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Covid-19 Pandemic; Recession, Virtual Revolution Leading to De-globalization?

ABSTRACT

Objective: The article is an attempt to make a diagnosis about the impact of the Covid-19 pandemic on global trends, including organizational processes in enterprises, and challenges for organization leaders in many areas. Issues such as recession phase in which the economy will find itself, de-globalization and the increase in virtualization of both the economy and entire societies are discussed in the article.

Methodology: The research method is a review of the literature, not very extensive, on the subject. There is a lack of research on social and cultural consequences of Covid-19 pandemics, and at the same time we are experiencing a flood of media information. The author is aware that impact assessment is subject to uncertainty and that it must be multidimensional.

Findings: The review of the literature, as well as reports from financial institutions, show that the economies of individual countries are entering a phase of stagnation and recession. This will probably lead to a global recession. The text indicates the sectors and types of enterprises that will be most affected by the changes. The article proves that governments' attitude to health care functions may change, as well as the role of states and international financial institutions. Virtualization of communication seems to be an important change. It is difficult to answer the question whether a pandemic will affect globalization or de-globalization, government decisions at national level are significant, but they draw from international experience.

Value Added: The article becomes an important voice on the impact of a pandemic on the functioning of the economy and globalization.

Recommendations: A question was posed demanding further analyses: whether strengthening the central government would mean de-globalization tendencies. It seems that the virtualization of social and economic life will continue after the pandemic expires, which needs to be confirmed. The impact of the pandemic on the world should be the subject of many research studies in the future.

Key words: pandemic, globalization, social life, virtualization

JEL codes: I18: Health, Government Policy, F6: Economic Impacts of Globalization, G01: Financial Crises

Introduction

The Covid-19 pandemic has a very significant impact on social and economic life by deeply transforming the conditions of functioning of people and organizations. Forecasting directions and depth of change is, at the current stage of development of the pandemic, very difficult, due to possible scenarios of Covid-19 progress and varied reactions in individual countries. However, it seems that in many areas of management, a diagnosis of the impact of a pandemic on organizational processes and predicting the challenges that managers and organizations face in many sectors are needed.

The article poses a question about three fundamental directions of changes in the world that are likely to be caused by the Covid-19 pandemic, namely the rapid entry of the world economy into the recession phase, the possibility of reversing certain effects of globalization known as de-globalization and a revolutionary increase in the degree of virtualization of the functioning of economies and societies. The research method used is based on a review of the relatively little literature on the subject.

Research and reflection on the social, economic, organizational and cultural aspects of the Covid-19 pandemic is very much needed. We are currently dealing with a flood of media information, and at the same time a deficit of research on the impact of the pandemic on social life. At the same time, the assessment of risks and effects of the pandemic caused by the spread of SARS-CoV-2 virus must be multidimensional and is subject to considerable uncertainty (Ragheb, 2020, p. 26).

Literature review

Development of the Covid-19 pandemic

In December 2019, a new viral lung disease, later named Covid-19, broke out in Wuhan, China. The origin of the virus is probably zoonotic and derived from bats. It is most likely that at the Wuhan market, the SARS-CoV-2 virus overcame the interspecies barrier and began to infect people. Originally, China tried to hide the outbreak of the epidemic by trying to silence the doctor-whistleblower, but the scale of the spread of the epidemic, primarily due to the infectivity of the virus, forced the Chinese authorities to take radical action. On February 8, 2020, shortly after the start of systematic analyses, 33,738 confirmed cases of the infection and 811 deaths were reported in China (Liu, Gayle, Wilder-Smith, & Rocklöv, 2020). On March 11, 2020, WHO announced the Covid-19 pandemic, pointing to the global health threat of the spread of coronavirus. China has become the first training ground for

fighting the pandemic and has shown examples of combating COVID-19 by applying radical public and health policies (Phelan, Katz, & Gostin, 2020, pp. 709–710). A dramatic increase in cases occurred in South Korea, Iran and Italy. After March 10, the dynamics of the epidemic development in Europe became greater compared to China. South Korea is one of the countries that fight the pandemic most effectively, which not only slowed down the rate of infection, but also has the lowest mortality rate, below 1% of those infected. As of March 16, COVID-19 is already present in 158 countries around the world, 170,237 people are infected, 6,526 people have died, and 77,788 people have recovered.

Recession as a result of a pandemic

The media are dominated by communication suggesting that the coronavirus pandemic will result in recession. This seems a fairly obvious observation resulting from the growing number of infections in most countries, closing schools and promoting social distancing measures, as well as sharp declines on global stock exchanges (Ramelli & Wagner, 2020). However, there is a lack of reliable research and estimates allowing to predict the scale of the recession. Undoubtedly, the impact of the pandemic on the economy will be very significant, given the scale of the epidemic and the vulnerability of the economy (Leiva-Leon, Pérez-Quirós, & Rots, 2020). Some commentators hoped that the effect would be limited mainly to China, but the scale and pace of pandemic development has consequences for the global economy (Brightman, Treussard, & Ko, 2020; Ayittey, F. K., Ayittey, M. K., Chiwero, Kamasah, & Dzuvoor, 2020; Khan & Fahad, 2020). It happened in a violent, unpredictable way and within three months took on a global scale (Sapovadia, 2020). Y. Bonaparte outlines three scenarios for the economic impact of the epidemic in the US, advocating the most radical intervention possible (Bonaparte, 2020). As a result, the author's recommendation of a minimum of \$500 billion in intervention and the reduction of interest rates

by the Fed, has already been implemented. In the editorial to the first issue of this year's "British Medical Journal", *Response to the emerging novel coronavirus outbreak* Kickbusch, I., and Leung, G. draw attention to China's decisive response in the fight against the epidemic, which is based on political decision. Probably many countries will need strong governance and fast decisions about health regulations that could respond to scale and speed of pandemic development (Kickbusch & Leung, 2020).

Fornaro, L., and Wolf, M. believe that the shock caused by the coronavirus will not only lead to a supply and demand crisis, but will also have significant impact on employment and productivity growth. This is due to the fact that agents are pessimistic about the growth of productivity in the future (Fetzer, Hensel, Hermle, & Roth, 2020). Since interest rates are below zero, central banks cannot counteract effectively. Employment and economic activity are falling sharply. Companies react by cutting investment expenditure, which negatively increases productivity and can in turn lead to recession (Fornaro, Wolf, 2020). Thus, as the literature review and, above all, the reports of financial institutions show, with the development of quarantine the economies of individual countries are entering a phase of stagnation and even recession. This will probably be reflected in a global recession.

Structural changes

It is likely that various sectors of the economy will be affected by the progression of the coronavirus pandemic to varying degrees, although the scale of the losses is likely to be very broad and multi-sectoral. The most sensitive and at the same time most affected by the epidemic sectors will include tourism, hotel industry, gastronomy, culture, show business, cinematography, transport, education and health (Albulescu, 2020a). Trade, financial, banking and insurance sectors as well as fuel extraction and processing, and many other activities are also sensitive (Albulescu, 2020b). Few types of specialized activities related to pharmaceutical production, medical devices, protection

and OHS, as well as selected types of ICT activities can count on maintaining or even increasing the growth rate. Probably the most threatened are entities from the SME group that do not have the resources to survive the crisis.

The likely consequence of the growing crisis of the world economy will be the increase in the intervention role of states and international financial institutions. Shielding economy packages that give the opportunity to: postpone loan and tax repayments, take over part of the employment or social security costs by the central budget, grant state aid, are introduced by governments of many countries, including France, Germany, Italy and Poland.

The fundamental change will probably also be the new attitude of governments to health care, which will be based more on safety management and disaster medicine.

Virtualization of communication

As a result of rapid virus proliferation, a revolutionary change is taking place in the dominant modes of communication. For reasons of health security, business, education, and even central and global administration moves online. This is a profound change involving: technical infrastructure and software, but above all the shaping of new socio-cultural patterns. It seems that the transition to web-based communication methods is taking place at a rapid pace and also includes training, motivating and controlling employees.

Education is one of the many sectors in which the rapid virtualization process is taking place (Leonardi, 2020, pp. 28–35). Schools and universities are radically transforming education by switching to online, e-learning forms and launching Learning Management Systems solutions (Tian, Zheng, & Chao, 2020). Similar processes take place in the area of e-administration, where most activities are starting to be conducted online.

Economic and social de-globalization?

The question is worth considering whether the Covid-19 pandemic will contribute to the increase of globalization or, on the contrary, will strengthen de-globalization tendencies. Both variants are possible. The increase in globalization may be explained by the structural tendencies described earlier. Recession, virtualization of communication, and the growing need for coordination of epidemic, health and medical activities between countries can force national governments and international organizations to strengthen cooperation on a global scale. On the other hand, de-globalization tendencies may take over (Balsa-Barreiro, Vié, Morales, & Cebrián, 2020, pp. 1–4; Kozlov & Sokolova, 2020, He, Lin, & Zhang, 2020). Undoubtedly, at the current stage of development of the pandemic, national governments play a leading role. They make decisions on health and public policies regarding: introduction of emergency states (e.g. Slovakia), division of the country into epidemic threat zones (China, Italy), closing of borders, forced quarantine and isolation of citizens, construction of hospitals, mobilization of health service, army and others services. The role of other institutions such as: WHO, churches, the European Union is complementary. In this sense, governments will generally come out with a stronger power from the pandemic crisis compared to the time before the crisis. At the current stage of the crisis (mid-March 2020), countries make their own choices, choosing more radical health and public policies (e.g. China, South Korea, Poland) or smaller-scale activities (e.g. UK, USA). Countries also rely primarily on the resources of their own health care and the national health and safety system. If large-scale, coordinated international action does not take place, we can speak of absolute dominance of fighting the pandemic at national levels, using only international experience. Let us hope that the development of vaccine and drug work is more international, which is favored by open access to medical publications on coronavirus. Thus, we will not find the answer to the question about the forecasted effects of a pandemic in the form of deepening globalization or de-globalization.

Conclusions

World experience to date in the fight against the coronavirus pandemic shows that, at this stage (March 16, 2020), national governments are the dominant actors in coordinating epidemic activities. They make choices about time, pace, depth and breadth of action, weighing aspects of public health and economic development. The key difference is between more radical solutions used in China, South Korea, Italy, Poland, and less resolute actions in the USA, Great Britain and many other countries. At present, it seems that public policy of states choosing pre-emptive, radical and large-scale actions is more effective. Much, however, depends on social discipline, the effectiveness of the healthcare system, and the effects of the pandemic that will show up in the economy. Undoubtedly, the effect of the pandemic is the strengthened role of national governments whose citizens hope to stop the epidemic or at least alleviate its effects. Therefore, the question arises whether strengthening the central government will give rise to de-globalization tendencies. Especially that it seems the effect of a pandemic may be recession and structural changes in many economies that may strengthen tendencies towards economic nationalism.

The undoubted effect of the pandemic will be the rapid and progressive virtualization of economic and social life. After the pandemic expires, the transfer of entire sectors of the economy and administration to the network may be slowed down, but changes in habits, reduced operating costs, and the infrastructure created will strengthen virtualization.

The Covid-19 pandemic will be the subject of much research in the future. The article merely signals the threads of a pandemic recession, virtualization of the economy and society, effective public policies and effects on globalization. The limitation of the article is its speculative nature, which is based on very little literature on the social, economic and cultural effects of pandemic development. I would like to thank experts and reviewers for sharing their comments.

References

Albulescu, C. (2020a). *Coronavirus and financial volatility: 40 days of fasting and fear*. Published Mar 9. arXiv preprint arXiv:2003.04005.

Albulescu, C. (2020b). *Coronavirus and oil price crash: A note*. Published Mar 13. arXiv preprint. arXiv:2003.06184.

Ayittey, F. K., Ayittey, M. K., Chiwero, N. B., Kamasah, J. S., & Dzuvor, C. (2020). Economic impacts of Wuhan 2019-nCoV on China and the world. *Journal of Medical Virology*. doi: 10.1002/jmv.25706.

Balsa-Barreiro, J., Vié, A., Morales, A. J., & Cebrián, M. (2020). Deglobalization in a hyper-connected world. *Palgrave Communications*, 6(1), 1–4.

Bonaparte, Y. (2020). *Pricing the Economic Risk of Coronavirus: A Delay in Consumption or a Recession?*. Published Mar 5. Available at SSRN: <https://ssrn.com/abstract=3549597> or <http://dx.doi.org/10.2139/ssrn.3549597>.

Brightman, C., Treussard, J., & Ko, A. (2020). Oh My! What's This Stuff Really Worth?. *Advisors Perspectives*. <https://www.advisorperspectives.com/commentaries/2020/03/05/oh-my-whats-this-stuff-really-worth>, 10.03.2020.

Fetzer, T., Hensel, L., Hermle, J., & Roth, C. (2020). *Perceptions of Coronavirus Mortality and Contagiousness Weaken Economic Sentiment*. Published Mar 8. arXiv preprint arXiv:2003.03848.

Fornaro, L., & Wolf, M. (2020). *Covid-19 Coronavirus and Macroeconomic Policy: Some Analytical Notes*. <http://www.crei.cat/wp-content/uploads/2016/07/CMP.pdf>, 10.03.2020.

He, L. Y., Lin, X., & Zhang, Z. (2020). The impact of de-globalization on China's economic transformation: Evidence from manufacturing export. *Journal of Policy Modeling*. Published online Feb 5. <https://doi.org/10.1016/j.jpolmod.2020.02.001>.

Khan, N., & Fahad, S. (2020). *Critical Review of the Present Situation of Corona Virus in China*. Published Feb 23. Available at SSRN: <https://ssrn.com/abstract=3543177>.

Kickbusch, I., & Leung, G. (2020). Response to the emerging novel coronavirus outbreak. *BMJ*, 368. <https://www.bmj.com/content/368/bmj.m406.short>, 10.03.2020.

Kozlov, N., & Sokolova, N. (2020). Deglobalization: The Impact of the External Environment on Russian Economic Development. *Norwegian Journal of Development of the International Science*, 38-2.

Leiva-Leon, D., Pérez-Quirós, G., & Rots, E. (2020). *Real-Time Weakness of the Global Economy: A First Assessment of the Coronavirus Crisis*. London: Centre for Economic Policy Research. https://cepr.org/active/publications/discussion_papers/dp.php?dpno=14484.

Leonardi, P. (2020). You're Going Digital-Now What?. *MIT Sloan Management Review*, 61(2), 28–35.

Liu, Y., Gayle, A. A., Wilder-Smith, A., & Rocklöv, J. (2020). The reproductive number of COVID-19 is higher compared to SARS coronavirus. *Journal of Travel Medicine*. published online Feb 13. DOI:10.1093/jtm/taaa021.

Phelan, A. L., Katz, R., & Gostin, L. O. (2020). The novel coronavirus originating in Wuhan, China: challenges for global health governance. *Jama*, 323(8), 709–710.

Ragheb, M. (2020). Risk quantification. *Nature*, 2, 26.



Ramelli, S., & Wagner, A. F. (2020). Feverish Stock Price Reactions to the Novel Coronavirus. Available at SSRN 3550274, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3550274, 10.03.2020.

Sapovadia, V. K. (2020). *Terrestrial and Celestial Forces Expose Vulnerable Economists: Financial Crisis 2008 vs. 2020.* Available at SSRN 3547745, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3547745, 10.03.2020.

Tian, F., Zheng, Q., & Chao, K. (2020), Current and future of technologies and services in smart e-learning. *SOCA*, 14, 1–3. <https://doi.org/10.1007/s11761-020-00288-9>.

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Understanding Uncertainty and Risk in Management

ABSTRACT

Objective: The purpose of this text is to identify approaches to defining and subsequently reviewing the definitions of uncertainty and risk as interdisciplinary terms which are of key importance in modern management.

Methodology: The work is theoretical. The main method used in the research process was the analysis of scientific literature. A one-dimensional logical classification method was also used, in order to categorize approaches to defining uncertainty and risk, satisfying the exhaustive and mutually exclusive criteria in the selection of categories of approaches.

Findings: The main results of the work are: 1) identification of approaches to defining uncertainty and risk, 2) interdisciplinary review of definitions of uncertainty and risk indicating the criteria to distinguish between the two, and 3) determination of the meaning of the terms uncertainty and risk in modern management.

Value Added: Considering the approaches to defining uncertainty and risk taken from many fields and disciplines of science, this text is a compendium of theoretical knowledge for the proper understanding and meaning of these concepts in management.

Recommendations: The research findings can have implications for both management theory as well as the practice of organization management.

Key words: uncertainty, risk, management, risk management

JEL codes: D81, G32

Introduction

Uncertainty and risk are the subject of research in many fields and disciplines of science, which is why they have become interdisciplinary terms that determine the process of effective management (Tchankova, 2002).

The interdisciplinary nature of management sciences justifies a pluralistic approach to the perception of risk (Jedynak, 2017) as one of the key areas of activity for business entities. Therefore, uncertainty and risk in the context of management should be analyzed in multiple dimensions. The interdisciplinary nature of management sciences allows us to understand them as the cumulated value of all areas of the organization's activities in which numerous disciplines intertwine (Czakoń & Komańda, 2011; van Baalen & Karsten, 2012).

In order to properly understand uncertainty and risk in the field of management, it is necessary to familiarize oneself with the definition-based approaches in various areas of science, as they determine the formation of their significance in contemporary management of organizations.

The purpose of this study is to identify approaches to defining and subsequently reviewing the definitions of uncertainty and risk as interdisciplinary terms which are of key importance in modern management.

Approaches to defining uncertainty

Defining uncertainty as a broader concept that is the source (cause) of risk (Jedynek & Szydło, 1997) is the first step to properly defining risk. An overview of the most important definitions of uncertainty is presented in Table 1.

Table 1. Review of the definition of uncertainty

AUTHOR	DEFINITION OF UNCERTAINTY
Schumpeter (1934)	Cognitive limitations (ontological uncertainty) and insufficient knowledge (epistemological uncertainty) in the decision making processes related to the market
von Hayek (1945)	Incompleteness of information in the decision-making process (knowledge dispersion).
Freeston et al. (1994)	Possibility of a potentially harmful event.
Smithson (1999)	Metacognitive awareness of ignorance as to the source of knowledge about a given phenomenon.
van der Heijden (2000)	The possibility of an event occurring by means of a cause and effect chain of reasoning, characterized by the inability to estimate the probability of its occurrence.
Krickx (2000)	Lack of full information on future events.
Dugas et al. (2001)	Possibility of a negative event.
Holton (2004)	Events about which it is not possible to obtain reliable data and it is not possible to estimate the probability of their occurrence.
Carleton et al. (2010)	Possibility of negative events that cannot be predicted.
Carbonara and Caiazza (2010)	A situation where decision makers have limited knowledge to be able to accurately describe the results of future events.
Spiegelhalter (2017)	The inevitable unpredictability of the future resulting from unpredictable factors expressed by classical probabilities.

Source: own study.

Analyzing the definitions of uncertainty presented in Table 1, four categories of approaches to defining them can be identified:

- due to reasons (Smithson, 1999; Krickx, 2000; Carbonara & Caizza, 2010),
- due to the ability / inability to assess probability (van der Heijden, 2000; Holton, 2004; Spiegelhalter, 2017),

- due to its role in the decision-making process (Schumpeter, 1934; von Hayek, 1945),
- due to anticipated consequences (Freeston et al., 1994; Dugas et al., 2001; Carleton et al., 2010).

Analyzing various definitions of uncertainty on a formal basis, it can be concluded that the vast majority of them, in terms of structure, can be qualified to the definitions of induction inequality (partial), i.e. those that explain the general concept (in this case – of uncertainty) by means of a list of comparable but differently formulated meaning. The consequence of this form of definitions is its incompleteness, which is expressed in the inability to exhaust all the designats of terms obtained in the definition review. Most often, uncertainty is identified with events of an unpredictable nature with negative consequences. However, the emergence of contextual comprehension, e.g. in relation to decision making processes or available resources of knowledge (Schumpeter, 1934; von Hayek, 1945; Smithson, 1999) results in the inability to clearly understand uncertainty. In turn, taking into account the functions, definitions of uncertainty can be included in the projecting, regulating, thereby determining the importance for the future. The visible consequence of such a function of the definition of uncertainty is, inter alia, their use in the process of defining risk as a narrower concept of a more real nature.

Approaches to defining risk

There is an unusually large variety of definitions of risk in the scientific literature which derives from the number and diversity of scientific disciplines (Spekman & Davis, 2004; Elahi, 2013). In the context of management, in addition to numerous conceptual attempts to define risk, they are more detailed in the area of individual sub-disciplines of management sciences, e.g. in quality management, financial management or strategic management (Kaczmarek, 2006).

The terminology of risk is also established at the level of standardized norms in various disciplines, e.g. on the basis of the risk management standard – ISO 31000 and quality management standard – ISO 9001 (Jedynek, 2011). Due to its multidimensional, interdisciplinary nature, the concept of risk can be defined as universal, which can be used not only in science, but above all, in all aspects of economic activities: economics, politics, social sciences (Śliwiński, 2002).

Risk is often defined in relation to the uncertainty analyzed earlier, constituting its specification and particularization. Table 2 presents a chronological overview of risk definitions.

Table 2. Review of the definition of risk

AUTHOR	DEFINITION OF RISK
Raiffa & Luce (1957)	One of the conditions for making managerial decisions that require the ability to determine the probability of anticipated effects of decisions.
Markowitz (1959)	Variation of return on investment in the capital market.
Zieleniewski & Szczypiorski (1963)	The possibility of failure, in particular the occurrence of independent events, which cannot be predicted and which cannot be fully prevented, and which may take away the characteristics of effectiveness, profitability and economy by reducing utility or increasing outlays.
Denenberg (1964)	Uncertainty of loss treated as a mainly psychological phenomenon relevant to people's relationships and experiences.
The Commission on Insurance Terminology of the American Risk and Insurance Association (1966)	Uncertainty as to the outcome of an event when two or more possibilities exist. This is measurable uncertainty as to whether the intended purpose of the action will be achieved
Lawrence (1976)	The measure of probability and the weight of undesired consequences
Pasieczny (1981)	A situation where at least one of the elements that make it up is not known, but the probability of its occurrence is known.
Wilson & Crouch (1982)	The product of the probability of occurrence and the severity of the event's consequences.
Holscher (1987)	Risk of failure to achieve intended profit due to incomplete information.
Gardner & Mills (1988)	Deviation from the expected level of income.

Kreim (1988)	Situation where, in conditions of incomplete information, decisions are taken that are not optimal from the point of view of the desired objective.
Sierpińska & Jachna (1993)	Danger of failure to achieve the intended goals or of incurring loss.
Sankey Jr (1992)	Uncertainty related to future events or to results of decisions made.
Gruszka & Zawadzka (1992)	Threat of failure to achieve the desired objective.
Uyemura & Deventer (1993)	Volatility of net cash flow streams generated in a given undertaking, measured by standard deviation.
Marsh (1995)	A situation in which there is a probability of achieving better or worse results than expected, assuming that the distribution of the probability of deviations of these results from their expected value is also known.
Kumamoto & Henley (1996)	A combination of: outcome, probability, significance, cause and effect scenario, and population affected.
Buschgen (1997)	Possibility of deviation of the actual result of the decision taken from the planned results.
Kendall (1998)	Possibility of suffering injury or loss.
Rosa (1998)	A situation or event in which material or human value is at risk and the outcome of which is uncertain.
Johanning (1999)	Uncertainty about the deviation of the results obtained from those planned.
Marshall (2001)	The possibility of events or adverse trends causing future losses or fluctuations in future income levels.
Knechel (2002)	The probability that the results of the process will not meet expectations.
Damodran (2002)	Danger threatening the success of actions taken.
Buła (2003)	Threat of incurring a quantifiable loss.
Doerig (2003)	Uncertainty about achieving future results.
Campbell (2005)	Expected damages resulting from the occurrence of an event.
Stabryła (2006)	The degree of variability or uncertainty in achieving the intended economic result or organizational effect.
Regda (2007)	Uncertainty regarding the occurrence of a loss.
Aven & Renn (2009)	Uncertainty and severity of events and their consequences in relation to values.
ISO Guide 73 (2009), Risk Management – Vocabulary	The degree of uncertainty associated with achieving the organization’s goals.

Urbanowska-Sojkin (2013)	A factor, the assessment and minimization of which, is a key condition for the effectiveness of strategic management.
ISO 31000 (2018) Risk Management-Guidelines	Effect (expressed as a deviation from the expected state) of uncertainty on objectives (which may have different aspects and categories and may be used at different levels of management).

Source: own study.

As can be seen from the review of the risk definitions made in Table 2, the method of defining this concept has changed over the years, from a narrow approach, focusing on the probability of negative events, to a broad approach analyzing the real consequences of risk materialization (Aven, 2012). In addition, in many cases, the concept of risk is treated the in the same way as the concept of uncertainty or a strong interdependence between the two can be observed. Approaches to defining risk can be divided into 6 categories:

- due to the cause, source (Pasiczny, 1981; Holscher, 1987; Kreim, 1988; Rosa, 1998),
- due to the ability/ inability to achieve the planned objectives (The Commission on Insurance Terminology of the American Risk and Insurance Association 1966; Gruszka & Zawadzka, 1992; Sierpińska & Jachna, 1993; Johanning, 1999; Knechel, 2002; Damodran, 2002; Doerig, 2003; Stabryła, 2006; ISO Guide 73, 2009; ISO 31000, 2018),
- due to its role in the decision-making process (Raiffa & Luce, 1957; Sinkey Jr, 1992; Buschgen, 1997; Urbanowska-Sojkin, 2013),
- due to the expected results and outcomes (Zieleniewski & Szczypiorski, 1963; Denenberg, 1964; Lawrence, 1976; Wilson & Crouch, 1982; Kumamoto & Henley, 1996; Gardner & Mills, 1998; Kendall, 1998; Marshall, 2001; Cambell, 2005; Buła, 2003; Regda, 2007; Aven & Renn, 2009),
- due to the possibility of estimating (Markowitz 1959; Uyemura & Deventer, 1993; Marsh, 1995).

In most cases, definitions of risk, like uncertainties, are induction inequality definitions that do not exhaust the catalog of possible ways of their understanding (thus they show the feature of incompleteness). On the contrary, they become the basis for refinement by other authors. Such examples are the

definitions of Knight (1921) and Keynes (1921) clarified e.g. by Snowdon et al. (1998). In the catalog of definitions of risk, one can also find a few examples of classical equality definitions, which clearly lay out the meaning of the concept (limited possibility of various interpretations). These are suggestions of e.g. Lawrence (1976), Wilson & Crouch (1982), where the definition is presented in the form of an unambiguous mathematical formula. Taking into account the function of definitions, the ways of understanding risk, as presented, can be included in the projecting, regulatoring. However, one can also find an example of a reporting definition whose task is to standardize existing ways of understanding a given concept for a given group. The definitions of risk contained in international standards, e.g. ISO Guide 73 (2009) may be an example of this. Here the definition of risk has been unified on the basis of its common understanding in the environment of the organization, the consequence of which is a precise and specific understanding of it in the environment of entities implementing the ISO 31000 standard.

Criteria to distinguish between uncertainty and risk

Despite the strong dependencies existing at the level of defining risk and uncertainty, examples can be identified where they are defined as separate concepts that should not be used synonymously. Definitions of uncertainty and risk formulated by the same authors can be found in the scientific literature (Table 3).

Table 3. Distinction of definitions of uncertainty and risk

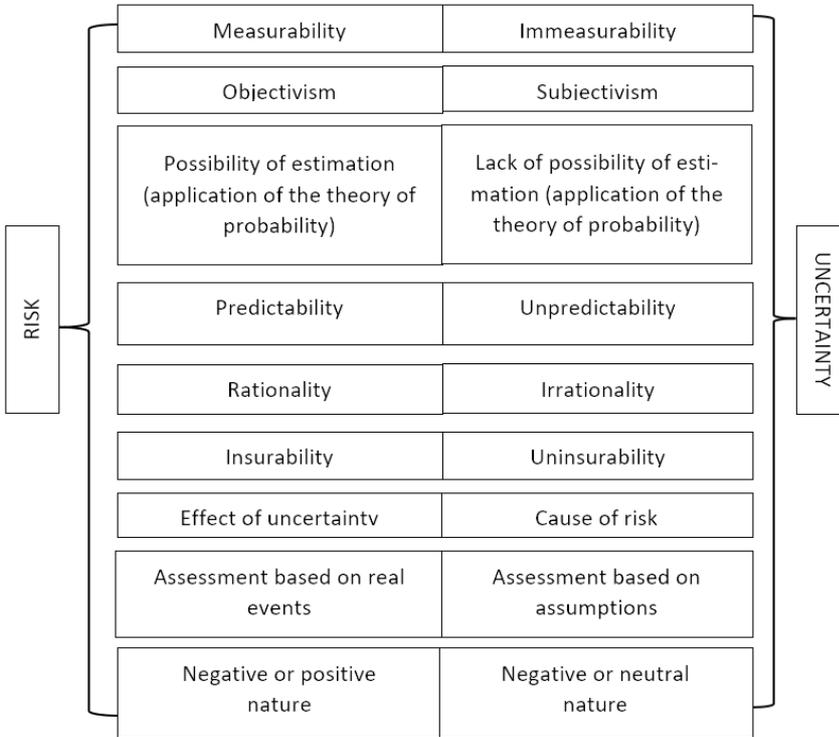
DEFINITION OF RISK	AUTHOR	DEFINITION OF UNCERTAINTY
Objectified uncertainty as to the occurrence of an undesirable event (degree of uncertainty as to the occurrence of a loss, which, however, does not translate into a certain level of probability of its occurrence)	Willett (1901)	Subjective feeling of undesirable significance

Uncertainty expressed in a measurable / tangible manner, related to adverse events (risk of loss)	Knight (1921)	Immeasurable / intangible qualitative events, often with positive consequences (profit uncertainty)
The possibility of occurrence of events subject to predictable probability, which can be presented in the form of a mathematical formula	Keynes (1921)	The possibility of occurrence of events the probability of which cannot be precisely determined
Combination of speculation measured by probability, current situation in the real world	Pfeffer (1956)	Combination of speculation measured by belief, state of mind
A case that can be researched using the theory of probability	Lange (1967)	A case that cannot be researched using the theory of probability
One dimension of uncertainty (subjective uncertainty)	Arrow (1971)	Irrational state of the world
Opportunity or threat to the decision maker under conditions of uncertainty	Jędralska (1992)	The consequence of the complexity of socio-economic phenomena and the resulting difficulties in estimating the likelihood of their occurrence in the future
Frequent, dynamic phenomenon (associated with human activities), of a negative or positive nature (profits or losses)	Jedynek & Szydło (1997)	Source of risk, common, complicated (difficult to measure) phenomenon of negative or neutral nature
The characteristic feature of a situation the probability of which is known, can be quantified (measurable) and is insurable, exhaustive and closed	Snowdon et al. (1998)	A situation, the probability of which cannot be quantified (not measurable), is uninsurable and open to potentially unexpected events
Measurable and objective uncertainty (potential variability of the event, inability to accurately predict the effects of any actions)	Williams et al. (2002)	The immeasurable aspect of subjective risk
Result of uncertainty (uncertainty affecting the well-being of stakeholders)	Bodie & Merton (2003)	Essential but not adequate condition for risk (cause of risk)

Source: own study.

