; under which conditions to interfere with the guaranteed rights; these are crucial issues that should be addressed at the level of legal provisions.

d.) The option of personal data processing must be regulated – how they should be recorded, processed and used, if these are public spaces; the current legal regulation could serve as an inspiration. It provides legal requirements for this procedure clearly and precisely; if the space to be monitored for specific purposes is accessible to public, monitoring should be indicated clearly and precisely, then this procedure is legal and also without the consent of the person, his/her personal data can be processed and used as evidence in criminal proceedings and administrative proceedings when deducing legal liability.

e.) The conditions, under which the recordings obtained in the context of the home monitoring (solely private spaces of the house, flat, etc.) can be used, must be clearly defined; the new act does not quite accurately define what is to be understood by processing for personal or home activities, and whether these are also camera systems in houses and flats; they can primarily be intended only for monitoring of children (home nannies) or they may record unlawful activity of a person within the personal life; it should be clearly defined at the level of law that processing of personal data for home and personal activities is something different (making of personal directory), but not the use of monitoring devices in the privacy; it should be directly determined by law that these are not home activities, and therefore that the application of the new act is not excluded; subsequently such recordings can be used, although the personal data are processed without the consent of the data subject for the reason referred to in § 13(1)(f).

f.) The use of vehicle cameras should be defined by law; i.e. that the processing of personal data in this form is possible even without the consent of the data subject and that such recordings may also be used without its consent in the proceedings assessing the claims, administrative and criminal claims; these systems have to increase road safety and assist in resolving minor offences, criminal offences and insurance claims; they should help to establish clearly the driver at fault in case of an accident and other key aspects; it is inconceivable that such a significant means is not supported in our legal provisions, and it should be definitely introduced that personal data may be processed and the recordings used also without the consent of the data subject for the purposes of responsibility relationships and solutions of insurance events; it is inconceivable that these fundamental questions are solved by a methodological guidance.

g.) It is necessary to resolve the processing of personal data, when a private space is monitored but it also captures a part of public space; as there are different individuals moving here, it is necessary to require meeting of conditions to be laid down for monitoring of public spaces in such case, so that every person was informed that this space is monitored and was aware that his/her personal data may be processed; in addition, this will support the usability of such recordings in administrative or criminal proceedings in responsibility relationships.

REFERENCES

Čentéš, J. et al.: Criminal Code. Large comment. IIIrd updated release. Bratislava: EUROKÓDEX, 2016.

Ivor, J.: Monitorovanie obydlia kamerovým systémom a jeho využitie na účely trestného konania. In Zborník príspevkov z medzinárodnej vedeckej konferencie „Teoretické a praktické problémy využívania informačno-technických prostriedkov, FP PEVŠ, Bratislava, 2017.

Ivor J.: Monitorovanie osôb ako dôkazný prostriedok v trestnom konaní In: Ochrana osobných údajov: zborník z celoštátneho seminára s medzinárodnou účasťou, Akadémia Policajného zboru, Bratislava, 2007.

Lazar J. et al.: Substantive civil law 1st and 2nd volume. Bratislava: IURIS LIBRI, 2014.

Siman, M., Slašťan, M.: Primárne právo EÚ. Bratislava: EUROIURIS, 2012.

The Constitution of the Slovak Republic No. 460/1992 Coll., as amended by constitutional laws.

The European Convention for the protection of human rights and fundamental freedoms as amended by additional protocols.

Civil Code No. 40/1963 Coll. as amended

Full wording of the Act on protection of personal data No. 136/2014 Coll.
The Act No. 18/2018 Coll. on protection of personal data and on amendments to certain acts, as amended.
Methodical guidance of the Office for the protection of personal data No. 5/2016 named "Monitoring of premises inaccessible to public".
Jtk 10/2012.

International Journal of
Entrepreneurial Knowledge