Based on the above considerations and taking into consideration the variety of relationships between uncertainty and risk, it can be concluded that they are disjoint concepts. However, on the basis of numerous common elements (Pablo, 1999) they are largely dependent on each other. The differences can be determined by a number of criteria, which are presented in Figure 1.

Figure 1. Criteria to distinguish between the concepts of risk and uncertainty



Source: own study.

The last differentiation criterion presented in Figure 1 (negative, neutral or positive results of the materialization of risk / uncertainty) is associated with the emergence of the concept of negative and positive risk. The perception of risk from the point of view of a negative concept, equates risk with the risk of suffering loss or damage. On the other hand, the positive concept treats risk as an opportunity and the prospect of obtaining additional benefits (Mittal & Ross Jr., 1998; Zinn, 2017), among others in the form of a chance for qualitative and quantitative development (Teczek, 1996).

The significance of the concepts of uncertainty and risk in modern management

In addition to the need for a purely definitive approach to understanding the role of uncertainty and risk in management sciences, one should also consider the role of perception of potentially risky activities in shaping organizational objectives and attitudes of managers. The perception of risk can significantly affect the process of identifying and achieving the objectives of the internal management process of an organization (Renn, 1998) by:

- enabling the definition of an autonomous, entity-specific way of defining risks and optimizing their management (Sargeant & Jen, 2016),
- adaptation of risk management methods to the information resources at disposal, its credibility, the individual situation of the entity and the scope of anticipated threats (Vasvari, 2015),
- shaping attitudes towards individual categories of risk depending on the severity of threats and motivators of taking risky actions (Ulbert & Csanaky, 2004),
- maintaining a balance between rationality in risk taking and subjectivity (Hámori, 2003),
- individual assessment of sources of risk (their reversibility / irreversibility), assessment of the effects of their materialization and the choice or necessity of compensating them (Kasperson et al., 1988).

Uncertainty and risk are also treated in management as determinants characterizing the conditions for making decisions (Ugur, 2005). Considering the scope and information available to the decision-maker, decision-making conditions can be differentiated into the following: conditions of certainty (the decision-maker has all the information necessary to predict the results of all available alternatives of choice), risk conditions (the decision-maker has information to forecast the effects of available alternatives of choice, but these are uncertain effects with a higher or lower probability of occurrence) or uncertainty conditions (the decision maker most often does not have information enabling him to predict the results of the available options,

and even if they do, it is not possible to estimate the degree of probability of their occurrence. Therefore, the effects of the decision undertaken in these conditions are most often unpredictable) (Tyszka, 2010).

Risk in management is usually analyzed in organizational terms. Thereupon, the risk relates to management at all levels of the hierarchical organization and may affect the functioning of the entity in the short, medium as well as long term. Furthermore, the risk relates to the organization's activities in three dimensions (Bugdol & Jedynak, 2012):

- strategic (risk related to the organization's strategy and organizational objectives),
- tactical (risk related to undertaken ventures, mergers, acquisitions, development of products and services),
- operational (risk related to routine activities).

In turn, uncertainty in relation to management processes is perceived in external and internal categories (depending on the nature of its source) (Johansen et al., 2014; Bombola, 2014). The reasons for identifying such categories of uncertainty are:

- 1) in case of external uncertainty:
 - emergence of new uncertainties resulting from social, cultural, technological, economic and climate changes (Obłój, 2007),
 - the far-reaching process of internationalization of enterprises and economies (Pierścioneck, 2011),
 - changes in the functioning of economies and societies (Raynor, 2008),
 - process changes in management forced by macro-scale events (Montana & Charnov, 2008).
- 2) in case of internal uncertainty:
 - unexpected intra-organizational changes caused by changes in objectives, management assumptions or cultural standards in the organization (Koźmiński & Latusek-Jurczak, 2011),
 - the possibility of disturbing the functional balance of the entity (Simon, 2007),
 - managerial mistakes (Goffee & Jones, 2006).

Conclusion

The deliberations that are the subject of this text have enabled the identification of approaches to the definition of uncertainty and risk on the basis of an interdisciplinary review of definitions of these concepts in the scientific literature. The multitude of definitions of uncertainty and risk that were identified indicates their significance in many areas and disciplines of science. This interdisciplinarity is the core for their understanding both in the theory of management sciences as well as in the practice of managing organizations.

The numerous definitions of uncertainty and risk that were identified have been divided based on one-dimensional logical classification method (Bailey, 1994; Saran, 2014) into categories that satisfying the exhaustive and mutually exclusive criteria thus creating approaches to defining them. On this basis, four approaches to defining uncertainty (due to: causes, possibility/impossibility to assess probability, role in the decision-making process, anticipated consequences) and five approaches to defining risk (due to: cause/source, possibility/impossibility to achieve the assumed objectives, role in the decision making process, expected outcomes/results, possibilities of estimation). Therefore, specific approaches differ from each other in the ways of understanding and the possibilities of interpreting the meaning of the concepts of uncertainty and risk.

On the basis of the various definitions of uncertainty and risk that were identified, a catalog of criteria distinguishing them was also developed, due to the need to prevent blurring of the boundaries between the ways of understanding these two dependent, but separate concepts.

It should be emphasized that the way of understanding uncertainty and risk (determined by definitions, sector specificity, scale of the entity's operations, strategy and even individual characteristics of the managerial staff) depends on the effectiveness of operations and results (Subramaniam et al., 2011), and sometimes even survival in a globalized economic environment and high



competitiveness (Dannreuther & Lekhi, 2000). The undoubted effect of the multitude of ways of understanding these concepts are various strategies and methods to prevent the negative effects of their materialization.

References

- Arrow, K. J. (1971).** *Essays in the Theory of Risk Bearing*. Amsterdam: North-Holland.
- Aven, T. (2012).** The risk concept—historical and recent development trends. *Reliability Engineering & System Safety*, 99, 33–44.
- Aven, T., & Renn, O. (2009).** On risk defined as an event where the outcome is uncertain. *Journal of Risk Research*, 12, 1–11.
- Bailey, K. D. (1994).** *Typologies and Taxonomies – An Introduction to Classification Techniques*. Thousand Oaks, London, New Delhi: Sage Publications.
- Bodie, Z., & Merton, R. C. (2003).** *Finanse [Finance]*. Warsaw: PWE.
- Bombola, P. (2014).** Uogólniona niepewność zewnętrzna i wewnętrzna [Generalized external and internal uncertainty]. *Economics and Management*, 1, 127–141.
- Bugdol, M., & Jedynek, P. (2012).** *Współczesne systemy zarządzania. Jakość, bezpieczeństwo, ryzyko [Contemporary management systems. Quality, safety, risk]*. Gliwice: Helion.
- Buła, P. (2003).** *Zarządzanie ryzykiem w jednostkach gospodarczych. Aspekt uniwersalistyczny [Risk management in business entities. The universalistic aspect]*. Kraków: Akademia Ekonomiczna w Krakowie [University of Economics in Kraków].
- Buschgen, H. (1997).** *Przedsiębiorstwo bankowe [Banking enterprise]*. 2, Warsaw: Poltext.
- Campbell, S. (2005).** Determining overall risk. *Journal of Risk Research*, 8, 569–581.

Carbonara, G., & Caiazza, R. (2010). How to turn crisis into opportunity: perception and reaction to high level of uncertainty in banking industry. *Foresight*, 12(4), 37–46.

Carleton, R. N., Gosselin, P., & Asmundson, G. J. G. (2010). The intolerance of uncertainty index: Replication and extension with an English sample. *Psychological Assessment*, 22(2), 396–406.

Czakon, W., & Komańda, M. (2011). *Interdyscyplinarność w naukach o zarządzaniu [Interdisciplinarity in management sciences]*. Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach [Publishing house of the University of Economics in Katowice].

Damodran, A. (2002). *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*. New York: Wiley Finance.

Dannreuther, C., & Lekhi, R. (2000). Globalization and the political economy of risk. *Review of International Political Economy*, 7(4), 574–594.

Denenberg, H. S. (1964). *Risk and Insurance*. Englewood Cliffs: Prentice Hall.

Doerig, H. (2003). *Operational Risk in Financial Services*. New York: Credit Suisse Group.

Dugas, M. J., Gosselin, P., & Ladouceur, R. (2001). Intolerance of uncertainty and worry: Investigating specificity in a nonclinical sample. *Cognitive Therapy and Research*, 25(5), 551–558.

Elahi, E. (2013). Risk management: the next source of competitive advantage. *Emerald*, 15(2), 117–131.

Freeston, M. H., Rhéaume, J., Letarte, H., Dugas, M. J., & Ladouceur, R. (1994). Why do people worry?. *Personality and Individual Differences*, 17(6), 791–802.

Gardner, M., & Mills, D. (1988). *Managing Financial Institutions*. Chicago: The Dryden Press.

Goffee, R., & Jones, G. (2006). *Why Should Anyone Be Led by You? What It Takes To Be An Authentic Leader?*. Boston: Harvard Business Review Press.

Gruszka, B., & Zawadzka, Z. (1992). *Ryzyko w działalności bankowej [Risk in banking activities]*. Warsaw: Oficyna Wydawnicza Szkoły Głównej Handlowej. [Publishing House of the Warsaw School of Economics].

Hámori, B. (2003). Experiments and prospects – in connection with Daniel Kahneman's Nobel Prize. *Economic Review*, L, 779–799.

Holscher, R. (1987). *Risikokosten-Management in Kreditinstituten [Risk cost management in banks]*. Frankfurt: F. Knapp.

Holton, G. (2004). Defining Risk. *Financial Analysts Journal*, 60(6), 19–25.

ISO Guide 73 (2009). Risk Management – Vocabulary.

ISO 31000 (2018). Risk Management – Guidelines.

Jedynek, P. (2011). *Znormalizowane systemy zarządzania. Modele, funkcje, wymagania [Standardized management systems. Models, functions, requirements]*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego [Publishing House of the Jagiellonian University].

Jedynek, P. (2017). *Znormalizowane systemy zarządzania a ryzyko działalności organizacji [Standardized management systems and the risk of an organization's activities]*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego [Publishing House of the Jagiellonian University].

Jedynak, P., & Szydło, S. (1997). *Zarządzanie ryzykiem [Risk management]*. Wrocław–Warsaw–Kraków: Zakład Narodowy im. Ossolińskich – Wydawnictwo [The Ossolineum – Publishing House].

Jędralska, K. (1992). *Zachowanie przedsiębiorstw w sytuacji niepewności i ryzyka [Behavior of enterprises in situations of uncertainty and risk]*. Katowice: Wydawnictwo Akademii Ekonomicznej [Publishing house of the University of Economics in Katowice].

Johanning, L. (1999). *Value-at-Risk zur Marktrisikosteuerung und Eigenkapitallokation*. Reihe: Risikomanagement und Finanzcontrolling [Value-at-Risk for market risk management and equity allocation. Series: Risk Management and Financial Control], 1, Uhlenbruch: Bad Soben.

Johansen, A., Halvorsen, S. B., Haddadic, A., & Langlo, J. A. (2014). Uncertainty Management – A Methodological Framework Beyond The Six W's. *Procedia-Social and Behavioral Sciences*, 119, 566–575.

Kaczmarek, T. T. (2006). *Ryzyko i zarządzanie ryzykiem. Ujęcie interdyscyplinarne [Risk and risk management. An interdisciplinary approach]*. Warsaw: Difin.

Kasperson, R. E., Renn, O., Slovic, P., Brown, H. S., Emel, J., Goble, R., Kasperson, J. X., & Ratick, S. (1988). The social amplification of risk: A conceptual framework. *Risk Analysis*, 8(2), 177-187.

Kendall, R. (1998). *Zarządzanie ryzykiem dla menedżerów [Risk Management for Executives]*. Warsaw: Liber.

Keynes, J. M. (1921). *A Treatise on Probability*. London: Macmillan and Co.

Knight, F. H. (1921). *Risk, Uncertainty and Profit*. Boston: Houghton Mifflin.

Koźmiński, A. K., & Latusek-Jurczak, D. (2011). *Rozwój teorii organizacji [The development of the theory of organization]*. Warsaw: Wolters Kluwer.

Knechel, W. R. (2002). The role of the independent accountant in effective risk management. *Review of Business and Economic*, 27(1), 65–86.

Kreim, E. (1988). *Zukunftsorientierte Kreditentscheidung [Future-oriented lending decisions]*. Wiesbaden: Gabler.

Krickx, G. A. (2000). The relationship between uncertainty and vertical integration. *The International Journal of Organizational Analysis*, 8(3), 309–329.

Kumamoto, H., & Henley, E. (1996). *Probabilistic Risk Assessment and Management for Engineers and Scientists*. New York: Wiley-IEEE Press.

Lange, O. (1967). *Optymalne decyzje. Zasady programowania [Optimal decisions. Programming principles]*. Warsaw: PWN.

Lawrence, W. W. (1976). *Of Acceptable Risk*. Los Altos: William Kaufman Inc.

Markowitz, H. (1959). *Portfolio Selection. Efficient Diversification of Investments*. New Haven: Yale University Press.

Marsh, W. H. (1995). *Basic Financial Management*. OH Cincinnati: South-Western College Publishing.

Marshall, C. (2001). *Measuring and Managing Operational Risk in Financial Institutions*. Singapore: John Wiley & Sons.

Mittal, V., & Ross, Jr W. T. (1998). The Impact of Positive and Negative Affect and Issue Framing on Issue Interpretation and Risk Taking. *Organizational Behavior and Human Decision Processes*, 76(3), 298–324.

Montana, P. J., & Charnov, B. H. (2008). *Management*. New York: Barron's Business Review.

Obłój, K. (2007). *O zarządzaniu refleksyjnie [Reflective management]*. Warsaw: MB Biznes.

Pablo, A. L. (1999). Management risk interpretations: Does industry make a difference? *Journal of Managerial Psychology*, 14(2), 92–107.

Pasieczny, L. (1981). *Encyklopedia organizacji i zarządzania [Encyclopedia of organization and management]*. Warsaw: PWE.

Pfeffer, I. (1956). *Insurance and economic theory*. Pennsylvania: Huebner Foundation for Insurance Education, University of Pennsylvania.

Pierścionek, Z. (2011). *Zarządzanie strategiczne w przedsiębiorstwie [Strategic management in an enterprise]*. Warsaw: Wydawnictwo Naukowe PWN [Polish Scientific Publishers PWN].

Raiffa, H., & Luce, E. S. (1957). *Games and Decisions*. New York: John Wiley and Sons.

Raynor, M. E. (2008). *Paradoks strategii [The Strategy Paradox]*. Warsaw: Studio EMKA.

Regda, G. E. (2007). *Principles of risk management and insurance*. New York: Prentice Hall.

Renn, O. (1998). The role of risk perception for risk management. *Reliability Engineering & System Safety*, 59(1), 49–62.

Rosa, E. (1998). Meta theoretical foundations for post-normal risk. *Journal of Risk Research*, 1, 15–44.

Saran, J. (2014). Classification and typologies as tools for pedagogical empirical research improvement. *Studia i Prace Pedagogiczne [Pedagogical Studies and Works]*, 1, 13–30.

Sargeant, A., & Jen, S. (2016). Risk perception and management in development philanthropy. *Voluntary Sector Review*, 7(3), 251–267.

Schumpeter, J. A. (1934). *Theory of Economic Development: An inquiry into profits, capital, credit, interest and the business cycles*. Cambridge, MA: Harvard University Press.

Sierpińska, M., & Jachna, T. (1993). *Ocena przedsiębiorstwa według standardów światowych [Assessing enterprises by global standards]*. Warsaw: PWN.

Simon, H. A. (2007). *Podjęmowanie decyzji i zarządzanie ludźmi w biznesie i administracji [Administrative Behavior]*. Gliwice: Helion.

Sinkey, J. F. Jr. (1992). *Commercial Bank Financial Management in the Financial Services Industry*. New York: Macmillan Publishing Company.

Smithson, M. (1999). *Conflict aversion: Preference for ambiguity vs conflict in sources and evidence*. *Organizational Behavior and Human Decision Processes*, 79(3), 179–198.

Snowdon, B., Vane, H., & Wynarczyk, P. (1998). *Współczesne nurty teorii makroekonomii [A modern guide to macroeconomics]*. Warsaw: Wydawnictwo Naukowe PWN [Polish Scientific Publishers PWN].

Spekman, R.E., & Davis, E. W. (2004). Risky business: Expanding the discussion on risk and extended enterprise. *International Journal of Physical Distribution & Logistics Management*, 34(5), 414–433.

Spiegelhalter, D. (2017). Risk and Uncertainty Communication. *Annual Review of Statistics and Its Application*, 4, 31–60.

Stabryła, A. (2006). *Zarządzanie projektami ekonomicznymi i organizacyjnymi [Economic and organizational project management]*. Warsaw: PWN.

Subramaniam, N., Collier, P., Phang, M., & Burke, G. (2011). The effects of perceived business uncertainty, external consultants and risk management on organisational outcomes. *Journal of Accounting & Organizational Change*, 7(2), 132–157.

Śliwiński, A. (2002). *Ryzyko ubezpieczeniowe. Taryfy, budowa i optymalizacja [Insurance risk. Tariffs, construction and optimization]*. Warsaw: Poltext.

Tchankova, L. (2002). Risk identification – basic stage in risk management. *Environmental Management and Health*, 13(3), 290–297.

Teczke, J. (1996). *Zarządzanie przedsięwzięciami zwiększonego ryzyka [High risk venture management]*. Kraków: Akademia Ekonomiczna w Krakowie [University of Economics in Kraków].

Tyszka, T. (2010). *Decyzje. Perspektywa psychologiczna i ekonomiczna [Decisions. Psychological and economic perspective]*. Warsaw: Wydawnictwo Naukowe SCHOLAR [Publishing house SCHOLAR].

Uyemura, D. G., & van Deventer, D. R. (1993). *Financial Risk in Banking Management: The Theory and Application of Asset and Liability Management*. Irwin: Burr Ridge.

Ugur, M. (2005). Risk, uncertainty and probabilistic decision making in an increasingly volatile world. *Handbook of Business Strategy*, 6(1), 19–24.

Ulbert, J., & Csanaky, A. (2004). Risk Perception and Risk Behavior. *Economic Review*, LI, 235–258.

Urbanowska-Sojkin, E. (2013). *Ryzyko w wyborach strategicznych w przedsiębiorstwach* [Risk in making strategic choices in enterprises]. Warsaw: PWE.

Van Baalen, P., & Karsten, L. (2012). The evolution of management as an interdisciplinary field. *Journal of Management History*, 18(2), 219–237.

Van der Heijden, K. (2000). *Planowanie scenariuszowe w zarządzaniu strategicznym* [Scenario planning in strategic management]. Kraków: Oficyna Ekonomiczna.

Vasvari, T. (2015). Risk, Risk Perception, Risk Management – a Review of the Literature. *Public Finance Quarterly*, 1, 29–48.

Von Hayek, F. A. (1945). The Use of Knowledge in Society. *American Economic Review*, 35(4), 519–530.

Willett, A. W. (1901). The Economic Theory of Risk and Insurance. *Studies in History, Economics and Public Law*, 14(2). New York: The Columbia University Press.

Williams, Jr. C. A., Smith, M. L., & Young, P. C. (2002). *Zarządzanie ryzykiem a ubezpieczenia*. P. Wdowiński (tłum.) [Risk management and insurance. Translated by P. Wdowiński], Warsaw: Wydawnictwo Naukowe PWN [Polish Scientific Publishers PWN].

Wilson, R., & Crouch, E. A. C. (1982). *Risk – Benefit analysis*. Cambridge, MA: Ballinger.

Zieleniewski, J., & Szczypiorski, S. (1963). *Zasady organizacji i techniki handlu zagranicznego [Principles of organization and techniques of foreign trade]*. Warsaw: PWE.

Zinn, J. (2017). The meaning of risk-taking – key concepts and dimensions. *Journal of Risk Research*, 20, 1–15.

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Social Innovation Living Labs as Platforms to Co-design Social Innovations

ABSTRACT

Objective: The aim of the research is to develop a new original concept of social innovation lab based on the concept of living labs seen from the perspective of design-led approach to management and innovation.

Methodology: The research was carried out with use of non-empirical (theoretical) framework. The existing knowledge was the source of reasoning leading to solve the scientific problem. It was rather implicit two-stage process of reasoning. The first stage was to reframe the conceptual framework, which was based on the analysis of the living lab concept seen from the perspective of the unique nature of social innovation and its limits. In the second stage, prototyping of a new concept of social innovation living lab was built on the conceptual framework developed at the first stage.

Findings: The original theoretical model of social innovation living lab and its operationalization have been developed. It is based on the concept of living labs regarded as long term environments for open innovation that are being developed with real users in real contexts, and framed from the perspective of design-led approach to management and innovation.

Value Added: The literature review has revealed the significant lack of research studies on the processes of generating social innovation. The proposed original model of social innovation living lab helps fill this gap. Social innovations as successful exploitation of new ideas to meet social problems and needs are essential in social and economic life. However, the conventional approaches to innovation are not sufficient to develop social innovation due to its nature. The proposed approach describes the operation of the social innovation living lab as an effective way to develop such innovations and at the same time the methodology useful in the further research.

Recommendations: The proposed original approach to the processes of designing and accomplishing social innovation can help to develop such innovations in a more intentional and goal-oriented way, which is difficult using traditional laboratories due to the nature of such innovations.

Key words: Social innovation, living labs, co-design, design-led approach

JEL codes: M10, O35

Introduction

The research is aimed at building a new concept and an experimental model of a social innovation living lab that can facilitate social innovation. The literature review has proved the significant lack of research studies on processes of creating and developing social innovation, particularly the lack of research on the potential use of research laboratories in which such innovations could be designed as it is done in technological innovation laboratories.

The analysis of current knowledge on social innovation revealed that social change results not as much from an innovative solution as from its impact on the change of social practices and relations (Howaldt & Schwarz, 2010; Murray et al., 2010; Neumeier, 2012). Although social innovation can be triggered by innovative products, services or processes that enable novel solutions to social problems (Olejniczuk-Merta, 2013), they are

mostly related to changes of social practices (Howaldt & Schwarz, 2010; Caulier-Grice et al., 2012).

Numerous researchers underline more the social innovation's consequences and its impact on the future societal development than its novelty (Caulier-Grice et al., 2012; Neumeier, 2012). Consequently, social innovations cannot be successfully generated in technical labs isolated from the real world. It is still little known about the mechanisms behind the emergence of social innovation and how to manage their design and accomplishment. As both a component and a cause of social change (Olejniczuk-Merta, 2013; Howaldt & Schwarz, 2010), social innovations need a completely different approach.

Consequently, the aim of the research was to develop a new original concept of social innovation lab based on the concept of living labs within a broader conceptual framework based on the design-led approach to innovation. The concept of living labs regarded as long term environments for open innovation that enable experimentation with real users in real contexts (Hillgren, 2013; Leminen et al., 2012; Følstad, 2008) was taken as the conceptual framework for the research. While using digital solutions, living labs can bring research closer to those places where such innovations arise and then rearrange how things are accomplished.

Materials & Methods

While reviewing the worldwide literature, the significant lack of research on the design and accomplishment of social innovation was found. Consequently, research efforts were aimed at building the concept of a social innovation lab. It is based on the concept of living labs framed from the perspective of design-led approach to innovations.

The research was carried out with use of non-empirical (theoretical) framework. This means that the existing knowledge was the source of reasoning leading to solve the scientific problem. In such a research, new knowledge arises in a complex and mostly implicit reasoning process involving: analysis

and abstraction of the current knowledge, challenging the assumptions in existing theories (Alvesson & Sandberg, 2011) and reframing the context to create a new synthesis based on in-depth insight that is used to interpret and explain (theoretically) observed facts.

The reasoning process is rather implicit and difficult to explicitly present in the form of a systematic methodological approach (Dubois & Gadde, 2002). It was two-stage process of reasoning. The first stage of the reasoning process was to reframe the conceptual framework. The insight resulted from the analysis of the living lab concept from the perspective of the unique nature of social innovation and its limits. The analysis was carried out in a broader context of the design-led approach to innovation and its capabilities.

The second stage was to build the original approach to social innovation lab and its operation. Prototyping of a new model of this approach was based on the conceptual framework developed in the first stage, and the existing knowledge on social innovation and living labs. The next stages of the research in the future was assumed, which provide feedback from the implementation of this approach; to reframe the conceptual framework in the next iteration of the reasoning process and to improve the prototyped approach. Such a scheme of research results from the assumption that in management sciences research are not only to verify the scientific beliefs, but to make continuous improvement of created solutions and the quality of knowledge they are based on.

Current state of knowledge

The concept of social innovation

The subject and fundamental context of the undertaken research are social innovations. In the context of the identified research problem, processes of designing and creating social innovations are particularly important. Consequently, the presentation of current state of knowledge includes a concept

of social innovations and the processes of their creation and development. Other theoretical components which were used to build a conceptual framework of the social innovation living labs were presented in the next section (as a source of premises for the inference).

Social innovations are so important for both management sciences and social life because they can radically change the world we live in for the better (Mumford, 2002; Pol & Ville, 2009; Howaldt & Schwarz, 2010; Neumeier, 2012; Olejniczuk-Merta, 2013). They can improve our lives by better use of novel technologies, methods and tools, introducing new patterns of practices, interactions and social relations, and even new structures, organizational forms and social institutions (Baran, 2018). What is more, most of what we now take for granted in social life began as social innovation (Mulgan, 2006). Although, the majority of research and policies have been focused on technological innovation, we need social innovation to effectively utilize that knowledge for human empowerment and development (Caulier-Grice et al., 2012). As Caulier-Grice et al. rightly note, „social innovation has also emerged as a response to growing social, environmental and demographic challenges – often called ‘wicked’ problems because they are complex, multi-faceted, involve a range of stakeholders and are, by their nature, impossible to solve (Caulier-Grice et al., 2012, p. 5).

It is not easy to word a clear definition of social innovation. There are several reasons for this. First, as Pol & Ville write, „the term ‘social innovation’ has entered the discourse of social scientists with particular speed, but there is no consensus regarding its relevance or specific meaning in the social sciences and humanities” (Pol & Ville, 2006, p. 878).

Secondly, despite many cases of successful social innovations in numerous fields (from health care, hospices and online self-help health groups, through microcredits, consumer cooperatives, fair trade movement, to zero-carbon housing development and community wind farms), the processes of social innovation remain understudied and are described at the level of anecdotes and vague generalizations (Mulgan, 2006, p. 146). While reviewing the scientific

literature it was found the evident shortage of systematic theoretical and empirical research in the field of social innovation (also in the area of solid methodological background of such research).

Third, despite the growing scientific interest in social innovations, which is pointed out by a number of authors (Mulgan, 2006; Pol & Ville, 2009; Cajaiba-Santana, 2014), this term still seems to be treated as a buzz word. The vastness and ambiguity of this term (Mulgan, 2006; Olejniczuk-Merta, 2013; Cajaiba-Santana, 2014) means that there is still not even a relatively common view of what this type of innovation exactly is (Pol & Ville 2009; Caulier-Grice et al., 2012).

Recently, scientists have offered a number of definitions of social innovation, which underline various aspects of the term and present varying degrees of specificity (Mumford, 2002; Mulgan, 2006; Bergman et al., 2010; Olejniczuk-Merta, 2013; Manzini, 2014; Kwaśnicki, 2015). First, social innovations are still innovations. Consequently, there are not social innovations without an aspect of novelty. One of the most concise definition of innovation was formulated by Steward et al. as „successful exploitation of new ideas” (Steward et al., 2009, p. 7). To paraphrase Schumpeter, social innovations (like any other innovations) cannot be just minor changes that each unit can carry out, adapting to the changes taking place in its environment and not going too far from the beaten path (Schumpeter, 1960, pp. 128-129). The aspect of novelty, which distinguishes social innovation from other changes, is noted by the majority of authors dealing with social innovation (Mumford, 2002; Mulgan, 2006; Olejniczuk-Merta, 2013; Manzini, 2014; Cajaiba-Santana, 2014).

However, some authors agree that social innovations may be based on the idea or solution not necessarily new et al., but rather, perceived as such by the relevant unit of adoption (Caulier-Grice et al., 2012). As Caulier-Grice et al. note, „this means that a social innovation does not necessarily need to be new per se, but rather, new to the territory, sector or field of action” (Caulier-Grice et al., 2012, p. 9). Other researchers underline more the impact than the novelty of social innovation (Caulier-Grice et al., 2012). According to

Neumeier, in Gillwald's definition, social innovations are described as „societal achievements that, compared with already established solutions, provide improved solutions that are to a lesser extent defined by their absolute novelty more than by their consequences” (Neumeier, 2012, p. 51). By those consequences Gillwald understands mainly how social innovation affects society and future societal development (Neumeier, 2012).

Secondly, most researchers and authors of publications on social innovations agree that they arise as a result of social motivation that is caused by the desire to meet social needs (Mumford, 2002; Mulgan, 2006; Pol & Ville, 2009; Caulier-Grice et al., 2012; Olejniczuk-Merta, 2013; Manzini, 2014; Kwaśnicki, 2015). According to OECD, „the key distinction is that social innovation deals with improving the welfare of individuals and communities through employment, consumption and/or participation, its expressed purpose being to provide solutions for individual and community problems.” (OECD 2011, p. 21). According to Olejniczuk-Merta, the effects of all social innovations contribute to improving the quality of life, regardless of the scale of occurrence of these effects and whether they appear directly or indirectly, intentionally or unintentionally (Olejniczuk-Merta, 2013, p. 29).

Third, social innovations are mainly regarded as a change of social practices (Howaldt & Schwarz, 2010; Murray et al., 2010). As Howaldt & Schwarz note, „with social innovations, the new does not manifest itself in the medium of technological artefacts, but at the level of social practices” (Howaldt & Schwarz, 2010, p. 26). Social innovation like any other innovation is not merely a new idea or invention but must be put into practice to be innovation (Schumpeter, 1960; Mulgan et al., 2007; Bergman et al., 2010; Kwaśnicki, 2015). Mulgan et al. describe (social) innovation as new ideas that work (Mulgan et al., 2007, p. 8).

Olejniczuk-Merta recall the definition developed by National Centre for Research and Development (NCBiR, 2012). According to this definition, social innovations are solutions that simultaneously respond to social demand, as well as cause lasting change in given social groups. These solutions can be associated with innovative products, services or processes that enable dif-

ferent solutions to typical social problems (Olejniczuk-Merta, 2013, p. 30). This means that social innovation is something more than an innovative solution to a social problem. This social novelty must ultimately relate to change at the level of practices and social relationships. According to Olejniczuk-Merta and Howaldt & Schwarz, social innovation is both a component and an important cause of social change (Olejniczuk-Merta, 2013, p. 27; Howaldt & Schwarz, 2010, p. 28). Social innovations as intentional and goal-oriented actions can establish new social practices also in a partly unintentional way (Howaldt & Schwarz, 2010, p. 28).

Based on the above findings, it is apparent that social innovation is clearly different from other types of innovation. Although scientific interest in social innovation is growing, we still know very little about the processes of their creation and development (Mulgan, 2006, Pol, Ville 2009; Howaldt, Schwarz, 2010; Caulier-Grice et al., 2012; Neumeier, 2012). According to Mulgan, „today most discussion of social innovation tends to adopt one of two main lenses for understanding how change happens” (Mulgan, 2006, p. 148). In the first, change is driven by a very small number of heroic, energetic, and impatient individuals. In the second lens, individuals are the carriers of ideas rather than originators, and those ideas initiate a bigger social movement (Mulgan, 2006, pp. 148–149).

In the both outlines, the crucial factor of change is a role of novel ideas and visions of how things could be better. According to Mulgan, „every successful social innovator or movement has succeeded because it has planted the seeds of an idea into many minds. In the long run, ideas are more powerful than individuals or institutions” (Mulgan, 2006, p. 149). Both strategies also confirm the importance of „the cultural basis for social innovation - the combination of exclusion, resentment, passion, and commitment that make social change possible” (Mulgan, 2006, p. 149).

However, research indicates that a large part of the changes related to social innovation are unintentional (Howaldt, Schwarz, 2010; Olejniczuk-Merta, 2013). Consequently, social innovation as both a component and an impor-

tant cause of social change cannot be created in laboratories along the lines of those known in the field of technological innovation. The research of social innovation should be carried out where such innovations arise and then rearrange how things are accomplished. This is a starting point for the research of creating social innovations.

Living labs

While reviewing the literature on living labs it was found that this concept is still in the initial stage of development (Eriksson et al., 2005; Følstad, 2008; Klimowicz, 2015; Keyson et al., 2017). The concept of living labs originates from Professor William Mitchell at MIT. It was initially used to observe the living patterns of users in smart homes, where real people was observed in their usage of emerging technologies in the setting of a real home (Eriksson et al., 2005). As Bergvall-Kåreborn et al. note, „today, there is an ongoing trend in Europe to tailor a living lab concept in wider use to enhance innovation, inclusion, usefulness and usability of ICT and its applications in the society” (Bergvall-Kåreborn et al., 2009).

Building on numerous studies, living labs can be regarded as long term environments for open innovation that enable experimentation with real users in real contexts (Hillgren, 2013; Veeckman et al., 2013; Leminen et al., 2012; Følstad, 2008). Veeckman et al. describe living labs as an emerging open innovation approach that involves multiple stakeholders (including users) to co-create value that eventually leads to innovation. This is possible as living labs offer a new way of structuring research through validation and testing in real-life contexts (Veeckman et al., 2013, p. 6). According to Leminen et al., living labs provide networks that support creating innovations that better meet user needs (Leminen et al., 2012). As Romero Herrera note, living labs offer a socio-technical infrastructure to support user-centric innovation processes. They offer collaborative platforms for professionals from different disciplines to work together with future users and other stakeholders

to develop solutions that are rooted in the daily life practices. Users play an active role in arising and applying contextualized practice-based knowledge in the innovation processes (Keyson et al., 2017, p. 9).

Consequently, living labs can reconstruct the interaction space. Leminen et al. cite the interview with one of living lab participants: „by living labs, we mean reconstructing the interaction space. It can be any space, anywhere, suitable for collaborative design, the application of knowledge for empowerment, uplift, and development of people and communities for the use of innovation” (Leminen et al., 2012, p. 6). Reconstruct in the context of social innovation can also mean to reframe and rebuild what has been lost in search of economically measured development. Rebuild the interaction space in that sense would mean developing conditions for cooperation, human empowerment by co-creating and sharing knowledge, development of people and communities for the creativity and use of innovation. This means that living labs can be a means of management reframing and reconstruction (Klimowicz, 2015; Leminen, 2015), which is very promising as social innovation’s purpose is considered.

Klimowicz presents the main features of living labs (Klimowicz, 2015, p. 188):

- They are innovation platforms that connect and engage all stakeholders (end users, scientists, industry people, policy makers) at an early stage in the innovation process.
- They are designed to experiment and gain the participation of users in real life, thus becoming a value for both users and society.
- They create opportunities for cooperation.
- Users play a significant role by identifying needs and formulating demand, bringing innovative ideas to solve current and real world problems in a unique and integrated way.

As Leminen et al. write, „successful innovation development is nowadays dependent on understanding both existing and emerging user needs, through which business opportunities are developed” (Leminen et al., 2012, p. 6). According to Romero Herrera, „innovative sustainable solutions in living

and working setups need to embrace users' appropriation of technologies in their daily life practices" (Keyson et al., 2017, p. 9). This is in line with the conclusions from the analysis of social innovations presented in the previous section. As long as social innovations are both a component and a cause of social change, their research should be carried out in users' daily life practices.

While an increasing number of managers are interested in living labs as a way to transform their conventional R&D into open-innovation model (Leminen et al., 2012, p. 6), the living labs and open innovation concepts seem to be the only alternative for intentional and goal-oriented development of social innovation. As long as social innovations may trigger unintentional social changes, they have to be researched, designed and accomplished in the context of users' daily life practices. Thus, living labs can be regarded as a user-centric innovation milieu built on every-day practice and research (Bergvall-Kåreborn et al., 2009). While that concept facilitates user influence in open and distributed innovation processes engaging all relevant partners in real-life contexts (Bergvall-Kåreborn et al., 2009), it could offer significant support in researching and designing social innovation.

Results

The research undertaken is ultimately aimed at building the new concept and an experimental model of a social innovation living lab. This presents the initial phase of the undertaken considerations, which leads to the outline a prototype approach to the operation of such laboratory within a broader conceptual framework, which is depicted in this section.

Analysis of current knowledge on social innovations (which was synthetically presented in the previous section) allows to draw some conclusions about the nature of these innovations. In the case of social innovations, not only the novelty of the implemented solution is important, but also its long-term impact on society and its development (Caulier-Grice et al., 2012; Neumeier, 2012). That social change does not result directly from the novel

solution itself, but from the change associate with the successful implementation of this solution at the level of social practices and interactions, and thus established patterns of social behavior (e.g. change of established habits, patterns of action, social relations). This is in line with the findings of numerous researchers who claim that social innovations are related to a change of social practices (Howaldt & Schwarz, 2010; Murray et al., 2010).

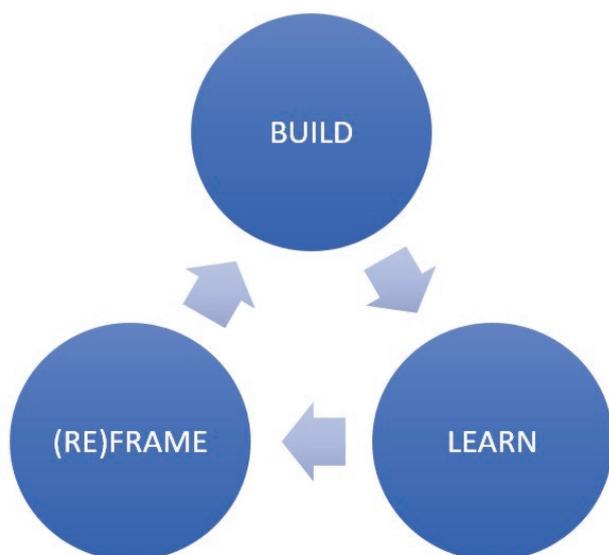
In this sense, social innovation can also be caused by technological innovation. For example, the option of paying by phone (as a technological novelty), which begins to gradually change the way payments are made and the relationships between social actors involved in this system. Although social innovation is often related to innovative products, services or processes that enable fresh solutions to social problems (Olejniczuk-Merta, 2013, p. 30), they should deliver something more than the intentional and goal-oriented solution to a single problem. Consequently, little is still known about the mechanisms behind the emergence of social innovation and how to manage their design and implementation. As social innovation is both a component and a cause of social change (Olejniczuk-Merta, 2013, p. 27; Howaldt & Schwarz, 2010, p. 28), they cannot be created in technical labs isolated from the real world and real users.

The concept of social innovation living labs suggests the foundations of a completely different approach based on the design-led approach (Simon, 1969/1996; Braha & Maimon, 1997; Aken, 2004; Bucolo & Matthews, 2010). Such an approach uses design qualities as a way of thinking and acting, but also methodology, culture and the working environment. According to Braha & Maimon, design „as problem solving is a natural and the most ubiquitous of human activities. Design begins with the acknowledgment of needs and dissatisfaction with the current state of affairs, and realization that some action must take place in order to solve the problem” (Braha & Maimon, 1997, p. 146). Design as an approach to social problem solving is particularly relevant because its tools and methodologies are grounded in the authentic understanding of users’ experiences. It supports an organization in creating

a vision of likely future scenarios and exploring new emerging possibilities (Bucolo & Matthews, 2010, p. 176).

This theoretical prototype approach to social innovation living laboratories is modeled in the form of the sequence of three stage of activities leading to co-create social innovation and relationships between them (Fig. 1).

Figure 1. The theoretical model of social innovation living lab



Source: own elaboration.

The „(re)frame” stage is crucial both for the emergence of new knowledge and the creation of novel solutions. Design-led approach brings a different way of framing situations and possible problem solutions. Thus, it can trigger a cultural transformation of the way organizations undertake their businesses (Bucolo et al., 2012, p. 18). Consequently, the core ability of design thinking is to capture new knowledge to enable the possible futures (Bucolo & Matthews 2010, p. 180). To achieve this, the new knowledge must be created in a real world and with the involvement of real users, which is enabled by the next two stages: building and learning.

The details on the three stages of the proposed approach are presented in Table 1. It contains the tools and activities as components of those stages, which enable the operation of the social innovation living labs.

Table 1. Components of the presented approach to the operation of social innovation living labs

Reframe	Build	Learn
<p>Analysis and abstraction of current knowledge (rather implicit process, partly intuitive, based on intellectual experiments, and trial and error thinking method)</p>	<p>Prototypes (the early stage device, circuit or program designed and built to demonstrate the ability of target devices)</p>	<p>Users' and experts' feedback (digital platforms facilitate collecting users' and experts' feedback opinions on their experiences with prototype solutions)</p>
<p>Problemization and challenging the assumptions in existing theories (further in: Alvesson & Sandberg, 2011)</p>	<p>Representations of prototype solutions (e.g. models, schemes, diagrams, drafts, sketches, descriptions, storytelling)</p>	<p>Observation (digital platforms provide mechanisms to observe real users in real contexts)</p>
<p>Systematic combining (non-linear, non-positivist approach to theorizing based on case studies analysis; further in: Dubois & Gadde, 2002, 2014)</p>	<p>Illustrations (e.g. photo, audio, video, also those that present future users in interaction with prototype solutions)</p>	<p>Empathizing (based on in-depth research on users' expectations and experiences)</p>
<p>Reframing the conceptual context (to create a new synthesis based on in-depth insight that is used to interpret and explain observed facts)</p>	<p>Opportunities to experiment (that enable users to interact with certain prototype's features)</p>	<p>Co-creating and co-designing (user and other stakeholders involvement in co-creating prototype solutions)</p>
	<p>Analogies and metaphors (that depict the features of prototype solutions that are difficult to present directly)</p>	<p>Experiments (that enable learning based on interaction with prototype solutions)</p>
		<p>Learning from mistakes (digital platforms provide mechanisms to test prototype solutions, detect fault and learn from mistakes)</p>

Source: own elaboration.

The logic of the presented approach is based on the following sequence of thinking and making: (1) reframe to build, (2) build to learn, and (3) learn to reframe. Thirst, we need a different way of framing situations and future possibilities to build more effective solutions to social problems. At the cognitive level, it relates to what Alvesson and Sandberg's conclusion that making a theory interesting and influential requires challenging our assumptions in some significant way (Alvesson & Sandberg, 2011). Especially that the reframed conceptual framework is then the basis for building a prototype of a specific solution for real users in a real world. It is particularly demanding stage because the reasoning process is implicit and difficult to explicitly present in the form of a systematic methodological approach (Dubois & Gadde, 2002; 2014).

In the second stage, we build a prototype of a future solution or some of its features with use of the conceptual framework developed in the first stage, as well as the existing knowledge and experiences (Tab. 1, column 2). Two functions of this process are here intertwined: (1) pragmatic that serves to make continuous improvement of the created solution, and (2) cognitive that serves to learn to improve the quality of knowledge.

Consequently, the learning stage is based on interaction with the users of built prototypes and other stakeholder to get feedback and gain valuable insights, which result in the improvement of designed solutions, and indirectly in the development of knowledge. As a result, the proposed methodology combines the pragmatic and cognitive dimensions, intertwining the empirical world with the world of scientific research. As it was said in the introduction, such an approach is based on the assumption that in management sciences research are not only to verify the scientific beliefs, but also to make continuous improvement of created solutions and the quality of knowledge they are based on.

Final remarks

The literature review has revealed the significant lack of research studies on social innovation and especially the processes of its generating. Thus, the research study was aimed at creating a new approach to designing and accomplishing social innovation in more intentional and goal-oriented way. Consequently, the theoretical model of social innovation lab and its operationalization have been developed.

The model is based on the concept of living labs as long term environments for open innovation developed with real users in real contexts, and examined from the perspective of design-led approach to management and innovation. The operationalization of the model includes the open proposition of tools and activities divided into three stages of the proposed conceptual model: reframing, building and learning, which enable the operation of such a social innovation living lab.

The uniqueness of this proposal is also determined by some properties of the social innovation lab. Thirst, the operation of the social innovation living lab was depicted as the sequence of three stages: reframing, building and learning. This sequence actually has an evolutionary nature and the real process is shaped by the results of consecutive activities. Secondly, the aforementioned process is a kind of iterative movement: from the theoretical background (reframing) to the real empirical world (building within the reframed theoretical framework and the feedback from the learning), and back again (reframing with use of the feedback). Consequently, the proposed approach serves both practice and theory in the same process. Those two spheres are interdependent: scientific cognition serves to create a better base for building future solutions, and learning in the process of improving the current solutions generates new knowledge.

Finally, the proposed approach describes the operation of the social innovation lab, but at the same time the same methodology was used in in the conducted research that resulted in the creation of this proposal. The first two

initial methodological stages were carried out in that research: reframing and building the model of social innovation living lab. However, it was assumed that future empirical research will be carried out that will provide data for the subsequent iterations aimed at improving subsequent prototypes of such a laboratory and developing the related scientific knowledge background.

References

Aken, J. E. V. (2004). Management research based on the paradigm of the design sciences: the quest for field-tested and grounded technological rules. *Journal of management studies*, 41(2), 219–246.

Alvesson, M., & Sandberg, J. (2011). Generating research questions through problematization. *Academy of management review*, 36(2), 247–271.

Baran, G. (2018). Design-led Approach to Social Innovation. *Przedsiębiorczość i Zarządzanie*, 19(9), part 3, 467–482.

Bergman, N., Markusson, N., Connor, P., Middlemiss, & L., Ricci, M. (2010). Bottom-up, social innovation for addressing climate change. In *Energy transitions in an interdependent world: what and where are the future social science research agendas*. Sussex, 25–26 February 2010.

Bergvall-Kåreborn, B., Ihlström Eriksson, C., Ståhlbröst, A., & Svensson, J. (2009). *A Milieu for Innovation: Defining Living Labs*. In *2nd ISPIM Innovation Symposium*. New York City, USA, 6–9 December 2009 (p. 12): ISPIM.

Braha, D., & Maimon, O. (1997). The design process: properties, paradigms, and structure. *IEEE Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans*, 27(2), 146–166.

Bucolo, S., & Matthews, J. H. (2010). Using a design led disruptive innovation approach to develop new services: Practising innovation in times of discontinuity. In *Proceedings of the 11th International CINet Conference: Practicing Innovation in the Times of Discontinuity* (pp. 176–187). CINet.

Bucolo, S., Wrigley, C., & Matthews, J. (2012). Gaps in organizational leadership: Linking strategic and operational activities through design-led propositions. *Design Management Journal*, 7(1), 18–28.

Cajaiba-Santana, G. (2014). Social innovation: Moving the field forward. A conceptual framework. *Technological Forecasting and Social Change*, 82, 42–51.

Caulier-Grice, J., Davies, A., Patrick, R., & Norman, W. (2012). *Defining social innovation. A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe"(TEPSIE)*. European Commission–7th Framework Programme, Brussels: European Commission, DG Research.

Dubois, A., & Gadde, L. E. (2002). Systematic combining: an abductive approach to case research. *Journal of business research*, 55(7), 553–560.

Dubois, A., & Gadde, L. E. (2014). "Systematic combining" – A decade later. *Journal of Business Research*, 67(6), 1277–1284.

Eriksson, M., Niitamo, V. P., & Kulkki, S. (2005). *State-of-the-art in utilizing Living Labs approach to user-centric ICT innovation-a European approach*. Center for Distance-spanning Technology. Lulea, Sweden: Lulea University of Technology.

Følstad, A. (2008). Living labs for innovation and development of information and communication technology: a literature review. *The Electronic Journal for Virtual Organizations and Network*, 10 (Special on Living Labs), 100–131.

Hillgren, P. A. (2013). Participatory design for social and public innovation: Living Labs as spaces for agonistic experiments and friendly hacking. In E. Manzini, & E. Staszowski (Eds.), *Public and Collaborative – Exploring the Intersection of Design, Social Innovation and Public Policy* (pp. 75–88). DESIS Network.

Howaldt, J., & Schwarz, M. (2010). *Social Innovation: Concepts, research fields and international trends*. Aachen: Aachen University, www.internationalmonitoring.com.

Keyson, D. V., Guerra-Santin, O., & Lockton, D. (2017). *Living Labs. Design and Assessment of Sustainable Living*. Netherlands: Springer.

Klimowicz, M. (2015). Żywe Laboratoria jako innowacyjne narzędzie zarządzania miastami. In A. Wiktorska-Święcka (ed.), *(Re)organizacja w zarządzaniu miastami w Polsce w kontekście wyzwań rozwojowych (pp. 186–197)*. Wrocław: Oficyna Wydawnicza ATUT.

Kwaśnicki, W. (2015). Innowacje społeczne – nowy paradygmat czy kolejny etap w rozwoju kreatywności człowieka? In W. Misztal, G. Chimiak, & A. Kościański (eds.), *Obywatelskość wobec kryzysu: uśpieni czy innowatorzy? (pp. 1–23)*. Warszawa: Instytut Filozofii i Socjologii PAN. Access: <http://kwasnicki.prawo.uni.wroc.pl/todownload/InnowacjeSpoleczneWK.pdf>.

Leminen, S., Westerlund, M., & Nyström, A. G. (2012). Living Labs as open-innovation networks. *Technology Innovation Management Review*, 9(2), 6–11.

Leminen, S. (2015). Q&A. What Are Living Labs?. *Technology Innovation Management Review*, 5(9), 29–35.

Manzini, E. (2014). Making things happen: Social innovation and design. *Design Issues*, 30(1), 57–66.

Mulgan, G. (2006). The process of social innovation. *Innovations: technology, governance, globalization*, 1(2), 145–162.

Mulgan, G., Tucker, S., Ali, R., & Sanders, B. (2007). *Social innovation: what it is, why it matters and how it can be accelerated*. Oxford: Skoll Centre for Social Entrepreneurship. Said Business School University of Oxford. The Young Foundation.

Mumford, M. D. (2002). Social innovation: ten cases from Benjamin Franklin. *Creativity research journal*, 14(2), 253–266.

Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). *The open book of social innovation* (p. 2). London: National endowment for science, technology and the art.

NCBiR (2012). *Program Innowacje Społeczne*. Warszawa, available at: https://www.ncbr.gov.pl/fileadmin/user_upload/import/tt_content/files/opis_programu_is_1.pdf.

Neumeier, S. (2012). Why do social innovations in rural development matter and should they be considered more seriously in rural development research? – Proposal for a stronger focus on social innovations in rural development research. *Sociologia Ruralis*, 52(1), 48–69.

OECD (2011). *Fostering Innovation to Address Social Challenges*. Workshop Proceedings, Paris: OECD.

Olejniczuk-Merta, A. (2013). Innowacje społeczne. *Konsumpcja i rozwój*, 1(4), 21–34.

Poi, E., & Ville, S. (2009). Social innovation: Buzz word or enduring term?. *The Journal of Socio-economics*, 38(6), 878–885.

Schumpeter, J. A. (1960). *Teoria rozwoju gospodarczego*. Warszawa: PWN.

Simon, H. (1969/1996). *The Science of the Artificial*. Massachusetts: MIT Press.



Steward, F., Liff, S., & Dunkelman, M. (2009). *Mapping the Big Green Challenge*. NESTA Research Report, London: NESTA.

Veeckman, C., Schuurman, D., Leminen, S., & Westerlund, M. (2013). Linking living lab characteristics and their outcomes: Towards a conceptual framework. *Technology Innovation Management Review*, 3(12), 6–15.

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Process Management: the Case of the Foreign and Commonwealth Office

ABSTRACT

Objective: The objective of the article is to mark the introduction of process changes in relation to the Emergency Travel Document service by The Foreign & Commonwealth Office. The paper analyses the changes and relates them to process and cost management strategies. Thus, it presents how process efficiency may be managed

Methodology: The article is of a theoretical and practical nature. The method used in the theoretical part is a review of literature on process management. The second part includes an analysis of The Foreign & Commonwealth Office's own documents.

Findings: The use of digitalization greatly facilitates the process for British citizens who are abroad and need to obtain a travel document. This facilitation applies to both customers and FCO employees. Numerous factors influence the processing time reduction, which in turn increases productivity.

Value Added: This article presents an example of the practical use of digitization in the process of issuing the Emergency Travel Document. The value is to show the impact of modern technologies on improving the processes for the organization itself (in the form of optimizing operational costs and increasing efficiency) and for the customers.

Recommendations: The use of digitization can be successfully implemented to streamline organizational processes. It can help in reducing their time and limiting human involvement. Increased productivity lowers the cost of a single unit of the service. The changes allow for a more standardized and repeatable service. The approach can be used to manage processes in any organization; though practical implications outlined in the text can serve as an example for other organizations offering similar services.

Key words: digitalization, Emergency Travel Document, The Foreign & Commonwealth Office, process management, efficiency

JEL codes: D73,O14,F68

Introduction

Organizations worldwide operate in a market where time and costs are of absolute value. Striving to reduce the time it takes to perform a service, and therefore minimize its costs by increasing productivity, remains the goal for many. Cost management can be defined as any action aimed towards cost reduction. The term is most often associated with general improving of business processes as well as all efforts to increase the efficiency and optimal use of resources available in the organization (Nowak, 2006, p. 6). B. Sadowska (2015) suggests that one of the key cost management practices is a continuous work on processes improvement.

M. Chmielowiec-Lewczuk (2017) describes three cost management approaches: the Japanese approach, the Anglo-American approach, and the German approach. The Japanese approach is the oldest. It assumes

that the organization focuses on its long-term goals and consistently pursues them while involving employees and decision-makers at all levels. The Anglo-American and German approaches focus primarily on the internal sphere of the organization and the quality and accuracy of information. M. Chmielowiec-Lewczuk (2017) regards these latter approaches dominant in the field of cost management.

At the beginning of the 20th century, F. Taylor defined the work of an organization as a set of tasks with specific procedures along with a manner and order of execution (Chmielowiec-Lewczuk, 2017). Management aims at planning and optimizing those activities. In the midst of the 20th century, thanks to the introduction of the first computers, it became possible to create algorithms in which a person is defined as a function of information. For several decades, computer programs, designed to understand work as a process in which existing resources are transformed into a planned result, have been used in organizations. In the 1970s, it has become widely known that, due to the understanding of work as a function of information processing, a reliable global communication system was necessary to make work as efficient as possible.

According to W. Toszewska-Czerniej (2016), service improvement can be achieved by process standardization. This is especially important in the case of an organization offering a particular service in multiple locations. Moreover, service and procedure standardization are also extremely important in the public sector as it is tasked with consistently and reliably providing its services to its "owners," so all of the members of the society. As an effective process, W. Toszewska-Czerniej (2016, p.592) defines the full and productive commitment of available resources as well as the use of time in a manner consistent with the aspirations of the employees and the employer.

P. J. Denning and R. Medina-Mora (1995) presented the process as a system of connected loops, which allows for its better understanding and modification. The authors relate the crisis in the services sector to the insufficient development of its effectiveness. Yet, the automation of the process in the

production sector, as the authors suggest, has allowed for the continuous improvement of its efficiency.

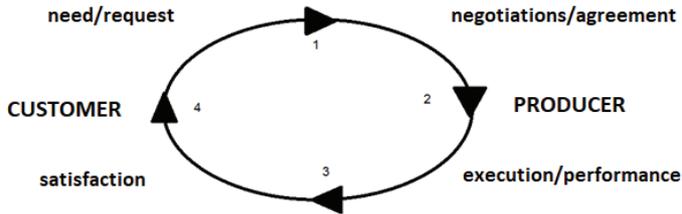
In the early 1980s, many organizations adopted Deming's method of Total Quality Management (TQM). Deming assumes that satisfying consumer needs is associated with continuous improvement and statistical monitoring. Additionally, the method implies that the employee is an internal client of the organization and his work-related needs should be met in order for both the process and the organization to succeed.

Organizational processes and their efficiency

The operation of each organization is based on the coordination of three processes: materials-related process, information-related process and the process of coordination and communication between people (Denning & Medina-Mora, 1995). The first two of these processes are associated with the classic approach to the enterprise. This approach implies that work is a function, which creates a specific product using the necessary materials and processes. All that happens inside an organization in order to perform a task (achieve a specific effect) can be expressed as a system of connected loops in which the human action is the binding agent. Only a man is able to assess the work's effect and determine who or what and how will be a part of the work. Hence, the human factor plays a major role in work performance.

A single closed loop in a process coordination system is called *workflow*. Workflow has a connecting function – it usually links two or more actors. Most often one of the parties has some expectations and the other agrees to meet them. In the most general case, it is the producer and the customer. A basic workflow model is presented in figure 1.

Figure 1. A basic workflow loop



Source: based on: Denning & Medina-Mora, 1995.

The figure depicts the relationship between the customer and the contractor (producer). The loop consists of four related stages covering:

- the emergence of a need (for a producer's product/service),
- establishing cooperation rules (price, time needed to create a product/perform a service, specific product/service details etc.),
- performance of the service/production of the product,
- final satisfaction with the course of cooperation of both the client and the contractor.

Each of the stages is to lead to the next stage, provided that it is correctly and fully completed. If any one of the stages is not completed (e.g. the customer is not satisfied with the final result of their purchase), most likely the need for the contractor's product/service will not occur again. P. J. Denning and R. Medina-Mora consider the fourth stage – the satisfaction of each party to the transaction – as the factor most often overlooked in the work of the organization. According to them, it is a source of many dangers for the organization, because it is most often not organized well enough.

A dissatisfied customer not only will not make the purchase again, but may also decide to lodge a complaint. The cost of which (the emotional cost for employees, the reputation cost for the organization and the cost of losing recurring customers) turns out to be much higher than the cost of organizing

the fourth part of the workflow by implementing precise monitoring of the quality of services/products, collecting feedback from clients and drawing conclusions from it.

The relationship between the client and the contractor presented in figure 1 is a general and imprecise depiction. It is a simplified model. In reality, this one "main" loop consists of a number of other, "smaller," loops symbolizing all the activities that an organization can influence. Those component loops can be created within each of the four basic parts of the main loop. Placing the organization's activities in a looped connection model should include all the activities of the organization and all its members. Component loops may refer to parts of a process (activities) related to materials, information or coordination as well as interpersonal communication, depending on the organization's activities. Thus, for instance, organizations not related to production, but data processing will find in their processes many more "information" loops than "material" loops." According to P. J. Denning and R. Medina-Mora, these strictly "information-related" loops can be a source of specific problems in each of the four parts of the basic workflow loop as follows:

- 1) Emergence of a need (for a producer's product/service): The buyer may place an order/communicate the need in a way that is unclear and incomprehensible to the contractor. The order may be forwarded to the contractor via an inappropriate or unforeseen channel.
- 2) Establishing cooperation rules (price, time needed to create a product/perform a service, specific product/service details etc.): The contractor may not respond to the order placing or may not sufficiently inform the buyer about the refusal to process the order. The contractor may also not provide all the necessary information to the customer. Both the contractor and the customer may be convinced of the similarity or compatibility of the expected results, although these expectations may differ significantly in the eyes of the producer and the customer. The producer may refuse to take responsibility for the effect of the product/service.

3) Performance of the product/service production: The producer may cease work without informing the customer or perform work that brings unsatisfactory results for the client.

4) Final satisfaction with the course of cooperation of both the client and the contractor: The buyer may vaguely indicate that the order has been received. The producer may not monitor the customer satisfaction levels.

P. J. Denning and R. Medina-Mora argue that none of the outlined potential problems can be eliminated entirely due to the involvement of the human factor. People can assume that the meaning of certain words or phrases is common and uniform, but this may be a false assumption, which can lead to misunderstandings. Therefore, building understanding between the producer and the customer is crucial for both parties to complete the transaction with a satisfactory result.

Additionally, a correct "closing" of each of the component loops in the workflow model is necessary to fully carry out the customer's order. To ensure maximum efficiency of this process, new technologies are often included in the workflow structure. They are designed to replicate the process with each single order as closely and accurately as possible. P. J. Denning and R. Medina-Mora suggest, however, that in addition to the role played by Information and Communication Technology, organizational culture is also a key player. Organizational culture in this case is understood as a common way of approaching tasks by the employees.

In order to further confirm their views on employee satisfaction, P. J. Denning and R. Medina-Mora refer to research conducted by R. Marshak (1993) regarding the relationship between introduced process changes and employee satisfaction. Despite the initial decrease in both process efficiency and employee satisfaction when introducing the change, there occurred a significant increase in both factors in time, as employees got fully used to operating the modernized processes, tools or technologies. Nonetheless, it should be noted that any change introduced to the organization's processes should be tied to a "period of adaptation" before it begins to bring the expected results.

One of the ways to increase the effectiveness of an organization's activities is to improve the service offered. This can be achieved by standardizing or coordinating of its processes. This is especially important in the case of an organization offering a particular service in multiple locations. Standardizing and coordinating processes include designing a workflow encompassing all relevant sub-processes. When each workflow loop is successfully completed, the entire process is also successful. Work in this sense means fulfilling promises or fulfilling expectations. This fulfillment results in satisfaction with the transaction for all (both) parts of the transaction. This approach assumes effort directed towards the efficiency of the processes, but also the customer's satisfaction.

The purpose of the article is to mark the introduction of process changes in relation to the Emergency Travel Document service by The Foreign & Commonwealth Office. The paper analyses the changes in the process and relates them to process and cost management strategies. Thus, it presents how process efficiency may be managed. The article is of a theoretical and practical nature. The method used in the theoretical part is a review of literature on process management. The second part includes an analysis of The Foreign & Commonwealth Office's own documents.

Research methodology

The Foreign and Commonwealth Office (FCO) is a unit of the British government responsible for foreign operational cooperation at the economic, political and social level. The FCO is tasked with promoting UK interests abroad as well as supporting British citizens and businesses around the world. The Foreign and Commonwealth Office operates a worldwide network of embassies and consulates, employing over 14,000 employees in almost 270 diplomatic missions.

The FCO's (Commonwealth Office 2016) consular department's strategy for 2016–2020 defines the duties of a consular officer. One of them is issu-

ing a temporary travel document called the *Emergency Travel Document* (ETD). This paper includes an analysis of the Emergency Travel Document project aiming to improve one of the services of the consular section of the British Embassy in Warsaw.

As per the FCO decision, the pilot project of issuing ETDs remotely began in the British Embassy in Warsaw in October 2017 and lasted until January 2019. The process of issuing ETDs has been digitalized since. No paperwork was necessary to produce the travel document which allowed the remote processing based in Warsaw. The region, founded for the pilot purposes, included a central unit – the consular section of the British Embassy in Warsaw. It covered 11 diplomatic units located in nine countries as follows:

- Poland – the British Embassy in Warsaw;
- Austria – the British Embassy in Vienna;
- Switzerland – the British Embassy in Bern;
- Luxembourg – the British Embassy in Luxembourg;
- Germany – the British Embassy in Berlin, the British Consulate in Munich, and the British Consulate in Dusseldorf;
- Denmark – the British Embassy in Copenhagen;
- Finland – the British Embassy in Helsinki;
- Estonia – the British Embassy in Tallinn;
- Slovakia – the British Embassy in Bratislava.

The main subject of the work is the improvement of organizational processes based on the findings of the ETD pilot project. The research methods used are a review of literature on the subject of process management and cost management and the analysis of documentation related to the implementation of the project.

Research thesis and questions

The thesis of this paper assumes the possibility of improving organizational processes through the use of digitalization. The research questions were

divided into two groups. The first group contained the following question: How is the process improved?

The second group included the following research questions:

Are streamlined processes faster to perform?

Are streamlined processes cheaper to perform?

Do streamlined processes require fewer actors?

The first question referred to the workflow theory and was based on process loops, while the questions from the second group were related to the empirical process of ETD introduction.

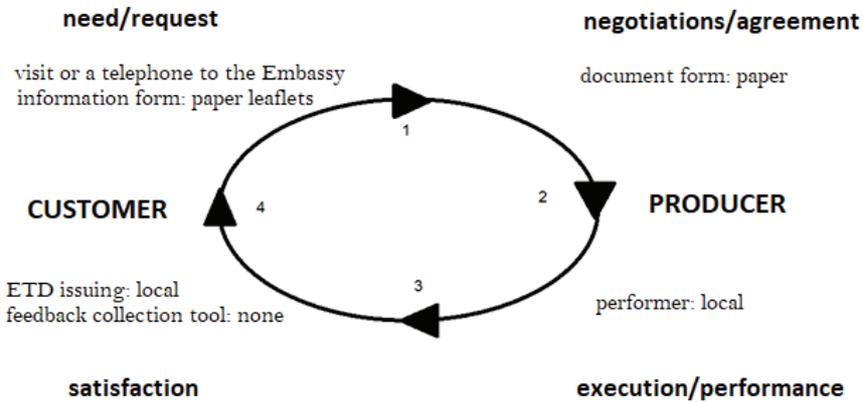
Research results

By comparing data collected during the project and before its start, and especially by comparing data from its very beginning and end, one can determine if and how much has the total time of ETD issuing been cut down. The improvement of the process as a whole was influenced by the improvement of its individual parts. The operation of each organization is based on the coordination of three processes: the materials-related process, the information-related process and the process of coordination and communication between people (Denning, Medina-Mora, 1995). All three types of processes occur in the general ETD issuing process. Models showing the workflow loops of the ETD issuing process before and after the introduced changes for all three types of processes are depicted in figures 2, 3, 4, 5, 6, 7.

Materials: before and after the change

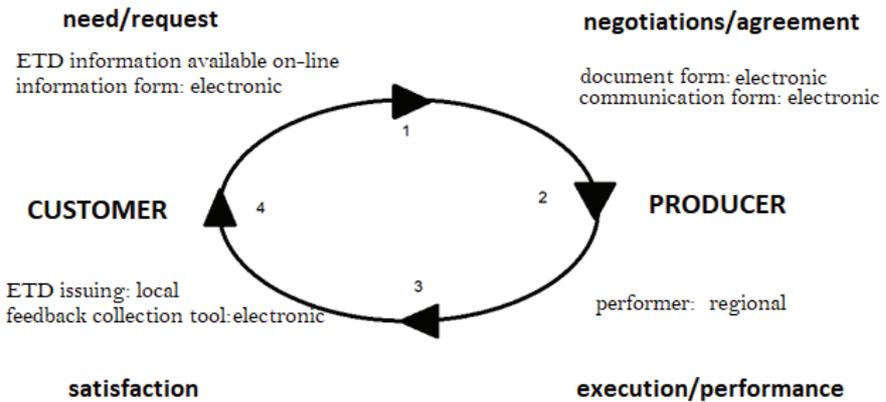
The main processing centre, the ETD *hub*, was responsible for receiving and processing information received from clients; while the other centres in the region - called *spoke* - printed the physical document and handed it out to the client locally. The process related to materials before and after the changes is depicted in figures 2 and 3.

Figure 2. Workflow of the ETD issuing process before the changes: materials



Source: author's own work based on: Denning & Medina-Mora, 1995.

Figure 3. Workflow of the ETD issuing process after the changes: materials



Source: author's own work based on: Denning & Medina-Mora, 1995.

Due to the changes in the process, primarily due to the introduction of the possibility of submitting ETD applications online, the earlier need to submit applications in paper version was eliminated. Digitizing the application process saves paper and time, because the consular officer processing data

from the application receives it in a digitized version. Thus, he/she no longer needs to enter data from the paper application into the system.

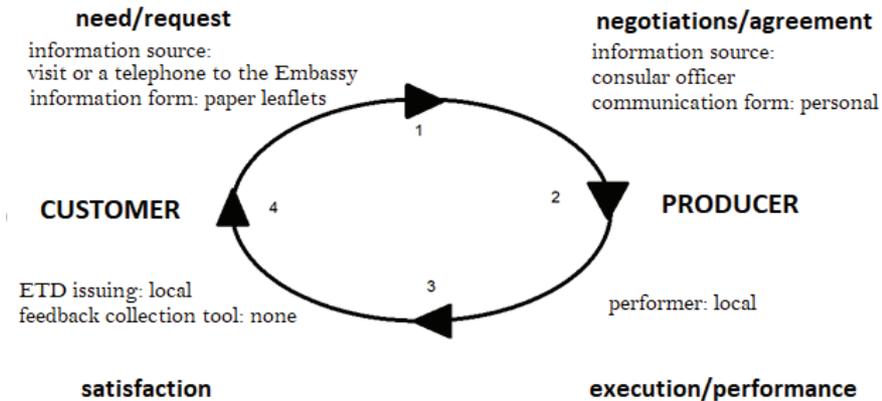
The process is also shortened by the change in document submitting. It is now the customer who uploads scans of documents and photos into the system and completes the on-line payment. All the documents are therefore received and processed not on paper, but in electronic form. It also makes them much easier to store. Instead of scanning all of the paper documents and uploading them into the system, the consular officer only validates them.

The part of the process associated with the physical printing of the ETD remains unchanged.

Information: before and after the change

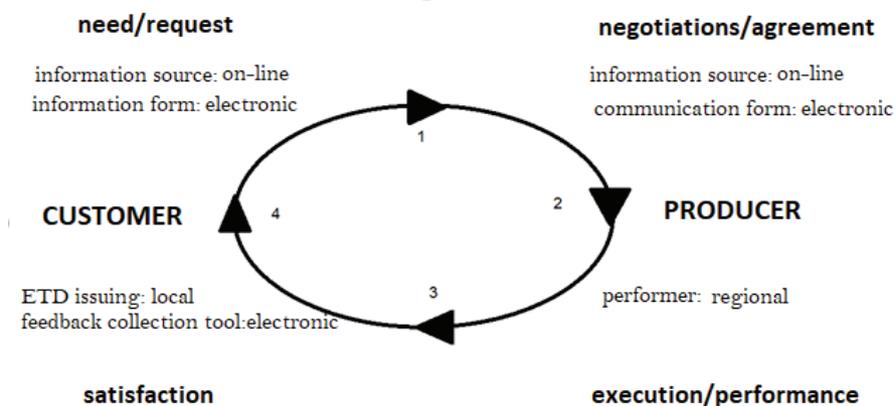
The process related to information before and after the changes is depicted in figures 4 and 5.

Figure 4. Workflow of the ETD issuing process before the changes: information



Source: author's own work based on: Denning & Medina-Mora, 1995.

Figure 5. Workflow of the ETD issuing process after the changes: information



Source: author's own work based on: Denning & Medina-Mora, 1995.

Due to the changes in the process, primarily due to the introduction of the possibility of submitting ETD applications online, the earlier need for the client to arrive at one of the diplomatic units was eliminated. All information regarding the ETD, submission requirements, and processing time is available on the website. This means that the full range of information about the ETD and the possibility and means of applying has become available to the customer at any time, and not only by phone or during the working hours of the diplomatic mission.

The customer is responsible for entering the data when applying online. This translates into shortening of the ETD issuing process time. Previously, it was the consular officer that was responsible for creating the case and entering customer data into the system. Since this activity has been digitized and automated, the data, entered during the application by the customer, is only verified (and corrected if necessary) by the officer issuing the ETD.

After issuing the document, an e-mail message informing the customer of the availability of the ETD is sent out by the ETD hub in Warsaw. It is addressed to both the client and the local diplomatic mission (spoke). This

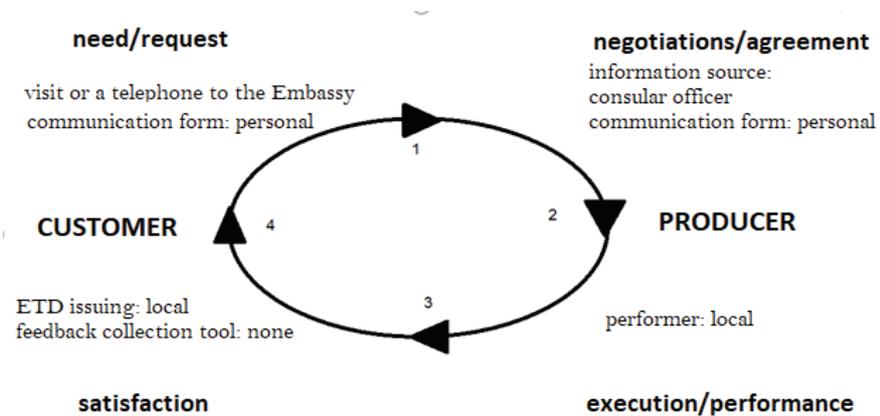
means adding another recipient of information – a local diplomatic mission (spoke) – to the message recipients in comparison to the previous process.

What is more, the customer feedback question is included in the application process. By adding this option, customers can share their opinion about the service using the online evaluation questionnaire. The ability to collect customer feedback can be a source of information about problems encountered by the customers and ideas how to improve the service.

Communication: before and after the change

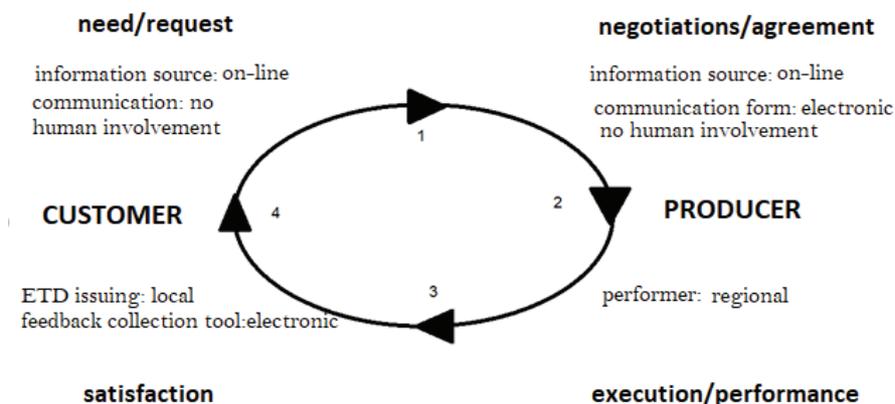
The process related to communication before and after the changes is depicted in figures 6 and 7.

Figure 6. Workflow of the ETD issuing process before the changes: communication



Source: author's own work based on: Denning & Medina-Mora, 1995.

Figure 7. Workflow of the ETD issuing process after the changes: communication



Source: author's own work based on: Denning & Medina-Mora, 1995.

Due to the changes in the process, primarily due to the introduction of the possibility of submitting ETD applications online as well as forming the region of 11 diplomatic units, the earlier need for the client to arrive at one of the diplomatic units was eliminated. This entails limiting the interpersonal communication to a minimum because of digitization and process automation. As a consequence, the involvement and time of the consular officers is limited and their time for other consular work is increased. This means shifting the priorities of employees of local consular sections (spokes) by minimizing their involvement in issuing ETDs. Increasing the efficiency of the process by partially eliminating the human factor and replacing it with an automated online system has disadvantages, however, especially for customers. Nationals who find themselves in a foreign country without a valid passport are in distress and often expect human contact and assurance. The process in the digitized and automatic version can be perceived as soulless and devoid of human factor.

Referring to the research question, it is apparent that process improvement may consist in changing the structure of the process, its contrac-



tors, the data carrier and/or the communication channel. The process improvement in this case encompasses changes in every aspect of the process: related to materials, information and interpersonal communication. It is also associated with systemic changes affecting the structure of the process. The structure as well as the number and character of the contractors, the data carrier and the communication channel have changed. The second group of research questions related to whether streamlined processes are faster to perform. The analysis of the documents related to the ETD project shows that due to the introduction of the changes described above, the time needed to complete the ETD issuing process has been reduced. There are many factors that contributed to the time reduction:

- digitization of information about the ETD;
- limiting the human factor involvement;
- the requirement to submit ETD applications online;
- entering data electronically by the client;
- making payments and sending documents electronically by the client;
- automatic transfer of customer data into the system;
- regionalization of the process to standardize the service.

The average time it took to issue an ETD before making changes was:

- children: 75 minutes;
 - adults: 60 minutes.
- The average time it took to issue an ETD after the changes was:
- children: 60 minutes;
 - adults: 45 minutes.

Comparing the above data, it should be noted that the time needed to issue an ETD has been reduced for both: the customers under 18 and adults. For children's applications, the average ETD issuance time was reduced by 15 minutes, which was a 20% reduction in time. For adult applications, the average ETD issuance time was also reduced by 15 minutes, which was a 25% reduction in time. Research therefore confirms that streamlined processes are faster to perform.

The next research question in this group read as follows: Are streamlined processes cheaper to perform? Improved processes allowed the ETD hub employees in Warsaw to issue more ETDs in comparison to consular officers in diplomatic units before the changes were introduced. This means that the shorter production time of a single ETD translates into less financial effort on the part of the FCO. The introduction of the changes and the operation of the ETD hub in Warsaw allowed consular employees in the 11 diplomatic units participating in the project to devote their time to other clients and consular affairs. The unit cost of performing an ETD service was reduced, while the price of the service did not change, which resulted in an increase in the profitability of the service from the point of view of FCO. Considering the above, it should be confirmed that streamlined processes are cheaper to perform.

The last research question dealt with the number of contractors and read as follows: Do streamlined processes require fewer contractors?

The changes introduced in the process significantly reduced the involvement of the human factor. The biggest impact on this limitation was due to the change in applying for an ETD online. It significantly reduced the number of customers coming to the Embassy or Consulate in search of help. In addition, regionalizing the process also limited the involvement of consular employees in the units participating in the project. Considering the above, it should be confirmed that streamlined processes require fewer contractors. Based on the above data and literature analysis, one can confirm that the use of digitization of documents can be successfully implemented to streamline organizational processes.

Recommendations

Based on the results obtained in this study and their analysis, practical conclusions regarding the further operation of the enterprise and its development can be drawn.



While expanding the reach of the ETD project one should consider the following:

- Increasing the scale of the project will also increase the financial effort and intensify bureaucratic activities. Under such conditions, it will be much more difficult to closely monitor activities and to measure and test the process.
- Smaller pilot projects bring more freedom when trying out new approaches or technological solutions or regulations. Projects on a much larger scale work better when all aspects of the project are specified: responsibility, time, regulations, customer approach, dispute resolution.
- Increasing the scale of the project will limit the involvement of the consular employees in successively “taken over” organizations. There may also appear reluctance on the future spokes. It could be related to employees’ (who are “cut off” from their previous tasks) fear of losing their job.
- When increasing the scope of the process, account should be taken of subsequent participant organizations and their specific geographical, cultural and economic conditions (Banerjee et al., 2017).
- The Anglo-American and German approaches to cost management, applied in this project, focus primarily on the internal area of the organization and the quality and accuracy of information. It could be advantageous for the FCO to also apply the Japanese approach to cost management and plan long-term strategies on offered services as well as work on gathering and using customers’ feedback.

References

Banerjee, A., Banerji, R., Berry, J., Duflo, E., Kannan, H., Mukerji, S., Shottland, M., & Walton, M. (2017). From Proof of Concept to Scalable Policies: Challenges and Solutions, with an Application. *Journal of Economic Perspectives, American Economic Association*, 31(4).

Chmielowiec-Lewczuk, M. (2017). Organization of The Cost Management Process in The Insurance Company. *Prace Naukowe Uniwersytetu Ekonomicznego We Wrocławiu*, 472. doi:10.15611/pn.2017.472.05.

Denning, P. J., & Medina-Mora, R. (1995). Completing the Loops. *Interfaces*, 3, 42–57. doi:10.1287/inte.25.3.42.

ETD pilot project monitoring documents of the British Embassy.

Commonwealth Office (2016). *Helping British People overseas: Consular services 2016–2020*. Retrieved from: <https://www.gov.uk/government/publications/helping-british-people-overseas-consular-services-2016-2020>. Access: 05.08.2019.

Marshak, R. (1993). Young and Rubicam improves productivity with workflow. *Workgroup Computing Report*, 16 (5), Boston, Massachusetts: Patricia Seybold Group.

Nowak, E. (2006). Geneza i istota strategicznego zarządzania kosztami. *Strategiczne zarządzanie kosztami*. Kraków: Oficyna Ekonomiczna.

Sadowska, B. (2015). Rachunek Kosztów Działań – Teoria i Praktyka. *Prace Naukowe Uniwersytetu Ekonomicznego We Wrocławiu*, 398. doi:10.15611/pn.2015.398.40.



Toszevska-Czerniej, W. (2016). Productivity of Service Delivery Process as a Factor Affecting the Level of Differentiation / Produktywność Procesu Usługowego Jako Czynn timer Kształujący Poziom Zróżnicowania. *Prace Naukowe Uniwersytetu Ekonomicznego We Wrocławiu*, 450. doi:10.15611/pn.2016.450.50.

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Leadership Coaching across Cultures

ABSTRACT

Objective: The discussion presented in this paper focuses on the practical coaching techniques premised on lasting principles of human learning; principles that are crucial to coaching relationships of all kinds. The principles involved tap into years of psychological research and practice (Kanfer & Goldstein, 1991; Mahoney, 1991) that focuses on issues that prompt changes in people, the important factors that fosters relationships and the ways of getting people to give up their regular actions for a new set.

Methodology: The article's research is based on extensive literature analysis.

Findings: The research was not able to identify the specifics of what people value in different cultures; however, it captures the major active ingredients in learning endeavor, without taking culture into consideration.

Value Added: The article discusses 3 main types of challenges that leadership coaches find across the globe and offers guidelines to handle them

Recommendations: Future papers on that topic research should include both qualitative and quantitative research findings.

Key words: coaching, leadership, leadership coaching

JEL codes: M1, M14

Introduction

The ability to straddle cultures and willingness to adapt to several norms and expectations that may even be conflicting are the qualities that must be imbibed by leaders who wish to gain any competitive edge in business. The dynamism and ever-changing demands only increase complexity; competition is getting more intense, the workforce more diverse and the technological revolution constantly out-pacing even the most progressive manufacturers. Taking these into consideration, success and steady growth are reserved for leaders who can foster versatility and resilience in their workforce.

In order to meet the demands of getting the best out of workers, leaders look for ways of boosting their coaching skills. Executive coaches offer personalized learning experience from the objective perspective of an outsider and on the other hand, Leader coaches are chosen from within the company (Peterson, Uranowitz, & Hicks, 1996). Leaders in top organizations like HP, Intel, PepsiCo and General Electric decisively foster the development of their team members and some go ahead to deploy people-development as an important technique in the quest to attain their set business objective (Tichy & Cohen, 1997). Discussion in this paper is primarily focused on the coaching techniques used worldwide by leadership coaches. Due to the fact that this research offers results based on people's ability to change under certain conditions, coaches have found it extremely useful in dealing

with their daily dealings with people. The research was not able to identify the specifics of what people value in different cultures; however, it captures the major active ingredients in learning endeavor, without taking culture into consideration. Different coaches have applied them in different fields, and it has been effective for them. This shows how robust the technique really is. Discussions like this may be used to talk about the vast differences that are pertinent in working across peculiar cultures and rather than focusing on offering culture specific advice, we have focused on the more common coaching issues that span across many cultures. The offered framework is designed to assist coaches in dealing with people in a personalized manner and based on the learning methods, communication styles, relationship norms an assumption about leadership, this framework can be adjusted.

Methods

The literature review provides the reader with a comprehensive look at a discussion focused on the practical coaching techniques premised on lasting principles of human learning; principles that are crucial to coaching relationships of all kinds. The principles involved tapping into years of psychological research and practice (Kanfer & Goldstein, 1991; Mahoney, 1991) that focuses on issues that prompt changes in people, the important factors that fosters relationships and the ways of getting people to give up their regular actions for a new set.

Discussion

In most cases, coaching is defined and taught as a collection of activities that may include the writing of development plans, delivering feedback, teaching a skill, offering advice (Peterson, Uranowitz, & Hicks, 1996; Flaherty, 2006; Hargrove, 2008). This definition often prompts coaches to focus on the wrong questions, like “How do I give feedback in this culture?”, whereas



coaching should be the process of assisting people, imparting knowledge and helping them with the right tools to make them more effective in their self-development (Peterson, Uranowitz, & Hicks, 1996). Coaching ought to prepare a person to face challenges, make progress and meaningfully contribute to solutions in the wake of new challenges. Broader questions arise from the definition that bring more attention to the outcomes rather than the coach's activity; questions such as "How can I help this person increase his or her insight?" The best approach in accomplishing the task may not be the one suggested by the coach simply because it is more of a process and should not be limited to a particular event. It ought to be infused into the daily activities of the person being coached. This way, the learner commits to certain guides and actions that help them take responsibility for acquiring and applying new techniques or learnings. Any coaching definition that focuses on one learner and probably puts him over another sub-optimizes the entire learning process. An effective coaching process goes beyond a leader impacting a learner. It is a process that both parties should benefit from. Also, the concept of placing the burden of growth and continuous employability on the shoulders of the employees puts less importance on leaders and organizations to proffer developmental directions. This process demands that those involved have a keen sense of interpersonal perceptiveness, sensitivity and timing. These requirements can place major demands on the shoulders of the coach within a single culture. Hurdles in this scenario can be as obvious as a language barrier or as complicated as the different interpretations or values placed on similar behaviors. Coaches ought to prepare for certain types of challenges and these 3 general guidelines can be very helpful:

- 1. Search for hidden layers.** People see things differently based on their culture, perception and assumptions and the difference in perspective could range from unbelievably dramatic to understated. Because of this, coaches should leave room for cultural differences, including the one they know and the ones they are completely oblivious of. As a coach, it is your responsibility to seek out these hidden layers and bring them to the surface; for the benefit

of the learners as well as you the coach. Cultures can sometimes be polarizing and the ability of a coach to accommodate different cultures, helps him/her create hypotheses about the person they are coaching. Would the person being coached be better spurred by a personal goal or a collective goal? Would this person want the coach to take the free-flowing approach that offers flexibility and freedom or will the person rather a more authoritative expertise and clear instruction from the coach? Would it be better for the coach to get to know the person first or just proceed immediately to the task at hand? Will this person be comfortable with the coach's preference for quick linear decisions? Taking time to test-relevant hypotheses can help the coach avoid unnecessary hurdles in the future. A leader can generate the hypothesis and test it out on persons from different culture so as to be better informed.

Cultural heroes can be identified and reasons why they are honored learnt. Learn who their leaders are and how they lead. Learn what important lessons they imbibe and what their educational system entails. It is also advised that coaches review resources that highlight broad dimensions of cultural differences and the distinct social and professional discourse in different cultures (e.g., Cushner & Brislin, 1996; Gudykunst, Ting-Toomey & Nishida, 1996; Hofstede, 1991; Hofstede, 2009; Lewis, 1996). Studying the traditions of other culture is important, but not adequate because of their cultural blinders, it becomes impossible for coaches to formulate relevant hypotheses about others. The cultural influence of the coach cannot be completely separated from how they interpret the information they gather about the culture of others. Based on their own culture, coaches have a presumed expectation of what learners will want from the learning process as well as how people respond to feedback or new information. How people relate with one another is another factor that cannot be sidelined as such. When faced with a task that transcends different cultures, people have to dig deep, probe further in order to understand themselves and others. As expected, they will then adjust their approach and techniques based on the findings made. A study of the cultural differences and the planning for



unexpected interactions could have smoothed the way for a French leader who embarked on a 3-year-long engineering project in the UK. He was made understand that a couple of adjustments would have to be made by him when he started the project. After all, his team had something in common – same profession – although the language was different. However, immediately when the project started, his team leaders started clashing and he, being the head, was surprised with the difference in understanding of status and roles of engineers as well as the approach used by teams to resolve issues. He later stated that if he had known that this was what he would face, there would have been fewer mistakes. Expecting it tough would have made him prepare better and as such, it would have become easier. If he had made room for unknown cultural differences, he would not have had that much difficulty on the job. There was a case of an American manager’s coaching with a new worker from Singapore as a result of their varying understanding of the boss-subordinate relationship. The boss asked the employee to highlight the areas he would need to be coached on and together, they were to identify development priorities. In some cultures, this joint participation would have been ideal as it would make the subordinate feel valued. However, this was not the case in this instance. The employee saw this as an attempt at abdicating responsibilities and legitimating authority by the employer. This undermined the manager’s credibility and the manager had to adjust appropriately when he observed the interpretation given to his actions. He started giving specific instructions on how to approach tasks as opposed to his former actions where he gave room for open-ended questions. The culture appropriate role of the manager was then restored with this new method.

2. Personalize the approach. The perspective a person might take cannot be predicted from what might be unique about their culture, even though culture can help the coach prepare hypotheses in anticipation of cultural differences. The fact is that the differences in people’s character and perspective cannot be solely pinned on their culture. Each person is a product of his/her personal experiences, genetics, and sub-cultural forces beyond

culture. A person's perspective of the world is influenced by these factors as much as culture and it is now known that with the current global interactions and communication, the massive differences in people's cultures are becoming less reliable. Traditional cultural distinctions are gradually being eroded by the ever-growing interconnectedness of people, which results in different cultures accepting each other (Hermans & Kempen, 1998). Cultural norms to a reasonable extent define a group of people and while coaches can get a glimpse of the factors that significantly influence a person, coaches cannot assume that it is the only factor that forms the personality of a person (Chmielecki, 2009). Anyone from China, Brazil, Germany, United States etc. may be timid, bold, chronically late, impulsive, punctual or methodical. It is easier to understand people from these different countries if one has prior knowledge of their cultural differences with respect to time or leadership, however, there will still be individual behavioral differences amongst people.

In the quest to understand a person, factors such as profession, age, social status, gender, education, personal life experience etc. are factors that must be taken into consideration and in most cases these are the factors that will help you understand a person beyond culture. A coach who focuses on the cultural differences and ignore all other factors would most likely miss out what makes each individual unique. This is why a French engineering executive was surprised to discover that his values, style and preferences were similar to that of the non-engineering British executives and strangely not like those of younger French engineers. He also observed that his age, status, life experience and education were more aligned to his collegial similarity even more than his nationality. Any coach who approaches him with the "French man" stereotype will most likely be wrong, that is if nothing is perceived as offensive in the process. Understanding a person as an individual first is the surest way for a coach to avoid stereotypes that do not apply. Studies from the US and Europe have supported the need to coach at a personal level and research has also shown that the number one cause for people's dissatisfaction with coaching received is



the impersonal coaching method which was used (Hicks & Peterson, 1996; Peterson, Uranowitz, & Hicks, 1999).

Cultural variables that are supposed to be considered by coaches are also being used as a cloak of avoidance. As a coach, you may sometimes hear sentences like “you don’t understand me, and you never will” or “that is not how we do things in my country”. There is a possibility that such a person is resisting change under that disguise or may have ulterior motives which the person conceals with statements like that.

An Italian manager vehemently claimed that the communication technique suggested by his American coach would never work in the Italian culture when he was having issues gaining full cooperation from his team. Rather than continue in the process that he felt would never work, he decided to probe into the manager’s objections and accepted that such techniques may not be so successful in Italy. With a few other techniques readily available, the coach suggested that the manager try out a new skill as an experiment to see how it would work.

Based on this, the Italian was surprised to see how well they worked. As shown in this example, coaches can be sensitive to cultural differences without allowing their work to be affected by these differences.

3. Orchestrate change. Coaches do not have to do everything themselves to be effective. They can enable learning by organizing the resources and setting up conditions favorable for development. In some cases, the coach may not be the expert on what the learner needs, but an environment of with the right resources and people can help the learner get the information, support and opportunities needed. In this case, the coach does not have to bear the burden of having to meet the expectations, feedback, instructions and advice instead the well-set up community and the person being coached as well have the responsibility of ensuring the training continues in the right direction. The fact that the leader is afforded better flexibility is a major advantage of orchestrating the cross-cultural coaching. If a person is not convinced by the techniques used by the coach an he/she needs a better

understanding of changing performance expectations, other sources of information could be considered, including colleagues, official organizational communications, and other leaders.

Other well-respected and credible people can step in whenever the coach or leader is not available to offer information. A person who needs information or guidance but is not in the same geographic location as the coach can be helped by people from a similar cultural background or ongoing support and guidance. Also, indirect channels of sharing info about a person can be sought in areas or places where feedback from a coach is not acceptable.

The most important task of the leader is to ensure that the person that needs to be coached is coached and the person's performance is improving. Important guiding questions to always ask are "What do I need to do to coach this person? How do I help this person develop?" the coach can then leverage on the shift in objective to easily navigate cultural barriers that may derail the coaching program. The 3 guidelines stated above will surely apply to all aspects of coaching. The leader is afforded the latitude to adapt to the uniqueness of individual and cultural differences, as well as the ability to flexibly adopt the principles of how people change. Irrespective of culture, these principles are effective.

Leaders basically have 3 main avenues for orchestrating an environment that supports continuous learning.

1. They can be development role models. When leaders make it open to all that he/she is still learning, a powerful message is sent to all members of the team that the process of learning is for all and that everyone is encouraged to try out new things with the aim of advancing learning techniques. Activities like sharing and learning, seeking feedback and coaching or trying out new skills in front of others can significantly improve the environment that supports continuous development. Even in the cases where the development climate is about to be changed, coaches have to pay extra attention to ensure that only the behaviors that can heighten the learning process is modeled.

2. The local learning climate can be influenced by each leader, irrespective of their role or position. When setting up group goals and tracking them, they can highlight the role of development and integrate discussions of development into meetings, performance reviews and project debriefing. They can also create an atmosphere of trust, where people feel safe and this supports easy transfer of information.

3. Leaders have the capacity to influence organizational practices and policies; they can make their opinion known even if they do not have the formal responsibility for development and performance initiatives (Conger, 2015; Hackman & Wageman, 2005; Bass & Riggio 2006). They can say what they feel about issues like reward systems, succession management, performance reviews, and competency models. The behavior of leaders and their expectations of individuals to change are guided by cultural beliefs (Hunt, 1991; Hughes, 1993; Robertson 2016; Kets de Vries, 2005). Coaches continually adapt their coaching methods as they uncover different norms and beliefs that may influence their coaching style. In a culture that promotes personal privacy and traditionally employs more indirect communications, it would be foolhardy to continue with open discussions about personal development. Some cultures see a coach as weak or effectual if he admits self-development efforts and as such the coach cannot be emulated. A coach also has to monitor levels of development stretch and risk taking which may be considered appropriate in his quest to establish an environment for development. All strategies require each coach to apply relentless vigilance and questioning to ascertain the approach that will best suit the circumstance.

Conclusion

First, leaders know themselves as well as what they can offer in terms of development techniques. They are open to new methods, capabilities and assumptions. Second, the process of coaching is something leaders pay close attention to. They are always searching for the next ingredient that

will enhance the learning process and help them connect better with others (Goleman 2000; Porras & Robertson, 1992). Third, leaders adjust to the person being coached and their individual goals and values in the cultural context. In situations where such a person is trying to create a radical change, the leader has a responsibility to accommodate the person's foundation and build on the unique capabilities of that person. With the help of these 3 sources, a leader can be adaptable, creative and adaptable in maintaining the coaching relationship and processes.

References

Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Mahwah, NJ: Lawrence Erlbaum Associates.

Chmielecki, M. (2009). Coaching modern day nomads. *Journal of Intercultural Management, 1*(2), 135–146.

Cushner, K., & Brislin, R. W. (1996). *Intercultural Interactions. A Practical Guide*. (2nd ed.) Thousand Oaks, CA: Sage Publications, Inc.

Conger, J. (2015). Charismatic leadership. *Wiley Encyclopedia of Management, 1–2*.

Flaherty, J. (2006). Coaching: Evoking excellence in others. *Development and Learning in Organizations: An International Journal, 20*(6), 114–127.

Goleman, D. (2000). Leadership that gets results. *Harvard business review, 78*(2), 4–17.

Gudykunst, W. B., Matsumoto, Y., Ting-Toomey, S., Nishida, T., Kim, K., & Heyman, S. (1996). The influence of cultural individualism-collectivism, self construals, and individual values on communication styles across cultures. *Human communication research, 22*(4), 510–543.

Hackman, J. R. & Wageman, R. (2005). A theory of team coaching. *Academy of management review, 30*(2), 269–287.

Hargrove, R. (2008). *Masterful coaching*. Hoboken, NJ: John Wiley & Sons.

Hermans, H. J., & Kempen, H. J. (1998). Moving cultures: The perilous problems of cultural dichotomies in a globalizing society. *American psychologist, 53*(10), 1111.

Hofstede, G. J. (2009). Research on cultures: how to use it in training?. *European Journal of Cross-Cultural Competence and Management*, 1(1), 14–21.

Hofstede, G. (1991). *Cultures and Organizations: Software of the Mind*. London: McGraw-Hill.

Hughes, R. L. (1993). *Leadership: Enhancing the lessons of experience*. London: McGraw-Hill.

Hunt, J. G. (1991). *Leadership: A new synthesis*. Thousand Oaks, CA: Sage Publications, Inc.

Kanfer, F. H., & Goldstein, A. P. (1991). *Helping people change: A textbook of methods*. Oxford: Pergamon Press.

Kets de Vries, M. F. (2005). Leadership group coaching in action: The Zen of creating high performance teams. *Academy of Management Perspectives*, 19(1), 61–76.

Lewis, D. (1996). The organizational culture saga—from OD to TQM: a critical review of the literature. Part 2—applications. *Leadership & Organization Development Journal*, 23(5), 280–287.

Mahoney, M. J. (1991). *Human change processes*. New York: Basic Books.

Hicks, M. D., & Peterson, D. B. (1999). Leaders coaching across borders. *Advances in global leadership*, 1, 297–315.

Peterson, D. B., Uranowitz, S. W., & Hicks, M. D. (1996). Management coaching at work: Survey of current practices in Fortune 250 organizations. *Annual conference of the American Psychological Association, Toronto, Ontario. Coaching and Performance Management*, 155.



Porras, J. I., & Robertson, P. J. (1992). *Organizational development: Theory, practice, and research*. Palo Alto, CA: Consulting Psychologists Press.

Robertson, J. (2016). *Coaching leadership: Building educational leadership capacity through partnership*. Wellington: New Zealand Council for Educational Research.

Tichy, N. M., & Cohen, E. (1997). *The leadership engine*. New York: HarperCollins.

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The Role of Social Media on Talent Search and Acquisition: Evidence from Contemporary Literature

ABSTRACT

Objective: The main objective of this paper is to explore/investigate the role of social media in searching and acquiring the talented employees and the appropriate rationales behind and ways of using the social media for such purposes with due advantages and risks involved.

Methodology: This paper uses the literatures published from 2010 to 2019 to highlight the research on social media influence on searching talent for organizations. For due purpose, Scopus and ResearchGate databases have been utilized to search the papers using the keywords such as social media, social networking sites, online recruitment & selection, candidate screening, hiring, human resources management and talent search.

Findings: Although social media is getting popular among employers, they are not utilizing this platform as the main rather as secondary sources. LinkedIn is the most preferred source among the employers for searching and acquiring talents.

Value Added: The paper is expected to contribute to the existing literature through an in-depth literature survey as well provide some proper guidelines for the HR professionals to conduct efficient search and recruitment.

Recommendations: The authors have provided some action recommendations based on the literature survey such as (a) the recruiters should make proper reliability and validity tests of the information collected through social media, (b) organizations that intends to use social media information need to develop a proper and transparent social media policy and user codes of conduct, (c) the codes of conducts should be linked to the training manual of the HR professionals who involve in talent search and acquisition, (d) organizations should use social media for searching talents more than screening/selecting, (e) social media should be used as a secondary instrument rather than the sole one; and (f) organizations/hiring professionals should focus only on job related information and professional social media (such as LinkedIn).

Key words: social media, social media recruitment, hiring professional, organization, human resources, recruitment & selection

JEL Codes: **J23** Labor demand, **L86** Information and internet services

1. Introduction

The modern organizations have been transformed into digitally interconnected and streamlined networks from the traditional time consuming and boring manual operations. The latest addition in this digitalization process is the inclusion of using social media in different areas of business such as marketing, operations, advertising, communicating and so on. Particularly in the areas of HR, social media is getting popularity from the inception of 2000s. The practice of using social media such as Facebook, LinkedIn, Twitter for hiring purposes is getting more and more popular among the hiring professionals. However, the questions have risen whether the social media is truly dependable for screening and selecting employees? If yes, how they should be utilized keeping the purpose of organizations served and satisfying the

candidates? What might be the consequences if that social media utilization is not appropriate? There are many more related questions which are yet to be answered. As still today, the academic literatures and organizational guidelines are not adequate in this area, there is a lack of transparent and satisfactory replies for all the questions raised above.

In a study conducted by Statista (2015), it was revealed that one in every four people has a Facebook account. Therefore, it is not surprising why social media are getting so popular among the organizations to serve their own purpose or as a source of massive information. Although, social media can serve as the source of searching talents by providing necessary information, such use might also pose some hidden, potential risks such as misuse of information, legal and ethical considerations, as well as candidates' perception of privacy, fairness and ethics.

Social networks such as LinkedIn, Facebook, Twitter, and Google+ can supply recruiters a vast collection of information about potential candidates. Many large companies with strong and active web presence constructed their brand not only on their own corporate website, but also on these social media sites providing a widespread reach whereby companies can additionally share information about their businesses and the available job opportunities with interested job seekers. Many of these firms using social media by including special job posting pages which make it easier for the tentative applicants to locate those jobs that interest them. Thus, social media is helping in making a potential bridge between candidates and recruiters.

More recently, corporate social media pages have proved to be effectual advertising media with several benefits over conventional job advertising media. As the unemployment rate is high in many countries due to various reasons, majority of job seekers today have at least one social network profile. Today employers definitely turn to social media for recruitment as they understood that they can reach a larger number of skilled job seekers. However, it is an elementary idea that all those who involved in this electronic world and particularly, those who intensively use and utilize social media are

fully conscious of the risks and benefits of such exposure (Melanthiou et al., 2015). In fact, a more methodical exploration of the benefits and pitfalls of social recruitment and the role of social media during the hiring process will discard some light on the reasons behind why companies choose to or not to utilize, this contemporary method of employee search.

2. Literature survey

The origin of human resource management (HRM) has its ancestry dates back to 1800s resulting from Robert Owens' development of "welfare to work" which called for the requirement of improving the working atmosphere for staffs (Deadrick & Stone, 2014). Between 1900 to 1970s, HRM widened encircling the age of Fredrick Taylor that emphasized to increase production efficiency. Throughout this phase, HRM was evident as related to relationship movement. The primary theory behind HRM was largely connected to the welfare, safety, and psychology movements (Kaufman, 2014).

In fact, HRM in current period, it is established and accepted as combination of approaches that significantly increase the success of overall business. Human resources management is currently defined as policies, processes, and systems concerning the inclusion of employee performance to the overall company strategy (Noe et al., 2014). The sub-functions of HRM include recruiting & selection, training and development, performance appraisal, reward systems, and compensation & benefit, even preparing and executing manpower policy. One of the important functions of HRM is to search and recruit the talented workforce for appropriate organizational positions to fill in. Recruiting objectives differ from the filling empty positions, type of candidates required, and time required to fill each and every position. Recruiting strategy of an organization consists of whom, where, and how to recruit. The subsequent steps include the authentic recruitment activities and the results in comparison to the objectives.

2.1 Recruitment

With the overall HRM expansion in terms of extents and topics, the particular aspect of recruiting and its subsequent procedures of screening and selecting have evolved as well. For example, from the 1950s to 1980s approximately 75% of applicants were connected through newspaper advertisements (Hebberd, 2017). At the end of the 19th century, a number of web-based recruiting sites such as careerbuilder.com, hotjobs.com, and monster.com were launched creating the pathway for online job seekers tremendously which increased from 6% in 2002 to 96% in 2006 (Hebberd, 2017). The contemporary level of recruiting mostly comprises of internet, which has become the top source for recruiting till 2012; including more than 90% of employers using SNS for screening purposes and 97% of recruiters use LinkedIn for hiring purposes (Hebberd, 2017). The digital age in organizations should be included with attention leading to the need to notify employers of the diverse aspects of the incorporation of the internet sites (including social media) used in the recruiting, screening, and selecting processes (Villeda & McCamey, 2019).

Any organization utilizing social media as part of their recruitment attempt should consider the general consequences on the organization and its hiring strategy. With the amplification in global competitive rivalry, organizational effectiveness is determined by its ability to attract talented personnel. As an element of the fundamental attainment of human capital, HR hiring officers must successfully complete the procedure of recruiting and selecting upcoming competent human resources. Recruitment and selection are two complicated functions in which organizations look for prospective employees who match the organization's requirements. Recruiting is simply a process of attracting talented job candidates to a company (Lussier, 2015). Selection is the process of choosing the best-qualified candidate from the pool of recruited applicants (Lussier, 2015). It is the first step of hiring a candidate where the organization should be extremely cautious and selective in finding the right future working partners for organizations.

2.2 Selection

The second step of hiring is selection that can be termed as the process of choosing the best-qualified candidate from the pool of recruited applicants (Lussier, 2015). During this process, there is an appraisal to decide applicants' work-related knowledge, skills and abilities (ISO 30405: 2016), as well as the hard and soft skills. Another important part of selection is candidate screening defined as the procedure of reviewing applicants' strengths and weaknesses, in order to make an adequate selection decision. The conventional screening process focuses on a person-job fit (person and organization fit) defined as the knowledge, skills, and abilities (also known as KSAs) job applicant that develop the potentiality of sufficiently performing a job. The technique used in selecting applicants differs depending on the nature of job and organization's culture.

In practice, the selection process begins with an evaluation or testing the information presented on a resume/CV and focusing on the visual form of the resume including legibility, professionalism etc. The screening process continues with a search for contradictory information, asymmetrical employment record and complementary clues that might indicate a certain applicant is well matched (or not) for the job opening. After the initial resume screening, top matched candidates who best fit with the job requirement are selected for an interview or some other standardized tests depending on the organizational hiring policy. Even those tests should not be used as exclusive screening tools; they can provide objective information about the job candidate. On the other hand, Youngman (2017) reported that the validity of personality tests is still inconclusive. According to him such tests should be used with utmost caution recommending for employers to control a test that has been validated with the procedures indicated by the Equal Employment Opportunity Commission. Moreover, any identical tests used must be pertinent to job qualification, administered, and recorded consistently for all job candidates in order to reduce the discrimination suit by the job applicants.

These are merely several most common conventional measures used in the recruiting, screening and selecting process. Employers (HR) should and can acclimatize this process to their specific needs according to the specific job requirements or company policies. Further argument is that although traditional methods of hiring have been successful for many years, they are not free from limitations that could lead employers to look for additional methods. For instance, time to announce a job opening with conventional methods takes time; whereas, by using a web-based platform to recruit can automatically inform hundreds of potential applicants immediately about a vacancy leading the process of hiring to become for efficient. Furthermore, some conventional methods overlook to think applicants' time availability that can be overcome if job opportunities are posted on the web and applicants are able to get the ideas of jobs and apply on their own convenient time.

2.3 Social media

In many previous papers "social media" and "social networking sites" were used interchangeably, each of them carries a specific meaning. Social media is powered by Web 2.0 allowing the connections among individuals through industrial devices; therefore, social networking sites, social shopping, social playing, and social positioning are all elements of social media (Haag & Cummings, 2013). On the other hand, social networking sites (SNS) are those online platforms in which individuals can mechanically produce an account, acquire friends, and share information (Haag & Cummings, 2013). These social media accounts are very familiar now not only for individuals but also many organizations are using them as a platform of advertising and for other different purposes like job advertising, online selling platforms etc. It has been anticipated that as of 2013, U.S. companies paid over \$5 billion for social media advertisements, and by 2018, that number was predicted to increase up to \$15 billion (Zhu & Chen, 2015). The first social media site was launched in 1997 with the creation of Sixdegrees.com that permitted users

to have a custom-made online profile and a list of friends. Later especially after 2004, many types of social networking sites have begun operation and till today, some of the most popular are Facebook, Twitter, and LinkedIn in terms of hiring tools.

2.4 Social media in hiring process: Literature survey

For numerous years, organizations have used jobsites such as Careerbuilder.com in their recruiting practice, leading to the attraction of job seekers from more than 100 career sources. According to Nessler (2014), Careerbuilder.com has been successfully reduced the cost per hire by 70% due to a decline in travel costs and has also reduced by 60% time taken for employers in hiring. Electronic recruiting is the blend of the Web with the process of recruiting human capital (Melanathiou et al., 2015). Companies now have their own social media pages for recruiting job applicants (Melanathiou et al., 2015). For example, companies are now creating and opening their own Facebook pages and using those pages as advertisement tools to assist getting talent (Andrews, 2012). Moreover, there is a boost in social media usage by HR professionals with the intending to find 'elaborate job applicant information', and to screen and select the best-suited applicants (Brown & Vaughn, 2011). According to Facebook authority, a new feature is in progress that would assist companies to their direct job postings (Take the Work out of Hiring, 2017). In addition, according to Facebook's official webpage, job posts are now linked to the Facebook Business Page from where job seekers can see new jobs available through the Jobs bookmarks on Facebook or on the Marketplace (Job posting on Facebook, n.d.). Social media thus serve as a lead to forward followers (job seekers) to organizations' personal website where they can learn about job vacancies (Spellmann, 2018). Having such a substantial figure of account holders, recruiting through Facebook gives employers a much wider diversity of opportunities and challenges.

According to previous research, Facebook and LinkedIn are the most popular social media hiring sites (Melanthiou et al., 2015). According to a study performed by the Society of Human Resource Management (SHRM), on 541 HR specialists, 95% admitted that they use LinkedIn as a recruiting tool; while 58 % reported they use Facebook, and 42 % said that they use Twitter (Zide et al., 2014). An investigation aimed to HR managers to recognize what type of technology they were using in their department and for what reason, concluded that in North America technology was becoming more widespread for hiring job applicants especially mid-level staffing (Villeda & McCamey, 2019). Furthermore, although interviewers reported a higher quantity of job applicants, the quality was likely to stay unchanged or even lower. The use of social media for hiring varies in different countries depending on the availability of internet connection and the usage of social media. For example, 89% of the U.S. has access to the internet, 91% in Canada, 71% in China, 67% in Mexico, 39% in Kenya, and 25% in India (Pew Research Center, 2018). In addition, according to Pew Research Center (2018), wealthier countries such as U.S., Netherlands, Germany, Sweden, Australia, and Canada have a higher utilization of internet compared to developing countries such as India, Tanzania, Indonesia, Bangladesh, Kenya etc. Social media usage differs in different countries, for example, U.S (69%), Canada (68%), and Russia (66%) have higher usage compared to India (20%), Kenya (30%), and Indonesia (26%) (Pew Research Center, 2018). However, in recent years, developing countries are observing an increase in the use of internet and social media from 42% in 2013 to 64% in 2018 (regarding internet usage) and 34% from 2013 to 53% in 2018 (regarding SM usage) (Pew Research Center, 2018). Considering those statistics as the use of social media in hiring process, it is assumed to occur more likely in developed countries rather than developing ones. Therefore, the authors would like to raise the following research questions based on the literature survey.

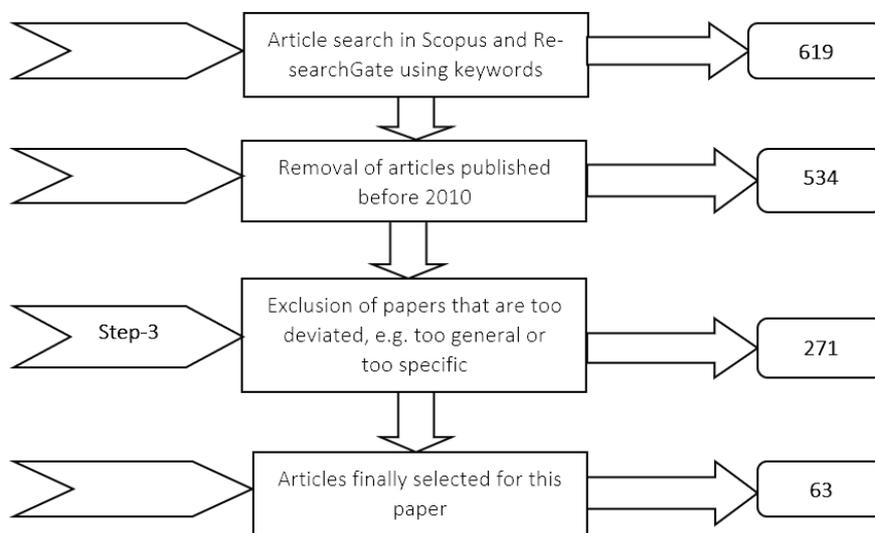
Research question 1: What is the role of social media in attracting and hiring talented candidates?

Research question 2: What are the motives and risks of using social media in searching and acquiring talents?

This paper uses the literature published from 2010 to 2019 to highlight the research on social media influence on searching talent for organizations. For the same purpose, Scopus and ResearchGate databases have been utilized to search the papers using the keywords social media, social networking sites, online recruitment & selection, candidate screening, hiring, human resources management and talent search. The motivations behind using those two research networks are that they are the leading search engines to get scientific articles. They provide meta- information and have the highest probability to be within the title, abstract and keywords. Although, Google Scholar is one of the largest storages of scientific and academic papers, I have not used that as it is very difficult to limit to search keywords within the items.

After the initial search with the keywords, 619 articles were detected. After removing the articles which were published before 2010, the number of papers stood to 434. Finally, those article were removed from consideration which did not include social media or social networking for hiring (recruitment & selection), rather the themes were too general or too specific such as online recruitment & selection, influence of social media in HRM, internet in HRM, branding through social media, social media background check, social media marketing etc. After final screening, the number of articles was 477. The filtering technique we used has been depicted on Figure 1. After that, the abstracts and information have been gone through and the titles, author name (s) and years of publication have been identified on Table 1:

Figure 1. Searching and filtering technique of literature



Source: Authors' elaboration.

Table 1. Literatures selected for this paper

Author(s), Title and Publication Year	Contents/Findings	Source
Juusola, T. (2010). Recruitment & social networking: The future for international recruitment agency	A move towards executive search is an appropriate strategic position for IRA to adopt. However, that it is necessary to continue monitoring trends in the current economic, social and technological areas.	Thesis for Degree Program in International Business, Lahti University of Applied Sciences
Smith, W. P., & Kidder, D. L. (2010). You've been tagged! (Then again, maybe not): Employers and Facebook	Facebook's own policies suggest that an organization may face legal challenges if it considers an applicant's Facebook page as part of the selection process. Just as importantly, there are ethical issues—in particular, an individual's right to privacy—which must be considered. Organizations are encouraged to develop guidelines regarding the use of social networking sites in the application process, based on the practical, legal, and ethical issues covered.	Business Horizons, 53(5)

<p>Abel, S. (2011). The role of social networking sites in recruitment: Results of a quantitative study among German companies</p>	<p>Facebook is defined as a social-oriented site, not often used for recruitment now, although companies predict that Facebook will gain more importance within the next three years.</p>	<p>Master Thesis, Business Administration Track: Human Resource Management, School of Management and Governance University of Twente</p>
<p>Davison et al. (2011). Friend or foe? The promise and pitfalls of using social networking sites for HR decisions</p>	<p>Many managers and HR practitioners are using social networking websites to make important HR decisions such as recruiting, selecting, and terminating individuals.</p>	<p>Journal of Business Psychology, 26</p>
<p>Dennis, C. M. (2011). Legal implications of employee social media use</p>	<p>The law relating to use of social media issues are still developing, but courts are likely to rely upon principles established well before the advent of social media. Employers must be cognizant of the risks inherent in the use of social media among their employees and the potential liability issues throughout the employment relationship, from pre-employment, to employment, to post-employment.</p>	<p>Massachusetts Law Review, 93(4)</p>
<p>Lory, B. E. H. (2011). Employer use of Facebook as a tool in pre-employment screening of applicants: Benefits and ethical, legal, and privacy implications</p>	<p>Using Facebook as a tool in the pre-employment screening of applicants can offer employers a fast and efficient way to get information about prospective employees that could preempt negligent hiring decisions.</p>	<p>Master of Arts Thesis, Organizational Leadership, St. Catherine University</p>
<p>Hoogen, E. (2012). The Role of social media in recruitment and selection processes</p>	<p>Organizations should actively recruit via SNSs, but not to use SNSs for checking a job applicant during the selection process.</p>	<p>BSc. Thesis, Management Studies & Education and Competence Studies, University of Rotterdam</p>
<p>Klumper, et al. (2012). Social Networking Websites, Personality Ratings, and the Organizational Context: More That Meets the Eye?</p>	<p>SNWs may provide useful information for potential use in organizational research and practice, taking into consideration various legal and ethical issues.</p>	<p>Journal of Applied Social Psychology, 42(5)</p>

<p>Madera, J. M. (2012). Using social networking sites as a selection tool: The role of selection process fairness and job pursuit intentions</p>	<p>Perceived fairness and job pursuit intentions of applicants are lower for an organization that use social networking websites as a selection tool than an organization that does not use social networking websites as a selection tool.</p>	<p>International Journal of Hospitality Management, 31(4)</p>
<p>Slovensky, R., & Ross, W. H. (2012). Should human resource managers use social media to screen job applicants: Managerial and legal issues in the USA</p>	<p>Using SNWs to screen applicants offers benefits to organizations in the form of gaining a large amount of information about applicants, which may be used to supplement other information (e.g. a resume). It may also help a firm address “negligent hiring” legal concerns. However, other legal considerations as well as issues pertaining to information accuracy, privacy, and justice argue against using such information.</p>	<p>Info, 14(1)</p>
<p>Willey et al. (2012). Candidate screening, information technology and the law: Social media considerations</p>	<p>IT departments, human resources and legal counsel will increasingly need to work together to develop the organization’s social media policies.</p>	<p>Issues in Information Systems, 13(1)</p>
<p>Broughton et al. (2013). The use of social media in the recruitment process</p>	<p>Social media in recruitment would make greater use of these types of tools in the future.</p>	<p>Prepared for Acas by Institute for Employment Studies</p>
<p>Fowler, K. M. (2013). Scanning social networking sites as part of hiring process</p>	<p>According to the screenshots taken from the applicants’ Facebook profiles and rated five personality, it was found that there was no relationship between available information and hiring.</p>	<p>PhD Thesis, Faculty of the Graduate School, Angelo State University</p>
<p>Iddekinge et al. (2013). Social media for selection? Validity and adverse impact potential of a Facebook-based assessment</p>	<p>Facebook ratings did not contribute to the prediction of criteria such as job performance, turnover intentions and actual turnover beyond more traditional predictors, including cognitive ability, self-efficacy, and personality. Furthermore, there was evidence of subgroup difference in Facebook ratings that tended to favor female and white applicants.</p>	<p>Journal of Management</p>
<p>Pritchard, M. (2013). How social recruitment requires students to manage a responsible digital footprint</p>	<p>Considering the extensive internet usage of Generation Y students, it is imperative for cooperative and work integrated learning practices and programs to support students in cultivating a responsible digital footprint. It is recommended that sensitization commences at freshman (first year) orientation and that it extends to curriculum content, policies and campus awareness campaigns.</p>	<p>Refereed Discussion Paper, 18th WACE World Conference on Cooperative & Work Integrated Education, June 24 -27, 2013, Durban, South Africa.</p>

<p>Kluesner, K. E. (2013). Fairness perceptions of screening social networking sites for hiring decisions</p>	<p>Higher levels of privacy invasiveness and less serious levels of the legitimate business concerns found resulted in lower fairness perceptions indicating potential issues employers may encounter as they attempt to balance their legitimate business concerns with applicants' privacy concerns.</p>	<p>Thesis, Degree of Master of Arts in Industrial and Organizational Psychology, Middle Tennessee State University</p>
<p>Ollington et al. (2013). Online social networks: an emergent recruiter tool for attracting and screening</p>	<p>The connector role is identified as a specific attraction mechanism that recruiters use to create numerous weak ties, where some are so weak that they barely constitute ties at all. Branding, transparency and data specificity are three mechanisms recruiters use to strengthen these ties when performing the attracting and screening functions.</p>	<p>Personnel Review, 42(3)</p>
<p>Reicher, A. (2013). The background of our being: Internet background checks in the hiring process</p>	<p>At least, a fifth to a quarter of employers uses internet search engines or social networks to screen candidates at some point during the hiring process, suggesting a taxonomy of three different approaches to internet information gathering.</p>	<p>Berkeley Technology Law Journal, 28(1)</p>
<p>Roth et al. (2013). Social media in employee-selection-related decisions: A research agenda for uncharted territory</p>	<p>Organizational practice has outpaced the scientific study of SM assessments in an area that has important consequences for individuals (e.g., being selected for work), organizations (e.g., successfully predicting job performance or withdrawal), and society (e.g., consequent adverse impact/diversity).</p>	<p>Journal of Management, 20(10)</p>
<p>Roulin, N., & Bangerter, A. (2013). Social networking websites in personnel selection: A signaling perspective on recruiters' and applicants' perceptions</p>	<p>Recruiters and potential applicants (students and graduates) both perceive professional SNWs (e.g., LinkedIn) as a potential antecedent of Person-Job fit information and personal SNWs (e.g., Facebook) as a potential antecedent of Person-Organization fit information. When evaluating the same SNW profile, recruiters and potential applicants focus on different sections of the profile (e.g., recruiters focus more on job-related information), but they tend to infer similar personality traits.</p>	<p>Personnel Psychology, 12(3)</p>
<p>Sameen, S., & Cornelius, S. (2013). Social networking sites and hiring: How social media profiles influence hiring decisions</p>	<p>LinkedIn is a widely used SNS for screening candidates and hiring professionals consider professional qualifications, organizational fit and communication skills to be the major determinants of selection or rejection of candidates.</p>	<p>Journal of Business Studies Quarterly, 7(1)</p>

<p>Stoughton et al. (2015). Examining applicant reactions to the use of social networking websites in pre-employment screening</p>	<p>Social networking website screening caused applicants to feel their privacy had been invaded which ultimately resulted in lower organizational attraction. Applicants low in agreeableness had the most adverse reactions to social networking website screening. Furthermore, screening again caused applicants to feel their privacy had been invaded, resulting in lower organizational attraction and increased intentions to litigate. The organization's positive/negative hiring decision did not moderate the relationship between screening and justice.</p>	<p>Journal of Business and Psychology</p>
<p>Tecassala, V. (2013). The use of social networking sites as a tool for employers in screening job candidates during the recruiting process: The ethical dilemma. Irish perspective</p>	<p>There is no specific legal restriction regarding the searching of candidate's information online as anything online is considered to be publicly accessible. However, there are some equality legislation in place to ensure that when employers or recruiters conduct such social networks checks on candidates, they do not interfere with candidate's right to privacy, neither their decision on not to hire the individual should be based on information found on social networking profile.</p>	<p>MSc. Thesis in Management, National College of Ireland</p>
<p>Lorenz, B. (2014). If I do not like your online profile, I will not hire you!</p>	<p>Companies require that their offices will search out information, ask around for background information or find other sources if they are not allowed to do that. This at the same time might be violating peoples' rights to privacy.</p>	<p>Conference Paper, Institute of Informatics, Tallinn University</p>
<p>Nikolaou, I. (2014). Social networking web sites in job search and employee recruitment</p>	<p>Job seekers still seem to use job boards more extensively than SNWs. The association between LinkedIn usage, its effectiveness, and time spent on SNWs and LinkedIn effectiveness, on the other, is stronger for 'passive' candidates, demonstrating the important role of SNWs for attracting 'passive' candidates. HR professionals are more engaged in LinkedIn than Facebook and were considering the former as more effective than the latter in the recruitment process.</p>	<p>International Journal of Selection and Assessment, 22(2)</p>
<p>Pike et al. (2014). Information from social networking sites: Context collapse and ambiguity in hiring process</p>	<p>Information from social networking sites can be useful, yet can create ambiguity for decision makers because of context collapse made possible in SNS technologies.</p>	<p>Information Systems Journal, 28</p>
<p>Zide et al. (2014). LinkedIn and recruitment: how profiles differ across occupations</p>	<p>There are significant differences with respect to ten of the LinkedIn variables in how people presented themselves across the three groups. There were also several gender differences found.</p>	<p>Employee Relations, 36(5)</p>

<p>Zhang, L. (2014). Legal and ethical implications of using social media in human resource management</p>	<p>Although there are many advantages in using social media networks to assist HR to select and filter job candidates, there are reasons for concerns.</p>	<p>International Journal of Innovation, 2(1)</p>
<p>Chiang, J. K. & Suen, H. (2015). Self-presentation and hiring recommendations in online communities: Lessons from LinkedIn</p>	<p>The recruiters make inferences about job seekers' person–job fit and person–organization fit based on argument quality in specific self-presentation categories, which in turn predict recruiters' intentions to recommend job seekers for hiring. Although certain specific categories of self-presentation offering source credibility have positive associations with person–person (P–P) fit perception, there is a non-significant relationship between perceived P–P fit and hiring recommendations.</p>	<p>Computers in Human Behavior, 48</p>
<p>Digle, A. & Yazdanifard, R. (2015). The utilization of social networking websites by companies as a hiring tool; its effectiveness and reliability from the applicants and employer's perspective</p>	<p>There is a distinction between how users of social networking sites perceive the utility and purpose of social networking sites and how recruiters see the social networking sites. Users of Social networking sites utilizes them mostly for social networking purposes, while recruiters utilize these sites to accumulate character data about job seekers without the candidates perpetually comprehending what data was considered. Nevertheless, Social networks offer an intense apparatus for employers to achieve a pool of experienced individuals that they may not otherwise have the capacity to reach.</p>	<p>European Journal of Business and Social Sciences, 4(1)</p>
<p>Dinesh, M. & Kumar, M. K. R. (2015). Is social media a preferable source of recruitment? An employers' perspective with reference to IT sector in Bangalore</p>	<p>Social media sites carry with distinct advantage of enabling companies to reinvent themselves internally as well as externally</p>	<p>International Journal of Business and Administration Research Review, 2(11)</p>
<p>Drake, J. R. & Furner, C. (2015). Screening job candidates with social media: A manipulation of disclosure requests</p>	<p>A request for social media account logins reduces the trust in the employer, whereas collectivism, perceived privacy protection competence, and social media production increases trust in the employer.</p>	<p>Conference paper, Twenty-first Americas Conference on Information Systems, Puerto Rico, 2015</p>

<p>Hazelton, A. S. & Terhorst, A. (2015). Legal and ethical considerations for social media hiring practices in the workplace</p>	<p>It is crucial for both employers and employees to be on the same page with social networking policies and procedures. Educating employees regarding the established guidelines will help prevent any mishaps in the workplace. Becoming informed on the best practices, and then applying them will have a tremendous impact on the work environment.</p>	<p>The Hilltop Review, 7(2)</p>
<p>Melanthiou et al. (2015). The use of social network sites as an E-recruitment tool</p>	<p>The online recruitment method has a lot of benefits but also pitfalls of which recruiters should be aware. Furthermore, it seems that the contemporary practice of employee screening through social media can highly affect the hiring decision and legal implications are likely to arise with the wrong use of information. On the contrary, a well-designed system and strategic utilization of available information about potential candidates may significantly assist the recruitment of employees with the most suitable skills and competencies.</p>	<p>Journal of Transnational Management, 20</p>
<p>Jennifer, D. J. (2015). From due diligence to discrimination: employer use of social media vetting in the hiring process and potential liabilities</p>	<p>Since inherent risks of inaccuracy, misinterpretation, and lack of verifiable data on social media can compromise any screen, setting strict internet search procedures and consistent application, or otherwise hiring a third-party vendor, are optimal self-regulatory approaches for employers to both maintain business interests and prevent legal liabilities.</p>	<p>Loyola of Los Angeles Entertainment Law Review, 35</p>
<p>Kroeze, R. (2015). Recruitment via social media sites: A critical review and research agenda</p>	<p>Companies should try to develop policies regarding appropriate and inappropriate use of internet screening. If this is done properly, everybody in the company will know what the standards are that will help to limit the problems concerning social media recruitment. Companies could also conduct a risk-benefit analysis.</p>	<p>5th IBA Bachelor Thesis Conference, The Faculty of Behavioral, Management and Social Sciences, Enschede, University of Twente</p>
<p>Lewis et al. (2015). A critical analysis of the implementation of social networking as an e-recruitment tool within a security enterprise</p>	<p>Social networking can be effectively used as an e-recruitment tool as long as a traditional recruitment method is also used.</p>	<p>Cogent Business & Management, 2</p>

<p>Rana, G. (2015). Use of social media to find suitable applicants in the advertising industry</p>	<p>Numbers of people being hired through these medias are increasing everyday with increasing number of users and with different new platforms available. It can be assumed that use of social media will grow in future for recruitment in advertising agencies as well as other sectors. With appropriate choice of words and designs and good communication and interaction skills employers can establish themselves as a desired recruiter.</p>	<p>Degree Thesis, International Business, ARCADA</p>
<p>Schneider, T. J. (2015). Social networking sites and personnel selection: An initial validity assessment</p>	<p>If password is requested, 57.87% applicants would refuse the request, and would thus remove themselves from the applicant pool reducing the utility of an organization's selection system and thereby impact an organization's bottom line. Also, the password request could result in adverse impact for protected groups, and lead to legal action on behalf of applicants within these groups. There was only a slight potential benefit to the loss of applicants in that those remaining in the pool were slightly higher on agreeableness and conscientiousness, and lower on psychopathy. However, the effect sizes were small, and those remaining in the applicant pool scored higher on impression management, suggesting that their more favorable personality scores may have been dissimulated.</p>	<p>PhD Thesis, Doctor of Philosophy, Industrial/ Organizational Psychology, The School of Graduate and Postdoctoral Studies, The University of Western Ontario</p>
<p>Aguado et al. (2016). Applicant reactions to social network web use in personnel selection and assessment</p>	<p>Applicants show more positive attitude to the use of professional SNWs compared to non-professional SNWs. In addition, female and young applicants have less positive attitudes than males and other participants towards the use of non-professional SNWs.</p>	<p>Journal of Work and Organizational Psychology, 32(3)</p>
<p>Black, S. W., & Schmidt, G. (2016). How to Stay Current in Social Media to Be Competitive in Recruitment and Selection</p>	<p>Developing technologies and other developments that could have significant impact on how social media is best used by organizations</p>	<p>Social Media in Employee Selection and Recruitment (Chapter 10)</p>
<p>Cooley, D., & Parks-Yancy, R. (2016). Impact of traditional and internet/social media screening mechanisms on employers' perceptions of job applicants</p>	<p>Older employers checked candidates once online, whereas younger employers checked candidates multiple times.</p>	<p>The Journal of Social Media in Society, 5(3)</p>

<p>Hoek et al. (2016). Publishing personal information online: How employers' access, observe and utilize social networking sites within selection procedures</p>	<p>SNS profiles were either accessed as part of an organization's official selection process through integrating internet screening as part of the formal process and obtaining candidate permission, or through covert (without consent) observation. Facebook was primarily used to identify a candidate's organization fit and make assessment of their soft skills, whereas LinkedIn distinguished their professional attributes and job fit. Problems were associated with the extent to which SNSs were reflective of the person and whether a candidate's personal life reflected their work. Respondents focused more upon the legality, rather than the ethics, of accessing "private" information via SNSs.</p>	<p>Personnel Review, 45(1)</p>
<p>Ladkin, A., & Buhalis, D. (2016). Online and social media recruitment: Hospitality employer and prospective employee considerations</p>	<p>Considerations for employers include website attributes, issues of fairness in the recruitments process and brand reputation. For prospective employees, the considerations center on public and private online profiles. Considerations common to both include the value of an online presence, the blurring of boundaries in online information and legal implications.</p>	<p>International Journal of Contemporary Hospitality Management, 28(2)</p>
<p>Schmidt, G. B. & O'Connor, K. W. (2016). Legal concerns when considering social media data in selection</p>	<p>Organizations might consider creating in-depth and clear procedures of how social media data from sites examined would have protected class information removed before the relevant social media data is passed onto evaluators. Companies may also consider having a third-party vendor do the social media data collection process.</p>	<p>Social Media in Employee Selection (Chapter-13)</p>
<p>Stephanie, L. B., & Schmid, G. B. (2016). How to stay current in social media to be competitive in recruitment and selection.</p>	<p>Social media can be a good source of recruitment and selection to be competitive if properly utilized.</p>	<p>Social Media in Employee Selection and Recruitment (Book chapter)</p>
<p>Wade, J. (2016). Social media and selection: How does new technology change an old game?</p>	<p>Perceived similarity influenced liking and in turn, hireability, for all of our political conditions, regardless of the social media platform information was viewed on.</p>	<p>Working Paper Series No. 61, Clemson University</p>
<p>Drake et al. (2016). Job Applicants' Information Privacy Protection Responses: Using Social Media for Candidate Screening</p>	<p>Individual ethical decisions and the perceived intensity of the moral dilemma increase job seekers' intentions to protect the information privacy of their social media accounts when confronted with requests for login credentials from potential employers.</p>	<p>Transactions in Human-Computer Interactions, 8(4)</p>

<p>Carpentier et al. (2017). Recruiting nurses through social media: Effects on employer brand and attractiveness</p>	<p>Nurses' exposure to the hospital's Facebook or LinkedIn page had a significant positive effect on a majority of the employer brand dimensions, both instrumental and symbolic. In addition, nurses who visited the Facebook page felt more attracted to working at the hospital. Most of these effects were mediated by social presence.</p>	<p>Journal of Advanced Nursing, 73(11)</p>
<p>Holland, P. & Jeske, D. (2017). Changing Role of Social Media at Work: Implications for Recruitment and Selection</p>	<p>Certain emergent practices such as cyber-vetting and applicant data mining demonstrate a lack in moral, ethical, and legal frameworks. The lack of attention paid to these new HR risks highlight the skill gap within the HR profession to handle information and data security challenges, any of which can be exacerbated due to social media.</p>	<p>The Changing Context of Managing People (Emerald Book Series)</p>
<p>Vroman et al. (2016). Employer Liability for Using Social Media in Hiring Decisions</p>	<p>The complex requirements and serious potential for loss imposed by state and federal legal systems demands that enterprises familiarize themselves with the rules and best practices concerning the use of social media in the hiring process.</p>	<p>Journal of Social Media for Organizations, 3(1)</p>
<p>Baert, S. (2017). Facebook profile picture appearance affects recruiters' first hiring decisions</p>	<p>Candidates with the most beneficial Facebook picture obtain approximately 38% more job interview invitations compared to candidates with the least beneficial picture. In addition, evidence suggested for a higher effect of Facebook profile picture appearance on hiring chances when candidates are highly educated and when recruiters are female.</p>	<p>New Media & Society, 20(3)</p>
<p>Cerro et al. (2017). Interpersonal perception of LinkedIn profiles and employability</p>	<p>LinkedIn is a very useful tool that provides added value by speeding the initial phase of the personnel selection process: the filtering of CVs. However, the benefits offered by this method serve only to streamline this process, not to eliminate the need for it.</p>	<p>Aloma, 35(2)</p>
<p>Egerová, D. & Eger, L. (2017). Recruitment through the use of corporate websites – A comparative study</p>	<p>Most companies provide explicit organizational related information and available information regarding job characteristics. On the other hand, the findings indicate that most companies do not communicate components regarding their culture and do not provide content specifically targeting college or university candidates. Moreover, only a half of companies from the study sample (AutoSAP) uses social media as a part of their recruitment efforts.</p>	<p>Education Excellence and Innovation Management through Vision 2020. Conference paper presented at Norristown: International Business Information Management Association</p>

<p>Priyadarshini et al. (2017). Employer attractiveness through social media: A phenomenological study</p>	<p>Through social media it has become very easy for to interact with the prospective employers. By using social media, resumes and applications can be received from prospective employees shortly to the applicants with equal efficiency. Further, social media reduces many costs for the company by enabling to reach potential employees. Lastly, the usage of social media should be restricted to recruitment and marketing only.</p>	<p>The Qualitative Report, 22(4)</p>
<p>Zubielqui et al. (2017). Social media, open innovation & HRM: Implications for performance</p>	<p>Social media serves as a mediator for the effect of external knowledge flows on firm innovativeness when firms attach high importance to modern HRM practices. Furthermore, while the results demonstrate that innovativeness and firm performance are positively related, innovativeness does not translate into improved firm performance in firms that attach low importance to modern HRM practices.</p>	<p>Technological Forecasting & Social Change</p>
<p>Callan, R. C. (2018). The effects of selection system characteristics and privacy needs on procedural justice perceptions: An investigation of social networking data in employee selection</p>	<p>Manipulation of justice rules being related to perceptions of the associated procedural justice rules, also related to overall procedural justice perceptions. Further, privacy concerns were related to overall procedural justice perceptions. The moderating role of privacy concerns on the relationship between procedural justice rule perceptions and overall procedural justice perceptions was not supported. A post-hoc analysis revealed that the interaction between objective procedural justice and privacy concerns had a small effect on procedural justice perceptions.</p>	<p>PhD Thesis, Psychology, Old Dominion University</p>
<p>Koch, T., Gerber, C., & De Klerk, J. J. (2018). The impact of social media on recruitment: Are you LinkedIn?</p>	<p>Despite still utilizing some traditional methods of recruiting, South African recruiters follow their international counterparts, with LinkedIn being central to their respective recruitment processes. The use of Twitter and Facebook for recruitment was found to be substantially lower in South Africa than elsewhere. Without following a focused approach, the volume of work that emanates from using social media may overwhelm a recruiter.</p>	<p>SA Journal of Human Resource Management, 16</p>
<p>Kutlur et al. (2018). LINKEDIN for recruitment: An examination of recruiters' use of "Apply" and "Easy Apply" features</p>	<p>Most recruiters prefer 'Easy Apply' for all recruitment on LinkedIn because of its ease of use.</p>	<p>Conference Paper. Department of Management Information Systems, Bogazici University, Istanbul, TURKEY.</p>

<p>Nugroho, F. E., & Trinugroho, I. (2018). Facebook contents and job recruitment: A experimental study</p>	<p>Applicants' Facebook contents significantly affect the recruitment decisions which are indicated by the difference of choice from the first phase to third phase. Qualified applicants are associated with more professional contents on their Facebook accounts</p>	<p>Jurnal Ilmiah Manajemen, 8(2)</p>
<p>Kimberly et al. (2018). Social media, data privacy and the internet of people, things and services in the workplace: A legal and organizational perspective</p>	<p>Social media and other data privacy issues have had a transformative impact on the workplace. They have also presented organizations with many issues, both positive and negative, to consider. Specifically, with regard to selection and termination of employment, social media has played an increasingly prominent role in organizations. Likewise, data management and employee privacy are vital, as wellness programs, GPS tracking, and mobile devices are often offered to employees.</p>	<p>The Internet of People, Things and Services Workplace Transformations (Book chapter)</p>
<p>Roulin, N., & Levashina, J. (2018). LinkedIn as a new selection method: Psychometric properties and assessment approach</p>	<p>Initial LinkedIn-based ratings correlate with self-reports for more visible skills (leadership, communication, and planning) and personality traits (extraversion), and for cognitive ability. LinkedIn-based hiring recommendations are positively associated with indicators of career success. Potential adverse impact is also limited. Profiles that are longer, include a picture, and have more connections are rated more positively. Some of those features are valid cues to applicants' characteristics (e.g., applicants high on conscientiousness have longer profiles). An itemized LinkedIn assessment is more effective than a global assessment.</p>	<p>Personnel Psychology</p>
<p>Suen, H. (2018). How passive job candidates respond to social networking site screening</p>	<p>A candidate who can better control his/her SNS information is less likely to perceive that his/her privacy has been invaded during SNS screening by potential employers, thus mitigating his/her perception of procedural unfairness. In addition, when SNS screening is more transparent, the candidate is less likely to perceive the selection procedure as unfair, which will reduce his/her intention to withdraw from employment selection.</p>	<p>Computers in Human Behavior, 85</p>
<p>Villeda, M., & McCamey, R. (2019). Use of social networking sites for recruiting and selecting in the hiring process</p>	<p>SNS should be used in recruiting and selecting of employees, but employers should not solely rely on such platforms. Employers greatly benefit from the unbiased information concerning SNS, but as time progresses and processes evolve.</p>	<p>International Business Research, 12(3)</p>

Source: Literature survey.

2.5 Increasing utilization of social media in hiring process: The motivations

Why increasing number of employers and jobseekers are using social media? What are the advantages and what are the pitfalls of using social media? Do the benefits and limitations differ for employers and jobseekers or actually the same? We try to find the answers of those questions on the following paragraphs:

Reduced cost and time: Literature indicate that social media can reduce the cost and time needed for recruitment with higher efficiency (Petre et al., 2016; Rosoiu & Popescu, 2016; Vidros et al., 2016). For example, placing an ad on the internet is often cost free and the information may be edited if any mistake is noticed or a change is needed (Sylva & Mol, 2009), while publishing a job ad in a newspaper requires financial resources. Online Recruitment also allows for a considerable reduction in paperwork, reducing application costs (Petre et al., 2016).

Readymade information: Social media provide some information already available for the employers that are not otherwise obtainable elsewhere such as behavioral pattern, hobbies, interests, friend groups etc. In addition, there is an opportunity for the employers to cross check the information that has been already provided to them.

To attract passive job seekers: HR professionals frequently sustain that business oriented SNSs present an abundant source of information concerning passive jobseekers (Wolk, 2004). These individuals are particularly attractive for organizations as they represent an unexploited pool of potentials not connected with placement agencies or other recruiting professionals. Many passive candidates are considered to be especially stable employees (DeKay, 2009). DeKay (2009) pointed out that a majority of LinkedIn members are having a profile to be contacted by employers for new career opportunities. Most of profiles include detailed descriptions of present and past work experiences, areas of expertise and links to references made available by former supervisors and co-workers.

To avoid negligent hiring: A good number of employers argue it is purely their responsibility, as stewards of their organizations and as individuals who uphold an obligation to their stakeholders, use social media information to learn as much as they can about potential employees. They further argue that they have a right and a need to protect them from the accusations of negligent hiring. This could occur if an organization 'fails to uncover an applicant's incompetence or unfitness by a diligent search of references, criminal background or even general background (Clark & Roberts, 2010).

Tentative predictor of potential employee's personality and person-job fitness: Some employers utilize social media information as instruments to evaluate candidates' behavior or characteristics (Stoughton et al., 2015) because such information provide relatively transparent and honest personal information, such as the content posted on candidates' sites by their friends, compared with the information on conventional resumes or application forms, which is expected to project a definite impression or preferred image (Slovensky & Ross, 2012). Kluemper et al. (2012) conducted two studies on Facebook established that screening a job candidate's SNS profile may also supply useful information to forecast the candidate's personality for a hiring decision. Moreover, SNS information can be used to develop targeted interview questions (Davison et al., 2011) and conversations and to build connections during interviews (Smith & Kidder, 2010).

2.6 Using social media in hiring: Benefits and risks

Social media is getting popular to the employers and jobseekers for several reasons. The causes for such popularities have been identified on the following paragraphs dividing between the employers and job applicants:

2.6.1 Benefits and challenges for the employers

It is not to mention that there are a few benefits to using SNS in the hiring. Numerous organizations, especially in technologically advanced countries have already integrated it to some extent. Among them, some notable examples are cheap cost and decreased time to hire, the capacity to reach out to a younger age group and a bigger pool of applicants, attracting passive job applicants, and providing organizations with a diverse tool for predicting the performance of tentative employees.

However, there are more than a few challenges associated for using social media information for hiring, which should also be noted by the HR professionals who are involved in hiring process. The main challenges/risks are legal issues, the incapability to employ a varied pool of candidates (regarding age, gender, and race) and the lack of validity and reliability of these platforms. As a hiring approach, social media provide more benefits at the recruitment stage, having no damage in attracting more job applicants when the charge is nominal. Rather social media use might create further troubles if used during the screening and selection process (Villeda & McCamey, 2019).

2.6.2 Benefits and challenges for the job applicants

A notable benefit of using social media sites for jobseekers in is that social media is a low costs medium for searching for job opportunities. Jobseekers can connect to the social platforms of companies (Job pages in SM) and can effortlessly have entrance to the vacancies companies post. Applicants can even do this secretly, which could be possibly an advantage for who presently employed thus assisting the jobseekers in a more responsive manner (Reiners, 2013).

Further, they can easily access to influential referees and important information about the company (Kroeze, 2015) helping them to prepare even better for the job screening process. On the other hand, social media and social

networking sites especially can raise the possibility to connect and swap information between the employers and job applicants face to face. Jobseekers and recruiters mutually can preserve, organize, and widen their social association more efficiently with the help of social media where they can filter out relevant information and use them to generate new cooperative opportunities.

In case of limitations for jobseekers, the first thing comes out is that users (also applicants) seldom realize what information might be disclosed publicly (Madejski et al., 2011) or how a normal post or comment might be misjudged (Wang et al., 2011) by a possible future employer. An applicant's social networking site does not contain only personal data posted online by him/her but also pictures/shares/comments uploaded by others such as friends, family or institutions. Such information might be incorrect, which might even damage them as an individual (Henson et al., 2011). Social media information might also be inaccurate as there is a lack of reliability that could be transferred when used in the hiring process since one party (candidate) has real information compared to the other (employer) who just interprets it (Villeda & McCamey, 2019).

Individuals are become the victim of identity theft or when fake information is posted about them on someone else's website (i.e., libelous information) (Davison et al., 2012). A study by Kluemper (2012) showed that employers reject jobseekers based on what they find about them on social media. He found that 35% of employers said that they would reject a jobseeker because of information they found on social media.

3. Recommendations for employers and employees

Based on the previous findings, the study attempts to make several recommendations for the employers on using the social media for hiring purposes. The suggestions are highlighted on the following paragraphs:

3.1 Reliability and validity of information collected

Since SM platforms such as Facebook and Twitter depicts decision makers to factors that equal employment law restricts, the burden of proof may be on the organization to demonstrate that group membership did not factor into the hiring decision (and this may be difficult to accomplish). On the basis of these factors, it is strongly suggested that the organizations should refrain from using SM (e.g., Facebook) and other Internet information (e.g., Google searches) until methods for collecting and evaluating such information are shown to be reliable and valid (Iddekinge et al., 2013).

3.2 Development of transparent policy and code of conduct

Iddekinge et al. (2013) recommend that organizations develop clear policies concerning the use of SM and other Internet information. In fact, the outcome of an SHRM (2011) survey suggested that a good number of organizations do not have a policy regarding the use of Internet information. Fortunately, some organizations have already recognized codes of conduct or ethical guidelines for the use of social media guided by some professional associations. Such codes should be extended to reflect on recruitment and selection. These codes should specify the ethical and/or professional consequences of certain actions while providing recommendations to HR professionals to reduce the reliance on individual judgment and morals. In addition, a well-structured and thought-through code of conduct sends a signal to all in the organization (employers and employees) about which practices are acceptable and which are not such as cybervetting applicants without consent or legal justification (Holland & Jeske, 2017).

3.3 Linking the code of conduct to training:

At present, individuals may be hired and promoted to roles with greater responsibility without being trained in how to spot, avert, and react to challenging social media use among employees they manage (Pallarito, 2014; Roberts & Sambrook, 2014). The Society of Human Resource Management (SHRM, 2016a, 2016b) reported the results of two surveys with HR professionals showing the following: Only 56% of respondents in 2011 and 59% in 2013 had a formal or informal policy on applicant screening in their organization. This means that risks such as slander (Lieber, 2011) are almost inevitable, given that around 40% of employers do not have such a policy. Attempts to control what is shared by employees on social media is less likely to be effective than a proactive discussion and effective training only if the responsibilities and confidentiality issues are understood will they be acted upon (Hyman, 2016). While code of conducts may exist, few of these are actually linked to induction training upon hiring or promotion. There are reasons to believe that training and discussion are the keys to ensuring that the underlying aspects of the code of conduct are understood and applied. Training, however, is unlikely to reduce discriminatory practices. The organization must have a policy of fair and unbiased treatment, modeled by its leaders and reinforced through additional training and appropriate legal selection practices (Holland & Jeske, 2017). If the training is not complemented by good management practice (e.g., such as having an open discussion around inclusion vs. discrimination, ethical leaders that role-model ethical behavior when discriminatory practices are discovered), codes of conduct are unlikely to be effective (recommendations on the EEOC, 2016).

3.4 Selection of appropriate media

If an organization wants to use social media for job advertising, it should select the appropriate one that suits. Selecting the wrong social media to

communicate a job opening could result in receiving excess and unrelated applications. Possible overloading of the system could lead to missing actual skilled (talented) applicants. On the other hand, wrong selection could also mean receiving less than the expected applications, leading again to the same outcome. According to some experts, online recruitment is more effective for companies already known (Greengard, 2012; Galanaki, 2002), large, and involved in technology. It was proven that e-recruitment was more effective and yielded more results when the company was more recognized, as job seekers look first at companies that they know and advertise more, and then locate less recognized ones.

3.5 Using the social media more for talent search than screening

The use of social media should be more concentrated in searching talent thorough social media news portals or social media advertising. Organizations should rely less on screening a candidate based on social media information to avoid lawsuit and privacy issues. With having proper guidelines and validity and reliability of social media information, organizations should refrain from using social media information on selection, screening and background checking.

3.6 Using social media a complimentary instrument rather than a sole one

Organization can use social media information as additional tool for initial recruitment rather than solely relying on that. Social media can act as the tool of checking the information on CV or resume of candidates.

3.7 Focusing on job-related information and professional social media only

SM assessments should be related to job related information (Miguel, 2013). The information should note the nature of the KSAs or behaviors being targeted or measured. Further, it is suggested that organizations consider what criterion (or criteria) they wish to predict and what SM information might be relevant to that criterion. This set of suggestions may help clarify results of the SM assessment process, because decision makers will better understand what to focus on and predict. Third, organizations focus only on employment purposed websites (e.g., LinkedIn) (Kluemper et al., 2012; Miguel, 2013; Sinar, 2013; Sinar & Winter, 2012). Again, in this respect, we do not generally recommend using such information in operational selection at this time. Rather, this is a good place to do research “in the background” to see if SM assessments might provide valid information. This background research might examine resume to check if variables such as breaks in employment and promotions might be captured from SM websites (Sinar, 2013). Such data might add to variance accounted for (in various criteria) beyond personality tests or cognitive ability tests, although dealing with potentially incomplete information could still prove challenging (Roth et al., 2013).

4. Theoretical and practical implications

4.1 Theoretical implications

The social media is gaining rapid attention from the academicians and researchers but there are very few evidences (both theoretical and empirical) on how to utilize, when to utilize such a platform form different HR functions. The paper is based on previous literatures where the findings and suggestions are summarized and highlighted. The Authors are hopeful that this paper will help the researchers to further investigate in this matter in more deeply

and with wider scope, thus acting as the bridge for additional investigation as this area of HRM needs more attention and results to be implemented.

4.2 Practical implications

The research will be expected to be further helpful to the organizations and policy makers to implement the suggestions made earlier. Social media is a tool that can be utilized for saving time and money provided that it should be used with extreme caution and with proper guidelines to avoid any complications. The paper might helpful also for formulating and implementing a proper social media policy (SMP) in order to make timely and efficient utilization of social media for hiring purposes.

5. Research limitations and scope for further research

This paper is based solely on previous research published in different journals and thesis based on the authors' findings. This study focused on individual organizations only; limiting the scope. The dimension can be further widened by focusing on the use of social media by recruitment agencies themselves. Further, the impact of training for recruiters in the use of social media, especially Facebook and LinkedIn in the recruitment process might be a further topic that has yet to be explored. Studies in the future may seek to use quantitative methods to do research that allow a much bigger sample size in order to validate the conclusions previously made.

6. Conclusion

As the inevitable parts of technological innovation and development, no one can ignore social media as part of our daily lives. However, cautions should be made while utilizing these networks keeping consistency with law and

regulations. Furthermore, both players in this game, employers and applicants should respect each other in terms of privacy, fairness and ethics (for employers) and organizational hiring policy and practices (for job applications). The social media can only function in an effective and efficient manner if both the employers and employees know the basic legal and ethical foundations regarding these recent utilizations in organizations and business purposes.

It is obvious that social media being widely utilized in searching and acquiring potential employees and it is expected to grow as a hiring tool in upcoming time. However, utilizing social media instead of the traditional methods can be as well problematic. Further, using social media as a searching and recruitment tool might lead to legal issues. Similarly, social media has non-work-related components that could bias decision making regarding recruitment (e.g. photograph, personal interests and personal information). On a final note, we emphasize that using social media as a searching and hiring tool is a rapidly burgeoning practice, though it is severely under-researched. We hope our investigative study will place the foundation for future experimental research in this particular sphere.

References:

Abel, S. (2011). *The role of social networking sites in recruitment: Results of a quantitative study among German companies.* Master Thesis, Business Administration Track: Human Resource Management, School of Management and Governance University of Twente. May.

Aguado, D., Rico, R., Rubio, V. J., & Fernandez, L. (2016). Applicant reactions to social network web use in personnel selection and assessment. *Journal of Work and Organizational Psychology*, 32(3), 183–190.

Andrews, C. (2012). Social media recruitment. *Applied Clinical Trials*, 21(11), 32.

Baert, S. (2017). Facebook profile picture appearance affects recruiters' first hiring decisions. *New Media & Society*, 20(3), 1220–1239.

Black, S. W., & Schmidt, G. (2016). How to stay current in social media to be competitive in recruitment and selection. *Social Media in Employee Selection and Recruitment* (6th ed.) (Chapter 10). Available at: <https://www.researchgate.net/publication/317029678>. Access: 01.03.2019.

Broughton, A., Foley, B., Lendermaier, S., & Cox, A. (2013). The use of social media in the recruitment process. *The Institute for Employment Studies*, 11, 1–81. Available at: <http://www.acas.org.uk/media/pdf/0/b/The-use-of-social-media-in-the-recruitmentprocess.pdf>. Access: 1.03.2019.

Brown R., V., & Vaughn, E. D. (2011). The writing on the (Facebook) wall: The use of social networking sites in hiring decisions. *Journal of Business and Psychology*, 2, 219. Available at: <https://doi.org/10.1007/s10869-011-9221-x>. Access: 01.03.2019.

Carpentier, M., Hoye, G. V., Stockman, S., Schollaert, E., Theemsche, B. V., & Gerd, J. (2017). Recruiting nurses through social media: Effects on employer brand and attractiveness. *Journal of Advanced Nursing*, 73(11), 2696–2708.

Cerro, S., Rodríguez, C., Vidal, M., Escabrós, M., & Oberst, U. (2017). Interpersonal perception of LinkedIn profiles and employability. *Aloma*, 35(2), 13–22.

Callan, R. C. (2018). *The effects of selection system characteristics and privacy needs on procedural justice perceptions: An investigation of social networking data in employee selection.* PhD Thesis in Psychology. Old Dominion University, Spring.

Chiang, J. K., & Suen, H. (2015). Self-presentation and hiring recommendations in online communities: Lessons from LinkedIn. *Computers in Human Behavior*, 48.

Clark, L. A., & Roberts, S. J. (2010). Employer's use of social networking sites: A socially irresponsible practice. *Journal of Business Ethics*, 95, 507–525.

Cooley, D., & Parks-Yancy, R. (2016). Impact of traditional and internet/social media screening mechanisms on employers' perceptions of job applicants. Impact of traditional and internet/social media screening mechanisms on employers' perceptions of job applicants. *The Journal of Social Media in Society*, 5(3), 151–160.

Davison, H.K., Maraist, C. & Bing, M. N. (2011). Friend or foe? The promise and pitfalls of using social networking sites for HR decisions. *Journal of Business and Psychology*, 26(2), 153–159.

Deadrick, D. L., & Stone, D. L. (2014). Human resource management: Past, present, and future. *Human Resource Management Review*, 24(3), 193–195. Available at: <https://doi.org/10.1016/j.hrmr.2014.03.002>. Access: 05.03.2019.

Dennis, C. M. (2011). Legal implications of employee social media use. *Massachusetts Law Review*, 93(4), 380–396.

DeKay, S. (2009). Are business-oriented social networking web sites useful resources for locating passive jobseekers? *Business Communication Quarterly*, 72, 101–105.

Diglei, A. & Yazdanifard, R. (2015). The utilization of social networking websites by companies as a hiring tool; its effectiveness and reliability from the applicants and employers perspective. *European Journal of Business and Social Sciences*, 4(1), 11–21.

Dinesh, M. & Kumar, M. K. R. (2015). Is social media a preferable source of recruitment? An employers' perspective with reference to IT sector in Bangalore. *International Journal of Business and Administration Research Review*, 2(11), 283–290.

Drake, J., Hall, D., Brecton, B. & Posey, C. (2016). Job Applicants' Information Privacy Protection Responses: Using Social Media for Candidate Screening. Job Applicants' Information Privacy Protection Responses: Using Social Media for Candidate Screening, *Transactions on Human Computer Interaction*, 8(4), 160–184.

Drake, J. R., & Furner, C. (2015). *Screening job candidates with social media: A manipulation of disclosure requests*. Conference paper. Twenty-first Americas Conference on Information Systems, Puerto Rico, August.

EEOC (2016). *U.S. Equal Employment Opportunity Commission Strategic Enforcement Plan*. Available at: <https://www.eeoc.gov/eeoc/plan/sep-2017.cfm>. Access: 17.03.2019.

Egerová, D., & Eger, L. (2017). *Recruitment through the use of corporate websites – A comparative study.* In Education Excellence and Innovation Management through Vision 2020. Conference paper presented at Norristown: International Business Information Management Association, UK, December.

Fowler, K. M. (2013). *Scanning social networking sites as part of hiring process.* PhD Thesis, Faculty of the Graduate School, Angelo State University. Spring.

Galanaki, E. (2002). The decision to recruit online: A descriptive study. *Career Development International*, 7(4), 243–251.

Haag, S., & Cummings, M. (2013). *Management information systems for the information age* (9th ed.). New York, NY: McGraw-Hill/Irwin.

Greengard, S. (2012). Picking—and keeping—the cream of the crop: Smart strategies are needed for both recruitment and retention of talent. *Human Resource Management International Digest*, 20(3), 26–29.

Hazelton, A. S., & Terhorst, A. (2015). Legal and ethical considerations for social media hiring practices in the workplace. *The Hilltop Review*, 7(2), 52–59.

Hebberd, L. (2017). *The evolution of finding candidates.* Available at: <https://theundercoverrecruiter.com/evolution-finding-candidates/>. Access: 02.03.2019.

Henson, B., Reynolds, B. W., & Fisher, B. S. (2011). Security in the 21st century examining the link between online social network activity, privacy and interpersonal victimization. *Criminal Justice Review*, 36(3), 253–268.

Hoek, J., O’Kane, P., & McCracken, M. (2016). Publishing personal information online: How employers’ access, observe and utilize social networking sites within selection procedures. *Personnel Review*, 45(1), 47–83.

Holland, P., & Jeske, D. (2017). Changing Role of Social Media at Work: Implications for Recruitment and Selection. In T. Bondarouk, J. M. Huub, & E. Ruël, Emerald Book Series, 287–309.

Hoogen, E. (2012). *The Role of social media in recruitment and selection processes.* BSc. Thesis, Management Studies & Education and Competence Studies, University of Rotterdam.

Hyman, J. (2016). Confidentiality key when training employees on social media. The one thing you're not going to do is stop your employees from posting and sharing. *Workforce*. Available at: <http://www.workforce.com/2016/06/23/confidentiality-key-when-training-employees-on-social-media/>. Access: 28.01.2019.

Iddekinge, C. H. V., Lanivich, S. E., Roth, P. L., & Junco, E. (2013). Social media for selection? Validity and adverse impact potential of a Facebook-based assessment. *Journal of Management*, 42(7). Available at: <https://www.researchgate.net/publication/273589034>. Access: 8.03.2019.

ISO 30405:2016 (2016). *Human resource management – guidelines on recruitment*, 1st ed. Technical Committee/Subcommittee TC 260/WG5; ISO Standards.

Jennifer, D. J. (2015). From due diligence to discrimination: employer use of social media vetting in the hiring process and potential liabilities. *Loyola of Los Angeles Entertainment Law Review*, 35(3), 249–280.

Juusola, T. (2010). *Recruitment & social networking: The future for international recruitment agency.* Thesis for Degree Program in International Business, Lahti University of Applied Sciences. Spring.

Kaufman, B. E. (2014). The historical development of American HRM broadly viewed. *Human Resource Management Review*, 24(3), 196–218. Available at: <https://doi.org/10.1016/j.hrmmr.2014.03.003>. Access: 03.03.2019.

Kimberly, W., O'Connor, J. D., & Schmidt, G. B. (2018). Social media, data privacy and the internet of people, things and services in the workplace: A legal and organizational perspective. In *The Internet of People, Things and Services Workplace Transformations* (pp. 89–187). Willey Online Library: NY, USA.

Kluesner, K. E. (2013). *Fairness perceptions of screening social networking sites for hiring decisions*. Master Thesis, Degree of Arts in Industrial and Organizational Psychology, Middle Tennessee State University.

Kluemper, D. H., Rosen, P. A. & Mossholder, K. W. (2012). Social Networking Websites, Personality Ratings, and the Organizational Context: More That Meets the Eye? *Journal of Applied Social Psychology*, 42(5), 1143–1172.

Koch, T., Gerber, C., & De Klerk, J. (2018). The impact of social media on recruitment: Are you LinkedIn?. The impact of social media on recruitment: Are you LinkedIn? *SA Journal of Human Resource Management*, 16.

Kroeze, R. (2015). *Recruitment via social media sites: A critical review and research agenda*. 5th IBA Bachelor Thesis Conference, The Faculty of Behavioral, Management and Social Sciences. Enschede: University of Twente, November.

Kutlu, B., Rabea, A., & Udeozor, C. R. (2018). *LINKEDIN for recruitment: An examination of recruiters' use of "Apply" and "Easy Apply" features*. Conference Paper. Department of Management Information Systems, Bogazici University, Istanbul, TURKEY. October.

Ladkin, A., & Buhalis, D. (2016). Online & social media recruitment: Hospitality employer and prospective employee considerations. *International Journal of Contemporary Hospitality Management*, 28(2), 327–345.

Lewis, A., Thomas, B., & James, S. (2015). A critical analysis of the implementation of social networking as an e-recruitment tool within a security enterprise. *Cogent Business & Management*, 2, 1–21.

Lieber, L. D. (2011). Social media in the workplace-proactive protections for employers. *Employment Relations Today*, 38, 93–101. Available at: doi:10.1002/ert.20358. Access: 18.03.2019.

Lorenz, B. (2014). *If I do not like your online profile I will not hire you!* Conference Paper, Institute of Informatics. Tallinn University, June.

Lory, B. E. H. (2011). *Employer use of Facebook as a tool in pre-employment screening of applicant: Benefits and ethical, legal, and privacy Implications.* (Online) Master of Arts Thesis, Organizational Leadership. St. Catherine University. Available at: http://sophia.stkate.edu/cgi/viewcontent.cgi?article=1008&context=maol_theses. Access: 29.12.2018.

Lussier, R. N. (2015). *Management fundamentals: concepts, applications & skill development* (7th ed.). Los Angeles, CA: SAGE. Marwick.

Madera, J. M. (2012). Using social networking websites as a selection tool: The role of selection process fairness and job pursuit intentions. *International Journal of Hospitality Management*, 31(4), 1276–1282. Available at: doi:10.1016/j.ijhm.2012.03.008. Access: 09.09.2019.

Madejski, M., Johnson, M. L., & Bellovin, S. M. (2011). *The failure of online social network privacy settings.* Department of Computer Science, Columbia University.

Melanthiou, Y., Pavlou, F., & Constantinou, E. (2015). The use of social network sites as an e-recruitment tool. *Journal of Transnational Management*, 20(1), 31–49. Available at: <https://doi.org/10.1080/15475778.2015.998141>. Access: 11.03.2019.

Miguel, R. F. (2013). LinkedIn for hiring decisions: A content validity framework. In R. F. Miguel, *The promise and perils of social media data for selection.* Symposium presented at the Society for Industrial and Organizational Psychology, Houston.

Nessler, M. (2014). Three ways virtual technologies are making a difference in HR. *Employment Relations Today*, 40, 47–52. Available at: <https://doi.org/10.1002/ert.21433>. Access: 02.03.2019.

Nikolaou, I. (2014). Social networking web sites in job search and employee recruitment. *International Journal of Selection and Assessment*, 22, 179–189.

Noe, R. A., Hollenbeck, J. R., Gerhart, B. & Wright, P. M. (2014). *Fundamentals of Human Resource Management* (5th ed.). New York, NY: McGraw-Hill Education.

Nugroho, F. E., & Trinugroho, I. (2018). Facebook contents and job recruitment: A experimental study. *Jurnal Ilmiah Manajemen*, 8(2), 420–428.

Ollington, N., Gibb, J., & Harcourt, M. (2013). Online social networks: An emergent recruiter tool for attracting and screening. *Personnel Review*, 42(3), 1–10.

Pallarito, K. (2014). Training for social situations; Educate workers on social media advantages, pitfalls. *Business Insurance*, 48.

Petre, A., Osoian, C., & Zaharie, M. (2016). Applicants' perceptions on online recruitment. *Managerial Challenges of the Contemporary Society*, 9(1), 63–67.

Pike, J. C., Bateman, P. J., & Butler, B. S. (2014). Information from social networking sites: Context collapse and ambiguity in hiring process. *Information Systems Journal*, 28, 729–758.

Pew Research Center (2018). *Social media use continues to rise in developing countries but plateaus across developed ones.* Retrieved from: http://www.pewglobal.org/2018/06/19/social-media-use-continues-to-rise-in-developing-countries-but-plateaus-across-developed-ones/pg_2018-06-19_global-tech_0-04/. Access: 10.01.2019.

Pritchard, M. (2013). *How social recruitment requires students to manage a responsible digital footprint.* Refereed Discussion Paper, 18th WACE World Conference on Cooperative & Work Integrated Education, June 24–27. Durban, South Africa.

Priyadarshini, C., Kumar, Y., & Jha, R. R. (2017). Employer attractiveness through social media: A phenomenological study. *The Qualitative Report*, 22(4), 969–983.

Rana, G. (2015). *Use of social media to find suitable applicants in the advertising industry.* Degree Thesis, International Business, ARCADA, August.

Reicher, A. (2013). The background of our being: Internet background checks in the hiring process. *Berkeley Technology Law Journal*, 28(1).

Reiners, T. A. (2013). *Social network perception alignment of e-recruiters and potential Applicants.* 46th Hawaii International Conference on System Sciences, 4576–4585.

Roberts, G., & Sambrook, S. (2014). Social networking and HRD. *Human Resource Development International*, 17, 577–587. Available at: doi:10.1080/13678868.2014.969504. Access: 27.01.2019.

Roth, P. L., Bobko, P., Van Iddekinge, C. H., & Thatcher, J. B. (2013). Social media in employee selection-related decisions a research agenda for uncharted territory. *Journal of Management*, 20(10), 1–30.

Rosoiu, O., & Popescu, C. (2016). E-recruiting platforms: Features that influence the efficiency of online recruitment systems. *Informatica Economică*, 20(2), 46–56.

Roulin, N., & Levashina, J. (2018). LinkedIn as a new selection method: Psychometric properties and assessment approach, *Personnel Psychology*, 17, 322–331.

Roulin, N., & Bangerter, A. (2013). Social networking websites in personnel selection: A signaling perspective on recruiters' and applicants' perceptions. *Personnel Psychology*, 12(3).

Sameen, S., & Cornelius, S. (2013). Social networking sites and hiring: How social media profiles influence hiring decisions. *Journal of Business Studies Quarterly*, 7(1).

Schmidt, G. B., & O'Connor, K. W. (2016). Legal concerns when considering social media data in selection. In R. Landers, G. Schmidt (ed.), *Social Media in Employee Selection and Recruitment*. Available at: https://link.springer.com/chapter/10.1007/978-3-319-29989-1_13. Access: 23.01.2019.

Schneider, T. J. (2015). *Social networking sites and personnel selection: An initial validity assessment*. PhD Thesis, Doctor of Philosophy, Industrial/Organizational Psychology, The School of Graduate and Postdoctoral Studies, The University of Western Ontario. December.

Sinar, E. F. (2013). What LinkedIn links to: Connecting virtual profiles to actual performance. In R. F. Miguel, *The promise and perils of social media data for selection*. Symposium presented at the Society for Industrial and Organizational Psychology, Houston.

Sinar, E. F., & Winter, J. (2012). Social media and selection: How on-line information helps and hurts your hiring process. *DDI Directions*, 1–9. Available at: http://www.imakenews.com/ddi/e_article002559717.cfm?x=b11,0. Access: 23.02. 2019.

Smith, W. P., & Kidder, D. L. (2010). You've been tagged! (Then again, maybe not): Employers and Facebook. *Business Horizons*, 53, 491–499.

Spellmann, E. (2018). *How to leverage social media to benefit your business*. Paper presented at Ranger College Erath County, Stephenville, TX.

Stephanie L. B. & Schmid, G. B. (2016). *How to stay current in social media to be competitive in recruitment and selection*. In: *Social Media in Employee Selection and Recruitment*. Springer International Publishing: Switzerland 2016 R.N. Landers, G.B. Schmidt (ed.). DOI: 10.1007/978-3-319-29989-1_10

Slovensky, R., & Ross, W. H. (2012). Should human resource managers use social media to screen job applicants? Managerial and legal issues in the USA. *Info*, 14, 55–69.

Society for Human Resources Management (SHRM) (2016a). *SHRM survey findings: Using social media for talent acquisition: Recruitment and screening*. January 7, 2016. Available at: <https://www.shrm.org/research/surveyfindings/pages/social-media-recruiting-screening-2015.aspx>. Assess: 28.02.2019.

Society for Human Resources Management (SHRM) (2016b). *The SHRM body of competency and knowledge*. Available at: <https://www.shrm.org/Documents/SHRM-BoCK-FINAL.pdf>. Access: 13.03.2019.

Society for Human Resources Management (SHRM) (2011). *The use of social networking websites and online search engines in screening job candidates*. SHRM Staffing Research, August.

Statista (2015). *Twitter: number of monthly active users 2014* | Statistic. [online] Available at: <http://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/>. Access: 15.03.2019.

Stoughton, J. W., Thompson, L. F., & Meade, A. W. (2015). Examining applicant reactions to the use of social networking websites in pre-employment screening. *Journal of Business and Psychology*, 31. Available at: DOI: 10.1007/s10869-013-9333-6. Access: 10.03.2019.

Suen, H. (2018). How passive job candidates respond to social networking site screening. *Computers in Human Behavior*, 85, 396–404.

Sylva, H., & Mol, S. T. (2009). E-recruitment: A study into applicant perceptions of an online application system. *International Journal of Selection and Assessment*, 17(3), 311–323. Available at: <http://dx.doi.org/10.1111/j.1468-2389.2009.00473.x>. Access: 9.03.2019.

Take the Work Out of Hiring. (2017). Available at: <https://www.facebook.com/business/news/take-the-work-out-of-hiring>. Access: 10.03.2019.

Tecassala, V. (2013). *The use of social networking sites as a tool for employers in screening job candidates during the recruiting process: The ethical dilemma. Irish perspective.* MSc. Thesis in Management, National College of Ireland, August.

Vidros, S., Koliass, C., & Kambourakis, G. (2016). Online recruitment services: Another playground for fraudsters. *Computer Fraud & Security*, 3, 8–13. Available at: [http://dx.doi.org/10.1016/S1361-3723\(16\)30025-2](http://dx.doi.org/10.1016/S1361-3723(16)30025-2). Access: 01.02.2019.

Villeda, M., & McCamey, R. (2019). Use of social networking sites for recruiting and selecting in the hiring process. *International Business Research*, 12(3), 66–78.

Vroman, M., Stulz, K., Hart, C., & Stulz, E. (2016). Employer liability for using social media in hiring decisions. *Journal of Social Media for Organizations*, 3(1), 1–12.

Wade, J. (2016). *Social media and selection: How does new technology change an old game?* Working paper series no. 61. Clemson University, February. Available at: https://tigerprints.clemson.edu/all_dissertations/1763. Access: 22.02.2019.

Wang, Y., Norcie, G., Komanduri, S., Acquisti, A., Leon, P. G., & Cranor, L. F. (2011). *I regretted the minute I pressed share: A qualitative study of regrets on Facebook.* In Proceedings of the Seventh Symposium on Usable Privacy and Security, ACM.

Willey, L., White, B. J., Domagalski, T. & Ford, J. C. (2012). Candidate screening, information technology and the law: Social media considerations. *Issues in Information Systems*, 13(1), 300–309.

Wolk, D. (2004). Social networking sites pique the interest of company recruiters. *Workforce Management [e-journal]* 83, 70–73.

Youngman, J. F. (2017). The use and abuse of pre-employment personality tests. *Business Horizons*, 60(3), 261–269. Available at: <https://doi.org/10.1016/j.bushor.2016.11.010>. Access: 15.03.2019.

Zhu, Y., & Chen, H. (2015). Social media and human need satisfaction: Implications for social media marketing. *Business Horizons*, 58(3), 335–345. Available at: <https://doi.org/10.1016/j.bushor.2015.01.006>. Access: 25.02.2019.

Zide, J., Elman, B., & Shahani-Denning, C. (2014). LinkedIn and recruitment: how profiles differ across occupations. *Employee Relations*, 36(5), 583–604. Available at: <https://doi.org/10.1108/ER-07-2013-0086>. Access: 27.02.2019.



Zubielqui, C. G., Fryges, H., & Jones, J. (2017). Social media, open innovation & HRM: Implications for performance. *Technological Forecasting and Social Change*, 8(3), 1–14.

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Managing Expats and Their Effectiveness: A Comparative Study

ABSTRACT

Objective: This paper investigates how expatriates and UAE citizens understand the effectiveness of expats' performance and significance in the workplace. In addition, it explores the difficulty of managing expats to achieve operational excellence.

Methodology: A questionnaire was sent to over 1000 subjects whose feedback was analysed using descriptive statistics. A t-test has been used for the inferential part whenever requirements allowed it; in case this was not possible, a Mann-Whitney U test was used.

Findings: The results of the conducted statistical analysis suggest that expats think it is difficult to be managed in the UAE compared to the locals who find it relatively easy to manage them.

Furthermore, expats believe their effectiveness as a distinct competency to organizations is much higher compared to UAE citizens.

Value Added: The results of the conducted statistical analysis point some important conclusions about the way that expats and local Emiratis view differently in managing expats and effectiveness of expats.

Recommendations: A further research of this study can be done by examining various types of firms and organizations, by distinguishing them based on their provided services. Comparison among the 7 emirates could also be examined. Comparison between the views of different nationalities of the expats would be very interesting. Other parameters to be examined include age, educational level, nationality (or country of origin), and marital status of the participants.

Key words: Operational excellence; multicultures; managing workforce; increasing efficiency; expats; locals

JEL codes: C02: Mathematical Methods; C012: Hypothesis Testing: General

Introduction

In the contemporary world, maintaining excellence is a major necessity and not an option. To be able to achieve success, organizations need to achieve operational excellence because this provides a major competitive advantage to all organizations. Implementing best practices is one of the major concerns for many organizations all around the world and how to achieve operational excellence is a major concern (Duggan, 2013; Al Darmaki & Ezziane, 2018; Euch, Bouzidi, & Bouzidi, 2019).

The main problem that forms the basis for this study is that the private sectors in the UAE are evolving at a very high pace as the current environment is highly dynamic in nature (Dahi & Ezziane, 2015). Businesses can experience huge losses or profits in a matter of days as the employee turnover is relatively high. In addition, the requirements of organizations are also changing very rapidly. All these factors put a strain on operational excellence at any organization.

As new employees are continuously being added to companies, their management is an underlying issue. Management of these employees is becoming even more difficult because the average age of employees in an organization is reducing greatly and many younger workers are continuously being added to workforce. Another factor in the UAE is that most of the workforce is from other countries. Hence, many employees belong to different countries and thus their management is increasingly difficult (McCreery, Phillips, & Francesco, 2013; Przytuła, 2018; Kipnis et al., 2019).

With all this in mind, the problem is how to manage the varied workforce while at the same time ensure that operational excellence is maintained in the organizations. Maintaining operational excellence is of vital importance for organizations in the UAE and it needs to be dealt with fairness and professionalism (Al Darmaki & Ezziane, 2018).

It is evident that managing employees from different countries is becoming increasingly difficult for companies in the UAE and achieving operational excellence in this scenario is even more difficult. One possible solution is to use this distinctive aspect of the UAE to be an advantage. In other words, nowhere in the world can you find such a large percentage of foreign employees where the working population from other countries is greater than the host country. In the UAE, it is estimated that more than 80% of the working force are foreigners (De Bel-Air, 2015).

The current global conditions advocate the improvement of workers' skills and capabilities (Papadopoulos & Xenaki, 2017). Operational excellence could be achieved using a variety of methods such as improving the existing process, introducing new processes, implementing a best practices framework, implementing Total Quality Management principles (TQM) and by using various other models defined in the literature. In addition to this, in order to accommodate a large expatriate population in a firm, socialization and supporting the newcomers with a social framework is increasingly important (Malik, Cooper-Thomas, & Jelena, 2014; Okpara, 2016; Farooq et al., 2019).

In this work, a comparative study is conducted to illustrate the opinions of locals and expats about managing expats as well as their effectiveness in achieving organizational goals. This study makes use of energies from different cultures to achieve operational excellence (Barbieri, Zani, & Sonn, 2014; De Dreu et al., 2017; Varshneyand & Varshney, 2017; Presbitero & Attar, 2018; Richardson, 2019; Sawagvudcharee, 2019). In order to understand the primary idea, consider the current scenario in the world and especially in the UAE in which most of the people working in UAE organizations are expatriates coming originally from different countries.

The aim is to use the experience and value of these people to achieve operational excellence by developing a best practices framework. Our approach is to utilize the competencies of this large number of expatriate workers in order to formulate a best practices framework (DuPont, 2005). This paper includes the following sections: literature review, theoretical background and hypothesis development, statistical analysis, conclusions and suggestions, and further research.

Literature Review

There are various key factors that lead to operational excellence in firms (Deloitte, 2014; Wassem et al., 2019). The best practices, which led to operational excellence, include the following:

- Alignment to the goals and principles;
- Focused group activities;
- Reduction in the work that is in progress;
- Quickly switching to different relevant technologies;
- Kaizen of operations (continuous improvement);
- Discipline in the workforce;
- Manufacturing and production with zero monitoring required;
- Maintenance of machines and equipment;
- Assured delivery of quality;

- Supplier development for better productivity;
- Waste elimination;
- Employee empowerment;
- Employee training and skills development;
- Scheduling production tasks;
- Control of efficiency of processes;
- Better use of information systems;
- Conservation of energy and materials;
- Use of leading technology.

All these aspects that are specified by Deloitte are highly relevant to organizations. It can be seen that most of these processes are linked with improving production capabilities and improving employees in terms of skills and knowledge and empowering them. Inter-cultural communication also holds primary importance in an organization and it is very important that the leader be highly adept in managing people from different cultures. It is required that a leader has conceptual knowledge of various cultures as well as to having significant knowledge of power distribution and status in a particular culture (Shenkar, 2001; Tihanyi, Griffith, & Russel, 2005, 2014; Homanfar et al., 2015; Gover, Halinski, & Duxbury, 2016; Mansouri & Vergani, 2018; Rezaei et al., 2018; Elia, Petruzzelli, & Piscitello, 2019).

The culture of a company is important in achieving operational excellence. Alignment of goals and principles, better organization, focused group activities, discipline in the workforce, assured delivery of quality, employee empowerment, employee training and skills development and use of leading technology are greatly related to the culture of an organization (Okpara & Kabongo, 2011; Gröschke & Schäfer, 2012; Maderer, Holtbugge, & Schuster, 2014; Glinkowska, 2016). Therefore, it can be stated that culture of an organization plays a very important role in achieving operational excellence in a firm.

Global talent management is also one technique that firms could adopt in order to use cross-cultural factors in their favor (Primecz, Romani & Sackmann, 2011; Meyer, 2014; Jyoti & Kour, 2017). For example, different competencies

of people from different countries can be highly useful for a firm in gaining significant advantage in the market (competitive advantage). Since all firms in a market are likely to have many things in common, one major effect on a firm's competency can be produced by employing people from different cultures and using their knowledge, skills and experience for the benefit of the firm to improve the underlying business process and gain overall competitive advantage (Scullion & David, 2010; Zgodavova, Hudec, & Palfy, 2017; Aytug et al., 2018).

Role of employees in achieving operational excellence

When talking about people, it is often assumed that excellence is a built-in trait of those who repeatedly demonstrate excellence. In organizations, especially the bigger ones, excellence is achieved by a number of smaller acts of excellence, which are in turn delivered by the employees. It should be no surprise that the employees working in a firm are mostly responsible for delivering excellence in a firm; one might counter this fact by stating that excellence is mainly achieved by implementing a best practices framework such as TQM, Six Sigma or other such framework of operational excellence. However, one fact that remains unspoken is that, excellence is delivered when the people in the organization implement best practices carefully.

Hills & Atkins (2013) conducted a study in the context of the UAE and compared it with views in the western world. It was reported that individuals from a different culture are under pressure to adapt to the underlying culture of the country that the person is employed in. Individuals are increasingly likely to adopt the dominant culture and values as per the local customs and therefore it is expected that they will not find much difficulty adjusting to the local environment.

Often it was assumed that organization culture was very hard to change but recent developments have shown that the process of continuous learning can improve organization culture; organizations can put learning at the

core of their methodology and adopt the culture to accommodate the same. This can be particularly beneficial for organizations, which are in the current sphere and where most of the things are dynamic in nature (Yang & Rhee, 2017; Zhang, Jex, Peng, & Wang, 2017; Yang, Zhang, & Yang, 2018).

The cross-culture factor

Consider for example, the employees working in an oil company in the UAE. In such company, there would be employees from Asian countries such as India and Pakistan and at the same time, there would be employees from western countries such as USA, UK etc. These countries have altogether different cultures and therefore mixing them together is a challenge for organizations because most of the people have to adjust themselves to the requirements of the organizations. In addition, the firm faces the difficulty of managing these employees. The fact that most of these employees belong to different countries and cultures could be used to benefit organizations in the UAE. Distinct competencies that these employees possess can be used for the benefit of organizations in operational excellence (Kessler, Cao, O'Shea, & Wang, 2014; Oyemomi et al., 2019).

Theoretical background and hypothesis development

Previous studies examined in the literature review pointed out an important question that this paper is going to address. Essentially, it examines the way local Emiratis and expats view the expats' experience in relation to the operational excellence and the competency of the organizations they work at, and the difficulty in managing the expats. Hence, the research question that is formed in correspondence to the above research target is: Are the opinions of the locals and the expats' experience and their effect on the Operational Excellence and Competency of the firms the same?

As a result, the following research hypotheses are formed:

Research hypothesis 1

The views of expats and locals differ as to the difficulty of managing expats in the UAE.

Research hypothesis 2

The views of expats and locals differ as to the effectiveness of leaders and managers in managing expats employees in the UAE.

Research hypothesis 3

The views of expats and locals differ as to the effectiveness of expats' experience and skills in operational excellence.

Research hypothesis 4

The views of expats and locals differ as to the effectiveness of expats, as a distinct competency to organizations.

The investigation for the acceptance or rejection of each research hypothesis was performed using a series of statistical methods, which are presented below. All these methods are derived from the field of both descriptive and inferential statistics.

The methods of descriptive statistics that are used are frequency tables and statistical measures of central tendency and dispersion. The descriptive statistical methods were used aiming at collecting, organizing and analyzing the data gathered in the context of conducting this research (Benos, 1997).

The method of inferential statistics that is used is the independent t-test, if the requirements for this test are valid, or, the Mann-Whitney U test, in case the requirements for the t-test are not satisfied. The statistical hypotheses in case the independent t-test is used are:

$$H_0: \mu_{\text{locals}} = \mu_{\text{expats}}$$

$$H_1: \mu_{\text{locals}} \neq \mu_{\text{expats}}$$

In case of the Mann-Whitney U test, the hypotheses are:

H_0 : Opinions of locals and expats do not differ as to the importance of human resources in making positive contribution in the organization.

H_1 : Opinions of locals and expats do differ as to the importance of human resources in making positive contribution in the organization.

This specific technique is used to compare the means of more than one population when different samples are used. In the present study, the choice of the technique is performed because of the use of two different samples (locals and expats). The acceptance (non-rejection) of the null proposal (H_0) is implemented when the p-value of the test is higher than the level of statistical significance and implies that there are no statistically significant differences between mean values of the different populations. In case of rejection of the null hypothesis, the estimation of confidence intervals for the difference of averages will show between which groups there are statistically significant differences (Keselman, 1998).

It is worth mentioning that the practice of independent t-test requires normality of the data, the test of which is implemented with the use of Kolmogorov-Smirnov or Shapiro-Wilk test.

In case of the rejection of normality, a non-parametric test will be used instead of the independent t-test, namely, the Mann-Whitney U test.

Finally, it must be mentioned that all of the above statistical methods were implemented by statistical package SPSS (Statistical Package for Social Sciences) and Excel, while the level of statistical significance used is 1%.

The sampling method used in the present work is that of simple random sampling. This methodology was chosen because it combines simplicity and accuracy (Kyriazopoulos & Samanta, 2011). The total population of the survey refers to all employees in the UAE, while the sample size of 1000 participants was determined in a way to achieve both the validity of the central limit theorem and to limit the statistical error to below 4% (3.2%) at a confidence level of 95%.

The sampling procedure was as follows: People were contacted randomly through electronic mail and invited to participate in the survey. This study

has been fortunate enough to gather 1000 fully completed questionnaires. The participants were either male or female of various ethnicities working in different companies in the UAE.

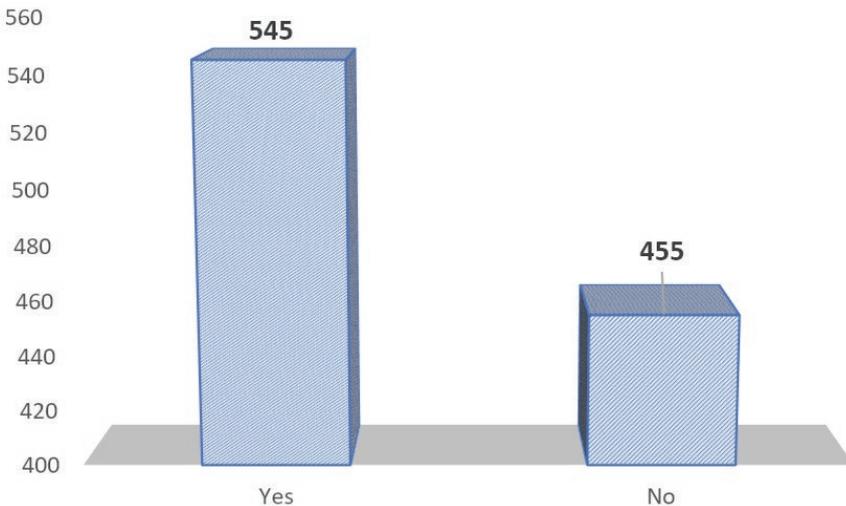
The research tool used in the present investigation was constructed especially for this purpose. The questionnaire consists of 5 closed questions.

Statistical analysis

Figure 1 below describes the sample regarding the basic characteristic of the participants to be local or expats. Specifically, out of 1000 participants:

- 545 (54.50%) are expats and 455 (45.50%) are locals.

Figure 1. Do you belong to a different country?



Source: own elaboration.

The present section presents the results of the conducted statistical analysis as refers to the answers of the participants for each question. Firstly, the frequency tables of the answers of the 1000 participants are displayed. These tables express the attitude of the sample regarding the

rating of each of the questions. Secondly, the results of the tests regarding the comparison between the answers of local Emiratis and expats to the questions are displayed.

The difficulty of managing expats in the UAE is illustrated in table 1. 84 (8.4%) respond "highly difficult", 341 (34.1%) respond "difficult", 217 (21.7%) respond "neutral", 319 (31.9%) respond "easy" and 39 (3.9%) respond "very easy".

Table 1. Rate the Difficulty of Managing Expats in the UAE

	Frequency	Percent	Valid Percent	Cumulative Percent
highly difficult	84	8.4	8.4	8.4
difficult	341	34.1	34.1	42.5
neutral	217	21.7	21.7	64.2
easy	319	31.9	31.9	96.1
very easy	39	3.9	3.9	100.0
Total	1000	100.0	100.0	

Source: own elaboration.

Analyzing the effectiveness of expats represents a distinct competency to organizations, table 2 shows that 324 (32.4%) respond "very effective", 401 (40.1%) respond "effective", 216 (21.6%) respond "neutral", 40 (4.0%) respond "ineffective" and 19 (1.9%) respond "highly ineffective". It is illustrated that the absolute majority of the sample 725 (72.5%) rates the effectiveness of expats, as a distinct competency to organizations as at least effective.

Table 2. Rate the Effectiveness of Expats, as a Distinct Competency to Organizations

	Frequency	Percent	Valid Percent	Cumulative Percent
very effective	324	32.4	32.4	32.4
effective	401	40.1	40.1	72.5
neutral	216	21.6	21.6	94.1
ineffective	40	4.0	4.0	98.1
highly ineffective	19	1.9	1.9	100.0
Total	1000	100.0	100.0	

Source: own elaboration.

When analyzing the effectiveness of expats’ experience and skills in operational excellence as depicted in table 3, 321 (32.1%) respond “very effective”, 361 (36.1%) respond “effective”, 260 (26.0%) respond “neutral”, 39 (3.9%) respond “ineffective” and 19 (1.9%) respond “highly ineffective”. It is observed that the absolute majority of the sample 682 (68.2%) rates the effectiveness of expats’ experience and skills in operational excellence at least effective.

Table 3. Rate the Effectiveness of Expats’ Experience and Skills in Operational Excellence

	Frequency	Percent	Valid Percent	Cumulative Percent
very effective	321	32.1	32.1	32.1
effective	361	36.1	36.1	68.2
neutral	260	26.0	26.0	94.2
ineffective	39	3.9	3.9	98.1
highly ineffective	19	1.9	1.9	100.0
Total	1000	100.0	100.0	

Source: own elaboration.

To understand the effectiveness of leaders and managers in managing expats participants in the UAE, responses are extracted in table 4 which show that 225 (22.5%) respond “very effective”, 440 (44.0%) respond “effective”, 119 (11.9%) respond “neutral”, 138 (13.8%) respond “ineffective” and 78 (7.8%) respond “highly ineffective”. Furthermore, the absolute majority of the sample 665 (66.5%) rates the effectiveness of leaders and managers in managing expats participants in the UAE at least effective.

Table 4. Rate the Effectiveness of Leaders and Managers in Managing Expat Employees in the UAE

	Frequency	Percent	Valid Percent	Cumulative Percent
very effective	225	22.5	22.5	22.5
effective	440	44.0	44.0	66.5
neutral	119	11.9	11.9	78.4
ineffective	138	13.8	13.8	92.2
highly ineffective	78	7.8	7.8	100.0
Total	1000	100.0	100.0	

Source: own elaboration.

Table 5 presents the mean and the standard deviation of the variables that express the importance that the sample recognizes on the 4 features of the questionnaire. These features are presented in descending order of importance:

- Difficulty of managing expats in the UAE (2.89 ± 1.068);
- Effectiveness of leaders and managers in managing expats participants (2.40 ± 1.198);
- Effectiveness of expats' experience and skill in operational excellence (2.07 ± 0.950);
- Effectiveness of expats, as a distinct competency to organizations (2.03 ± 0.933).

Table 5. Descriptive Statistics

	N	Mean	Std. Deviation
Rate the difficulty of managing expats in the UAE	1000	2.89	1.068
Rate the effectiveness of leaders and managers in managing expats employees in the UAE	1000	2.40	1.198
Rate the effectiveness of expats' experience and skills in operational excellence	1000	2.07	.950

Rate the effectiveness of expats, as a distinct competency to organizations	1000	2.03	.933
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Source: own elaboration.

According to both Kolmogorov-Smirnov and Shapiro-Wilk tests of normality, the hypothesis of normality of data is rejected ($p < 0.01$) for all the variables for both expats and locals.

Hence, an independent t-test for comparing the means for each group cannot be used for either of the questions; the Mann-Whitney U test will be used instead. Table 6 shows the results of the Mann-Whitney U test.

Table 6. Test Statistics^a

	Rate the difficulty of managing expats in the UAE	Rate the effectiveness of expats, as a distinct competency to organizations	Rate the effectiveness of expats' experience and skills in operational excellence	Rate the effectiveness of leaders and managers in managing expats employees in the UAE
Mann-Whitney U	95799.000	106936.500	115233.000	120340.500
Wilcoxon W	244584.000	255721.500	264018.000	224080.500
Z	-6.472	-3.971	-2.026	-.846
Asymp. Sig. (2-tailed)	.000	.000	.043	.398
a. Grouping Variable: q5				

Source: own elaboration.

At a level of significance $\alpha = 0.01$, statistically significant differences in the answers for the questions: "Rate the difficulty of managing expats in the UAE" and "Rate the effectiveness of expats, as a distinct competency to organizations" were observed. In addition, at a level of significance $\alpha = 0.05$, statistically significant difference was observed for the question: "rate the effectiveness of expats' experience and skills in operational excellence".

References

Al Darmaki, N., & Ezziane, Z. (2018). Organizing Energies from Different Cultures and Achieving Operational Excellence. *International Journal of Operations and Quantitative Management*, 24(1), 39–48.

Aytug, Z. G., Rua, T., Brazeal, D. V., Almaraz, J., & Gonzales, C. B. (2018). A socio-cultural approach to multicultural experience: Why interactions matter for creative thinking but exposures don't. *International Journal of Intercultural Relations*, 64, 29–42.

Barbieri, I., Zani, B., & Sonn, C. (2014). Meanings of community in contexts of multi-culture: The role of citizenship, identity, and cultural changes. *Journal of Community Psychology*, 42(8), 980–996.

Benos, B. (1997). *Statistics: Descriptive Statistics (Vol. A)*, Stamoulis edition.

Dahi, M., & Ezziane, Z. (2015). Measuring e-government adoption in Abu Dhabi with Technology Acceptance Model (TAM). *International Journal of Electronic Governance*, 7(3), 206–231.

De Bel-Air, F. (2015). *Demography, Migration, and the Labour Market in the UAE, Explanatory Note No. 7/2015*. Gulf Labour Market and Migration (GLMM) programme of the Migration Policy Center (MPC) and the Gulf Research Center (GRC). Retrieved from cadmus.eui.eu/bitstream/handle/1814/36375/GLMM_ExpNote_07_2015.pdf.

De Dreu, C. K. W., Kluwer, E. S., Euwema, M. S., & Van der Vegt, G. S. (2017). Conflict and Culture Across Time and Space: Work and Legacy of Evert van de Vliert. *Negotiation and Conflict Management Research*, 10(2), 141–152.

Deloitte (2014). *Operational Excellence*. Retrieved from www.deloitte.com, http://www.deloitte.com/view/en_VG/vg/services/consulting/strategyoperations/operationalexcellence/index.htm.

Duggan (2013). *Eight operational excellence principles to grow your business.* Retrieved from <http://www.processexcellencenetwork.com/lean-six-sigma-business-transformation/articles/8-operational-excellence-principles-to-grow-your-b/>.

DuPont (2005). *Delivering Operational Excellence to the Global Market.* Retrieved from: <https://docplayer.net/2045056-Delivering-operational-excellence-to-the-global-market-a-dupont-integrated-systems-approach.html>.

Euchi, J., Bouzidi, D., & Bouzidi, Z. (2019). Interpretive structural modeling technique to analyze the interactions between the factors influencing the performance of the reverse logistics chain. *Global Journal of Flexible Systems Management*, 20(1), 43–55.

Elia, S., Petruzzelli, A. M., & Piscitello, L. (2019). The impact of cultural diversity on innovation performance of MNC subsidiaries in strategic alliances. *Journal of Business Research*, 98, 204–213.

Ezziane, Z., & Al Kaabi, A. (2015). *Impact of Social Media towards improving Productivity at AADC.* International Journal of Virtual Communities and Social Networking (IJVCSN), 7(4), 1–22.

Farooq, Q., Fu, P., Ahmad, S., Zhang, Y., & Hao, Y. (2019). Assessing Human Factor in the Adoption of Computer-Based Information Systems as the Internal Corporate Social Responsibility. *SAGE Open*, 9(3). <https://doi.org/10.1177/2158244019868858>.

Frost & Sullivan (2008). *How to improve your operational excellence – TQM Vs Six Sigma.* Retrieved from www.frost.com/prod/servlet/cio/116843782.

Garmero, A., Kampelmann, S., & Rycx, F. (2014). The Heterogeneous Effects of Workforce Diversity on Productivity, Wages, and Profits. *Industrial Relations*, 53(3), 430–477.

Glinkowska, B. (2016). Managing Team in the Multicultural Organizations. *Journal of Intercultural Management*, 8(2), 55–69.

Gover, L., Halinski, M., & Duxbury, L. (2016). Is it Just Me? Exploring Perceptions of Organizational Culture Change. *British Journal of Management*, 27(3), 567–582.

Gröschke, D., & Schäfer, T. (2012). The necessity for self-regulation in intercultural situations. *European J. of Cross-Cultural Competence and Management*, 2(2), 133–148.

Hills, R. C., & Atkins, P. W. (2013). Cultural identity and convergence on western attitudes and beliefs in the United Arab Emirates. *International Journal of Cross Cultural Management*, 13(2), 193–213.

Houmanfar, R. A., Alavosius, M. P., Morford, Z. H., Herbst, S. A., & Reimer, D. (2015). Functions of Organizational Leaders in Cultural Change: Financial and Social Well-Being. *Journal of Organizational Behavior Management*, 35(1–2), 4–27.

Jyoti, J., & Kour, S. (2017). Cultural intelligence and job performance: An imperial investigation of moderating and mediating variables. *International Journal of Cross Cultural Management*, 17(3), 305–326.

Kessler, K., Cao, L., O’Shea, K. J., & Wang, H. (2014). A cross-culture, cross-gender comparison of perspective taking mechanisms. *Proceedings of Biological Sciences*, 281(1785). <https://doi.org/10.1098/rspb.2014.0388>.

Kipnis, E., Demangeot, C., Pullig, C., & Broderick, A.J. (2019). Consumer multicultural identity affiliation: Reassessing identity segmentation in multicultural markets. *Journal of Business Research*, 98, 126–141.

Kyriazopoulos P. G., & Samanta, E. (2011). *Writing dissertations methodology*, Athens: Contemporary editions.

Maderer, D., Holtbuge, D., & Schuster, T. (2014). Professional football squads as multicultural teams: Cultural diversity, intercultural experience, and team performance. *International Journal of Cross Cultural Management*, 14(2), 215–238.

Malik, A. R., Cooper-Thomas, H. D., & Jelena, Z. (2014). The neglected role of cultural intelligence in recent immigrant newcomers' socialization. *International Journal of Cross Cultural Management*, 14(2), 195–213.

Mansouri, F., & Vergani, M. (2018). Intercultural contact, knowledge of Islam, and prejudice against muslims in Australia. *International Journal of Intercultural Relations*, 66, 85–94.

McCreery, J., Phillips, E., & Francesco, C. (2013). *Operational excellence: The imperative for oil and gas companies*. Retrieved from www.bain.com:

<http://www.bain.com/publications/articles/operational-excellence-the-imperative-for-oil-and-gas-companies.aspx>.

Meyer, E. (2014). *The Culture Map*. New York: Public Affairs.

Okpara, J. O. (2016). *Cross-cultural adjustment of expatriates*. *International Journal of Cross Cultural Management*, 16(3), 259-280.

Okpara, J. O., & Kabongo, J. D. (2011). Cross-cultural training and expatriate adjustment: A study of western expatriates in Nigeria. *Journal of World Business*, 46(1), 22–30.

Oyemomi, O., Liu, S., Neaga, I., Chen, H., & Nakpodia, F. (2019). How cultural impact on knowledge sharing contributes to organizational performance: Using the fsQCA approach. *Journal of Business Research*, 94, 313–319.

Papadopoulos, P., & Xenaki, M. (2017). The marketing of Higher Education: How the features of an educational institution affect the selection of post graduate courses by prospective students. *Journal of Tourism, Heritage and Services Marketing*, 3(2).

Presbitero, A., & Attar, H. (2018). Intercultural communication effectiveness, cultural intelligence and knowledge sharing: Extending anxiety-uncertainty management theory. *International Journal of Intercultural Relations*, 67, 35–43.

Primecz, H., Romani, L., & Sackmann, S. (2011). Cross-Cultural Management in Practice: Culture and Negotiated Meanings. Edward Elgar Publishing.

Przytuła, S. (2018). Global Labor Market Trends and Their Significance for the Future Employees' Competences. *Journal of Intercultural Management*, 10(4), 5–38.

Rezaei, G., Mardani A., Senin A. A., Wong, K.Y., Sadeghi, L., Najmi, M., & Shaharoun, A.M. (2018). Relationship between culture of excellence and organisational performance in Iranian manufacturing companies. *Total Quality Management & Business Excellence*, 29(1–2), 94–115.

Richardson, L. (2019). Culturalisation and devices: what is culture in cultural economy? *Journal of Cultural Economy*, 12(3), 228–241.

Sawagvudcharee, O., Yoles, M., Fink, G., & Dauber, D. et al. (2019). Dealing with Change towards Culture and Cognitive. *International Journal of Management and Applied Science (IJMAS)*, 6(7), 21-27.

Scullion, H., & David, C. (2010). *Global talent Management*. Routledge.

Shalender, K., & Yadav, R.K. (2019). Strategic Flexibility, Manager Personality, and Firm Performance: The Case of Indian Automobile Industry. *Global Journal of Flexible Systems Management*, 20(1), 77–90.

Shehadeh, R., Al-Zu'bi, Z. M. F., Abdallah, A. B., & Maqableh, M. (2016). Investigating Critical Factors Affecting the Operational Excellence of Service Firms in Jordan. *Journal of Management Research*, 8(1), 18–49.

Shenkar, O. (2001). Cultural Distance Revisited: Towards a More Rigorous Conceptualization and Measurement of Cultural Differences. *International Business Studies*, 32(3), 519–535.

Tihanyi, L., Griffith, D. A., & Russel, C. J. (2005). The effect of cultural distance on entry mode choice, international diversification, and MNE performance: a meta-analysis. *Journal of International Business Studies*, 36(3), 270–283.

Varshneyand, D., & Varshney, N. K. (2017). The effect of resilience on performance and job satisfaction among construction managers in Saudi Arabia. *Global Business and Organizational Excellence*, 36(5), 36–45.

Wassem, M., Baig, S.A., Abrar, M., & Hashim, M. et al. (2019). Impact of Capacity Building and Managerial Support on Employees' Performance: The Moderating Role of Employees' Retention. *SAGE Open*, 9(3). <https://doi.org/10.1177/2158244019859957>.

Yang, D., & Rhee, M. (2017). The role of co-production networks in organisations' efforts to enhance the learning curve outcomes. *Total Quality Management & Business Excellence*, 28(11–12), 1421–1445.

Zgodavova, K., Hudec, O., & Palfy, P. (2017). Culture of quality: insight into foreign organisations in Slovakia. *Total Quality Management & Business Excellence*, 28(9–10), 1054–1075.

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